



AN ABSTRACT OF THE THESIS OF

Jennifer J. Lee for the degree of Master of Arts in Design and Human Environment presented on May 29, 2013

Title: Deliver Knowledge or Touch the Mind? The Effect of Informational and Emotional Advertisement Strategy on Sportswear Brand Attitude and Recall

Abstract approved:

---

Leslie D. Burns

The purpose of the present study was to investigate the effect of advertisement strategy (informational, positive emotional, negative emotional) and brand awareness (high, low awareness) on brand name recall and change in brand attitude. The study extends previous research by focusing on the sportswear market and including personal involvement towards sportswear as moderating variable.

Two online surveys were distributed to implement a 2X3 between subject experiment, and a total of 394 college students aged 18 and older participated in this study. Participants were divided into two groups. One group viewed ads with high awareness brands' logos and the other was exposed to low awareness brands' ads.

The results indicated that compared to low awareness brands, high awareness brands had higher brand name recall in general. However after viewing informational and positive emotional ads, brand name recall was not different between high awareness brands and low awareness brands. Compared to informational ad strategy, emotional ad strategies led to greater change in brand attitude. Also, after viewing informational and positive emotional ads, change in brand attitude was greater when consumers were less aware of the brand. However, after viewing negative emotional ads, change in brand attitude was greater when consumers were more highly aware of the brand. The results showed no effect of ad strategy on brand name recall, and involvement was not found to have a moderating effect on brand name recall or change in brand attitude.

The findings of the present study emphasize on the importance of raising brand awareness and touching consumers' mind. First, the findings imply that brands should receive high initial brand awareness in order to achieve high brand name recall of the printed advertisement. The results also suggest to marketers to use emotional advertisement strategy when they aim to change consumers' attitudes towards their brands. Third, for low awareness brands, it is suggested for the marketers to implement positive emotional ad executions to achieve higher brand name recall. Since advertising effectiveness varied depending on the initial brand awareness and different strategies led to different marketing outcomes, the present study implies the importance for the marketers to understand their expected marketing output, consumers' needs, and brand perceptions to carefully select the most effective ad strategy for their brand.

©Copyright by Jennifer J. Lee  
May 29, 2013  
All Rights Reserved

Deliver Knowledge or Touch the Mind? The Effect of Informational and  
Emotional Advertisement Strategy on Sportswear Brand Attitude and Recall

by

Jennifer J. Lee

A THESIS

submitted to

Oregon State University

in partial fulfillment of

the requirements for the

degree of

Master of Arts

Presented May 29, 2013

Commencement June 2013

Master of Arts thesis of Jennifer J. Lee presented on May 29, 2013.

APPROVED:

---

Major Professor, representing Design and Human Environment

---

Associate Dean for the School of Design and Human Environment

---

Dean of the Graduate School

I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

---

Jennifer J. Lee, Author

## ACKNOWLEDGEMENTS

I am grateful to have so many people around who have given invaluable support and inspiration in completion of my thesis. I thank God for sending them to my life.

First of all, I would like to express the deepest appreciation to my major professor, Dr. Leslie D. Burns for giving me various opportunities to experience *the new world*. Her encouraging and comforting words helped me gain confidence throughout my graduate study. Many thanks go to my co-major professor, Dr. Minjeong Kim, for always being there to listen and giving precious advices to broaden my perspective. I am also thankful to Dr. Colleen Bee and Dr. Scott Leavengood for the precious comments and feedbacks. I have to give thanks to the professors and instructors who helped me gather data for this research. Professor Mark Elton, Keith Nishida, Jennifer Mower, and Ali Howell were very supportive as it were for their own work.

Heartfelt thanks go to all of my friends in the U.S. and Korea who were always on my side. They kept me fully motivated by telling how much they love and believe in me. This work is dedicated to my parents. Nothing would have been possible without their unconditional love and unsparing support. Thank you and I love you.

## TABLE OF CONTENTS

	<u>Page</u>
1. Chapter 1 Introduction.....	1
1.1. Research Objectives.....	4
1.2. Definition of Terms.....	4
1.3. Hypotheses.....	6
2. Chapter 2 Literature Review.....	7
2.1. Sportswear Market.....	7
2.2. Advertisement Strategies: Informational, Positive Emotional, Negative Emotional Ads.....	8
2.3. Personal Involvement.....	10
2.4. Brand Awareness and Familiarity.....	12
2.5. Brand Recall.....	12
2.6. Brand Attitude.....	16
3. Chapter 3 Methodology.....	17
3.1. Overview.....	17
3.2. Research Design.....	17
3.3. Scales and Measurements.....	18
3.3.1. Brand Awareness.....	18
3.3.2. Involvement in Sportswear Product Category.....	19
3.3.3. Emotion towards Ad.....	20
3.3.4. Dependent Variables.....	21
3.3.4.1. Brand Attitude.....	21
3.3.4.2. Brand Recall.....	22



## TABLE OF CONTENTS (Continued)

	<u>Page</u>
3.4. Subjects and Data Collection.....	22
3.5. Selection of Advertisement Stimuli.....	23
3.6. Experimental Procedure.....	24
3.6.1. Pretest.....	24
3.6.2. Actual Test.....	25
3.7. Limitations of Methodology.....	27
4. Chapter 4 Results.....	29
4.1. Pretest.....	29
4.1.1. Verification of Ad Strategy and Ad Selection for Actual Test .....	29
4.1.2. Verification of Brand Awareness.....	34
4.2. Actual Test.....	35
4.2.1. Demographics.....	35
4.2.2. Validity and Reliability Test.....	37
4.2.2.1. Survey #1 .....	37
4.2.2.2. Survey #2 .....	40
4.2.3. Hypotheses Test.....	42
5. Chapter 5 Discussion.....	53
5.1. Discussion and Conclusions.....	53
5.2. Implications.....	57
5.3. Limitations.....	59
5.4. Recommendations for Future Research.....	60

## TABLE OF CONTENTS (Continued)

	<u>Page</u>
Bibliography.....	62
Appendices.....	67
Appendix 1. IRB Approval.....	67
Appendix 2. Ranking of the Best Sportswear and Athletic Footwear Brand Names.....	68
Appendix 3. The Forbes Fab 40: The World's Most Valuable Sports Brands - Business.....	68
Appendix 4. Survey Questionnaire for Pretest.....	69
Appendix 5. Survey Questionnaire for Actual Test (Survey #1).....	82
Appendix 6. Survey Questionnaire for Actual Test (Survey #2).....	94

## LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
Figure 3.2. Proposed Model.....	18
Figure 3.6. Experimental Procedure.....	27
Figure 4.1.1.1. Informational ad #1.....	30
Figure 4.1.1.2. Informational ad #2.....	30
Figure 4.1.1.3. Positive emotional ad #1.....	31
Figure 4.1.1.4. Positive emotional ad #2.....	31
Figure 4.1.1.5. Negative emotional ad #1.....	32
Figure 4.1.1.6. Negative emotional ad #2.....	32
Figure 4 2.3. Result from Hypothesis Testing.....	52

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
Table 3.3.2. Items from Zaichkowsky (1994)'s Revised Personal Involvement Inventory.....	19
Table 3.3.3. Items from Mano's(2010) Measure of Emotional Experiences .....	20
Table 3.3.4.1. Items from Yoo & MacInnis (2005)'s Brand Attitude Scale . .....	22
Table 4.1.1.1. Survey question for ad strategy verification and ad selection .....	29
Table 4.1.1.2. Mean scores for ad strategy verification and ad selection.....	33
Table 4.1.2.1. Mean awareness scores for brand awareness verification.....	34
Table 4.1.2.2. Mean awareness scores for brand awareness verification (cont'd) .....	34
Table 4.2.1.1. Demographic characteristics of Survey#1 participants.....	36
Table 4.2.1.2. Demographic characteristics of Survey#2 participants.....	37
Table 4.2.2.1.1. Results from validity and reliability test for emotions after viewing high aware, informational ad in survey#1.....	39
Table 4.2.2.1.2. Results from validity and reliability test for emotions after viewing high aware, positive emotional ad in survey#1.....	39
Table 4.2.2.1.3. Results from validity and reliability test for emotions after viewing high aware, negative emotional ad in survey#1.....	40
Table 4.2.2.2.1. Results from validity and reliability test for emotions after viewing low aware, informational ad in survey #2.....	41
Table 4.2.2.2.2. Results from validity and reliability test for emotions after viewing low aware, positive emotional ad in survey #2.....	41

## LIST OF TABLES (Continued)

<u>Table</u>	<u>Page</u>
Table 4.2.2.2.3. Results from validity and reliability test for emotions after viewing low aware, negative emotional ad in survey #2.....	42
Table 4.2.3.1. Correlation Matrix for variables.....	42
Table 4.2.3.2. Result from One way ANOVA, rejecting H1.....	43
Table 4.2.3.3. Result from linear regression with interacting variable, rejecting H2.....	44
Table 4.2.3.4. Result from Chi-square test for brand name recall and brand awareness, supporting H3. ....	44
Table 4.2.3.5. Result from Chi-square test for brand recall and awareness for informational strategy.....	45
Table 4.2.3.6. Result from Chi-square test for brand recall and awareness for positive emotional strategy.....	45
Table 4.2.3.7. Result from Chi-square test for brand recall and awareness for negative emotional strategy.....	46
Table 4.2.3.8. Result from Independent sample t-test for H5.....	48
Table 4.2.3.9. Result from One way ANOVA, supporting H6.....	49
Table 4.2.3.10. Result from regression analysis for re-testing of H6 with new dummy variables. ....	50
Table 4 2.3.11. Result from linear regression with interacting variable, rejecting H7.....	51
Table 5.1. Interaction effect between ad strategy and brand awareness on brand name recall.....	55

# **Deliver Knowledge or Touch the Mind? The Effect of Informational and Emotional Advertisement Strategy on Sportswear Brand Attitude and Recall**

## **CHAPTER 1**

### **INTRODUCTION**

Sportswear has grown from an athlete-only niche market to a part of mainstream fashion (Dawes, 2009). When sportswear products are consumed as “fashion”, emotional attributes, such as aesthetic design or emotional brand attachment, are emphasized in addition to functional superiority. In fact, some sportswear brands are said to have become highly iconic to global fashion consumers; Nike is a well-known example. Marc Gobe, a prominent marketing author, says that ‘Nike is a good example of an emotional brand. It made sportswear accessible to non sportspeople with a brand story that inspired not just success but energy and determination.’ (Bouwman, 2008). According to Kevin Roberts, the CEO of advertising agency Saatchi & Saatchi, the term ‘Lovemark’ can be applied to Nike since they receive both love and respect from their loyal, further fanatic customers (Roberts, 2004).

Based on the understanding of utilitarian and hedonic attributes of sportswear, *informational ads*, which aim to deliver utilitarian and functional superiority, and *emotional ads*, which aim to touch consumers’ minds for hedonic purposes, are set as the main focus for the present study. The purpose of the present study was to determine the effectiveness of advertising strategies when marketing sportswear brands. Studies indicate that advertising agencies have long

recognized that ad execution format (emotional advertisements vs. informational advertisements) is a useful tool for strategic advertising management (Chandy, Tellis, MacInnis, & Thaivanich, 2001; MacInnis, Rao, & Weiss, 2002). As sportswear brands tend to use integrated advertisement strategies to deliver the functional superiority of their products and build emotional brand attachment among their consumers, both emotional and informational advertisement strategies are widely executed. The advertisements are executed to make people aware of the product and its characteristics (informational role) and make people desire it before they have bought it (persuasive role) (Ehrenberg, 2000).

Based on the stimuli of emotional and informational printed advertisements, the present research aimed to examine two dependent variables related to advertising strategy effectiveness: change in brand attitude and the brand recall. According to the extant studies, these two measures are main antecedents to consumer behavior such as purchase intention and brand loyalty.

Brand attitude, defined as a person's judgment of the goodness or badness of the brand (Park, MacInnis, Priester, Eisingerich, & Iacobucci, 2010), has been identified by marketing scholars as a key antecedent to purchase intention, brand equity, brand love, brand loyalty, word of mouth, and resistance to negative information as outcomes (Part et al, 2010; Batra, R., Ahuvia, A. & Bagozzi, R, 2012). In addition, prerequisite to the establishment of brand preference and loyalty is an awareness of brand name (Meng Leong, Hoon Ang & Leng Tham, 1996). Also, an important determinant of brand strength is the likelihood that a consumer will recall a brand name when questioned about brands belonging to a certain product category (Haugtvedt, Leavitt & Schneier, 1993).

In addition to the advertisement strategy, internal traits of individual consumers may also be critical determinants of advertisement effectiveness. Due to the

effect of selective perception, the same stimuli are likely to result in different outcomes depending on the person's perception level. That is, certain types of stimuli may be more effective and powerful to certain people than the others. In the present study, the personal trait of consumer involvement (high/low) is measured as a moderator of the interaction effect of brand awareness level and advertisement strategy on brand recall and change in brand attitude.

Informational and emotional advertisement strategies and their effect on various brand measures have been chosen as a popular research topic for extant and ongoing research. To my knowledge, however, a gap was identified in the previous literature and little is known about the interaction effect of brand awareness level and advertisement strategy particularly in sportswear market.

Although very few studies have been conducted regarding this research topic, understanding the effect of informational and emotional advertisement strategies in the context of sportswear is significant for two reasons. First, sportswear products have both hedonic and utilitarian features. Since sportswear consumers generally expect both functional and aesthetic superiority when using the product, sportswear product category is suitable when measuring the effect of informational advertisements that focus on delivering utilitarian superiority and emotional advertisements that value more on feeling and aesthetics. Second, the sportswear market reflects a product category with high market growth and potential. Sales of the sportswear industry represent a large and growing market worldwide, with the use of sportswear becoming appropriate not only for sports activities but also for daily life (Ko, Taylor, Sung, Lee, Wagner, Navarro & Wang, 2012). According to Just-Style.com (2008) (as cited in Ko et al., 2012), the sales of active sportswear and athletic footwear in the global market in 2005 was about US \$138 billion, which is analogous to every single man, woman, and child in the world spending US\$21.48 for sportswear items that year (Ko et al., 2012).



### **1.1. Research Objectives**

The main objectives of the study were:

- 1) To determine the main and interaction effects of brand awareness level and advertisement strategy on brand recall and brand attitude change.
- 2) To provide practical marketing implications for sportswear brands by suggesting a marketing model related to brand advertising strategy.

### **1.2. Definition of Terms**

#### ***Sportswear***

Sportswear is defined primarily as apparel and footwear made for sports participation, though it now also includes casual clothes worn by people for daily activities. (Ko et al., 2012) According to the Sporting Goods Manufacturers Association (SGMA) (2008) (as cited in Chi & Kilduff, 2011), the sportswear market is segmented into three different product categories: active sports clothing (apparel designed and specifically purchased for use in active sports), sports clothing (fitness-oriented apparel bought for general lifestyle usage), and licensed sports clothing (lifestyle apparel bearing team or league logos). In this study, the term sportswear is limited to active sports clothing and sports clothing, including both casual sportswear and athletic shoe brands. The study includes both fashion-oriented and function-oriented sportswear brands and the followings are the examples of brands considered in this study: Nike®, Adidas®, Reebok®, Columbia Sportswear Company®, Asics®, and REI®.

***Emotion***

Emotions are strong, relatively uncontrolled personal feelings that affect one's behavior (Hawkins, Mothersbaugh & Best, 2007).

***Informational Advertisements***

Informational ads aim to evoke potential customers' memory (Ambler & Burne, 1997).

***Emotional Advertisements***

Advertisements that can evoke a wide range of emotional responses, from disgust to happiness (Solomon, 2011).

***Brand Awareness***

A dimension of brand knowledge, related to the strength of the brand node or trace in memory, as reflected by consumers' ability to identify the brand under different conditions (Rossiter & Percy, 1997). The ability of a potential buyer to recognize or recall that a brand is a member of a certain product category (Aaker, 1991).

***Brand Attitude Valence***

The degree of positivity or negativity with which an attitude object (in the current context, a brand) is evaluated. (Park et al., 2010)

***Brand Attitude Strength***

The positivity or negativity of an attitude weighted by the confidence or certainty with which it is held. (Park et al., 2010)

### **1.3. Hypotheses**

H1: Recall of brand name will be higher after viewing informational ads than emotional ads.

H2: Consumer's involvement in sportswear product category will moderate the relationship between advertisement strategy and brand name recall.

H3: Brand name recall will be higher when consumers are more highly aware of the brand

H4: Brand name recall will vary as a function of brand awareness and advertisement strategy.

H5: Change in brand attitude will vary as a function of brand awareness and advertisement strategy.

H6: Change in brand attitude will be greater after viewing emotional ads than informational ads.

H7: Consumer's involvement in sportswear product category will moderate the relationship between advertisement strategy and change in brand attitude. For high-involved consumers, informational ad strategy will lead to greater change in brand attitude change than emotional ad strategy.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1. Sportswear Market

The term sportswear includes apparel that are designed and specifically purchased for use in active sports, fitness-oriented apparel bought for general lifestyle usage, and lifestyle apparel bearing team or league logos (Chi & Kilduff, 2011).

According to Chi and Kilduff (2011), sports clothing and licensed sports clothing segments, named as casual sportswear, target the mass consumer market. In general, the term casual sportswear refers to the wide range of products with various price categories and purposes of usage (Chi & Kilduff, 2011; Ko et al., 2012). Casual sportswear includes everything from basic items, such as inexpensive sports socks, to high-end designer pieces such as golf shirts (Chi & Kilduff, 2011). Moreover, the term extends from apparel products to footwear products made for sports participation, now including casual clothes worn by people for daily activities (Ko et al., 2012).

Sportswear products have both utilitarian and hedonic features as they pursue to have high functionality and aesthetically pleasing design. Based on such unique characteristics of sportswear, both informational and emotional advertisement strategies are widely executed in the sportswear market and the terms hedonism and utilitarianism are adequate when investigating the underlying intention of sportswear product purchase behaviors. According to Voss, Spangenberg, & Grohmann's (2003) definitions, hedonism is referred to as being sensation-driven by the experience of purchasing or consuming a product or service whereas utilitarianism refers to the functions performed by the product or service.

According to Bouwman's (2008) study, Nike is a well-publicized example of a brand that made sportswear accessible to non-sportspeople by building emotional brand attachment. Like Nike, many sportswear brands aim to deliver functional and utilitarian features that are superior to their competitor brands, as well as to create strong emotional brand attachment by developing fashion-oriented and aesthetically pleasing design (Bouwman, 2008). In the study measuring the consumer perceived value (CPV) of casual sportswear by Chi and Kilduff (2011), the results demonstrate that CPV is not a unidimensional construct and consumers assess products not just from utilitarian aspects such as price value and quality value, but also in terms of the emotional value (e.g., the enjoyment and pleasure derived from the product) and the social consequences of what the product communicates to others (Chi & Kilduff, 2011).

Accordingly, sportswear product category, having both features as hedonic fashion product and utilitarian functional clothing, is selected as an appropriate product category for this research which measures the effects of informational and emotional advertisements. The study includes a broad range of sportswear brands regardless of their fashion- or function-orientation.

## **2.2. Advertisement Strategies: Informational, Positive Emotional, Negative Emotional Ads**

Advertising appeal is defined as the approach used to attract the attention of consumers and to influence consumer's feelings toward a product, service, or cause. Advertising appeals can be categorized as: 1) informational/rational appeals, and 2) those that aim to transform personal states and feelings, such as transformational ads. (Belch G.E. & Belch M.A., 2012). Advertising execution style is defined as the way an appeal is turned into an advertising message; the

way the message is presented to the consumer. Various ad execution techniques are executed including straight sell, animation, scientific, humor, dramatization, imagery, and testimonial techniques (Belch G.E. & Belch M.A., 2012).

The role of advertising is twofold. Brands advertise to give information to people about their product and brand, and to persuade and make people want to purchase the product (Ehrenberg, 2000). According to Dens and De Pelsmacker (2010), advertising execution strategies are categorized into informational ('thinking') versus emotional ('feeling') appeals.

Informational or rational appeals focus on consumers' practical, functional, or utilitarian need for using the product or service and emphasize on the features of the product or services and/or benefits or reasons for owning or using a particular brand. The informational/rational appeal message emphasizes on facts, learning, and the logic of persuasion. It tends to be informative in nature and attempts to convince the consumer to use the brand because it is the best available, or because it does a better job of meeting their needs. Rational motives can be used as the basis for following advertising appeals: comfort and convenience, economy, health, touch, taste, smell, and quality, dependability, and durability (Belch G.E. & Belch M.A., 2012). Informational ads aim to enter into potential customers' memory, which makes the connection between advertising inputs and behavior (Ambler & Burne, 1997). However, some studies show that emotion-based ads are better remembered than are non-emotional messages (Belch G.E. & Belch M.A., 2012). According to the limited capacity model (Lang, 2000) and the cognitive load theory (Sweller, 1988), people have a limited cognitive capacity and cannot process more than a limited amount of information in a short amount of time. Thus, certain studies support that the greater amount of information an advertisement possesses, the lower the expected recall while others indicate that informational ads raise recall. In this study, accordingly, the controversy in

literature about the effect of emotional and informational advertisement strategies on brand recall is tested in the context of sportswear market.

***H1: Recall of brand name will be higher after viewing informational ads than emotional ads.***

Informational appeals inform consumers of one or more key benefits about the advertised product and/or brand, while emotional appeals are aimed at evoking emotions in consumers (Johar & Sirgy, 1991). Advertisements using humor, sex, and other appeals that are entertaining, arousing, upbeat, or exciting can affect the emotions of consumers and put them in a favorable frame of mind (Belch G.E. & Belch M.A., 2012). Emotional advertisements can evoke a wide range of emotional responses, from disgust to happiness (Solomon, 2011). Previous research identifies three key emotional dimensions in commercials: pleasure, arousal, and intimidation (Holbrook & Batra, 1987). According to the study by Burke and Edell (1989), the emotions driven from the advertisement exposure are classified as positive and negative feelings, and positive feelings are again classified into two different categories (warm and upbeat). Specific types of feelings an ad generates include the following: upbeat feelings (amused, delighted, playful), warm feelings (affectionate, contemplative, hopeful) and negative feelings (critical, defiant, offended) (Burke & Edell, 1989).

### **2.3. Personal Involvement**

Involvement generally refers to a person's perceived relevance of the focal object based on inherent needs, values and interests (Zaichkowsky, 1994). When consumers perceive an advertisement, they go through selective attention,

comprehension, and retention process. And the level of each selective process is likely to depend on the involvement the person has toward the object. According to the Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986; Petty, Cacioppo, Strathman & Priester, 2005), a person's level of involvement during message processing is considered a critical factor in determining the route to persuasion. High product involvement tends to engender central processing, meaning consumers will exert the cognitive effort required to evaluate the issue-relevant arguments presented to them (Petty & Cacioppo, 1981; Brown, Homer & Inman, 1998).

It is also studied that highly involved individuals best recall the brand in informational appeals, and for lower involved individuals, the highest recall scores are noted with positive emotional appeals, both warm and upbeat (Dens & De Pelsmacker, 2010). In their study, two different product categories (laptop representing high-involvement product category and candy bar representing low-involvement category) are provided with printed advertisements with informational and emotional appeals. Being different from the Dens & De Pelsmacker's (2010) study, the present study will measure the effect of product involvement level within the same product category (sportswear). The previous study viewed involvement as product attribute whereas the present study viewed as consumers' individual characteristic. Zaichkowsky (1994)'s Personal Involvement Inventory (PII) scale is adopted to measure each individual's involvement toward the sportswear product category. PII is measured to find out the moderating effect of product involvement on the relationship between brand awareness, advertisement strategy, brand name recall, and brand attitude change.

***H2: Consumer's involvement in sportswear product category will moderate the relationship between advertisement strategy and brand name recall.***



## **2.4. Brand Awareness and Familiarity**

As mentioned earlier, brand awareness is a dimension of brand knowledge, related to the strength of the brand node or trace in memory, as reflected by consumers' ability to identify the brand under different conditions (Rossiter & Percy 1997). In particular, brand name awareness relates to the likelihood that a brand name will come to mind and the ease with which it does so (Keller, 1993). Initial level of brand awareness influences how well a person communicates with a brand and its marketing executions. Prior familiarity with an item enhances its recall. Indeed, this is one of the basic goals of marketers who try to create and maintain awareness of their products (Solomon, 2011). The more experience a consumer has with a product, the better use she makes of product information (Johnson & Russo, 1984).

***H3: Brand name recall will be higher when consumers are more highly aware of the brand***

## **2.5. Brand Recall**

Measures such as advertising awareness prompted by the brand names and detailed recall have been popular topics for most of the advertising tracking studies for the last 20 years (Heath & Nairn 2005). Since brand awareness and familiarity are of the important variables that affect consumer behavior as mentioned earlier, the brand name recall, which is related to brand preference and loyalty (Meng Leong, Hoon Ang & Leng Tham, 1996), is an adequate item to measure the effect of an advertisement. Recall and memory bridge between the advertising input and actual consumer behavior (Ambler & Burne, 1997).

Although brand recall does not measure memory perfectly (Krugman, 2000), it is an important measure to plumb how meaningful the message is and how well the brand name registers (Wells, 2000). In the study by Dens and De Pelsmacker (2010), the interaction between brand familiarity and advertisement strategy (informational, positive emotional, and negative emotional execution) showed that familiar brands were better recalled than unfamiliar brands in negative emotional appeal, but the gap was insignificant for positive emotional appeals. Consumers are too engaged in processing the ad execution, or turned away from the ad before capturing the new brand name. In this study, the interaction effect of brand awareness and advertisement strategy is studied in the context of sportswear brands' ads, and the effect of informational advertisement is additionally examined.

***H4: Brand name recall will vary as a function of brand awareness and advertisement strategy.***

Although familiar brands are generally more easily recalled, unfamiliarity of the brand may lead to 'more effective' results in some situations according to previous research. For example, according to Fedorikhin and Cole's (2004) study, the feelings an ad generates can directly affect product attitude, especially if the brand is unfamiliar to consumers. That is, when consumers have preexisting attitudes toward a brand, moods do not easily change these attitudes. (Fedorikhin & Cole, 2004). For the brands that have lower brand awareness, the advertisement exposure is the only information a consumer may depend on, which leads to the dominating feeling or attitude towards the product or brand.

***H5: Change in brand attitude will vary as a function of brand awareness and advertisement strategy.***

Brand awareness is measured in the pretest using the scale from Lehmann, Keller, and Farley's (2008) brand equity scale to categorize brands into high awareness group and low awareness group. Three items (I am aware of this brand, I am quite familiar with this brand, I have heard of this brand.) are questioned to measure the brand awareness level. Extending the extant studies on the effect of brand awareness and brand attitude, ad strategy is added to examine the interaction effect of brand awareness and ad strategy on change in brand attitude.

## **2.6. Brand Attitude**

Marketers have long invoked the constructs of attitude valence and strength as key antecedents to consumer behavior. Park et al. (2010) defines attitude valence as "the degree of positivity or negativity with which an attitude object (in the current context, a brand) is evaluated". They conceptualize brand attitude strength as the positivity or negativity (valence) of an attitude weighted by the confidence or certainty with which it is held (Park et al., 2010).

A viewer's feelings about the context in which an ad appears can influence his attitudes not only toward the advertisement itself but also toward the brand (Solomon, 2011). For example, according to Yoo and MacInnis (2005), ads with emotional execution heighten positive feelings and reduce negative feelings, then enhance thoughts about credibility of the ad, in turn affecting ad attitudes and brand attitudes. On the other hand, ads with an informational ad format enhance evaluative thoughts about the credibility of the ad, finally enhancing positive feelings and reduced negative feelings. These variables in turn affected brand attitudes, both directly and through the mediational influence of ad. Adding onto

the existing study stating that brand attitude is affected by both emotional and informational ad executions, the present study aims to study the relationship between ad execution strategy and change in brand attitude in the sportswear market. This study focuses on short-term response of printed advertisement in order to test the direct effect of emotional advertisement on brand attitude.

***H6: Change in brand attitude will be greater after viewing emotional ads than informational ads.***

The concepts of *brand attachment* and *brand attitude* both focus on the affective feelings consumers may have toward a brand. However in the present study, brand attitude measurement is selected to more adequately reflect the short-term change in perception and affection of a brand after the advertisement exposure based on the study by Park et al. (2010). The study verified how brand attachment and brand attitude strength differ conceptually and empirically. Park et al. (2010) indicates that attachment implicates “hot” affect from the brand’s linkage to the self, and strong brand attitudes reflect evaluations and “cold” affect. With attachment, what is strong is the bond that connects the brand with the self, whereas with strong attitudes, what is strong is a person’s judgment of the goodness or badness of the brand. Moreover, attachment is largely time dependent and brand attitude strength need not be time dependent. Brand attitudes are based on thoughtful processing (elaboration) and can be formed in a limited time (Park et al, 2010). Accordingly, in order to measure a person’s change in the judgment of the goodness or badness of the brand over a short period of time, brand attitude measure is selected. Brand attachment scale is suggested for future studies that measure consumers’ long-term, emotional feelings after repetitive advertisement exposures.

Brand attitude may also be different depending on the consumers' involvement toward the products. Products with high-involvement trait incline consumers to seek out rational information to satisfy their needs for tangible, product-related information (Kotler, Ang, Leong & Tan, 1999). The rational appeal "puts a fine point" on the development of the consumer's attitude. The rational appeal can be adopted to elaborate the message argument, and increase positive brand attitude among high-involved consumers (Johar & Sirgy, 1991).

***H7: Consumer's involvement in sportswear product category will moderate the relationship between advertisement strategy and change in brand attitude. For high-involved consumers, informational ad strategy will lead to greater change in brand attitude change than emotional ad strategy.***

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1. Overview**

The primary purpose of the present research was to examine whether advertisements with different execution strategies lead to different levels of brand recall and brand attitude. Accordingly, several printed advertisements were shown to the participants and participants' responses were measured before and after the exposure. To see the effect of brand awareness level, participants were divided into two groups. One group was provided with ads with popular brands' logos, and the other group viewed ads with less popular, international brands' logos.

#### **3.2. Research Design**

A 2x3 between subject research design with two levels of brand awareness (high brand awareness/low brand awareness) and three different advertisement strategies (informational, positive emotional, negative emotional strategies) (see Figure 3.2.) was implemented. The key dependent variables were brand name recall and change in brand attitude (Brand attitude are measured before and after the ad exposure to measure the change.). Besides the main effect, individual's personal involvement towards the sportswear product category was measured to check the moderating effect. The moderator is included in the model to examine the effect of personal characteristics.

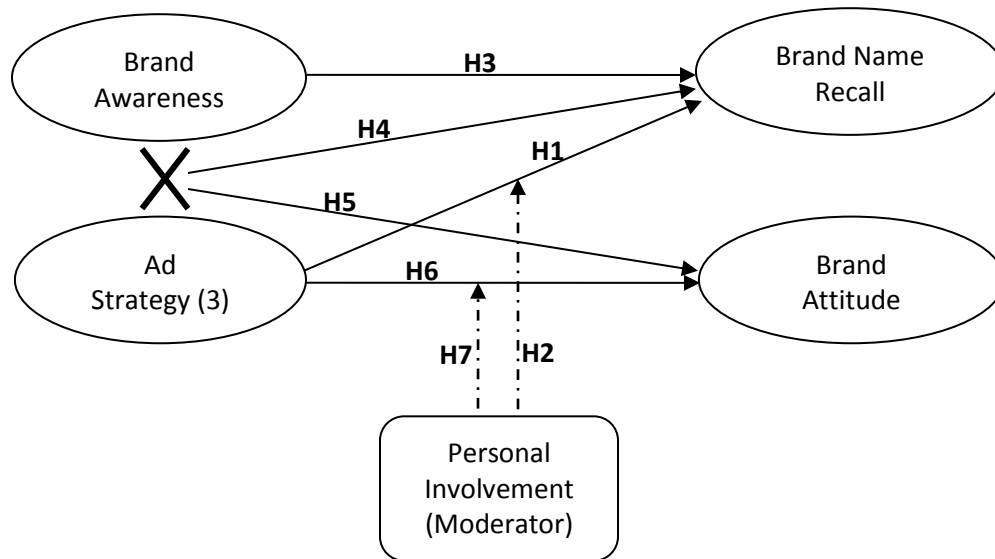


Figure 3.2. Proposed Model (2x3 between subject design)

### 3.3. Scales and Measurements

#### 3.3.1. Brand Awareness

In the present study, initial brand awareness was measured in the pretest to categorize sportswear brands into two groups: high and low awareness brands. In the research by Lehmann, Keller, and Farley (2008), consumer-based brand performance measures are grouped into five principal categories: awareness, associations, attitudes, attachment, and activity, and an integrative measurement scale is developed by adopting existing scales by Aaker (1991), Fournier (1998), Keller (2002, 2008), and Keller and Lehmann (2003) (Lehmann et al, 2008). To measure the brand awareness, three brand awareness items that are adopted and

validated by Lehmann et al. (2008) from Aaker(1991)'s original scale of brand equity were used in this study (1. I am aware of this brand, 2. I am quite familiar with this brand, 3. I have heard of this brand). The items were scored on 5-point scales ranging from strongly agree to strongly disagree.

### 3.3.2. Involvement in Sportswear Product Category

To measure the participants' personal involvement towards the sportswear product category, Zaichkowsky's (1994) Revised Personal Involvement Inventory (PII) was adopted. The revised version of PII scale was adopted in this study since it has reliably reduced number of items (10 items) from the original PII scale (20 items) (Zaichkowsky, 1985). Also, the Revised PII is more suitable for the context of advertising, and further finding can be made based on the two subscales of the revised PII: cognitive and affective grouping. The examples of the items were important/unimportant, boring/interesting, relevant/irrelevant, etc. PII scale is a context-free measure applicable to involvements in advertisements, products, or purchase decisions.

Items		
1.	Important	unimportant*
2.	Boring	interesting
3.	Relevant	irrelevant*
4.	Exciting	unexciting*
5.	Means nothing	means a lot to me
6.	Appealing	unappealing*
7.	Fascinating	mundane*
8.	Worthless	valuable
9.	Involving	uninvolving*
10.	Not needed	needed

*Table 3.3.2. Items from Zaichkowsky (1994)'s Revised Personal Involvement Inventory*



### 3.3.3. Emotion towards Ad

According to the literature, there have been various ways of categorizing a person's emotion and affection: pleasure/arousal/domination, positive/negative, and upbeat/negative/warm (Edell & Burke, 1987; Holbrook & Batra, 1987). According to Edell and Burke's (1987) scale of Feelings Towards Ads, feelings toward the ad are composed of positive affective feelings and negative affective feelings. Positive affective feelings are composed of "warm" and "upbeat" feelings toward the ad, and these feelings in turn affect both attitude toward the ad and attitude toward the brand (Edell & Burke, 1987). Similar to Edell and Burke's (1987) scale, the measurement scale developed by Mano (2010) also categorizes emotions by positive affect (warm, upbeat) and negative affect. Mano (2010)'s measure, which has eight emotion items (aroused, elated, pleased, calm, quiet, bored, unhappy, distress) is utilized in this study to best reflect the context of assessing a person's feeling towards advertisements that are expected to arouse warm, upbeat, and negative feelings. Also, Mano's (2010) scale with relatively few number of items fits better to this study compared to that of Edell and Burke (1987), since each participant is asked to rate their emotion three times (see Table 3.3.3.).

Items
1. Aroused
2. Elated
3. Pleased
4. Calm
5. Quiet
6. Bored
7. Unhappy
8. Distressed
(Very unlikely - unlikely - undecided - likely - Very likely)

*Table 3.3.3. Items from Mano's (2010) Measure of Emotional Experiences*

### **3.3.4. Dependent Variables - Brand Attitude and Brand Name Recall**

#### ***Rationale for the selection of dependent variables***

The present study measured changes in brand attitude and brand name recall as the final dependant variable adopting the study by Loewenstein, Raghunathan, and Heath (2011). In their study, the effects of television advertisements were analyzed by using two measures: persuasion measure and attention measures. Attitude toward the brand, engagement, and purchase intention were included in the persuasion measures, whereas recognition and recall were included in their attention measures. Accordingly, in the present study, brand attitude was selected to represent the persuasion measures, and brand name recall was adopted from the attention measures.

In addition, according to Belch & Belch's (2012) study, in order for a brand to achieve conative (behavioral) results such as purchase behavior, brands should first 1) build brand awareness and knowledge, and then 2) build favorable attitudes and image which then leads to 3) purchase intentions and actual purchase behavior (Belch & Belch, 2012). Therefore, brand recall was selected to represent the brand awareness and knowledge, and change in brand attitude is selected to measure favorable attitude and image.

According to Loewenstein et al. (2011) and Belch & Belch (2012), brand recall and change in brand attitude were selected as adequate dependent variables to measure the effect of printed advertisements.

#### **3.3.4.1. Brand Attitude**

Adopting the measurement scales from Yoo & MacInnis's (2005) study, brand attitude was measured by four items (like-dislike, positive-negative, good-bad, and favorable-unfavorable). Items were scored on five-point semantic differential scale (see Table 3.3.4.1.).

Brand attitude was measured twice, in the beginning of the study and again at the end. In the beginning of the study, brand name and logo was shown to the participants to record their attitude toward the brand. After the ads were shown, the brand attitude was asked once again to measure the change in brand attitude.

Items		
1.	Like	Dislike*
2.	Positive	Negative
3.	Good	Bad*
4.	Favorable	Unfavorable

*Table 3.3.4.1. Items from Yoo & MacInnis (2005) 's Brand Attitude Scale*

### **3.3.4.2 Brand Recall**

To measure brand recall, image of the ad shown earlier in the survey were displayed again with the logo and brand name completely concealed. And then participants were asked 'What was the brand name of the advertisement above?', and they chose one answer among six brand logos. The sequence of Ad stimuli was randomized for each participant to minimize the order effect.

## **3.4. Subjects and Data Collection**

Online survey questionnaires were distributed via Qualtrics to the students who were enrolled in the classes (BA390, BA495, DHE370, DHE270, and DHE475) in Oregon State University, Oregon, U.S.A. during Winter and Spring Terms 2013. The study aimed to include a diverse pool of participants by distributing the survey questionnaires to the male and female students from different majors and school years (junior and senior levels of classes in Design and Human Environment, Business, and other majors). Extra credit was given for the participating classes to encourage participation.

### **3.5. Selection of Advertisement Stimuli**

Printed ads were selected as the stimuli for this experiment to measure the effect of the advertisement strategies. To select the brands that U.S. consumers are highly aware of, ‘Three brand rankings of sportswear including Best brand names rank’ by classora.com, ‘The most valuable brands rank’ by Forbes.com, and ‘Digital IQ Index’ by L2 Think Tank, ‘Ranking of the Best Sportswear and Athletic Footwear Brand Names’ by Classora.com, and ‘Top Outdoor Clothing Brands’ by The Full Wiki were referred to (Classora, n.d.; L2 Digital IQ Index, 2012; The Forbes Fab 40; The full wiki, n.d.) (see Appendix 2 and 3.). Among total of 124 sportswear brands, 5 brands (Columbia Sportswear Company®, Reebok®, The North Face®, REI®, and Nike®) were selected for the pretest to validate the actual awareness level. To select the brands with relatively low awareness, four Korean local sportswear brands (EXR®, K2®, Scelido®, Hazzys Sport®), were selected and the actual awareness of each brand was also validated through pretest.

After selecting the sportswear brands for pretest, general internet search engines such as Google Image (image.google.com), Getty Image, and Naver Image

(naver.com), and specialty magazines including ESPN® and Sports Illustrated® were referred in order to search printed ads and internet catalog ads for the high awareness brands. Ad images of high awareness brands are selected since there was lack of quality for low awareness brands' ads. The selected ads of high awareness brands were used for both Survey #1 (High awareness brands) and Survey #2 (Low awareness brands) to minimize the confounding effect between ad quality and brand awareness. The logos in the high awareness brands' ads were substituted with the low awareness brands' logos. The type of information included in the ads and emotions related to each ad are jotted down by the researcher to classify the advertisements into three different groups: informational ads, positive emotional ads, and negative emotional ads. Execution strategies for each ad were also validated through pretest.

### **3.6 Experimental Procedure**

#### **3.6.1. Pretest**

A pretest was conducted from March 11th, 2013 to March 20th, 2013 via Qualtrics. Online survey questionnaire (see Appendix 4.) was distributed to the students enrolled in DHE475 and BA495 courses in Oregon State University, OR, USA. Extra credit was given to the participants to encourage participation.

#### ***Verification of Ad Strategy and Ad Selection for Actual Test***

Fifty printed advertisements of sportswear brands were gathered from Google Image, Naver Image, and GettyImage, and specialty magazines (ESPN and Sports Illustrated), and total six images were chosen based on clarity of message,

purpose of message, and brand awareness. To verify respondents' perception on ad strategy (1. informational, 2. positive emotional and 3. negative emotional strategy) of each ad, three questions (1. This advertisement contains information of the product, 2. This advertisement arouses positive emotion, and 3. This advertisement arouses negative emotion) were rated from 1 to 5 point (Strongly Disagree - Strongly Agree) scales.

### ***Verification of Brand Awareness***

In the pretest, logos of national brands such as Nike®, Reebok®, REI®, Columbia Sportswear Company®, and The North Face®, and relatively less-known local Korean brands such as Scelido®, K2®, Hazzys Sport®, and EXR® were shown to the participants to verify the brand awareness level of each brand. The initial awareness level of the selected sportswear brands were measured in the pretest by adopting Lehmann et al. (2008)'s brand awareness measure (I am aware of this brand, I am quite familiar with this brand, I have heard of this brand). All three items were measured in five-point semantic differential scale ranging from 'strongly agree' to 'strongly disagree'. According to the result from the pretest, the brands were categorized into two groups: high and low awareness brands.

### **3.6.2. Actual Test**

Two online survey sets were developed for the actual test and both of them were distributed to two different participant groups from April 6th, 2013 to April 16th, 2013 via Qualtrics. Survey #1 contained three printed ads by high awareness brands, each representing informational, positive emotional, and negative

emotional strategy (Columbia Sportswear Company®, REI®, and Nike®) (see Appendix 5.). Survey #2 contained the same questions and ads but the original logos in the ad were substituted with low awareness brand logos (Scelido®, EXR®, and Hazzys Sport®) (see Appendix 6.). Survey #1 was distributed to students enrolled in BA390, DHE370, and DHE 270 and survey #2 was responded by students in BA390 and BA 495 in Oregon State University, OR, USA. Extra credit was given to the students to encourage participation.

Both Survey #1 (High awareness brands) and Survey #2 (Low awareness brands) followed the procedure listed below:

***(1) Before Ad Exposure***

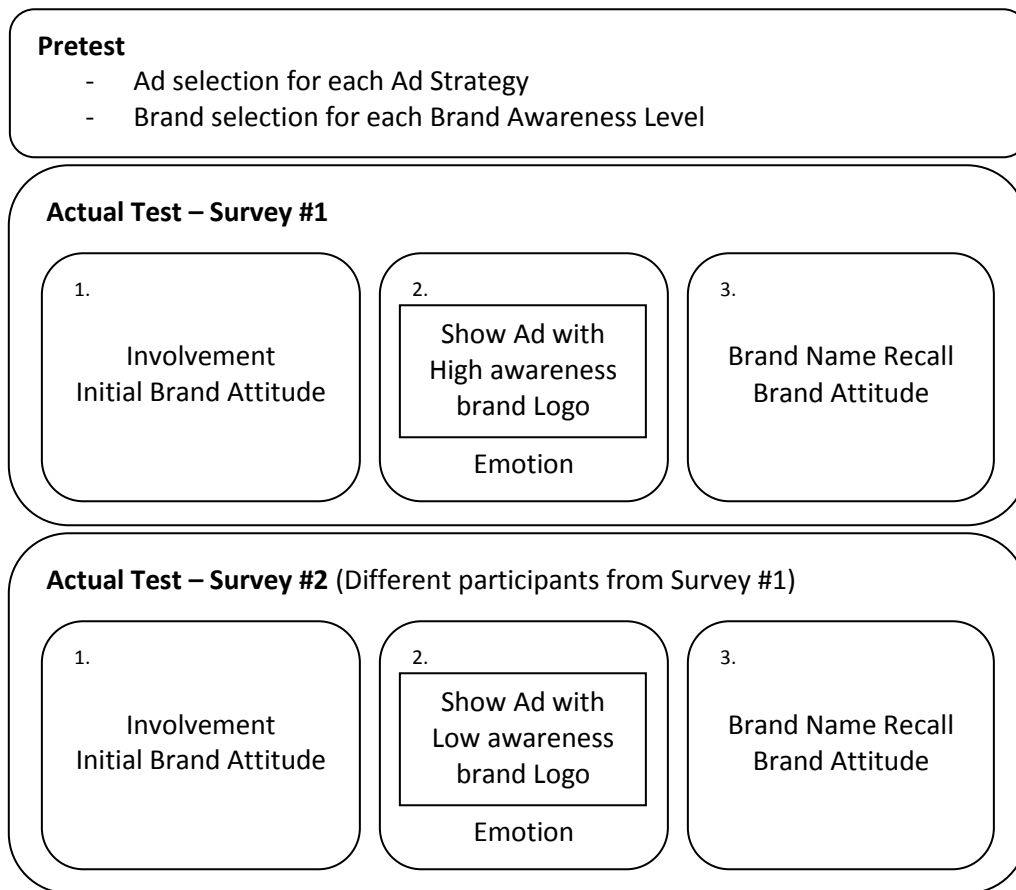
The actual test started by measuring the survey participant's personal involvement toward sportswear category. And then, brand logos were shown and initial brand attitude was measured.

***(2) Ad exposure and Measuring Ad Emotion***

Subsequently, images of printed advertisements were shown and participants' emotions were measured for each ad.

***(3) After Ad Exposure***

After the ad exposure, brand recall and change in brand attitude were measured. Brand recall was measured by providing the ad image that was previously shown in the questionnaire, but with brand name and logo completely erased. Also, brand attitude was measured once again to examine the change in brand attitude before and after viewing the ad image.



*Figure 3.6. Experimental Procedure*

### 3.7. Limitations of Methodology

For each participant, a total of three different advertisements were shown and brand name recall was measured a few minutes after the ad exposure. Due to the



limited number of ad images and short time gap between the time of ad exposure and recall, brand name recall may not appropriately reflect real market situation where consumers are exposed to a great number of ads simultaneously.

Additionally, since ad image was provided along with the brand name and logo, confounding effect between ad strategy and brand may have taken place. That is, previously built brand image may have affected how individual perceived each advertisement stimulus.

## CHAPTER 4

### RESULTS

#### 4.1. Pretest

For the pretest, total 85 students participated and 77 valid responses were collected. Eight surveys were excluded due to incomplete participation.

##### 4.1.1. Verification of Ad Strategy and Ad Selection for Actual Test

To verify the perceived ad strategy (1.Information, 2.Positive emotion, and 3.Negative emotion) for each ad image, three questions are asked in the pretest: 1.This ad contains information of the product, 2.This ad arouses positive emotion, and 3.This ad arouses negative emotion (see Table 4.1.1.1.)

#	Question	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
<b>Q1</b>	This advertisement contains information of the product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Q2</b>	This advertisement arouses positive emotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Q3</b>	This advertisement arouses negative emotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Table 4.1.1.1. Survey question for ad strategy verification and ad selection*

#### 1) Informational ad

Two advertisements (Columbia Sportswear Company® and Reebok®) rated the highest score for the Question 1. Columbia Sportswear Company® advertisement

was selected as a representative informational ad based on the highest mean score (4.05) for the Question 1 (This advertisement contains information of the product) (see Table 4.1.1.2).



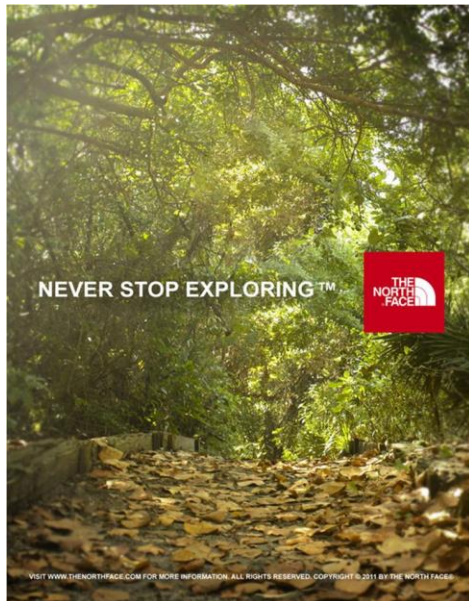
*Figure 4.1.1.1. Informational ad #1 (Columbia Sportswear Company ®)*



*Figure 4.1.1.2. Informational ad #2 (Reebok®)*

## **2) Positive emotional ad**

Two advertisements (The North Face® and REI®) rated the highest score for the Question 2. The results show that the mean score for the Question 2 is higher for The North Face® ad (see Table 4.1.1.2.). However, 34% of the respondents indicated that they have seen The North Face® ad before whereas only 18% have seen REI® ad. Since high ad exposure may cause external effect due to participants' previous perception or bias towards the ad or the brand, I decided to use REI® ad for positive emotional strategy.



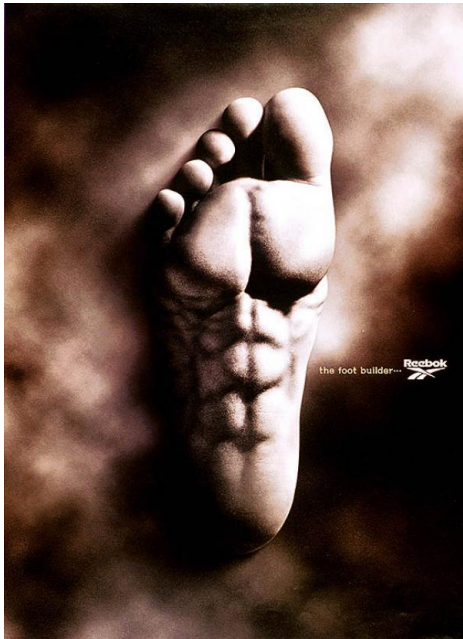
*Figure 4.1.1.3. Positive emotional ad #1(The North Face®)*



*Figure 4.1.1.4. Positive emotional ad #2 (REI®)*

### **3) Negative emotional ad**

Between two negative emotional advertisements (Reebok® and Nike®), results indicate Nike® ad as more adequate negative emotional ad with the highest mean score for the Question 3 (This ad arouses negative emotion) (see Table 4.1.1.2.).



*Figure 4.1.1.5. Negative emotional ad #1 (Reebok®)*



*Figure 4.1.1.6. Negative emotional ad #2 (Nike®)*

	Informational ad		Positive Emotional Ad		Negative Emotional Ad	
	#1	#2	#1	#2	#1	#2
	Columbia	Reebok	The North Face	REI	Reebok	Nike
Q1	<b>4.05</b>	3.94	2.42	2.61	2.44	1.96
Q2	3.83	3.61	4.26	<b>4.10</b>	2.99	2.06
Q3	2.15	2.52	1.81	1.91	2.82	<b>3.79</b>
<ul style="list-style-type: none"> <li>• Q1: This advertisement contains information of the product.</li> <li>• Q2: This advertisement arouses positive emotion.</li> <li>• Q3: This advertisement arouses negative emotion.</li> </ul> <p>(1:Strongly disagree ~ 5: Strongly agree)</p>						

*Table 4.1.1.2. Mean scores for ad strategy verification and ad selection*

In sum, Columbia Sportswear® ad was selected as informational ad, REI® ad was selected as positive emotional ad, and Nike® ad was selected as negative emotional ad based on the pretest.

One limitation can be addressed from the ad selection process. The ad that was selected for negative emotional strategy (Nike®'s ad) was not clearly perceived as an ad that arouses negative emotion. That is, selected informational ad (Columbia Sportswear Company®) rated 4.05 for the question 'This ad contains information of the product', and selected positive emotional ad (REI®) rated 4.10 for the question 'This ad arouses positive emotion', but selected negative emotional ad (Nike®) only rated 3.79 for the question 'This ad arouses negative emotion'. With the mean score (3.79) being close to 3 (Neither agree nor disagree). Although the mean score is on the negative side, such result may be insufficient to support that Nike® ad is perceived as a 'negative emotional ad' by the participants. For future research, an advertisement that more clearly arouses negative emotion among the viewers is suggested to be adopted.

#### 4.1.2. Verification of Brand Awareness

Based on the pretest, Columbia Sportswear Company®, Reebok®, The North Face®, REI®, and Nike® were classified as high awareness brands group with mean scores above 4 for brand awareness scale (see Table 4.1.2.1.). EXR®, K2®, Scelido®, and Hazzys Sport® were classified as low awareness brands group with mean scores below 2 (see Table 4.1.2.2.). Among the low awareness brands group, K2® received the highest level of awareness (mean score of 2.26), thus excluded for the actual test. Brand awareness was verified by providing the brand logos to the participants.

	Columbia Sportswear Company®	Reebok®	The North Face®	REI®	Nike®
Q1. I am aware of this brand	4.68	4.52	4.7	4.34	4.79
Q2. I am quite familiar with this brand	4.14	3.74	4.21	3.71	4.64
Q3. I have heard of this brand	4.64	4.51	4.61	4.37	4.74
Mean (Q1+Q2+Q3)/3	4.49	4.26	4.51	4.14	4.72

• (1:Strongly Disagree ~ 5:Strongly Agree)

*Table 4.1.2.1. Mean awareness scores for brand awareness verification*

	EXR®	K2®	Scelido®	Hazzys Sport®
Q1. I am aware of this brand	1.66	2.34	1.55	1.59
Q2. I am quite familiar with this brand	1.58	2.03	1.53	1.54
Q3. I have heard of this brand	1.64	2.42	1.56	1.6
Mean (1+2+3)/3	1.63	2.26	1.55	1.58

• (1:Strongly Disagree ~ 5:Strongly Agree)

*Table 4.1.2.2. Mean awareness scores for brand awareness verification (cont'd)*

After the pretest, high awareness brands' ads are selected for each strategy: Columbia Sportswear® (informational ad), REI® (positive emotional ad), and Nike® (negative emotional ad). For low awareness brands, logos of Scelido®, EXR®, and Hazzys Sport® are adopted.

## 4.2. Actual Test

For actual tests, total number of participants was 229, and 210 valid responses were collected for survey #1. For survey #2, there were 165 total participants and 151 valid responses. Incomplete survey responses were excluded for analysis. As a between-subject experimental research, each participant viewed three advertisements in randomized order and the response to the first advertisement was analyzed.

### 4.2.1. Demographics

#### *Survey #1- High Awareness Brand Group*

Survey #1 participants were composed of 43.6% male and 56.4% female. Most of them were junior and senior in college (76.9%), and in the age range of 18-23 years old (88.3%). Majority of participants (71.7%) responded that they spend from \$0 to \$49.99 on sportswear apparel and shoes each month. Additional demographic characteristics of the sample in this study are presented in table 4.2.1.1.

Variables	Descriptions	Frequency	Percent
Gender	Male	89	43.6%
	Female	115	56.4%



Age	18-20	79	38.5%
	21-23	102	49.8%
	24-26	14	6.8%
Class standing	Freshman	9	4.4%
	Sophomore	34	16.7%
	Junior	90	44.1%
	Senior	67	32.8%
	Graduate	4	2.0%
Average spending on sportswear	\$0-49.99	147	72.1%
	\$50-99.99	42	20.6%
	\$100-149.99	10	4.9%
	\$150 and more	5	2.5%

*Table 4.2.1.1. Demographic characteristics of Survey#1 participants*

#### ***Survey #2- Low Awareness Brand Group***

Survey #2 participants were 52.6% male and 47.4% female. Majority of respondents were junior and senior in college (72.1%), and in the age range of 21-23 years old (58.4%). 64.1% of the participants responded that they spend from \$0 to \$49.99 on sportswear apparel and shoes each month, and 24.2% spent from \$50 to \$99.99 each month. Additional information about Survey #2 participants is presented in table 4.2.1.2.

Variables	Descriptions	Frequency	Percent
Gender	Male	81	52.6%
	Female	73	47.4%
Age	18-20	26	16.9%
	21-23	90	58.4%
	24-26	24	15.6%

Class standing	Freshman	3	1.9%
	Sophomore	8	5.2%
	Junior	69	44.8%
	Senior	42	27.3%
	Graduate	32	20.8%
Average spending on sportswear	\$0-49.99	98	64.1%
	\$50-99.99	37	24.2%
	\$100-149.99	12	7.8%
	\$150 and more	6	3.9%

*Table 4.2.1.2. Demographic characteristics of Survey#2 participants*

Most demographic characteristics showed similar pattern between the participants for Survey#1 and Survey #2. Differences were found with gender and age where Survey#2 had more male participants and more participants in higher age range. The differences, however, were minor and were not analyzed as factors affecting the results.

#### **4.2.2. Validity and Reliability Test**

After the frequency test, all reverse coded items in PII (Personal Involvement Inventory) scale and Brand attitude scale were re-coded before conducting validity and reliability tests.

##### **4.2.2.1. Survey #1- High Awareness Brand Group**

###### ***PII (Personal Involvement Inventory)***

Explanatory factor analysis was conducted for PII scale. Principal component analysis was used to extract factor components, and Varimax rotation was

selected to simplify the factor loadings. KMO value shows high value of .906, indicating that the selection of variables is very adequate and the correlations between variables are well explained by other variables. Bartlett's Test of Sphericity shows high significance ( $p=.000$ ). All communalities are above .4 and only one factor component is extracted. Internal consistency of PII scale was examined by using Cronbach's alpha test. All ten items measuring Personal involvement showed high reliability (Cronbach's  $\alpha=.910$ ), therefore all items in the original scale were included for further analyses.

### ***Emotion Scale***

According to the factor analysis for emotion scale for high awareness, informational ad (Columbia Sportswear Company®), all eight items showed 0.4 or higher factor loadings. Total three factor components were extracted and all showed 1.0 or higher Eigen value. Therefore eight variables were categorized into three categories: 1) aroused, elated, pleased, 2) calm, quiet, bored, 3) unhappy, distressed. This result is consistent with the original study by Mano (2010) which categorized eight emotions into three categories: 1) upbeat emotions, 2) warm emotions, and 3) negative emotions. The same patterns were shown in the rotated factor component matrix of the other two advertisements (positive emotional and negative emotional ads) used in this study.

Result from the reliability test showed that Cronbach's  $\alpha$  increased when two items (pleased and bored) were deleted. When 'pleased' item was deleted, the Cronbach's alpha increased from .764 to .821, and when 'bored' was deleted, alpha increased from .633 to .792. Accordingly, with pleased and bored items deleted, scale showed significantly high reliability among upbeat emotions ( $\alpha=.821$ ), warm emotions ( $\alpha=.685$ ), and negative emotions ( $\alpha=.792$ ) (see Table

4.2.2.1.1.). The same patterns of results from reliability and validity tests of the other two advertisements (positive emotional and negative emotional ads) are shown in Table 4.2.2.1.2. and 4.2.2.1.3. Therefore, ‘pleased’ and ‘bored’ items were excluded.

Factor Analysis						Reliability	
Factor	Variable	Factor loading	Communality	Eigen Value	Explained variance (%)	Alpha if item deleted	Cronbach's $\alpha$
Upbeat	Aroused	.839	.741	2.434	30.423	.645	.764
	Elated	.865	.781			.541	
	Pleased	.721	.667			.821	
Warm	Calm	.848	.779	1.551	19.384	n/a	.685
	Quiet	.867	.797			n/a	
Negative	Bored	.439	.577	1.922	24.026	.792	.633
	Unhappy	.880	.791			.336	
	Distressed	.877	.775			.461	

*Table 4.2.2.1.1. Results from validity and reliability test for emotions after viewing **high aware, informational ad** in survey #1*

Factor Analysis						Reliability	
Factor	Variable	Factor loading	Communality	Eigen Value	Explained variance (%)	Alpha if item deleted	Cronbach's $\alpha$
Upbeat	Aroused	.873	.777	2.034	25.431	.684	.748
	Elated	.871	.777			.523	
	Pleased	.616	.723			.762	
Warm	Calm	.787	.781	1.644	20.550	n/a	.676
	Quiet	.914	.840			n/a	
Negative	Bored	.761	.666	2.437	30.461	.841	.800
	Unhappy	.882	.798			.616	
	Distressed	.841	.752			.697	

*Table 4.2.2.1.2.: Results from validity and reliability test for emotions after viewing **high aware, positive emotional ad** in survey #1*

Factor Analysis						Reliability	
Factor	Variable	Factor loading	Communality	Eigen Value	Explained variance (%)	Alpha if item deleted	Cronbach's $\alpha$
Upbeat	Aroused	.902	.819	2.187	27.338	.792	.832
	Elated	.867	.834			.684	

	Pleased	.693	.696			.819	
Warm	Calm	.810	.787	1.965	24.559	n/a	.820
	Quiet	.871	.776			n/a	
Negative	Bored	.608	.428	1.911	23.893	.865	.552
	Unhappy	.907	.864			-.060	
	Distressed	.911	.859			.141	

*Table 4.2.2.1.3. Results from validity and reliability test for emotions after viewing **high aware, negative emotional ad** in survey #1*

#### **4.2.2.2. Survey #2- Low Awareness Brand Group**

##### ***PII (Personal Involvement Inventory)***

The same explanatory factor analysis with Survey #1 was conducted for Survey #2. In line with the result from Survey #1, KMO value shows high value of .899, meaning that the selection of variables is highly adequate and correlation between variables are well explained by other variables. Bartlett's Test of Sphericity shows high significance ( $p=.000$ ). Community for all ten items are above .4. Ten items measuring Personal involvement showed high reliability (Cronbach's  $\alpha=.913$ ) and all ten items were included for further analyses.

##### ***Emotion Scale***

The results from the validity test for emotion scale for Survey #2 are mostly consistent with the results from Survey #1. Eight items were categorized into three factors ('upbeat', 'warm', and 'negative' emotion), and 'pleased' and 'bored' items were deleted to increase Cronbach's  $\alpha$  value (see Table 4.2.2.2.1. and Table 4.2.2.2.2.). The negative emotional ad shows different result where Cronbach's  $\alpha$  value decreased when 'pleased' item was deleted (see Table 4.2.2.2.3.). However, since .794 (Cronbach's  $\alpha$  value after the item deleted) is still

a significantly high value, I decided to delete ‘pleased’ item in order to maintain consistency among the scales.

Factor Analysis						Reliability	
Factor	Variable	Factor loading	Communality	Eigen Value	Explained variance (%)	Alpha if item deleted	Cronbach's $\alpha$
Upbeat	Aroused	.833	.695	2.327	29.088	.761	.801
	Elated	.923	.875			.592	
	Pleased	.758	.660			.812	
Warm	Calm	.808	.809	1.846	23.070	.518	.671
	Quiet	.871	.768			.392	
	Bored	.625	.655			.776	
Negative	Unhappy	.948	.900	2.063	25.782	n/a	.906
	Distressed	.935	.875			n/a	

*Table 4.2.2.2.1. Results from validity and reliability test for emotions after viewing low aware, informational ad in survey #2.*

Factor Analysis						Reliability	
Factor	Variable	Factor loading	Communality	Eigen Value	Explained variance (%)	Alpha if item deleted	Cronbach's $\alpha$
Upbeat	Aroused	.902	.826	2.251	28.131	.755	.819
	Elated	.892	.819			.665	
	Pleased	.710	.733			.824	
Warm	Calm	.902	.830	1.752	21.902	n/a	.776
	Quiet	.868	.815			n/a	
Negative	Bored	.792	.716	2.339	29.240	.839	.831
	Unhappy	.879	.813			.707	
	Distressed	.881	.789			.733	

*Table 4.2.2.2.2. Results from validity and reliability test for emotions after viewing low aware, positive emotional ad in survey #2.*

Factor Analysis						Reliability	
Factor	Variable	Factor loading	Communality	Eigen Value	Explained variance (%)	Alpha if item deleted	Cronbach's $\alpha$
Upbeat	Aroused	.873	.767	2.257	28.217	.780	.819
	Elated	.886	.809			.677	
	Pleased	.728	.739			.794	
Warm	Calm	.859	.857	2.107	26.337	.474	.731
	Quiet	.862	.794			.540	
	Bored	.642	.596			.870	

Negative	Unhappy	.930	.878	1.977	24.711	n/a	.904
	Distressed	.946	.899			n/a	

*Table 4.2.2.2.3. Results from validity and reliability test for emotions after viewing **low aware, negative emotional ad** in survey #2.*

### 4.2.3. Hypotheses Test

Before hypotheses testing, a correlation matrix is presented to check the overall relationship between variables. The result shows significant relevance between brand attitude change and ad strategy, and brand attitude change and brand awareness (see Table 4.2.3.1.).

Variables	Mean	Std.Dev	Inter-construct correlations				
			Ad Strategy	Awareness	Recall	Attitude change	Involve-ment
Ad Strategy	n/a	n/a	1				
Awareness	n/a	n/a	-.069	1			
Recall	.9304	.25489	-.054	.099	1		
Attitude change	-.0267	.97702	-.446**	.171**	.003	1	
Involvement	3.9658	.67534	.048	.026	.061	.014	1

\*\*. Correlation is significant at the 0.01 level (2-tailed).

*Table 4.2.3.1. Correlation Matrix for variables*

**H1: Recall of brand name will be higher after viewing informational ads than emotional ads.**

Since the independent variable (ad strategy) was nominal and the dependent variable (recall of brand name) was ordinal, one way ANOVA was run to test the effect of ad strategy on brand name recall. Result showed p-value of .389, which

indicated that brand name recall did not vary depending on ad strategy (see Table 4.2.3.2.). Therefore, H1 was rejected.

#### ANOVA

Recall					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.123	2	.062	.948	.389
Within Groups	23.136	356	.065		
Total	23.259	358			

*Table 4.2.3.2. Result from One way ANOVA, rejecting H1*

**H2: Consumer's involvement in sportswear product category will moderate the relationship between advertisement strategy and brand name recall.**

To test H2, the moderating variable 'involvement' was added in the dummy variable regression model to check the interaction effect between the two independent variables: involvement and ad strategy. New interaction variables (DummyPos\*Involvement and DummyNeg\*Involvement) were computed and added in the regression. However, change in  $R^2$  remained constant although after adding new interacting variables, and significant F change showed a high p-value of .427 (see Table 4.2.3.3), leaving H2 rejected. Therefore, result showed that involvement did not moderate the relationship between ad strategy and brand name recall.



Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.072 <sup>a</sup>	.005	-.001	.25730	.005	.901	2	349	.407
2	.097 <sup>b</sup>	.009	.001	.25712	.004	1.494	1	348	.222
3	.119 <sup>c</sup>	.014	.000	.25723	.005	.854	2	346	.427

a. Predictors: (Constant), Dummy\_Neg, Dummy\_Pos

b. Predictors: (Constant), Dummy\_Neg, Dummy\_Pos, INVOLVEMENT

c. Predictors: (Constant), Dummy\_Neg, Dummy\_Pos, INVOLVEMENT, DummyNegXInv, DummyPosXInv

d. Dependent variable: Recall

*Table 4.2.3.3. Result from linear regression with interacting variable, rejecting H2.*

### **H3: Brand name recall will be higher when consumers are more highly aware of the brand**

To check the association between Awareness (high/low) and Recall (yes/no), Chi-square test was conducted. The results show that 90.1% of participants recalled the brand name correctly when exposed to low awareness brand ads while 95.2% correctly recalled after viewing high awareness brand ads (see Table 4.2.3.4.). Accordingly, H3 was supported.

			Initial Brand Awareness		$\chi^2/p$
			Low	High	
Brand Name Recall	Wrong	Count (% within aware)	15(9.9%)	10(4.8%)	3.548/.048
		Expected count	10.5	14.5	
	Correct	Count (% within aware)	136(90.1%)	198(95.2%)	
		Expected count	140.5	193.5	
Total % within aware			100%	100%	

*Table 4.2.3.4. Result from Chi-square test for brand name recall and brand awareness, supporting H3.*

**H4: Brand name recall will vary as a function of brand awareness and advertisement strategy.**

To verify if the brand name recall varies as a function of brand awareness and ad strategy, three Chi-square analyses were conducted, one for each ad strategy. For ads with informational strategy, the result shows p-value of .191, indicating no significant relevance between brand recall and awareness after viewing informational ad (see Table 4.2.3.5.).

Informational strategy			Initial Brand Awareness		$\chi^2$ /p
			Low	High	
Brand Name Recall	Wrong	Count (% within aware)	4(7.4%)	2(2.6%)	1.680/.191
		Expected count	2.5	3.5	
	Correct	Count (% within aware)	50(92.6%)	75(97.4 %)	
		Expected count	51.5	73.5	
Total % within aware			100%	100%	

*Table 4.2.3.5. Result from Chi-square test for brand recall and awareness for informational strategy.*

Also for positive emotional ads, there was no significant relationship found between brand recall and awareness level ( $p=.501$ ).

Positive Emotional strategy			Initial Brand Awareness		$\chi^2/p$
			Low	High	
Brand Name Recall	Wrong	Count (% within aware)	3(7.5%)	7(9.6%)	.140/.501
		Expected count	3.5	6.5	
	Correct	Count (% within aware)	37(92.5%)	66(90.4%)	
		Expected count	36.5	66.5	
Total % within aware			100%	100%	

*Table 4.2.3.6. Result from Chi-square test for brand recall and awareness for positive emotional strategy.*

However, for negative emotional ads, results showed that there was significant relationship in brand recall and awareness level ( $p=.015$ ,  $\chi^2=6.040$ ). More

participants correctly recalled the name of high awareness brands compared to low awareness brands (see Table 4.2.3.7.).

Negative Emotional strategy			Initial Brand Awareness		$\chi^2$ /p (2-sided)
			Low	High	
Brand Name Recall	Wrong	Count (% within aware)	8(14.0%)	1(1.7%)	6.040/.015
		Expected count	4.5	4.5	
	Correct	Count (% within aware)	49(86.0%)	57(98.3 %)	
		Expected count	52.5	53.5	
Total % within aware			100%	100%	

*Table 4.2.3.7. Result from Chi-square test for brand recall and awareness for negative emotional strategy.*

To sum up, the hypothesis 4, ‘Brand name recall will vary as a function of brand awareness and advertisement strategy.’ was supported. In condition of negative emotional ads, high initial brand awareness led to high recall, however, no relationship between brand awareness and brand name recall was found with positive emotional ads and informational ads.

#### **H5: Change in brand attitude will vary as a function of brand awareness and advertisement strategy.**

To test if changes in attitude before and after viewing the ad depend on the initial awareness level of the brand, independent samples t-test was conducted for each ad strategy. Results showed that the level of change in attitude differs significantly between low awareness and high awareness ads (see Table 4.2.3.8.). First, **for ads with informational strategy**, participants had more positive attitude after viewing the ad when brand name was new to them (mean value for attitude toward low awareness brand increased by .4856 after viewing informational ad). However when they were initially highly aware of the brand name, their attitude merely changed after viewing informational ad (mean value

increased by .1923). The absolute value for attitude change was higher when brand name was less aware after viewing informational ad. Secondly, **for ads with positive emotional strategy**, similar result was found and mean value increased by .90 for low awareness brands and by .04 for high awareness brands. Degree of attitude change was more significant when brand name was new to the participants. Lastly, **for ads with negative emotional strategy**, unique result was observed. Unlike informational ads and positive emotional ads, the absolute change in attitude was more significant among high awareness brands when consumers viewed the negative emotional ad. Attitude became more negative after viewing negative emotional ads for both low awareness brand and high awareness brands, and the absolute degree of change in attitude was more significant with high awareness brands (attitude toward low awareness brand dropped by .6384, while attitude toward high awareness brand dropped by .9526 after viewing the ad). This result indicates that negative emotional ads cause more significant negative effect when the brand is more well-known. The result shows that attitude change is evident after viewing a printed ad even for a highly well-known and popular brand like Nike®. Such unique result may be partially due to the confounding effect between brand and ad strategy. (See discussion chapter for further analysis.)

In sum, H5 was supported. Change in brand attitude was found to be more significant after viewing low awareness brands' ads than high awareness brands' ads in terms of informational and positive emotional execution. However when participants view negative emotional ads, attitude change was more significant among high awareness brands compared to low awareness brands. Thus, change in brand attitude varied as a function of brand awareness and advertisement strategy. However, this result must be carefully interpreted due to insignificant p-value for negative emotional ad ( $p=.123$ ).

	Attitude Change (AfterAtti-InitialAtti)					
	Mean		Std. Deviation		t-value	p-value (2-tailed)
	Low aware	High aware	Low aware	High aware		
Informational Ad	.4856	.1923	.58	.48	3.148	.002
Positive Emotional Ad	.9000	.0439	1.0	.67	13.775	.000
Negative Emotional Ad	-.6384	-.9526	1.11	1.04	1.555	.123
<ul style="list-style-type: none"> <li>• Attitude Change=AfterAtti-InitialAtti</li> <li>• AfterAtti: Attitude after viewing the ad</li> <li>InitialAtti: Initial attitude before viewing the ad</li> <li>(1: negative attitude ~ 5: positive attitude)</li> </ul>						

*Table 4.2.3.8. Result from Independent sample t-test for H5*

**H6: Change in brand attitude will be greater after viewing emotional ads than informational ads.**

For H6, difference in changes in attitude variable among three ad strategies was tested, excluding the effect of brand awareness level. Since the independent variable (ad strategy) is nominal and the dependent variable (attitude change) is continuous, one way ANOVA was run to test the effect of ad strategy on change in attitude. Result showed p-value of 0.000 indicating that degrees of attitude change were significantly different among different strategies. Mean score for attitude change was .3096 for informational strategy, .3443 for positive emotional strategy, and -.7982 for negative emotional strategy (see Table 4.2.3.9.).

To examine the difference in means among the three ad strategies, post hoc test was conducted. Test of Homogeneity of Variance showed significant p-value ( $p=.000$ ), therefore, result from Dunnett's T3 test was conducted (Dunnett's T3 test is a post hoc comparison test when equal variances are not assumed). Results

showed significant differences in means among all three ad strategies ( $p=.000$  for all three multiple comparisons).

As result shows, attitude changed positively after viewing positive emotional ad, and negatively after viewing negative emotional ad. By analyzing the absolute value of each mean, the results indicate that informational strategy had the least attitude change, followed by positive emotional strategy and negative emotional strategy. This result supports H6 that attitude changes more significantly after viewing emotional ads than informational ads.

Dependent variable	Ad strategy	Mean	Std. Deviation	F-value/P-value	Dunnett's T-3
Attitude Change	Informational ad(a)	.3096	.538	66.749/.000	b>a>c
	Positive emotional ad(b)	.3443	.896		
	Negative emotional ad(c)	-.7982	1.085		
<ul style="list-style-type: none"><li>• Attitude Change=AfterAtti-InitialAtti</li><li>• AfterAtti: Attitude after viewing the ad</li><li>InitialAtti: Initial attitude before viewing the ad (1: negative attitude ~ 5: positive attitude)</li></ul>					

*Table 4.2.3.9. Result from One way ANOVA, supporting H6*

**H7: Consumer's involvement in sportswear product category will moderate the relationship between advertisement strategy and change in brand attitude. For high-involved consumers, informational ad strategy will lead to greater change in brand attitude change than emotional ad strategy.**

To conduct regression analysis between ad strategy (nominal variable) and Change in attitude (continuous variable), two dummy variables (DummyPos and DummyNeg) were created. Also, to compare the 'absolute' degree of change in

attitude, new dependent variable indicating ‘absolute attitude change’ was calculated in order to delete the effect of positive or negative direction of attitude change.

Before testing H7, linear regression was conducted with new dummy variables to re-test H6. Result shows moderate correlation between ad strategy and attitude change ( $R=.280$ ) and ad strategy explained 7.9% of attitude change ( $R^2=.079$ ). F-value was 15.143 and p-value was .000 ( $p<.05$ ), showing high significance. Table 4.2.3.10. shows significant relationship between ad strategy and attitude change. There was significant difference in attitude change between positive emotional and informational ad ( $p=.030$ ), and between negative emotional and informational ad ( $p=.000$ ). Emotional ads (both positive and negative) led to more significant attitude change compared to informational ads, and this is consistent with the result from the One-way ANOVA for H6.

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.413	.065		6.373	.000
DummyPos	.207	.095	.126	2.182	.030
DummyNeg	.521	.095	.316	5.486	.000

a. Dependent Variable: Absolute Attitude Change

*Table 4.2.3.10. Result from regression analysis for re-testing of H6 with new dummy variables.*

To test H7, the moderating variable ‘involvement’ was added in the dummy variable regression model to check the interaction effect between the two independent variables: involvement and ad strategy. New interaction variables

(DummyPos\*Involvement and DummyNeg\*Involvement) was computed and added in the regression. However, change in  $R^2$  dropped as new interacting variables were added, and significant F change showed a high p-value of .400 (see Table 4.2.3.11), leaving H7 rejected. Therefore, involvement did not moderate the relationship between ad strategy and change in attitude.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.280 <sup>a</sup>	.078	.073	.73754	.078	14.820	2	348	.000
2	.284 <sup>b</sup>	.081	.073	.73771	.002	.845	1	347	.359
3	.293 <sup>c</sup>	.086	.072	.73788	.005	.920	2	345	.400

a. Predictors: (Constant), Dummy\_Neg, Dummy\_Pos

b. Predictors: (Constant), Dummy\_Neg, Dummy\_Pos, INVOLVEMENT

c. Predictors: (Constant), Dummy\_Neg, Dummy\_Pos, INVOLVEMENT, DummyNegXInv, DummyPosXInv

*Table 4 2.3.11. Result from linear regression with interacting variable, rejecting H7*



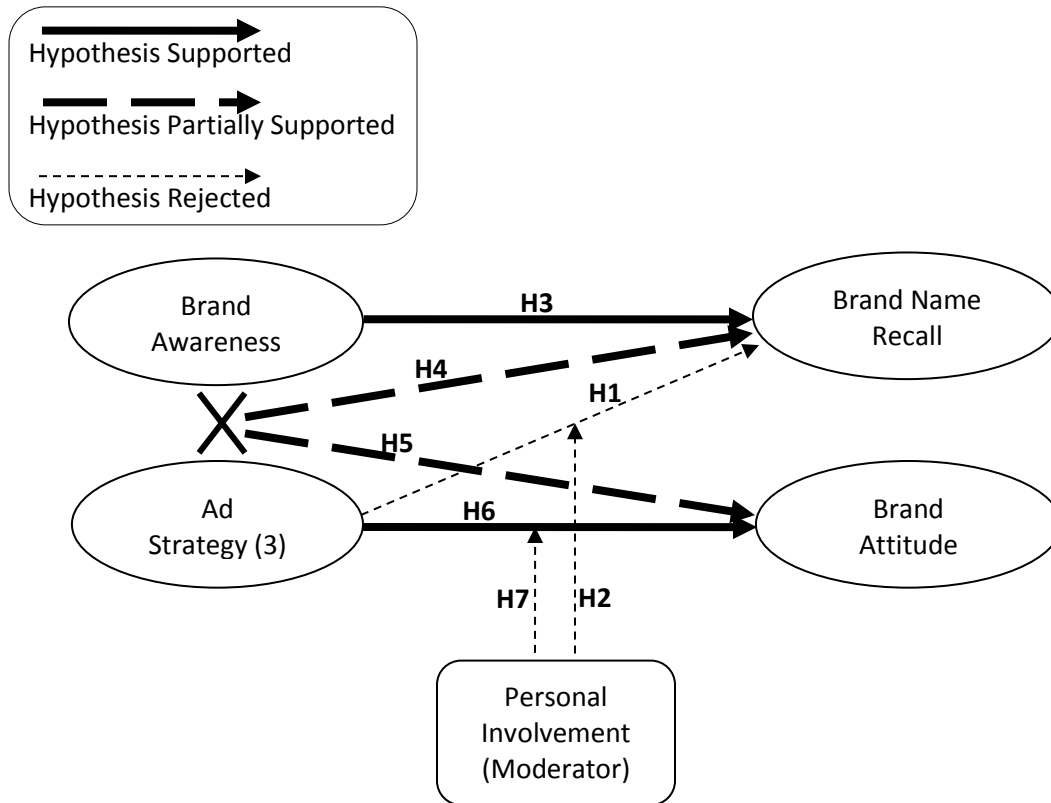


Figure 4.2.3. Result from Hypothesis Testing

## **CHAPTER 5**

### **DISCUSSION**

#### **5.1. Discussion and Conclusions**

The purpose of the present study was to investigate the effect of advertisement strategy on brand recall and brand attitude change. The study extends the previous research by Dens & De Pelsmacker (2010), which examined the effect of advertising strategy on brand recall, by adding Change in Attitude, Brand Awareness, and Personal Involvement as new variables. In addition, the present study fills the gap of the extant literature by focusing particularly on the sportswear market. Sportswear products, having both utilitarian and hedonic features in product characteristics and purchase intentions, were selected as an adequate product category to check the effect of informational and emotional advertisements. Several conclusions emerge with respect to advertising effectiveness for different ad strategies, and finally the importance of moving consumers' minds is emphasized. The results will provide implications for both sportswear marketers and consumer behavior studies.

Certain results of the present research were consistent with previous studies. First, as with previous research, results of the present study demonstrated that regardless of ad strategy, high brand awareness leads to higher brand name recall in general (H3). This result not only emphasizes the importance of increasing consumers' brand awareness but also suggests the question 'How can brands enhance awareness?'. According to Aaker (1996), there are six levels of awareness: Recognition (Have you heard of the Buick Roadmaster?), Recall (What brands of cars can you recall?), Top-of-Mind (the first-named brand in a

recall task), Brand Dominance (the only brand recalled), Brand Knowledge (I know what the brand stands for), and Brand Opinion (I have an opinion about the brand). It is also suggested that for new or niche brands, recognition can be important and for well-known brands, recall and top-of-mind are more sensitive and meaningful (Aaker, 1996). Accordingly, it is suggested to the marketers to carefully consider their current situation and marketing goal to determine their strategy to enhance brand awareness.

Second, emotional ads were found to be more effective in changing consumers' attitude compared to informational ads (H6). The result supports the previous literature that a viewer's feelings can influence his attitudes not only toward the advertisement itself but also toward the brand (Solomon, 2011), and emotional ads more directly affect ad attitudes and brand attitudes compared to informational ads (Yoo & MacInnis, 2005). This result emphasizes the importance of 'moving consumers' minds' via emotional ad execution rather than 'delivering information' in order to change their attitude toward sportswear brands. This result partially answers the question stated in the title of this research: Deliver knowledge or touch the mind?

Third, the results supported previous research with regards to the interaction effect of ad strategy and awareness on brand name recall. Higher brand awareness led to higher recall after viewing negative emotional ad, but no significant relevance was found with positive emotional ads (H4) (see Table 5.1.). Although the interpretation should not to be overreached due to the result showing high recall for all ads and brands, the result may still suggest that positive emotional ads are suitable for the new brands with low brand awareness to achieve higher brand recall. This result agrees to the previous study which stated that positive emotional appeals are capable of increasing brand recall for new brands while negative emotional appeals lead consumers to be either too highly engaged in

processing the ad execution or turned away from the ad before capturing the new brand name (Dens & De Pelsmacker, 2010). Additionally, since recall was high for all ad strategies and brand awareness levels in the present study, other variables that might affect brand recall can be added in the future research. For instance, instead of grouping brands into high/low awareness, awareness level can be measured for each brand to more clearly examine the effect of brand awareness on brand name recall.

		Informational strategy		Positive Emo strategy	Negative Emo strategy	
		Low awareness	High awareness		Low awareness	High awareness
Recall	Wrong	11%	2%	No significant difference between low/high awareness	12%	1%
	Correct	89%	98%		88%	99%

*Table 5.1. Interaction effect between ad strategy and brand awareness on brand name recall*

On the other hand, certain results were not consistent with past research. First, type of advertising strategy was not found to have direct effect on brand name recall in this study (H1). Previous studies show that ads containing a great amount of information interrupt consumers to successfully process brand name, negatively affecting brand recall. Although a similar result was expected, there was no significant difference in brand recall in this study and brand recall was significantly high for all ads and brands. Two reasons may have affected the result. In this experimental setting, there was only a few minutes between the point of ad exposure and brand name recall, causing ease of recall. Another reason is that limited number of ads was shown to each participant, enabling the participants to correctly recall most of the brand names.

Secondly, previous studies indicate that emotion derived from ads lead to more change in attitude when consumers are unfamiliar with a brand, since consumers' preexisting attitude may block additional cognitive processing to take place (Fedorikhin & Cole, 2004). The present study aimed to extend the research by categorizing emotional ads into positive and negative emotional ads. As a result, after viewing positive emotional ad, low awareness brands led to greater change in attitude, but after viewing negative emotional ad, high awareness brands led to greater change in attitude. That is, results for only positive emotional ads were consistent with previous studies. This may have been the result based on the confounding effect between advertisement and brand name. Nike, a brand that has exclusively high brand equity and positive brand image, was selected as the negative emotional ad stimulus. Initial attitude toward the Nike brand may have been significantly more positive than other brands, possibly exaggerating the negative effect of the ad. That is, consumers who were fond of the brand may have gone through an emotional 'shock' after viewing the ad, resulting in more negative change in attitude.

Third, involvement was not found to have any moderating effect on the relationship between ad strategy and change in attitude (H7). The result fails to support the previous research that highly involved consumers tend to seek out rational information which increases positive brand attitude. Since involvement was not proven to be an adequate moderating variable representing personal characteristic of a consumer, other moderating variables such as utilitarian/hedonic shopping motivation or cognitive/affective grouping from Personal Involvement Inventory scale (Zaichkowsky, 1994) are suggested for future research.

Validity of the present study has been strengthened by conducting a pretest and reflecting the results to improve the method of the actual tests. Awareness of the

ad was measured in the pretest to exclude the printed advertisement that received too high awareness. This was done to minimize the effect of the participants' preconception towards a certain ad or a brand. Also, potential problem of using false ads for low awareness brands was partially solved through this process. That is, since unaware ad images were selected for actual tests, it was unlikely that the participants felt deception or confusion when they viewed ad images that were incorporated with low awareness brand logos. Besides ad awareness, pretest also measured brand awareness and ad strategy to categorize the ad stimuli for the actual tests. Results from the pretest provided guidelines, understandings, and insights for the present study.

## **5.2. Implications**

### ***Theoretical implication***

The present study fills the gap in the previous studies by measuring the effect of emotional and informational advertisement specifically in the context of sportswear market. Although significant amount of experimental research has been conducted in emotional advertising field, none of them had focused on the sports apparel brands to my knowledge.

Also, this study incorporated various variables ranging from consumer's individual factors such as personal involvement to marketing tactical factors such as ad execution strategy. By supplementing different variables to the existing theoretical models, present study aimed to understand consumer behavior from a more diverse perspective.

Lastly, the researcher specified emotional ad execution into two sub categories: positive and negative appeal. Furthermore, positive emotions were again

categorized into upbeat and warm emotions. Such specification was done with the effort to more objectively understand consumers' complex state of mind.

### ***Applied implication***

There are several applied implications for the marketers of sportswear brands. First, the results imply that high initial brand awareness should be preceded in order to achieve high brand name recall of the printed advertisement. The present study supports that high brand awareness leads to higher brand name recall. Therefore, it is suggested to the marketers to first implement marketing strategies to promote brand awareness in order to achieve the best outcome from a printed advertisement.

Secondly, the findings of the present study suggest marketers to use emotional advertisement strategy when they aim to change consumers' attitudes towards their brands. Since positive brand attitude often leads to long-term effect such as more positive brand image and greater brand value, emotional advertisement execution can be an effective tool for sportswear brands.

Third, for low awareness brands, it is suggested to utilize positive emotional ad execution to achieve higher brand name recall instead of negative emotional ads. However, this implication should be carefully implemented since easy recall may not always lead to positive outcome.

In summary, the present study provides empirical results implying that different ad strategy leads to different results, and the result varies based on both brands' marketing efforts (e.g. advertisement strategy) and consumers' perception (e.g. brand awareness). Therefore, it is important for the marketers to define their

marketing goals and understand their consumers' needs and perceptions to carefully select the most effective ad strategy for their brands.

### **5.3. Limitations**

There are several limitations that should be taken into account when discussing the results of this study. The first limitation is the method. Experimental design was selected as the research method for this study, which may lead to lack in external validity. Validity is an issue when conducting an experimental study, therefore careful interpretation is required when generalizing the results to the practical market situation. The second issue is the research procedure. Since different advertisements were selected for each ad, there may be potential confounding effect between the ad strategy and brand name. Although the present study intended to minimize such effect by using the same ad images for Survey #1 and #2, the present approach may have exaggerated the effect of ad strategy. Third, due to relatively high brand recall for all brands, the interpretation of the brand recall variable could not draw a definitive conclusion. Although I randomized the order of ad stimuli in an effort to draw more generalizable result regarding brand recall variable, the absolute score for brand recall was high for all ads, diluting the result. Lastly, the brand attitude measure may have been confounded with ad attitude. Brand attitude is a long-term measure that is generally developed through consumers' repeated exposure to a brand and its products, whereas advertisement attitude measures a more immediate response. Thus, a more long-term experimental research with repeated exposures of ad image is suggested to more accurately measure the attitude toward a brand.



#### **5.4. Recommendations for Future Research**

For the future research, I suggest selecting more adequate moderating variables to measure the effect of consumer's individual characteristics. Since this model aims to study consumer's emotional and cognitive perception, consumer's utilitarian/hedonic shopping motivation can be one of the effective variables. Individuals with utilitarian shopping motivation may be more likely to search for information about the product while hedonic consumers are more affected by the emotional execution.

In the following research, Emotion towards Ad scale is recommended to be included as an independent variable. The result from the scale showed high validity and reliability with high consistency with the original study. Therefore, instead of categorizing the advertisements into informational, positive emotional, and negative emotional strategy, specific emotions aroused by each ad can be examined to draw more in-depth conclusion in regards of consumers' emotion.

In addition, I recommend allowing enough time gap between the point of ad exposure and brand recall to add distractions. This can be done by distributing two separate survey questionnaires to the same participants. It is suggested to show the ad stimuli during first survey, and after a few days, second survey shall be distributed to the same participants asking if they recall the brand name of the ad. Such modification can increase external validity which is a crucial limitation for an experimental study.

Another way to increase external validity is to increase the number of ad stimuli. In the real market, consumers are living in deluge of information, and such phenomenon is intensifying as internet and mobile communications grow.

Therefore, adding more number of ads in the experiment may help future study to more accurately reflect the actual situation in the market.

Also, Nike® brand is suggested not to be used for the future research. Nike® is exclusively well known compared to other sportswear brands such as REI® or Columbia Sportswear Company®. Too much difference in the level of awareness among brands may lead to skewed result, and it is encouraged to select the brands with similar awareness level.

I highly suggest focusing on a specific subcategory among various sportswear brands. One of the comments received from the survey participants was that since Nike® was the only non-outdoor wear brand among the high awareness brands used in the experiment (Nike®, REI® and Columbia Sportswear Company®), the result may have been skewed. Suggested subcategories for future studies are: athletic wear, outdoor, gender specific, or sports specific brands.

Lastly, the relationship between the two dependent variables, recall and attitude, may be studied in the future. Brand name recall and brand attitude, both being the antecedents for success of a brand, may have mutually exclusive relationship. That is, although an advertisement is easily recalled, it does not necessarily indicate that consumers have positive attitude towards the brand. In the same manner, consumer may easily forget about the brand even after establishing positive attitude if the impact is not strong enough.

## BIBLIOGRAPHY

- Aaker, David A. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. New York: The Free Press.
- Aaker, David A. (1996). Measuring Brand Equity Across Products and Markets. *California Management Review*, 38(3), 102-120.
- Ambler, T. & Burne, T. (1997). The impact of affect on memory in advertising. *Journal of Advertising Research*, 39(2), 25–34.
- Batra, R., Ahuvia, A., & Bagozzi, R. (2012). Brand Love. *Journal of Marketing*, 76(2), 1-16.
- Bearden, W.O., Netemeyer, R.G., & Haws, K.L. (2011). *Handbook of marketing scales: multi-item measures for marketing and consumer behavior research/editors*. Thousand Oaks, CA: Sage publications.
- Belch G.E. & Belch M.A. (2012). *Advertising and Promotion: An Integrated Marketing Communications Perspective*, p.223. Irwin, New York: McGraw-hill
- Bouwman, J. (2008) *Winning people's hearts*. ESOMAR Research World, January. Amsterdam: ESOMAR.
- Brown, S.P., Homer, P.M. & Inman, J.J. (1998) A meta-analysis of relationships between ad-evoked feelings and advertising responses. *Journal of Marketing Research*, 35(1), 114–126.
- Burke, M., & Edell, J. A. (1989). The impact of feelings on ad-based affect and cognition. *Journal of Marketing Research*, 26(1), 69-83.
- Chandy, R, Tellis, G., MacInnis, D.J., & Thaivanich, P. (2001). What to say when: advertising appeals in evolving markets. *Journal of Marketing Research*, 38, 399– 414

- Chi, T. & Kilduff, P.P.D. (2011). Understanding consumer perceived value of casual sportswear: An empirical study. *Journal of Retailing and Consumer Studies*, 18(5), 422-429.
- Dawes, J. (2009). Brand loyalty in the UK sportswear market. *International Journal of Market Research*, 51(4), 449-463.
- Dens, N. & De Pelsmacker, P. (2010) How advertising strategy affects brand and USP recall for new brands and extensions. *International Journal of Advertising*, 29, 165-194.
- Edell, J. A. & Burke, M.C. (1987). The power of feelings in understanding advertising effects. *Journal of Consumer Research*, 14(3), 421-33.
- Ehrenberg, A.S.C. (2000) Repetitive advertising and the consumer. *Journal of Advertising Research*, 40(6), 39-48.
- Fedorikhin, A., & Cole, C.A.(2004). Mood effects on attitudes, perceived risk and choice: Moderators and mediators. *Journal of Consumer Psychology*, 14, 2-12.
- Hagtvedt, C.P., Leavitt, C., & Schneier, W.L. (1993). *Cognitive Strength of Established Brands: Memory, Attitudinal, and Structural Approaches*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Hawkins, D.I., Mothersbaugh D. L. & Best, R.J. (2007). *Consumer behavior: Building marketing strategy*, McGraw-Hill/Irwin, New York
- Heath, R. & Nairn, A. (2005) Measuring affective advertising: implications of low attention processing on recall. *Journal of Advertising Research*, 45(2), 269-281.
- Holbrook, M.B. & Batra, R. (1987). Assessing the role of emotions as mediators of consumer responses to advertising. *Journal of Consumer Research*, 14, 404-20.
- Lehmann, D.R., Keller, L.K., & Farley, J.U. (2008). The structure of survey-based brand metrics. *Journal of International Marketing*, 16(4), 29-56.


- Johar, J.S. & Sirgy, M.J. (1991) Value-expressive versus utilitarian advertising appeals— when and why to use which appeal. *Journal of Advertising*, 20(3), 23–33.
- Johnson, E.J. & Russo, J.E. (1984), Product familiarity and learning new information. *Journal of Consumer Research*, 11, 542-50.
- Just-Style.com. (2008). Global market review of active sportswear and athletic footwear—forecasts to 2014. Retrieved from: <http://www.just-style.com/store/product.aspx?id=66249> 2008.
- Keller, K.L. (1993) Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–21.
- Ko, E., Taylor, C. R., Sung, H., Lee, J., Wagner, U., Navarro, D., & Wang, F. (2012). Global marketing segmentation usefulness in the sportswear industry. *Journal of Business Research*, 65(11), 1565-1575.
- Kotler, P., Ang, S. H., Leong, S. M., and Tan, C. T. (1999), *Marketing management*. Prentice-Hall, New York.
- Krugman, H.E. (2000) Memory without recall, exposure without perception. *Journal of Advertising Research*, 40(6), 49–54.
- Lang, A. (2000) The limited capacity model of mediated message processing. *Journal of Communication*, 50(1), 46–70.
- L2 Digital IQ Index: Sportswear. (2012). Retrieved from <http://www.l2thinktank.com/research/sportswear-2012/>.
- Loewenstein, J., Raghunathan, R., Heath, C. (2011). The Repetition-Break Plot Structure Makes Effective Television Advertisements. *Journal of Marketing*, 75(5), 105-119.
- MacInnis, D.J., Rao, A., & Weiss, A. (2002). Assessing when increased media weight of real-world advertisements helps sales. *Journal of Marketing Research*, 39, 391– 407.

- Mano, H. (2010). The structure and intensity of emotional experiences: Method and context convergence. *Multivariate Behavioral Research*, 26(3), 389-411.
- Meng Leong, S., Hoon Ang, S., & Leng Tham, L. (1996). Increasing brand name recall in print advertising among Asian consumers. *Journal of Advertising*, 25(2), 65-81.
- Park, C.W., MacInnis, D. J., Priester, J., Eisingerich, A. B., & Iacobucci, D. (2010). Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marketing*, 74(6), 1-17.
- Petty, R.E. & Cacioppo, J.T. (1986) *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.
- Petty, R.E., Cacioppo, J.T., Strathman, A.J. & Priester, J.R. (2005) To think or not to think? Exploring two routes to persuasion. *Persuasion: Psychological Insights and Perspectives*. 81-116. Thousand Oaks, CA: Sage Publications.
- Classora- Ranking of the Best Sportswear and Athletic Footwear Brand Names. (n.d.). Retrieved Nov 16, 2012, from <http://en.classora.com/reports/x77213/ranking-of-the-best-sportswear-and-athletic-footwear-brand-names>.
- Roberts, K. (2004) *Lovemarks: The future beyond brands*. New York: Powerhouse Books.
- Rossiter, J.R. & Percy, L. (1997) *Advertising and promotion management*. New York: McGraw-Hill.
- Solomon, M.R. (2011). *Pearson Custom Business Resources: Consumer Behavior*. Prentice Hall.
- Sporting Goods Manufacturers Association (SGMA). (2008). Retrieved from *Sporting Goods Manufacturers Association(SGMA)*. <http://www.sgma.com/reports/S>

- Sweller, J. (1988) Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257–285.
- The Forbes Fab 40: The World's Most Valuable Sports Brands. (2012). Retrieved Nov 16, 2012, from Forbes: <http://www.forbes.com/sites/mikeozanian/2012/10/17/the-forbes-fab-40-the-worlds-most-valuable-sports-brands-4/>.
- Top Outdoor Clothing Brands (Trending topics). (*n.d.*). Retrieved Nov 16, 2012, from The full wiki: [http://top-topics.thefullwiki.org/Outdoor\\_clothing\\_brands](http://top-topics.thefullwiki.org/Outdoor_clothing_brands).
- Voss, K. E., Spangenberg, E. R., & Grohmann, B. (2003). Measuring the hedonic and utilitarian dimensions of consumer attitude. *Journal of Marketing Research*, 40(3), 310–320.
- Wells, W.D. (2000) Recognition, recall, and rating scales. *Journal of Advertising Research*, 40(6), 14-20.
- Yoo, C. and MacInnis, D. (2005). The brand attitude formation process of emotional and informational ads. *Journal of Business Research*, 58, 1397-1406.
- Zaichkowsky, J.L. (1994) The personal involvement inventory – reduction, revision, and application to advertising. *Journal of Advertising*, 23(4), 59–70.

## APPENDICES

### Appendix 1. IRB Approval

 <b>Institutional Review Board</b> Office of Research Integrity   Oregon State University A312 Kerr Administration Building, Corvallis, OR 97331-2140 Telephone (541) 737-8008 irb@oregonstate.edu   http://oregonstate.edu/irb/		<b>STUDY ID</b> <b>5634</b>	
---	--	--------------------------------	--

Notification Type	<b>EXEMPTION</b>		
Date of Notification	3/11/2013		
Study Title	Effectiveness of Sportswear Advertisements		
Principal Investigator	Leslie Burns, PhD		
Study Team Members	Jennifer Lee		
Submission Type	Initial Application		
Level	Exempt	Category(ies)	2
Number of Participants	400 <i>Do not exceed this number without prior IRB approval</i>		
Funding Source	None	Proposal #	N/A
PI on Grant or Contract	N/A		

The above referenced study was reviewed by the OSU Institutional Review Board (IRB) and determined to be exempt from full board review.

**Expiration Date:** 3/10/2018  
*The exemption is valid for 5 years from the date of approval.*

Annual renewals will not be required. If the research extends beyond the expiration date, the Investigator must request a new exemption. Investigators should submit a final report to the IRB if the project is completed prior to the 5 year term.

Documents included in this review:

<input checked="" type="checkbox"/> Protocol	<input checked="" type="checkbox"/> Recruiting tools	<input type="checkbox"/> External IRB approvals
<input type="checkbox"/> Consent forms	<input checked="" type="checkbox"/> Test instruments	<input type="checkbox"/> Translated documents
<input type="checkbox"/> Assent forms	<input type="checkbox"/> Attachment A: Radiation	<input type="checkbox"/> Attachment B: Human materials
<input checked="" type="checkbox"/> Alternative consent	<input type="checkbox"/> Alternative assent	<input type="checkbox"/> Grant/contract
<input type="checkbox"/> Letters of support	<input type="checkbox"/> Project revision(s)	<input type="checkbox"/> Other:

**Comments:**

**Principal Investigator responsibilities:**

- Amendments to this study must be submitted to the IRB for review prior to initiating the change. Amendments may include, but are not limited to, changes in funding, personnel, target enrollment, study population, study instruments, consent documents, recruitment material, sites of research, etc.
- All study team members should be kept informed of the status of the research.
- Reports of unanticipated problems involving risks to participants or others must be submitted to the IRB within three calendar days.
- The Principal Investigator is required to securely store all study related documents on the OSU campus for a minimum of three years post study termination.

OSU IRB FWA00003920 1 IRB Form | v. date September 2012



## Appendix 2. Ranking of the Best Sportswear and Athletic Footwear Brand

Names (Classora, n.d.)

Rank	Brand name	Number of votes
1	Nike	55
2	Adidas	39
3	Puma	31
4	Reebok	26
5	Kappa	21
6	Quicksilver	21
7	Joma	20
8	Umbro	19
9	Asics	16
10	Kelme	15
11	Converse	14
12	Arena	12
13	Billabong	12
14	Lotto	11
15	John Smith	10
16	Rip Curl	10
17	Mizuno	10
18	O'Neill	9
19	Fila	7
20	And1	7
21	Reef	7
22	New Balance	7
23	Spalding	6
24	Ortus Fitness	5
25	Marca Admiral	2

## Appendix 3. The Forbes Fab 40: The World's Most Valuable Sports Brands-Business (Ozanian, 2012)

Rank	Sports Brands - Business	Brand Value
1	Nike	\$15.9 billion
2	ESPN	\$11.5 billion
3	Adidas	\$6.8 billion

4	Sky Sports	\$4 billion
5	Under Armour	\$3.5 billion
6	Reebok	\$1.2 billion
7	Yes	\$600 million
8	Img	\$520 million
9	Nesn	\$500 million
10	Mlbam	\$420 million

#### Appendix 4. Survey Questionnaire for Pretest

Hello! Thank you so much for choosing to participate in this survey. The survey is expected to take about 10 minutes to complete. If you are told by your instructor that you will be provided with extra credits, don't forget to provide your information in the last part of survey. Below is the detailed information about this research to help you decide to participate or not. If you agree, please click on the '>>' button in the bottom to start the survey.

1. WHY IS THIS STUDY BEING DONE? This study is being conducted for the completion of a master's thesis. We are interested in finding out the effectiveness of different strategies of the printed advertisements for sportswear brands.

2. WHY AM I BEING INVITED TO TAKE PART IN THIS STUDY? You are being invited to take part in this study since you are considered as a part of potential target consumer group for sportswear brands. Individuals must be at least 18 years old in order to participate.

3. WHAT WILL HAPPEN IF I TAKE PART IN THIS RESEARCH STUDY? This is an online survey of your attitudes and behaviors as they relate to your perception of printed advertisements. The survey should take about 10 minutes to complete. Your answers will not have any connection with you individually.

4. RISKS AND DISCOMFORTS There are no anticipated discomforts beyond those encountered in everyday life. The security and confidentiality of information collected from you online cannot be guaranteed. Confidentiality will be kept to the extent permitted by the technology being used. Information collected online can be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses.

5. PRIVACY AND CONFIDENTIALITY There is a risk that we could accidentally disclose information that identifies you. However to minimize this risk, the identifiers will not be linked to your responses. Gathered data will be kept in a secured computer and will be destroyed after 3 years post study termination. Only the study team will have access to the survey responses.

6. WHAT ARE THE BENEFITS OF THIS STUDY? Your participation in this study will help us better understand the effectiveness of sportswear advertisements and provide practical implications to the marketers in the industry.

7. WILL I BE PAID FOR BEING IN THIS STUDY? You will not be paid for being in this research study. However, you may receive extra credits for your course as non-monetary compensation. Please contact your instructor if you have any question regarding this matter.

8. VOLUNTARY PARTICIPATION Taking part in this research study is entirely up to you. You may choose not to participate or discontinue your participation at any time without penalty or loss of benefits to which you are otherwise entitled. You are not losing any benefit if you do not participate or discontinue your participation since there will be multiple extra credit opportunities in the class. Choosing not to participate will not affect the individuals standing in their course or the University. Please contact

your instructor if you have any question about the extra credit opportunities.9. WHO DO I CONTACT IF I HAVE QUESTIONS? If you have any questions or concerns about this research, you may contact Jennifer Lee at 971.295.1625. or [leeje@onid.orst.edu](mailto:leeje@onid.orst.edu), or Dr. Leslie Burns at [Leslie.Burns@oregonstate.edu](mailto:Leslie.Burns@oregonstate.edu). This project has been approved by the Oregon State University Institutional Review Board. If you have questions about your rights or welfare as a participant, please contact the Oregon State University Institutional Review Board (IRB) Office, at (541) 737-8008 or by email at [IRB@oregonstate.edu](mailto:IRB@oregonstate.edu). 10. AGREEING ON PARTICIPATION I have read this form and have had the opportunity to have my questions answered to my satisfaction. By proceeding to the survey questions, I approve that I am 18 years old or older and I agree to participate in this study.

Please take a look at this advertisement to answer the following questions:



Have you seen this advertisement before?

- ☐ Yes  
☐ No  
☐ Maybe

Please indicate your thoughts on this advertisement.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
This advertisement contains information of the product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This advertisement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

arouses positive emotion.					
This advertisement arouses negative emotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please take a look at this advertisement to answer the following questions:



Have you seen this advertisement before?

- ☐ Yes  
☐ No  
☐ Maybe

Please indicate your thoughts on this advertisement.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
This advertisement contains information of the product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This advertisement arouses positive emotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This advertisement arouses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

negative emotion.					
-------------------	--	--	--	--	--

Please take a look at this advertisement to answer the following questions:



Have you seen this advertisement before?

- ☐ Yes  
☐ No  
☐ Maybe

Please indicate your thoughts on this advertisement.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
This advertisement contains information of	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

the product.					
This advertisement arouses positive emotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This advertisement arouses negative emotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please take a look at this advertisement to answer the following questions:



Have you seen this advertisement before?

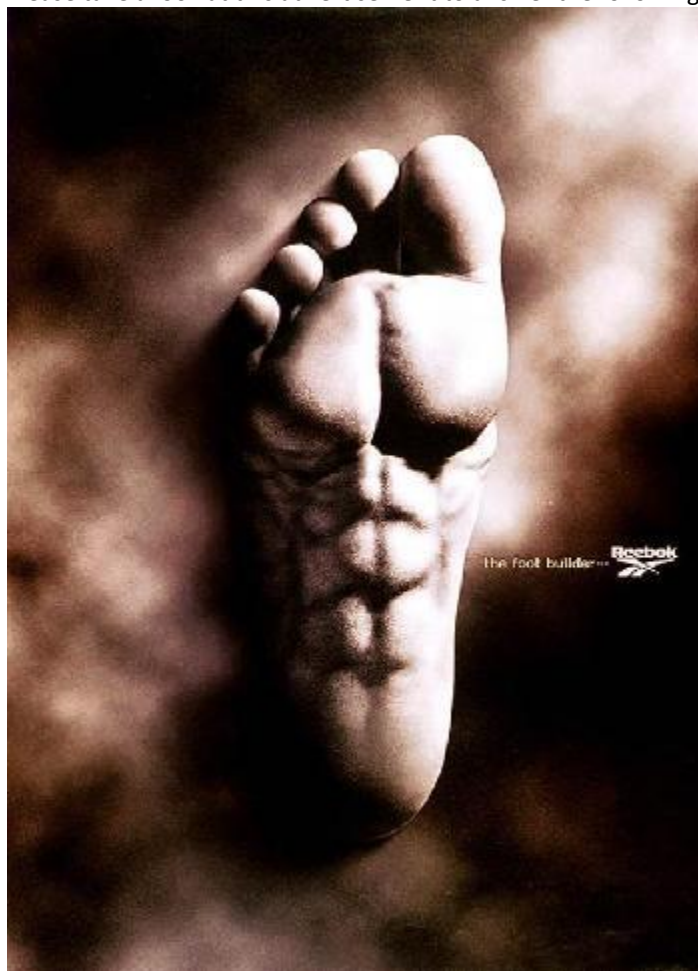
- ☐ Yes  
☐ No  
☐ Maybe

Please indicate your thoughts on this advertisement.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
This advertisement contains information of the product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

advertisement arouses positive emotion.					
This advertisement arouses negative emotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please take a look at this advertisement to answer the following questions:



Have you seen this advertisement before?

- ☐ Yes  
☐ No

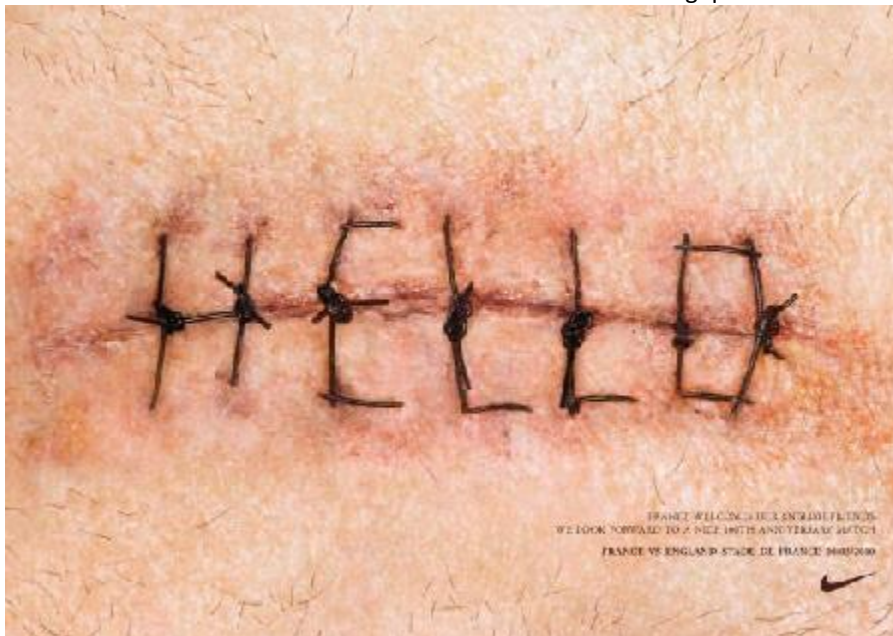


☐ Maybe

Please indicate your thoughts on this advertisement.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
This advertisement contains information of the product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This advertisement arouses positive emotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This advertisement arouses negative emotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please take a look at this advertisement to answer the following questions:



Have you seen this advertisement before?



- ☐ Yes  
☐ No  
☐ Maybe

Please indicate your thoughts on this advertisement.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
This advertisement contains information of the product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This advertisement arouses positive emotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This advertisement arouses negative emotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please indicate your awareness level of Columbia Sportswear Company®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please indicate your awareness level of Reebok®.


	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please indicate your awareness level of The North Face®.


	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

of this brand.					
----------------	--	--	--	--	--

Please indicate your awareness level of REI®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your awareness level of Nike®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
--	----------------	-------	----------------------------	----------	-------------------

			Disagree		
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please indicate your awareness level of EXR®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please indicate your awareness level of K2®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please indicate your awareness level of Scelido®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please indicate your awareness level of Hazzys Sport®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your gender

- ☐ Male  
☐ Female

What is your class standing?

- ☐ Freshman  
☐ Sophomore  
☐ Junior  
☐ Senior  
☐ Graduate

Please indicate your age range

- ☐ 18-20  
☐ 21-23  
☐ 24-26  
☐ 27 and older

What is your ethnicity?

- ☐ White, European American, Non-Hispanic
- ☐ Black, African american, Non-Hispanic
- ☐ Asian American
- ☐ Middle Eastern
- ☐ Pacific Islander
- ☐ North African
- ☐ Hispanic American
- ☐ American Indian, Alaskan Native
- ☐ Other

On average, how much do you spend on sportswear apparel and shoes for each month?

- ☐ \$0.00-49.99
- ☐ \$50.00-99.99
- ☐ \$100.00-149.99
- ☐ \$150 and more

Please provide your course number AND your last four digits of student ID number for extra credit purposes. (This information will be kept separately from your survey answers and your answers will NOT be informed to anyone outside the research team including your instructor.) Course number:

- ☐ DHE 270
- ☐ DHE 475/575
- ☐ BA 390 - 8am class
- ☐ BA 390 - 10am class
- ☐ BA 495/595
- ☐ Other (Please indicate) \_\_\_\_\_

Please indicate your full name (We are asking this for extra credit purpose. Your name WILL NOT be linked to your survey responses.)

## Appendix 5. Survey Questionnaire for Actual Test (Survey #1)

Hello! Thank you so much for participating in this survey. The survey is expected to take about 10 minutes to complete. If you are told by your instructor that you will be provided with extra credits, don't forget to provide your information in the last part of survey. Below is the detailed information about this research to help you decide to participate or not. If you agree, please click on the '>>' button in the bottom to start the survey!

1. WHY IS THIS STUDY BEING DONE? This study is being conducted for the completion of a master's thesis. We are interested in finding out the effectiveness of different strategies of the printed advertisements for sportswear brands.

2. WHY AM I BEING INVITED TO TAKE PART IN THIS STUDY? You are being invited to take part in this study since you are considered as a part of potential target consumer group for sportswear

brands. Individuals must be at least 18 years old in order to participate. 3. WHAT WILL HAPPEN IF I TAKE PART IN THIS RESEARCH STUDY? This is an online survey of your attitudes and behaviors as they relate to your perception of printed advertisements. The survey should take about 10 minutes to complete. Your answers will not have any connection with you individually. 4. RISKS AND DISCOMFORTS There are no anticipated discomforts beyond those encountered in everyday life. The security and confidentiality of information collected from you online cannot be guaranteed. Confidentiality will be kept to the extent permitted by the technology being used. Information collected online can be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. 5. PRIVACY AND CONFIDENTIALITY There is a risk that we could accidentally disclose information that identifies you. However to minimize this risk, the identifiers will not be linked to your responses. Gathered data will be kept in a secured computer and will be destroyed after 3 years post study termination. Only the study team will have access to the survey responses. 6. WHAT ARE THE BENEFITS OF THIS STUDY? Your participation in this study will help us better understand the effectiveness of sportswear advertisements and provide practical implications to the marketers in the industry. 7. WILL I BE PAID FOR BEING IN THIS STUDY? You will not be paid for being in this research study. However, you may receive extra credits for your course as non-monetary compensation. Please contact your instructor if you have any question regarding this matter. 8. VOLUNTARY PARTICIPATION Taking part in this research study is entirely up to you. You may choose not to participate or discontinue your participation at any time without penalty or loss of benefits to which you are otherwise entitled. You are not losing any benefit if you do not participate or discontinue your participation since there will be multiple extra credit opportunities in the class. Choosing not to participate will not affect the individuals standing in their course or the University. Please contact your instructor if you have any question about the extra credit opportunities. 9. WHO DO I CONTACT IF I HAVE QUESTIONS? If you have any questions or concerns about this research, you may contact Jennifer Lee at 971.295.1625. or [leeje@onid.orst.edu](mailto:leeje@onid.orst.edu), or Dr. Leslie Burns at [Leslie.Burns@oregonstate.edu](mailto:Leslie.Burns@oregonstate.edu). This project has been approved by the Oregon State University Institutional Review Board. If you have questions about your rights or welfare as a participant, please contact the Oregon State University Institutional Review Board (IRB) Office, at (541) 737-8008 or by email at [IRB@oregonstate.edu](mailto:IRB@oregonstate.edu). 10. AGREEING ON PARTICIPATION I have read this form and have had the opportunity to have my questions answered to my satisfaction. By proceeding to the survey questions, I approve that I am 18 years old or older and I agree to participate in this study.

To me, SPORTSWEAR PRODUCTS are... (Definition of Sportswear: Apparel and footwear made for sports participation. It includes casual clothes for daily activities. Examples of sportswear brands are: Nike®, Adidas®, Reebok®, Columbia Sportswear Company®, Asics®, REI®)

	1	2	3	4	5
Practical:Impractical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary:Unnecessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Functional:Not functional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helpful:Unhelpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effective:Ineffective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Dull:Exciting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not delightful:Delightful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not fun:Fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not thrilling:Thrilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unenjoyable:Enjoyable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To me, SPORTSWEAR PRODUCTS are:

	1	2	3	4	5
important:unimportant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
boring:interesting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
relevant:irrelevant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
exciting:unexciting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
means nothing:means a lot to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
appealing:unappealing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
fascinating:mundane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
worthless:valuable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
involving:uninvolving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
not needed:needed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please refer to this brand to answer the questions below.



Please indicate your awareness level of Columbia Sportswear Company®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Please indicate your attitude toward Columbia Sportswear Company®.

	1	2	3	4	5
Like:Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good:Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please take a careful look at this printed advertisement to answer the questions below.



Have you seen this ad before?

- ☐ Yes  
☐ No

Please indicate how strong you have each feeling related to THIS ADVERTISEMENT.

	Very Unlikely	Unlikely	Undecided	Likely	Very Likely
Aroused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Quiet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bored	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unhappy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please indicate your attitude toward Columbia Sportswear Company® after viewing the advertisement.

	1	2	3	4	5
Like:Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good:Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please refer to this brand to answer the question below.



Please indicate your awareness level of REI®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

this brand. I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
--	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Please indicate your attitude toward REI®.

	1	2	3	4	5
Like:Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good:Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please take a careful look at this printed advertisement to answer the questions below.



Have you seen this advertisement before?

- ☐ Yes  
☐ No

Please indicate how strong you have each feeling related to THIS ADVERTISEMENT.

	Very Unlikely	Unlikely	Undecided	Likely	Very Likely
Aroused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quiet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Bored	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unhappy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please indicate your attitude toward REI® after viewing the advertisement.

	1	2	3	4	5
Like:Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good:Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please refer to this brand to answer the question below.



Please indicate your awareness level of Nike®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

brand.					
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your attitude toward Nike®.

	1	2	3	4	5
Like:Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good:Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please take a careful look at this printed advertisement to answer the questions below.



Have you seen this ad before?

☐ Yes

☐ No

Please indicate how strong you have each feeling related to THIS ADVERTISEMENT.

	Very Unlikely	Unlikely	Undecided	Likely	Very Likely
Aroused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quiet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bored	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unhappy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please indicate your attitude toward Nike® after viewing the advertisement.

	1	2	3	4	5
Like:Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good:Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



What was the brand name of the advertisement above?

- ☐ Image:Logo columbia
- ☐ Image:Logo asics
- ☐ Image:Logo rei
- ☐ Image:Logo reebok
- ☐ Image:Logo nike
- ☐ Image:Logo the north face



What was the brand name of the advertisement above?

- ☐ Image:Logo columbia
- ☐ Image:Logo asics
- ☐ Image:Logo rei
- ☐ Image:Logo reebok
- ☐ Image:Logo nike



☐ Image:Logo the north face



What was the brand name of the advertisement above?

- ☐ Image:Logo columbia
- ☐ Image:Logo asics
- ☐ Image:Logo rei
- ☐ Image:Logo reebok
- ☐ Image:Logo nike
- ☐ Image:Logo the north face

Please indicate your gender

- ☐ Male
- ☐ Female

What is your class standing?

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Graduate

Please indicate your age range

- ☐ 18-20

- ☐ 21-23
- ☐ 24-26
- ☐ 27 and older

What is your ethnicity?

- ☐ White, European American, Non-Hispanic
- ☐ Black, African american, Non-Hispanic
- ☐ Asian American
- ☐ Middle Eastern
- ☐ Pacific Islander
- ☐ North African
- ☐ Hispanic American
- ☐ American Indian, Alaskan Native
- ☐ Other

On average, how much do you spend on sportswear apparel and shoes for each month?

- ☐ \$0.00-49.99
- ☐ \$50.00-99.99
- ☐ \$100.00-149.99
- ☐ \$150 and more

Please provide your course number and your full name for extra credit purposes. (This information will be kept separately from your survey answers and your answers will NOT be informed to anyone outside the research team including your instructor.) Course number:

- ☐ DHE 370
- ☐ BA390 - 4pm class
- ☐ BA 390 - 6pm class
- ☐ BA 495/595
- ☐ Other (Please indicate) \_\_\_\_\_
- ☐ DHE 187
- ☐ DHE 271
- ☐ DHE 270

Please indicate your FULL NAME (We are asking this for extra credit purpose. Your name WILL NOT be linked to your survey responses.)

Please write any comment about this survey if you have one. This will be much help. Thank you!

## Appendix 6. Survey Questionnaire for Actual Test (Survey #2)

Hello! Thank you so much for participating in this survey. The survey is expected to take about 10 minutes to complete. If you are told by your instructor that you will be provided with extra credits, don't forget to provide your information in the last part of survey. Below is the detailed information about this research to help you decide to participate or not. If you agree, please click on the '>>' button in the bottom to start the survey!

1. WHY IS THIS STUDY BEING DONE? This study is being conducted for the completion of a master's thesis. We are interested in finding out the effectiveness of different strategies of the printed advertisements for sportswear brands.

2. WHY AM I BEING INVITED TO TAKE PART IN THIS STUDY? You are being invited to take part in this study since you are considered as a part of potential target consumer group for sportswear brands. Individuals must be at least 18 years old in order to participate.

3. WHAT WILL HAPPEN IF I TAKE PART IN THIS RESEARCH STUDY? This is an online survey of your attitudes and behaviors as they relate to your perception of printed advertisements. The survey should take about 10 minutes to complete. Your answers will not have any connection with you individually.

4. RISKS AND DISCOMFORTS There are no anticipated discomforts beyond those encountered in everyday life. The security and confidentiality of information collected from you online cannot be guaranteed. Confidentiality will be kept to the extent permitted by the technology being used. Information collected online can be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses.

5. PRIVACY AND CONFIDENTIALITY There is a risk that we could accidentally disclose information that identifies you. However to minimize this risk, the identifiers will not be linked to your responses. Gathered data will be kept in a secured computer and will be destroyed after 3 years post study termination. Only the study team will have access to the survey responses.

6. WHAT ARE THE BENEFITS OF THIS STUDY? Your participation in this study will help us better understand the effectiveness of sportswear advertisements and provide practical implications to the marketers in the industry.

7. WILL I BE PAID FOR BEING IN THIS STUDY? You will not be paid for being in this research study. However, you may receive extra credits for your course as non-monetary compensation. Please contact your instructor if you have any question regarding this matter.

8. VOLUNTARY PARTICIPATION Taking part in this research study is entirely up to you. You may choose not to participate or discontinue your participation at any time without penalty or loss of benefits to which you are otherwise entitled. You are not losing any benefit if you do not participate or discontinue your participation since there will be multiple extra credit opportunities in the class. Choosing not to participate will not affect the individuals standing in their course or the University. Please contact your instructor if you have any question about the extra credit opportunities.

9. WHO DO I CONTACT IF I HAVE QUESTIONS? If you have any questions or concerns about this research, you may contact Jennifer Lee at 971.295.1625. or [leeje@onid.orst.edu](mailto:leeje@onid.orst.edu), or Dr. Leslie Burns at [Leslie.Burns@oregonstate.edu](mailto:Leslie.Burns@oregonstate.edu). This project has been approved by the Oregon State University Institutional Review Board. If you have questions about your rights or welfare as a participant, please contact the Oregon State University Institutional Review Board (IRB) Office, at (541) 737-8008 or by email at [IRB@oregonstate.edu](mailto:IRB@oregonstate.edu).

10. AGREEING ON PARTICIPATION I have read this form and have had the opportunity to have my questions answered to my satisfaction. By proceeding to the survey questions, I approve that I am 18 years old or older and I agree to participate in this study.

To me, SPORTSWEAR PRODUCTS are... (Definition of Sportswear: Apparel and footwear made for sports participation. It includes casual clothes for daily activities. Examples of sportswear brands are: Nike®, Adidas®, Reebok®, Columbia Sportswear Company®, Asics®, REI®)

	1	2	3	4	5
Practical:Impractical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary:Unnecessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Functional:Not functional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helpful:Unhelpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effective:Ineffective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dull:Exciting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not delightful:Delightful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not fun:Fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not thrilling:Thrilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unenjoyable:Enjoyable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To me, SPORTSWEAR PRODUCTS are:

	1	2	3	4	5
important:unimportant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
boring:interesting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
relevant:irrelevant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
exciting:unexciting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
means nothing:means a lot to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
appealing:unappealing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
fascinating:mundane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
worthless:valuable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
involving:uninvolving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
not needed:needed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please refer to this brand to answer the questions below.



Please indicate your awareness level of Scelido®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your attitude toward Scelido®.

	1	2	3	4	5
Like:Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good:Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please take a careful look at this printed advertisement to answer the questions below.



Have you seen this ad before?

- ☐ Yes  
☐ No

Please indicate how strong you have each feeling related to THIS ADVERTISEMENT.

	Very Unlikely	Unlikely	Undecided	Likely	Very Likely
Aroused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quiet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bored	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unhappy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please indicate your attitude toward Scelido® after viewing the advertisement.

	1	2	3	4	5
Like:Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good:Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please refer to this brand to answer the question below.



Please indicate your awareness level of Hazzys Sport®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your attitude toward Hazzys Sport®.

	1	2	3	4	5
Like:Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good:Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please take a careful look at this printed advertisement to answer the questions below.



Have you seen this advertisement before?

- ☐ Yes  
☐ No

Please indicate how strong you have each feeling related to THIS ADVERTISEMENT.

	Very Unlikely	Unlikely	Undecided	Likely	Very Likely
Aroused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quiet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bored	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unhappy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





Please indicate your attitude toward Hazzys Sport® after viewing the advertisement.

	1	2	3	4	5
Like:Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good:Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please refer to this brand to answer the question below.



Please indicate your awareness level of EXR®.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am aware of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite familiar with this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard of this brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your attitude toward EXR®.

	1	2	3	4	5
Like:Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good:Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please take a careful look at this printed advertisement to answer the questions below.



Have you seen this ad before?

- ☐ Yes  
☐ No

Please indicate how strong you have each feeling related to THIS ADVERTISEMENT.

	Very Unlikely	Unlikely	Undecided	Likely	Very Likely
Aroused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Quiet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bored	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unhappy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# EXR®

Please indicate your attitude toward EXR® after viewing the advertisement.

	1	2	3	4	5
Like:Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good:Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



What was the brand name of the advertisement above?

- ☐ Image:Logo scelido
- ☐ Image:Logo k2
- ☐ Image:Logo hazzys sport
- ☐ Image:Logo eider

- ☐ Image:Logo exr
- ☐ Image:Logo kolon sport



What was the brand name of the advertisement above?

- ☐ Image:Logo scelido
- ☐ Image:Logo k2
- ☐ Image:Logo hazzys sport
- ☐ Image:Logo eider
- ☐ Image:Logo exr
- ☐ Image:Logo kolon sport



What was the brand name of the advertisement above?

- ☐ Image:Logo scelido
- ☐ Image:Logo k2
- ☐ Image:Logo hazzys sport
- ☐ Image:Logo eider
- ☐ Image:Logo exr
- ☐ Image:Logo kolon sport

Please indicate your gender

- ☐ Male
- ☐ Female

What is your class standing?

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Graduate

Please indicate your age range

- ☐ 18-20
- ☐ 21-23
- ☐ 24-26

- ☐ 27 and older

What is your ethnicity?

- ☐ White, European American, Non-Hispanic  
☐ Black, African american, Non-Hispanic  
☐ Asian American  
☐ Middle Eastern  
☐ Pacific Islander  
☐ North African  
☐ Hispanic American  
☐ American Indian, Alaskan Native  
☐ Other

On average, how much do you spend on sportswear apparel and shoes for each month?

- ☐ \$0.00-49.99  
☐ \$50.00-99.99  
☐ \$100.00-149.99  
☐ \$150 and more

Please provide your course number and your full name for extra credit purposes.(This information will be kept separately from your survey answers and your answers will NOT be informed to anyone outside the research team including your instructor.) Course number:

- ☐ DHE 370  
☐ BA 390 - 4pm class  
☐ BA 390 - 6pm class  
☐ BA 495/595  
☐ Other (Please indicate) \_\_\_\_\_  
☐ DHE 187  
☐ DHE 271

Please indicate your FULL NAME (We are asking this for extra credit purpose. Your name WILL NOT be linked to your survey responses.)

Please write any comment about this survey if you have one. This will be much help. Thank you!