



Revealing Consumer Preference through Product Attribute and Consumer Lifestyle: A Study of Lifestyle Shoes

Bachelor Thesis

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Study: IBEB / Marketing

Thesis: Bachelor

June 23, 2016

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Abstract

This study aims to reveal the role of consumer preference on performance and non-performance attributes on lifestyle shoes. The author addresses this issue by using discrete choice experiment to extract consumer's preference, thereby utility. 100 respondents were asked to fill in a questionnaire including choice sets and consumer demographic questions. This finding indicates that performance attributes of cushioning, stability and shoe weight has a positive significant influence along with non-performance attributes; price and usage imagery. Packaging design has no significant influence. This research also includes fashion-consciousness as a moderating variable, and gender, past purchase and brand purchased. The black box model, and self-expression theory is the foundation of this study's background. Results shows the effect were not significant. The article's implication for future research is to clearly assess consumers' heterogeneous background, and to possibly use latent class logit models or continuous mixture models for the research design.

Chapter 1

Introduction

1.1 Background

This bachelor thesis is put together to identify the effects of product attributes and consumer lifestyle for consumer's preference in lifestyle shoes. In choosing a product, a consumer analyzes attributes related to the product. This preference is proposed to be influenced by the consumer characteristics and lifestyle.

A brand is more than just a name, or a design of a logo. Brand is defined by Kotler and Armstrong (2002) as,

“a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors”.

Brand appeals to consumers when they either fit their actual or ideal self (Sirgy, 1982). In one scenario, a person may buy a product because it fits with his current lifestyle and belief. While on the contrary, a person may purchase or consume an item because it helps portray a certain belief or image of the individuals. Regardless of the initial reason, an individual chooses a product based on its attributes (Fader & Hardie, 1996). The utility theory states that a person derives utility not by the unity of the item as a whole, but by their set of attributes.

In order to relate to a certain brand, it should have focal attributes that creates or provokes desire and needs for a consumer. Investing in research and marketing for the wrong type of attributes are costly. Thus aligning the target consumer's generally preferred attributes with the company's effort in marketing its unique selling point is important.

There is an increase in demand of sports footwear that are used by millennials as a lifestyle product. Brands such as Nike and Adidas are the main worldwide players in the category. Based on financial reports (marketwatch.com), Nike enjoyed 30.7

billion dollars in revenue in 2015. While Adidas received around half of that figure, at 16.92 billion dollars. Both companies experienced an upward trend in the last five years. They both position their products in a way that are functionally satisfying and creates an image of its brand and user through its marketing efforts.

1.2 Scientific and Social Relevance

The first relevant scientific contribution of this study is to provide a deeper understanding of how consumer can reveal their preference of a product by choosing an attribute that is deemed most important to them. Currently there are limited number of literatures on the topic of consumer's preference on non-product related attributes. Thus the result of this bachelor thesis is aimed at adding to the relevant field of study. Additionally, to see which type of attributes plays a bigger importance in the studied consumer segment.

This study is socially relevant as it aims to give further insight for companies, to focus its resources on attributes most relevant to the consumers. Keller and Lehman (2006) argued that brand positioning, especially attribute association in the mind of customers is highly relevant on building, managing and measuring brand equity. For that reason, its worthy of attention to determine which attribute association is most beneficial for brand managers to focus on. It is important for them to realize that there may be undiscovered opportunities on how to market their offerings. Correspondingly, to assist companies in focusing more on specific attributes that they can communicate to achieve better marketing outcomes. Assuming that the sample of this study correctly represents the brands' target segment.

For consumers, this study is intended to help them in reaching a more informative decision making in purchasing a product. Which may result them to reduce unwanted possibilities such as after purchase cognitive dissonance.

1.3 Problem Statement and Research Questions

The problem arises when there are many combination of possible attributes and its level within one product. This is called the product space. Not all attributes give the same weight in forming preference for consumer to decide on a product. Thus to reveal the significant attribute, or attempting to create the most desirable product in respect to its characteristics, the study should use discrete choice experiment. Given that there are two categories of attributes, performance and non-performance related attributes, the main research question is formulated as follows:

What is the effect of performance and non-performance product attributes and consumer lifestyle on consumer's preference of lifestyle shoes?

Considering the main research question, additional partial questions to guide this report are developed as such:

1. Does the high level of performance attribute increases preference of fashion-conscious consumer?
2. Does the high level of non-performance attribute increases preference of fashion-conscious consumer?
3. Is non-performance attribute more important compared to performance related attribute for fashion-conscious consumer?

1.4 Research Objectives

Research trends on branding are committed to have better knowledge in the area of brand choice and preference (Keller, 2004) The purpose of the proposed research will focus on Nike's target consumers' observed stated preference. Preference will be sought by revealing the approximate utility derived from two type of product attributes; performance and non-performance related. Additionally, to identify whether there is a correlation between consumer's lifestyle with respondent's chosen attributes. The survey will contain choice sets, consumer lifestyle and demographic questions. Each choice set has hypothetical options that requires them to choose trade-off between attributes. Consequently, we can elicit consumer's preference based on

the utility theory. The result will help companies understand which product features to prioritize for their consumer.

1.5 Research Structure

Chapter 1 acts as an introduction to the study. It explains the background of why this study is interesting to conduct, problems at hand and ways to investigate the problem, in order to achieve its purpose. It includes a brief explanation of the research and data collection strategy. Chapter 2 will specify the preliminary information gathering to assemble possible network connections to create the direction of studied variables. Past research and findings will help formulate several hypotheses to solve the problem of this research. Chapter 3 will touch on the research method. It explains how discrete choice experiment is conceptualized and later on how it is used to create the questionnaire. Structure, pre-test and final test of data collection will be explained. Chapter 4 includes the analysis of the data collection result. I will use JMP to analyze the relationships between variables, create the most preferred combination of product, willingness to pay, and product rankings. Chapter 5 will conclude the findings of study, and suggest applicable insights for managers and suggestions for future related research.

1.6 Research Process and Methodology

Selected Product Category

Sport shoes have also been used in previous research on brand association by (Rio et al., 2001). Various leading sport shoes brand launched a line that is used specifically as daily wear. Nike is popularly known for its Ultra Flykit, Air Force, Air Max and SB product line for its lifestyle shoes. Their competitor, Adidas, have its Superstar and Stan Smith editions. Based on personal observation, these lifestyle shoes are becoming a trend for millennials not only in Europe, but also in Asia. Nike has 5,709 million dollars in revenue in Western Europe, growing at a 14.66% rate. In China alone they have a 17.87% growth rate (csimarkets.com). Lifestyle shoes was chosen because it is an experience-based product where evaluation are done while using the product. Shoes are considered as a conspicuous product where the public can visibly see the chosen brand. Hence, social needs such as image seeking may play a role in choice of alternative. Fashion-conscious individuals are hypothesized to more likely

follow the current trend. Respondents are also expected to have general knowledge about the product category.

Conceptualizing Discrete Choice Experiment

This within-subject experiment will use discrete choice experiment (DCE) to create the structure of the data collection. DCE has the ability to contribute directly for outcome measurement in economic evaluation by assuming choice made in DCE will reveal stated preference of individuals (Lancsar, 2006). The choice process is conceptualized to effectively elicit consumer preference with paired choice sets. Next, attribute and levels are selected. The reliability is indicated by its usage in previous research. Two levels are chosen to avoid confusion; fatigue bias and high drop out rates that can result from having too many options. The type of experimental design is fractional factorial, where an orthogonal subset of attribute level combinations is considered. The effects to be identified are the main affects and high order interactions. It will be examined which attributes within a category is most relevant, and which category is most relevant to predict consumer preference. JMP, a market research statistical software will be used to create the choice design and analyze the data collection findings.

Data Collection

The survey will be distributed online to carefully chosen respondents that fit the criteria as the target segment. The criteria are university students of all gender that are aged between 18-24. The questionnaire will include 10 alternating choice sets. Choice set will include six varying levels of performance and non-performance related attributes. Likert scales will act as an indication of the respondent's level of fashion consciousness. Lastly, demographic questions and past purchase behaviors will be included.

Chapter 2

Theoretical Framework

This chapter includes relevant findings of previous research and established theories that induces the proposed hypothesis. This background information explains in detail relevant variables in the research questions. Utility theory, as the basis of consumer preference will be explained. Details on consumer preferences will be elaborated. Furthermore, the relevancy and differences between performance and non-performance attribute will be outlined.

2.1 Blackbox Model

The base of this study closely follows the Black Box Model also known as the Stimulus-Response Theory of Consumer Behavior developed by Kotler et al., (2000). It explains the relationship of certain stimulies and consumer's response. It is named after the the same term in psychology. It describes how the brain processes information to create choices. However, there are still more to learn from the process itself. Within the consumer's mind, they are influenced by their own perception, needs, learning ability, beliefs and lifestyle. This study will focus solely on consumer lifestyle. Environmental factors consists of marketing and environmental stimuli.

The black box itself is divided to buyer characteristic and decision process; and lastly, the buyer's final response.

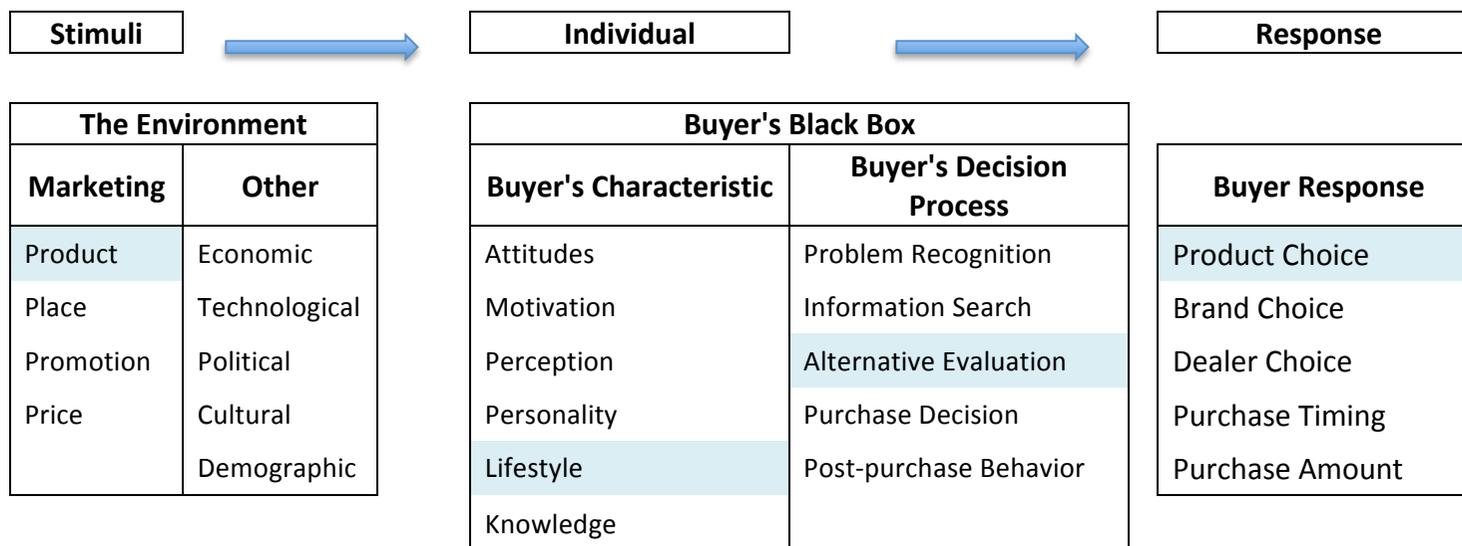


Figure 1. The Black Box Model

To limit the scope of this study, only certain aspects of the blackbox model will be discussed and studied into detail. Namely, the product, lifestyle of buyer, and consumer's product choice as their response, as highlighted above.

2.1.1 Product Attributes

Performance Attribute

Keller (1993) defined product-related attribute as functional specification needed to perform a service or function to the consumers. For the purposes of this study, Keller's definition of product-related attributes will be referred as performance attributes. The reason is that the attributes he mentioned in the study and his given definition were tangible to how the product performed. This change of name is used to avoid common confusion by respondents of the attributes. Examples of performance attributes would be material, shape and color. Specific to this study, the performance attribute is taken from the proceeding of the 5th Asia-Pacific Congress on Sports Technology for lifestyle shoes are cushioning, stability, and shoes weight (Bedford et al., 2011). Even if the attribute is irrelevant but unique, previous research has shown that it increases the attractiveness of the differentiated brand (Carpenter et al., 1994). Performance attributes are more commonly acknowledge and more objectively observable. Consumers may associate the brand through it's quality or observable offering. This plays an increasing importance in pre-purchase evaluation of alternative in the consumer decision process since every individual have different evaluative criteria. Its association is significant in the process of forming a belief on the product, especially when the product category or product advertises its strength more towards its function.

Non-performance Attribute

Keller (1993) describes non-product related attribute to be closely related to the purchase or consumption of the product; mainly it's price, packaging, user imagery and usage imagery. Price is not considered as Keller's product-related attribute, because it does not relate directly to the product's performance. Similarly for packaging, the container does not directly contribute to create the actual product. Imagery, whether user or usage, may be formed in consumer's mind through marketing communication or positioning and direct experience. Brand intangibles, which do not involve concrete attributes, are pertinent to how consumers perceives the brand (Keller, 2001). Non-performance attribute are said to measure a products quality and may satisfy consumer's need for social approval (Wang & Tang, 2011). Solomon et al. (2002) additionally suggest that consumers obtain products to gain the

intangible values such as sense of belonging and signal of wealth. The decision to purchase a conspicuous product, such as a branded shoe, depends on material needs and social needs. Social needs can be further categorized into need for uniqueness or exclusivity, or need for similarity or conformity (Amaldos & Jain, 2005). It is based on the motivation to project a certain image to the consumer's social environment. Generally, Nike have their famous 'swish' logo written on the side of the shoe in a larger scale compared to Adidas' logo, which is located either in the back or the front of the shoe. Certain models, which are relatively more expensive, or limited edition, can project the aforementioned desired image.

Non-product related attributes, especially user and usage imagery, plays a role in need recognition, search for information and pre-purchase evaluation of alternative in the decision making process. Internally formed attitude for a brand will be used in the search for information stage. If the overall impression of the brand is lacking, the consumer will look for this information externally. Consumers may opt for looking at others who are already using the brand, implying user imagery.

2.1.2 Consumer Lifestyle

Lifestyle portrays a person's living pattern as expressed in activities, interest and opinion (AIO). It is determined by their past experience, individual characteristic, and current surroundings (Kotler, 2000). Consumer influences their rational thinking in purchasing goods based on their lifestyle. Hawkins et al. (2001) created their interpretation model of consumer behavior, with a consumer's self-concept and lifestyle as the central piece of decision-making process. It is influenced by both external and internal influences. The self-concept and lifestyle plays a big role in creating needs and desires that starts the problem recognition in the decision process. The concept of lifestyle has become the underlying core of segmentation through psychographics. It is the operational technique to measure consumer's lifestyle by providing quantitative measures to define market segments (Blackwell et al., 2006, p.278). It incorporates social and behavioral science to demographic to develop adequate marketing communication strategies (Vyncke, 2002). There are various measures to quantify an individual's view of the world such as AIO, values and lifestyle and the list of values (Kahle et al., 1986).

The focus consumer segment of this study is the relatively fashion-conscious individuals. Vyncke (2002) claims that lifestyle influences consumption patterns and marketing communication processing. Consequently, lifestyle segmentation is a useful tool for marketing and advertising. Based on Kucukemiroglu (1999) understanding of lifestyle segmentation, it measures people's activities in how they spend their time, interests and importance of their surroundings, views of themselves and others, and demographic characteristics. He included leadership, family concern, health consciousness, carefree, cost consciousness, and practicality factor. Following the theme of this topic, the most suitable aspect is fashion conscious. Kara and Kaynak (2001) have also used fashion-conscious as a variable in their consumer lifestyle topic studies.

2.1.3 Self-Expression Theory

Brands may be represented as a mean of expressing consumers' identities and remains as one of its most important functions (Keller, 2008). These identities could be caused by different motivations. An example would be to express one's actual-self or ideal-self. Reference group can also influence an individual's behavior through forming values and beliefs. Regardless of the initial motivation, a consumer may purchase a brand as a mean of self-expression. They have the tendency to make inferences about their peers based on their possession. Brands can reinforce or supplement the unique identity the individual strive for (Cătălin & Andreea, 2014). Brand serves three self-expressive goals; which is to identify, differentiate and assimilate (Chernev, 2011). In his paper, he explained that consumer have strong preference if there is greater perceived personal relevance of brand, greater perception of brand differentiation and willingness to pay. Seeing this as an opportunity, companies recreate the product to reposition its functional attributes to better-fit consumers' lifestyle.

The respondent for this study is controlled for their age. Those that fit into the millennial age were chosen, assuming that the generation has relatively common characteristics. Self-expression is a vital characteristic of those born as the generation Y. Utilizing social media has become nearly a necessity for the majority of the generation. This research is based on the notion that brand can express consumers identity and lifestyle.

2.1.4 Consumer Preference

Consumer preferences may be revealed through identifying the most important characteristic of a product. Through determining how much consumers would be willing to pay to have an addition of each attribute. Alternatively, by seeing how they would trade off a certain attribute for less of another (Salvatore, 2003, p.68). A rational consumer will want to maximize their utility. However, in reality there are constraints in which consumers could not satisfy all their wants. This constraint is called the budget line. The consumer's taste is reflected by their indifference curve/map. Consequently consumers will try to maximize their satisfaction by trying to achieve the highest indifference curve, given their budget line. Utility is defined as the property of a good that allows it to satisfy human wants (Salvatore, 2003, p.58). A relevant concept for this study is total utility, where if the consumer consume more of an good, their utility increases. The cardinal utility theory states that individuals attach specific values from consuming each good. It acts as an actual measure of satisfaction (Salvatore, 2003, p.60). According to the utility theory, given the range of alternatives of product, consumers will prefer the attributes that gives the highest utility. Rationally, consumers choose the products that have the highest preferred attributes ranking.

Fader and Hardie (1996) explained that initially, the unit analysis of choice modelers are brands. Nonetheless, observations and studies implies that a consumer chooses a product based on multiple stock-keeping units (SKU) or discrete product attributes. Earlier researchers such as Guadagni and Little (1983) have acknowledge the importance of using SKU attributes in choice models. Fader and Hardie (1996) developed a choice model which considers heterogeneity of consumers and attribute-specific intercepts.

2.2 Hypothesis Formulation

Having specified each variable of interest and its relevance for this study, the relationship between the variables has become more clear. Product attributes are divided based on whether they are related to performance or not. Based on the utility theory, consumers reveal their product preference through SKU or product attributes.

This preference may be influenced by a certain type of daily lifestyle, in this study we investigate fashion-consciousness.

2.2.1 Formulation of Hypothesis 1

In selecting which products to purchase, the quality of the item itself is evaluated. The tangible attributes will be weighted to identify which attributes play more importance may differ between individuals. Lifestyle footwear tends to be marketed for their performance-related strengths. Performance attribute may be one of the criterias in selecting a product during the alternative evaluation process of decision making. For that reason, the first hypothesis is proposed as:

Hypothesis 1: A higher level of performance attribute, positively influence consumer preference through consumer lifestyle.

- Hypothesis 1A: Attribute *cushioning* positively influences consumer preference.
- Hypothesis 1B: Attribute *stability* positively influences consumer preference.
- Hypothesis 1C: Attribute *shoe weight* positively influences consumer preference.

2.2.2 Formulation of Hypothesis 2

Products are attractive for certain customers not only because of their performance functions. Price is an important factor for some consumers in deciding which item to buy. It can be evaluated from the price quality ratio or cost and benefit ratio. Usage imagery is important because some brands are preferred, when it is treated as ‘top of the mind’ by consumers when associated with a certain activity. It may simplify or shorten the alternative evaluation stage for a consumer. Packaging may play a role because consumers have the tendency to buy products for it’s attractive packaging design.

Hypothesis 2: A higher level of non-performance attribute, positively influence consumer preference through consumer lifestyle.

- Hypothesis 2A: Attribute *price* negatively influences consumer preference.
- Hypothesis 2B: Attribute *usage imagery* positively influences consumer preference.
- Hypothesis 2C: Attribute *packaging* positively influences consumer preference.

2.2.3 Formulation of Hypothesis 3

The main subject of this study is related to the Generation Y's characteristic of being self-expressive. As stated before, social approval may be the reason non-performance attributes play an important role for consumers to choose products (Wang and Tang, 2011). Social approval can be associated to the price of a product. There is a propensity that the higher the price of the item, the more society will 'approve' your fashion choice. In high level of usage imagery where individuals who buy certain products can express their actual or ideal self. Suggesting that these consumers buy a product for its intangible benefits. For those reasons, the last hypothesis is formulated as follows:

Hypothesis 3: Non performance attribute has a higher influence on consumer preference compared to performance attribute.

Relationships among variable will be visualized with the conceptual framework graph given below:

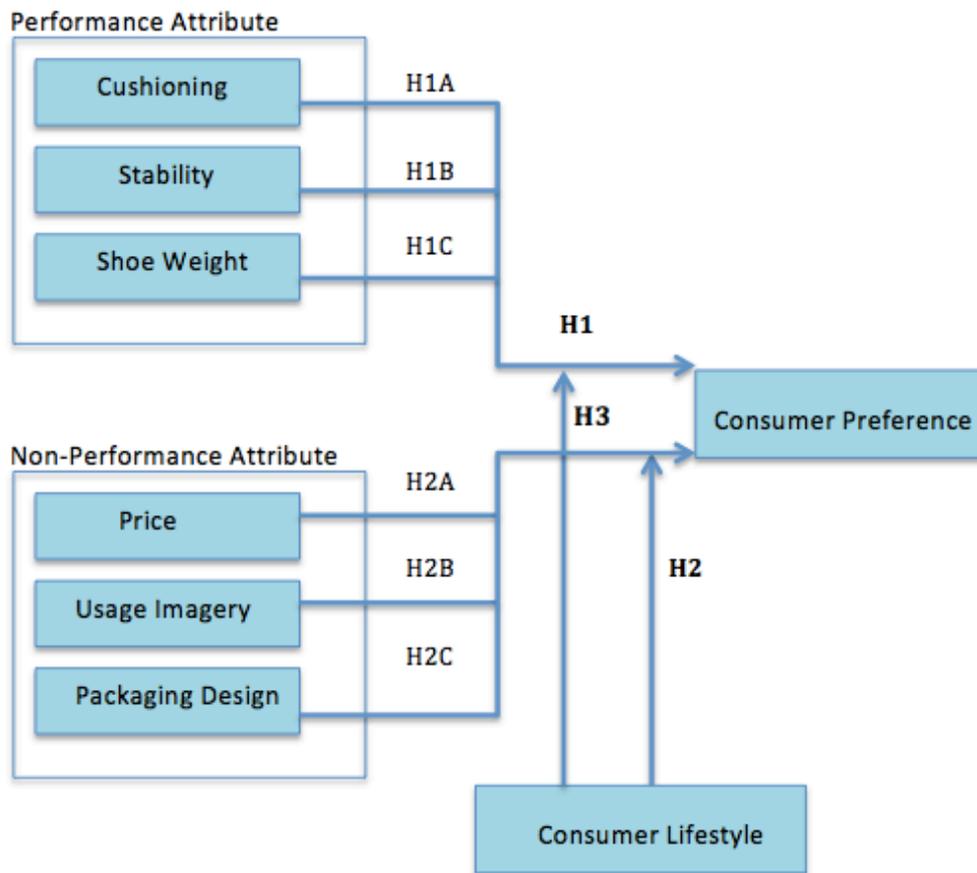


Figure 2. Theoretical Framework

Chapter 3

Research Methodology

This research is considered as an artefactual field experiment; the setting or context of this experiment is fictional, yet the respondents are treated as Nike's real target segment. JMP is a statistical software that is common used for market research purposes. It is used to create the choice set, compare attributes, and create product ranking. It also shows what the respondents believe is an acceptable price for its features. Prior means specifies combinations of alternatives that are most attractive based on prior knowledge.

3.1 Research Design

In this experiment, subjects will receive more than one treatment. The levels of the independent variable are manipulated through JMP and exposed to the subjects to create a hypothetical choice. Compared to between-subject experiment, this method increases statistical power from having relatively more treatment-effect output. Fewer respondents are needed to have the comparable effect with between subjects. However, weaknesses apply. Respondents are prone to carryover effects. They have fatigue and practice playing into the process of decision-making. Fatigue is experienced when respondent's answers are negatively affected after receiving initial treatment. On the contrary, if respondents answers are positively affected, they experience the practice effect.

3.1.1 Conceptualizing Discrete Choice Experiment

This study's aim is to observe alternating choices, in a way that the target respondent will reveal their stated preference. Discrete Choice Experiment (DCE) will be used to create the structure of the data collection. DCE is known for its ability to contribute directly for outcome measurement in economic evaluation by assuming choice made in DCE will reveal stated preference of individuals (Lancsar, 2006). He also pointed that through the use of hypothetical choices, DCE is able to quantify the preference and value of goods that have not existed yet.

The method includes making individual state their preference from a range of hypothetical alternative products. The choice will be amongst paired alternatives.

Each alternative will contain the equal amount of qualitative attributes, but with differing levels. Attributes chosen must be salient to the majority of the respondents to avoid biases of inferences (Lancsar, 2006). Preference will be elicited by seeing the attributes that significantly influences the decision.

The reliability of attribute variables is indicated by its usage in previous research. Two levels are chosen to avoid confusion; fatigue bias and high drop out rates that can result from having too many options. In order for the design to be effective, Huber and Zwerina (1996) suggest the design to have attribute levels to be inserted with equal frequency with other attributes, that the level of each attribute appear equally and that each option has equal probability to be chosen.

The type of experimental design is fractional factorial, where an orthogonal subset of attribute level combinations is considered. Only specific combinations of attributes and its main affects and high order interactions will be studied. Designing DCE will create an estimation matrix, where respondents contribute dependent variables through their choices, and co-variates or other relevant information for the study (Lancsar, 2006). The type of experiment is a within subject experiment; the same respondent is similarly assigned to each level of treatment variables. Needing less subjects and a more comprehensive understanding for a single person's preferences.

3.1.2 Random Utility Theory

Consumer's utility is based on product characteristic, not the good as a whole. The choice rule is consumer will choose products they find most attractive, or the highest utility (Lancaster, 1996). Based on the information integration theory by Louviere (1988), individuals' preference for the values of each attribute differs. They integrate preference into overall utility through cognitive processing.

This choice-based model is based on the random utility theory, where individuals create choices with a certain degree of error. Examples of these errors are perceptual errors and cognitive calculation errors (Payne, Bettman, Johnson, 1993).

Hence, it is assumed that:

1. The total utility is the sum of utilities of individual attributes. These utilities are binomial according to number of levels, assigned as 0 and 1 in this study.
2. Individual utilities are derived from the evaluation of product total utility.
3. Consumer rank preferences through choosing attributes with the highest level of utility.

In this study, there are two alternatives per choice set. Based on the random utility choice model, a probabilistic choice rule will be used. Assuming that if errors are independently and identically (IID) Gumbel, a binary logit model is used by JMP. Based on McFadden's (1986) interpretation on random utility model, the utility equation specific to this study is:

$$U_i^{shoes} = x_c\beta_c + x_s\beta_s + x_{sw}\beta_{sw} + x_p\beta_p + x_{ui}\beta_{ui} + x_{pd}\beta_{pd} + \varepsilon_i$$

U_i^{shoes} = utility of shoes i
x_c, x_s, \dots, x_{pd} = attribute utility
$\beta_c, \beta_s \dots \dots \dots \beta_{pd}$ = attribute coefficient
$x_c\beta_c, x_s\beta_s \dots \dots \dots x_{pd}\beta_{pd}$ = systematic utility
ε_i = error term

3.1.3 Designing Choices in JMP

As stated previously, the choice alternatives in the questionnaire will be generated through JMP. The procedures can be seen in Appendix A. This choice design is based on a utility balance design. Levels that are more desirable for attributes are located at the right side of 'Attribute Levels'. For example, we have prior information that high cushioning is most preferred than low. It is also generally accepted that the lower the price, it is most preferred. Prior specifications gives better information for JMP to create the design. In a way if the attribute were assigned a value of negative one (-1),

the last column of attribute levels is preferred. In prior variance matrix, prior values of variance are specified as 1 to allow for uncertainty.

Various combinations of choice sets are created through JMP. Trade-offs between levels will result in the calculation for utility. These particular choices constitute a fractional factorial design, where not all attributes prevalent to the shoe product's performance will be assessed. These combinations will be included as the first part of questionnaire.

3.2 Measures

Product related attributes are the brand's features that determine the performance of the product (Keller, 1998). Based on a report from the 5th Asia-Pacific Congress on Sports Technology in 2011, performance attributes of sport shoes are cushioning, stability, and shoe weight. Non-performance attributes will be measured by price, usage imagery and packaging.

Table 1: Performance attributes

Item	Definition	Level
Cushioning	Ability to provide consistent level of cushioning while running	High
		Low
Stability	How stable shoes feel whilst running on uneven surface	High
		Low
Shoe Weight	How heavy shoe feels while running	Heavy
		Light

Table 2: Non-performance attributes

Item	Definition	Level
Price	Cost to purchase the shoes	High
		Low
Usage Imagery	Type of activity associated with the shoes	High
		Low
Packaging Design	Attractiveness of design	High
		Low

The second part of the questionnaire will include stating agreement through Likert scales on these following items:

Table 3: Questionnaire Scales

Fashion Conscious Scale Items	Source	Scale
I usually have one or more outfits that are the very latest style When I must choose between the two I usually dress for fashion, not for comfort An important part of my life and activities is dressing smartly I often try the latest hairdo styles when they change	Kaynak, E., & Kara, A., 2001	Likert 1-7
I like parties where there is lots of music and talk I would rather spend a quiet evening at home than go out to a party I often try new stores before my friends and neighbors do I spend a lot of time talking with my friends about products and brands	Kucukemiroglu, 1999	Likert 1-7

3.3 Pretest

There are 60 respondents for this preliminary data collection sample; all aged between 18 and 24 years old. The structure of the online questionnaire was eight sets of alternative, three statements on fashion consciousness and two demographic variables. Alternative choice sets were set by the JMP and will be used again for the actual study. The next three statements were rated with a 7 scale Likert. Stating ‘I usually have one or more outfits that are the very latest style’, ‘When I must choose between the two I usually dress for fashion, not comfort’, and ‘an important part of my life and activities is dressing smartly (Kucukemiroglu, 1999). Demographic questions only include age and gender. Data was visualized through JMP to see the general relationship of the variables, and to identify unusual data points. Based on a preliminary scale (Kaynak & Kara, 2001), more statement will be added to the questionnaire.

3.5 Data Collection Procedure

The survey will be distributed online through Qualtrics with the criteria of university students of all gender that are aged between 18-24. University students were chosen because they are generally aged between 18 and 24, which is a part of the millennial generation. They are a part of Nike's target segment. Questions regarding respondent's background such as age, gender, and lifestyle will be added. This demographic variable is asked to both ensure if the respondent of the survey is as intended, and if there are correlation with earlier formed preference. The survey has been initially tested to ensure that it serves its purpose and that the sample respondents understand the questions given before released to the public. The questionnaire will include alternating level of attributes formed as paired choice sets. The attribute trade-off is created by JMP. The online questionnaire is set up through Qualtrics.

Chapter 4

Result Analysis

There will be four sections of this chapter; the data collection result itself, utility analysis through JMP, the significance of predictor variables and their relationship with the dependent variable.

4.1 Survey Results

The summary of the respondents answer to the ‘Consumer Demographic’ section of the questionnaire is given below. The survey was distributed online through informal connections, social media, and university platforms. This entails that the location of the respondents differ significantly, namely 60% in the Netherlands, 30% in Indonesia, and 10% includes Australia, Malaysia and Italy. The total response was 132. However with the limited access to Qualtrics, only 100 response data can be analyzed. Thus, the first 100 answers were chosen. There were eight more female respondents compared to male. There were 13% of respondents that does not know which type of shoes can be described as lifestyle shoes. In the last question, 87 respondents answered which brand of lifestyle shoes they have previously bought. There was a twelve-response difference with the previous question. This result shows that there is an error in how people perceived the shoe category, 75 people said they have bought the shoes but 87 people answered which brand they bought. It was expected to have an equal number of respondents for this section.

Table 4: Respondent Characteristics

Question	Choice	N	%
Gender	Male	46	46%
	Female	54	54%
Age	18-24	100	100%
Response	Yes	75	75%
	No	11	11%
	I Don't Know	14	13%
Brand Recently Purchased	Nike	50	57%
	Adidas	19	22%
	New Balance	6	7%
	Puma	0	0%
	Other	12	14%

*Only 87 respondents answered the recently purchased brand

4.2 Reliability of Questionnaire

Fashion-conscious is tested as the moderated variable between performance and non-performance attribute's relationship with consumer preference. It is important to estimate the reliability or consistency of the survey items for the model prediction. The cronbach's alpha is known to determine the average relation of survey instrument's items. For these items it received an 0,719 score, which is a relatively high score.

Table 5: Item Reliability

Fashion-Conscious Scale Items	Mean	Standard Deviation	Cronbach's Alpha
I usually have one or more outfits that are the very latest style	4,8	1,497	0,719
When I must choose between the two I usually dress for fashion, not for comfort	3,86	1,537	
An important part of my life and activities is dressing smartly	5,26	1,26	
I often try the latest hairdo styles when they change	3,2	1,63	
I like parties where there is lots of music and talk	4,42	1,76	
I would rather spend a quiet evening at home than go out to a party*	3,45	1,61	
I often try new stores before my friends and neighbors do	4,13	1,41	
I spend a lot of time talking with my friends about products and brands	4,73	1,69	

*=*negative scale*

4.3 Utility Analysis

The main relevance of using JMP to analyze our data is discovering the utility as an interpretation of our dependent variable, consumer preference. There are three separate functions that we will use, namely utility profiler, and marginal effects. The explanation will be discussed in detail below.

4.3.1 Utility Profiler

The utility profiler function gives the predicted utility for various factor settings. In this study, only the predicted utility for the most desirable set of attribute combinations is discussed. The example of utility calculation of one random respondent, for 5 choice set pairs can be seen below.

Table 6: Example of Utility Result

Response Indicator	C	S	SW	P	UI	PD	Utility
1	Low	Low	Heavy	High	High	Low	1,5575953
0	Low	Low	Light	High	Low	High	-0,6991114
1	High	Low	Heavy	Low	Low	Low	0,6000337
0	High	Low	Heavy	High	Low	Low	-1,2785095
0	Low	High	Light	Low	Low	Low	0,0770472
1	High	Low	Heavy	High	High	High	-0,0770473
1	Low	Low	Light	Low	High	High	0,7327206
0	Low	High	Heavy	Low	High	High	0,1147759
0	Low	High	Light	Low	Low	High	0,5251546
1	High	High	Light	Low	High	Low	1,8628457

The attributes are abbreviated. C = cushioning, S = stability, SW = shoe weight, P = price, UI = usage imagery, P = packaging design.

When 1 is entered as a response indicator, it means that that choice set is preferred than the other (entered as 0). There are in total 2000 data points to calculate this study's consumer preference. The result shows that the highest utility from having maximizing the desired combination of attributes is 2,310952 (Appendix C). Where the lowest utility from having all the attributes set as low, heavy, or high price is -1,7793 (Appendix D).

4.3.2 Marginal Effects

Marginal utility is the fitted utility values for certain levels of the effect, while other unrelated factors is set at neutral. For the performance attributes, having light shoe weight gives the highest marginal utility. Shoe stability is perceived relatively less important with only 0,27289 marginal utility. The negative values indicate if that particular level of attribute is chosen, they actually prefer that less. Marginal probability is the probability of the average individual to select that attribute level over the other level, while all other attributes are at their default levels.

Corresponding to the marginal utility, light shoe weight is most likely to be chosen. Then high cushioning and high shoe stability is preferred next.

Table 7a: Performance Attribute Marginal

Attribute	Levels	Marginal Utility	Marginal Probability
Price	High	-0,33924	0,3366
	Low	0,33924	0,6634
Usage Imagery	Low	-0,37668	0,3201
	High	0,37668	0,6799
Packaging Design	Low	-0,22405	0,3898
	High	0,22405	0,6102

For the non-performance attributes, the marginal utility and probability does not have a wide variation between the attributes. The attribute level that gives the highest utility is the high level of usage imagery, followed by low price and high packaging design. Similarly, high usage imagery, low price and high packaging design have higher probability of being selected by an individual.

Table 7b: Non-Performance Attribute Marginal

Attribute	Levels	Marginal Utility	Marginal Probability
Cushioning	Low	-0,51622	0,2626
	High	0,51622	0,7374
Stability	Low	-0,27289	0,3668
	High	0,27289	0,6332
Shoe Weight	Heavy	-0,58187	0,238
	Light	0,58187	0,7629

4.4 Testing the Conceptual Model

4.4.1 Hypothesis One

Hypothesis 1:

A higher level of performance attribute, positively influence consumer preference through consumer lifestyle.

Table 8a: Effect of Performance Attribute

	t Ratio	Prob > t	Prob > t
Performance Attribute			
Cushioning	9,3	<0,0001	<0,0001***
Stability	21,894	<0,0001	<0,0001***
Shoe Weight	37,156	<0,0001	<0,0001***

*** significant for 99% confidence level

Cushioning, stability and shoe weight are all statistically significant seen by the p-value (<,0001). The confidence level of this regression is 99% by default. We can conclude that the changes in the predictor variables, cushioning, stability and shoe weight does relate to the changes in the response variable.

Effect of Performance Attributes on Consumer Preference

The first proposed hypothesis is that a higher level of performance attribute will positively influence consumer preference and moderated by consumer lifestyle. Consumer lifestyle in this context is measured by the degree of a person's fashion-consciousness.

Table 8b: Effect of Performance Attribute

	Standardized β	t	Sig.	R Square	Sig. F Change
Performance Attribute				0,683	<0,0001
Constant		-12,41	,000***		
Cushioning	0,414	7,01	,000***		
Stability	0,25	4,28	,000***		
Shoe Weight	0,741	12,45	,000***		

*** significant for 99% confidence level

Shoe weight is proven to be significant in relating to consumer preference ($\beta=0,741$ and $p= <0,0001$). It has the highest β value in relation to the dependent variable compared to cushioning ($\beta=0,414$ and $p=<0,0001$) and stability ($\beta=0,25$ and $p=0,0001$). This is an interesting finding because brands like Nike has product lines that accentuate its light shoe weight features such as Nike Flyknit, Nike Air Max and Nike Roshe OneFlight. Based on it's official website, it claims that its shoes are "incredibly light" by "replacing multiple stiched or glued panels with ultra-light yarn to dramatically reduce weight" (www.nike.com, 2016). This implies consumers also consider shoe weight not only important for sport shoes but also for daily-wear lifestyle shoes. One possible explanation for this is due to the comfort it gives the user. A relatively high R square (0,683) indicates that 68,3% of the dependent variable could be explained by the performance attributes.

Table 8c: Effect of Fashion-conscious on Consumer Preference

	Standardized β	t	Sig.	R Square	Sig. F Change
Fashion-Conscious Effect				0,69	0,171
Constant		-10,38	,000***		
Cushioning	0,414	7,11	,000***		
Stability	0,25	3,98	,000***		
Shoe Weight	0,741	12,54	,000***		
Fashion-Conscious	-0,8	-1,38	0,171		

*** significant for 99% confidence level

The second analysis attempts to identify the influence of fashion-consciousness as a moderating variable. The result suggests that the first hypothesis is rejected due to its negative β value ($\beta=-0,8$ and $p=0,171$). Its insignificance implies that we could not derive the conclusion that consumers do not have to be fashion-conscious to prefer performance attributes. The majority of the respondents have a tendency to be fashion-conscious (mean=4,23 from a scale of 7). Fashion-conscious is a very narrow assessment of one's lifestyle. Possibly, there are more important factors of the AIO scaling that influences consumer's preference. The heterogeneity of consumers was not fully assessed. This might lead to the negative and non-significant effect of consumer lifestyle.

Table 8d: Effect of Gender on Consumer Preference

	Standardized β	t	Sig.	R Square	Sig. F Change
Gender Effect				0,69	0,174
Constant		-7,85	,000***		
Cushioning	0,413	7,01	,000***		
Stability	0,256	4,39	,000***		
Shoe Weight	0,751	12,58	,000***		
Gender	0,079	1,37	0,174		

*** significant for 99% confidence level

For additional information, gender, past purchase and brand purchase were also asked in the questionnaire. The result was that Gender has a positive but no significant effect in relating to consumer preference ($\beta=0,079$ and $p=0,174$).

Table 8e: Effect of Purchase Behavior on Consumer Preference

	Standardized β	t	Sig.	R Square	Sig. F Change
Past Purchase Effect				0,687	0,294
Constant		-9,49	,000***		
Cushioning	0,408	6,87	,000***		
Stability	0,243	4,13	,000***		
Shoe Weight	0,752	12,45	,000***		
Past Purchase	0,062	1,06	0,294		
Brand Purchased Effect				0,689	0,18
Constant		-10,12	,000***		
Cushioning	0,403	6,77	,000***		
Stability	0,255	4,37	,000***		
Shoe Weight	0,74	12,48	,000***		
Brand Purchased	-0,78	-1,35	0,18		

*** significant for 99% confidence level

Past purchase and brand purchased is included in the questionnaire because it has a possibility in determining the type of attributes the consumer prefers. From a performance point of view, consumers may prefer an attribute because of the certain brand that they have bought and used in the past. Their experience and post-purchase evaluation may influence their future behavior (Santos & Boote, 2003). However, the

result of this study indicates that past purchase is not significant ($\beta=0,062$ and $p=0,294$) and similarly brand purchased ($\beta =-0,78$ and $p=0,18$).

4.4.2 Hypothesis Two

Hypothesis 2:

A higher level of non-performance attribute, positively influence consumer preference through consumer lifestyle.

Table 9a: Effect of Non-performance Attribute

	t Ratio	Prob > t	Prob > t
Non-Performance Attribute			
Price	-16,008	<0,0001	<0,0001***
Usage Imagery	9,706	<0,0001	<0,0001***
Packaging Design	2,904	0,0037	0,0019**

*** significant for 99% confidence level

** significant for 95% confidence level

Repeating the same process we have done previously, the oneway variance is used to see the relationship between the independent and dependent variables. Price and usage imagery are statistically significant seen by the p-value (<0,0001). Packaging design is significant if the alpha of 95% is used ($p=0,0019$). Thus, changes in the independent variables, price, usage imagery and packaging relate to the changes in consumer preference.

Effect of Non-Performance Attributes on Consumer Preference

The second proposed hypothesis is the higher level of non-performance attribute will positively influence consumer preference through consumer lifestyle. As explained previously, this hypothesis is backed by consumer lifestyle as the central of consumer's decision-making process (Hawkins et al., 2001) and self-expression theory. This hypothesis is tested and is not accepted.

Table 9b: Effect of Non-performance Attribute

	Standardized β	t	Sig.	R Square	Sig. F Change
Non-Performance Attribute				0,202	0
Constant		-4,383	,000***		
Price	0,472	4,73	,000***		
Usage Imagery	0,272	2,61	,000***		
Packaging Design	0,095	0,99	0,327		

*** significant for 99% confidence level

At the preliminary stages of writing this thesis, non-performance attribute is expected to be important in determining consumer preference. Based on the study conducted, only price ($\beta=0,472$ and $p=<0,0001$) and usage imagery ($\beta=0,272$ and $p=<0,000$) are statistically significant. Their linear relationship with consumer's utility is positive. Note that here there is a negative effect of price underlying the regression from the JMP settings. Meaning that the lower the price, the higher the consumer's utility. Packaging has an insignificant relationship with the response variable ($\beta =0,095$ and $p=0,327$). The possible justification would be that packaging is only the means to protect the products and ease storage and distribution for the company or retail. The consumer does not necessarily deliberate on which products to choose based on their packaging. This might be the case for certain product categories, but not generally for footwear. However due to the insignificance, no conclusion can be made.

Table 9c: Effect of Fashion-conscious on Consumer Preference

	Standardized β	t	Sig.	R Square	Sig. F Change
Fashion-Conscious Effect				0,205	0,547
Constant		-4,31	,000***		
Price	0,468	4,66	,000***		
Usage Imagery	0,274	2,63	,000***		
Packaging Design	0,101	1,03	0,305		
Fashion-Conscious	-0,056	-0,605	0,547		

*** significant for 99% confidence level

Consumer lifestyle was particularly thought to be an important factor for millennials to choose shoes based on their fashion-consciousness. This generalization was inferred mainly from personal observation and secondary literature. Those who are included in the Generation Y, has a self-expressive as a common characteristic.

Surprisingly the result shows a negative and insignificant relationship of fashion-consciousness as a moderating variable ($\beta=-0,056$ and $p=0,547$). The significant F has changed, however not much information can be derived from this.

Table 9d: Effect of Gender on Consumer Preference

	Standardized β	t	Sig.	R Square	Sig. F Change
Gender Effect				0,207	0,435
Constant		-2,15	0,034		
Price	0,479	4,77	,000***		
Usage Imagery	0,283	2,69	,000***		
Packaging Design	0,094	0,97	0,334		
Gender	-0,072	-0,78	0,435		

*** significant for 99% confidence level

The moderating effect of gender was tested but the results were insignificant and negative ($\beta=-0,072$ and $p=0,435$). Respondent's previous purchases were asked in the questionnaire in search for additional information. Both past purchase ($\beta=-0,41$ and $0,663$) and brand purchased ($\beta=-0,046$ and $p=0,631$) have a negative and insignificant effect.

Table 9e: Effect of Purchase Behavior on Consumer Preference

	Standardized β	t	Sig.	R Square	Sig. F Change
Past Purchase Effect				0,204	0,663
Constant		-3,06	,000***		
Price	0,477	4,73	,000***		
Usage Imagery	0,268	2,552	,000***		
Packaging Design	0,1	1,02	0,309		
Past Purchase	-0,41	-0,44	0,663		
Brand Purchased				0,204	0,631
Constant		-3,55	,000***		
Price	0,465	4,59	,000***		
Usage Imagery	0,278	2,64	,000***		
Packaging Design	0,086	0,87	0,385		
Brand Purchased	-0,046	-0,48	0,631		

*** significant for 99% confidence level

4.4.3 Hypothesis Three

Hypothesis 3:

Non performance attribute has a higher influence on consumer preference compared to performance attribute.

This hypothesis is not accepted. The weight of attribute category is assessed through comparing the upper and lower bound of the respective categories. The individual upper bound mean for performance attributes were summed to 0,9726 while the lower bound is 0,6613. The same technique is applied to the non-performance category, where it has 0,2529 as an upper bound and -0,0336 as a lower bound. Through visualization of these numbers, clearly performance attribute's lower bound is higher than non-performance attribute's higher bound ($0,6613 > 0,2529$). Consequently, we can weakly derive the conclusion that performance attribute plays a more important role in determining consumer preference than non-performance attributes. The visualization of these numbers can be seen in Appendix E and Appendix F. The green line displays the mean and standard deviation lines. This result is aligned with higher beta values for performance attributes as explained in the previous section. A possible explanation for this result would be that consumers choose quality, comfort and the sustainability of lifestyle shoes rather than its intangible values.

4.5 Summary of Results

Table 10: Results

	Standardized β	Sig.	Result
Performance Attribute (H1) with Fashion-Consious			R
Cushioning* (H1A)	0,414	,000***	A
Stability* (H1B)	0,25	,000***	A
Shoe Weight* (H1C)	0,741	,000***	A
Fashion-Consious	-0,8	0,171	R
Non-Performance Attribute (H2) with Fashion-Consious			R
Price* (H2A)	0,472	,000***	A
Usage Imagery* (H2B)	0,272	,000***	A
Packaging Design (H2C)	0,095	0,327	R
Fashion-Consious	-0,056	0,547	R
Non-Performance > Performance (H3)			R

These attributes are assessed independent with their interaction effect with the moderating variable.

R = Rejected, A = Accepted

Chapter 5

Conclusion

5.1 Conclusion

The last chapter of this thesis includes the summary of the study's result. The main research question that guided this thesis research is:

“What is the effect of performance and non-performance product attributes and consumer lifestyle on consumer's preference of lifestyle shoes?”

Based on the research method explained in detail in chapter 3, it became possible to answer the question above. Performance attribute of lifestyle shoes consists of cushioning, stability, and shoe weight. All of these attributes are proven to be statistically significant predictor variables for consumer preference of lifestyle shoes. Shoe weight places the highest importance proven by having the highest marginal utility and marginal probability in its category. Non-performance attribute includes price, usage imagery and packaging design. Only price and usage imagery were considered statistically significant to predict changes in response variable. Usage imagery has the highest marginal utility and marginal probability compared to price, even though the difference is relatively little. The effect of consumer lifestyle is also measured through an individual's level of fashion-consciousness. Through data collection of 100 individuals, fashion-consciousness does not have a significant effect as it was hypothesized. Consumer characteristic such as gender and purchase behavior was included in the data collection for additional information. When tested for their effect, none were significant to consumer preference.

5.2 Implication for Managers

The relevance and purpose of this study is to give insight for managers that consumers evaluate attributes of a product differently. Each of these individual has a tendency to prefer an attribute to the other. However market research can be done to show which attributes the target consumer finds most important in their pre-purchase evaluation stage. When this particular attribute is known, managers can use it as a

point of differentiation. It can be used to increase effectiveness of marketing communication and product development.

Lifestyle shoes were chosen for this study because of its increasing trend in the period of writing this thesis. With the rate of how new shoe lines are constantly introduced, the competition remains fierce. One way to overcome and be ahead of the competition is by giving the consumers what they really want in a pair of shoes. Through the findings of this study we discovered that it is having high level of tangible performance attributes. The usability of the findings of this study can be used by managers for an initial and general insight to their world consumers' preference of their product.

5.3 Limitation and Future Research

There are several limitations that should be mentioned in creating this research. Within the data collection process, only 100 participants can be collected for the study due to the limited access of the online questionnaire collection platform. For future research, sample respondents should be assessed in a clearer manner. The demographic variables used in this study are not as comprehensive as intended. This is also seen from the insignificance of the related findings. More related consumer demographics should be included, such as income or past education.

As a suggestion for future research, background theories that are used as an assumption should be thoroughly tested. Self-expression theory that based the problem of this study could have been used to assess the consumer's way of thinking. However, there were no comprehensive scales and previously tested for the writer to use correctly in the context of this study. For that reason, the true effect of self-expression is still unclear. Additionally, when taking a moderating variable to account, the definition and what it represents should be clear. The insignificance of consumer lifestyle might be the result of a poor representation of the dynamic through measuring one's fashion-consciousness only. Lifestyle itself means the interest, attitude, and opinion of an individual or a group. There should be at least one representation from each of the three categories of lifestyle.

On the subject of the research design, this study only controlled for the respondent's age. Nowadays, consumers are more divided than previous years. They differ in their cultural background, views and lifestyle. This unobserved heterogeneity was not properly accounted for through the choice model. The random utility theory might be insufficient to capture these individual differences. Future research could use latent class logit models or continuous mixture models to better capture consumer heterogeneity. Latent class logit models estimates segment level effect sizes. While continuous mixtures assumes each individual have their own unique preferences.

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Appendix 1: Questionnaire

Dear Respondent,

This questionnaire is for my bachelor thesis in International Bachelor Economics and Business Economics at Erasmus University Rotterdam. This research is concentrated on revealing consumer preference of lifestyle shoes through product attributes and consumer lifestyle.

This survey consists of three parts; 10 choice sets, lifestyle statements and basic demographics. It will take approximately 10 minutes of your time.

If you have any questions or concerns, feel free to email me at: 431125tp@eur.nl

Thank you for your time and participation.

Best regards,

Tsamara.

Product Attribute Choice Sets

You will be asked to **choose one alternative** from the given hypothetical sets of attributes. Imagine what **aspect of a lifestyle shoe you find most important**. The attributes are defined as follows:

Performance-related:

1. Cushioning = ability to provide consistent level of padding for comfort.
2. Stability = how shoes feel on uneven surfaces.
3. Shoe Weight = how heavy the shoes feel while walking.

Non-performance related:

1. Price = how much monetary cost to purchase shoes.
2. Usage imagery = ability to associate the shoes/brand with a certain type of activity.

Example = Timberland shoes for outdoors.

3. Packaging design = attractiveness of package or box design.

Please **refer back** to these definitions in conditions of uncertainty and confusion.

1.

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 1	Low	Low	Heavy	Low	Low	Low

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 2	Low	High	Heavy	High	High	High

2.

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 1	High	High	Light	High	Low	Low

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 2	Low	Low	Light	Low	High	Low

3.

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 1	High	Low	Heavy	Low	Low	High

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 2	Low	High	Light	High	High	Low

4.

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 1	Low	Low	Heavy	Low	High	High

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 2	High	Low	Light	Low	Low	Low

5.

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 1	High	High	Heavy	Low	Low	Low

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 2	Low	Low	Light	High	High	High

6.

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 1	Low	Low	Heavy	High	High	Low

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 2	Low	Low	Light	High	Low	High

7.

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 1	High	Low	Heavy	Low	Low	Low

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 2	High	Low	Heavy	High	Low	Low

8.

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 1	Low	High	Light	Low	Low	Low

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 2	High	Low	Heavy	High	High	High

9.

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 1	Low	Low	Light	Low	High	High

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 2	Low	High	Heavy	Low	High	High

10.

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 1	Low	High	Light	Low	Low	High

	Cushioning	Stability	Shoe Weight	Price	Usage Imagery	Packaging
Shoe 2	High	High	Light	Low	High	Low

Fashion-Conscious

This second part of the survey is about your personal lifestyle. You will be asked to choose whether you agree or disagree to the following statements. Please answer truthfully.

1. I usually have one or more outfits that are the very latest style
2. When I must choose between the two I usually dress for fashion, not comfort
3. An important part of my life and activities is dressing smartly
4. I often try the latest hairdo styles when they change
5. I like parties where there is lots of music and talk
6. I would rather spend a quiet evening at home than go out to party
7. I often try new stores before my friends and neighbors do
8. I spend a lot of time talking with my friends about products and brands

Scales: Entirely Disagree, Mostly Disagree, Disagree Somewhat, Neither, Agree Somewhat, Mostly Agree, Entirely Agree

Consumer Demographics

For the last part of the questionnaire, you will be asked to answer demographic questions.

The information you provide will be confidential and used only for the purposes of this study. It will not be given to any third party.

What is your gender?

- Male
- Female
- Other

What is your age?

- Below 18
- 18-24
- 25-34
- 35-44
- Above 44

Have you previously bought “lifestyle shoes”?

- Yes
- I don't know what it is
- No

- If yes, what brand did you purchase most recently?
Nike
- Adidas
- New Balance
- Puma
- Other

Appendix 2: Research Design

Choice Design

Attributes

Name	Role	Attribute Levels	
▼ Cushioning	Categorical	Low	High
▼ Stability	Categorical	Low	High
▼ Shoes Weight	Categorical	Heavy	Light
▼ Price	Categorical	High	Low
▼ Usage Imagery	Categorical	Low	High
▼ Packaging Design	Categorical	Low	High

Model

▶ **DOE Model Controls**

▼ **Prior Specification**

Ignore prior specifications. Generate the Utility Neutral design.

▼ **Prior Mean**

Effect	Prior Mean
Cushioning	-1,00
Stability	-1,00
Shoes Weight	-1,00
Price	-1,00
Usage Imagery	-1,00
Packaging Design	-1,00

Ignore prior variance. Generate the local design for the prior mean.

▼ **Prior Variance Matrix**

Effect	Shoes		Usage	Packaging
	Cushioning	Stability	Imagery	Design
Cushioning	1,000	0,000	0,000	0,000
Stability		1,000	0,000	0,000
Shoes Weight			1,000	0,000
Price				1,000
Usage Imagery				
Packaging Design				

▼ **Design Generation**

Number of attributes that can change within a choice set

Number of profiles per choice set

Number of choice sets per survey

Number of surveys

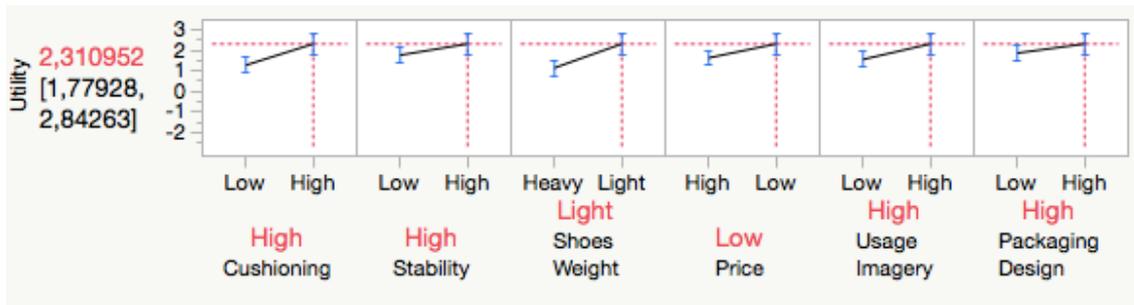
Expected number of respondents per survey

Appendix A: Choice Design Creation

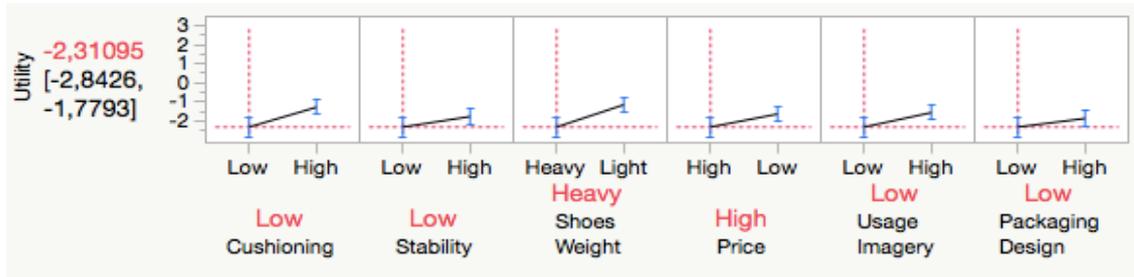
Design

Choice Set	Cushioning	Stability	Shoes Weight	Price	Usage Imagery	Packaging Design
1	Low	Low	Heavy	Low	Low	Low
1	Low	High	Heavy	High	High	High
2	High	High	Light	High	Low	Low
2	Low	Low	Light	Low	High	Low
3	High	Low	Heavy	Low	Low	High
3	Low	High	Light	High	High	Low
4	Low	Low	Heavy	Low	High	High
4	High	Low	Light	Low	Low	Low
5	High	High	Heavy	Low	Low	Low
5	Low	Low	Light	High	High	High
6	Low	Low	Heavy	High	High	Low
6	Low	Low	Light	High	Low	High
7	High	Low	Heavy	Low	Low	Low
7	High	Low	Heavy	High	Low	Low
8	Low	High	Light	Low	Low	Low
8	High	Low	Heavy	High	High	High
9	Low	Low	Light	Low	High	High
9	Low	High	Heavy	Low	High	High
10	Low	High	Light	Low	Low	High
10	High	High	Light	Low	High	Low

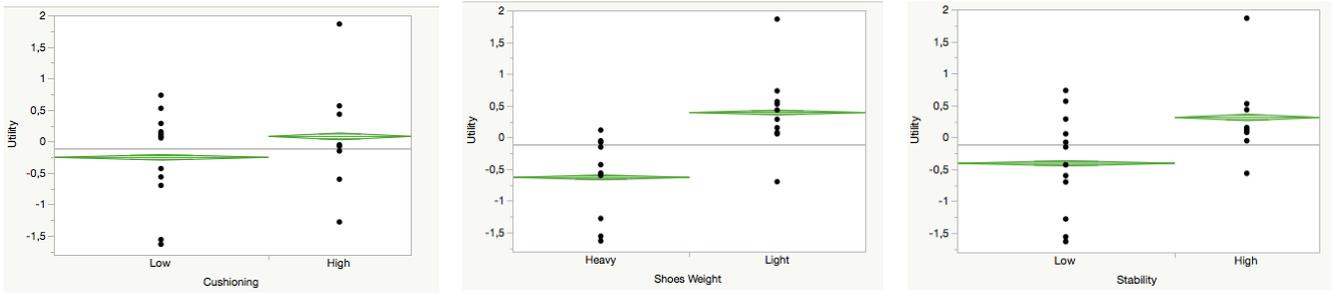
Appendix B: Sample of Choice Design Result



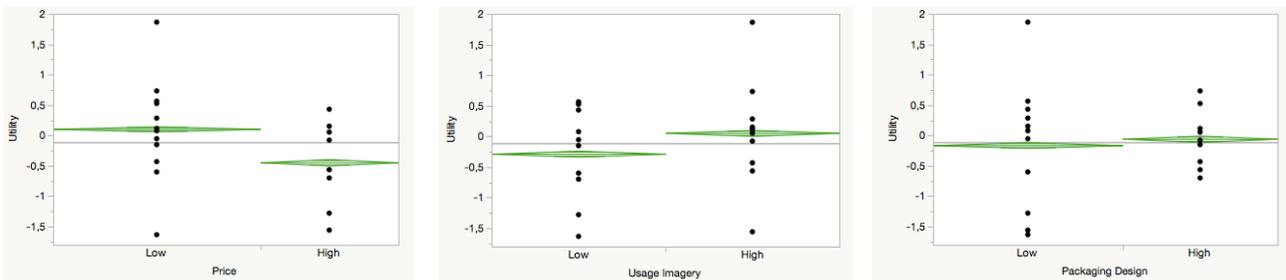
Appendix C: Maximum Utility Profiler



Appendix D: Minimum Utility Profiler



Appendix E: Oneway Analysis of Utility by Performance Attribute



Appendix F: Oneway Analysis of Utility by Non-performance Attribute