HOW WE DECIDE WHEN WE CAN’T DECIDE: A STUDY OF BRAND DEPENDENCY

AND BRAND SENSITIVITY

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Abstract

This thesis focuses on the degree of influence that brand plays in consumer purchase decisions. The study proposes that consumers fall into two categories when making purchase decisions involving branded items: brand sensitive and brand dependent. Consumers who are brand dependent will mainly rely on brand to guide purchase decisions while consumers who are brand sensitive will ultimately consider attributes related to the brand. It is theorized that brand dependency is based on four factors, which are the hedonic or utilitarian value of the brand, consumers’ need for cognition, consumers’ level of risk avoidance and the brand’s level of message integration. The study uses ANOVA testing to determine the correlation between the factors and brand dependency and brand sensitivity.
Introduction

Research Background

Although much focus has been given to the psychology of branding and determining how to best relate to consumers, there is relatively little research on how branding influences purchase outcomes. Research that does deal with branding in consumer purchase decisions often focus on consumer’s perceptions of brands and their actions toward brands. This can be seen in the research interest in brand recall, However, there is a research gap in what human influences and brand influences cause a brand to be more or less influential in any given purchase scenario.

Research Question

In writing this thesis, two theories were developed to explain the influence that a brand may have on consumer purchases: brand sensitivity and brand dependence. Brand dependency is when the consumer uses brand as the main search criteria in a purchase decision. The search for alternative brands or products only occurs if the preferred brand is not available. Brand sensitivity, on the other hand, occurs when consumer purchase decisions are made primarily using factors other than brand, although brand may still have an influence.

Whether a person is brand dependent or brand sensitive is based on four factors. These factors are the hedonic or utilitarian value of the brand, the consumers’ need for cognition, the consumers’ level of risk avoidance and the brand’s level of message integration. Message integration is a term created for the use of this thesis to describe how well a brand uses advertisements and other means to maintain a consistent brand message. Volvo, for example, has a high level of brand integration because consumers
consistently view it as safe. The purpose of this study is to determine if the four factors developed in the theory have any correlation to the concepts of brand dependency and brand sensitivity.

**Thesis Outline**

The thesis will start out with a literature review. This section will contain all of the pertinent information, terms, and background needed to understand the study in the current context of marketing literature. Following the literature review, the hypotheses of the study will be discussed. There are four hypotheses, one for each of the four factors. The thesis will then cover the methodology of the qualitative and quantitative studies. Next, the thesis will delve into the results of the qualitative and quantitative results, followed by the discussion, conclusion, and limitations and future research section.

**Literature Review**

This literature review outlines concepts and terms related to the topic of brand sensitivity and brand dependency. It also contains information on the significant theories that make up the basis of the brand sensitivity and brand dependency theories. The topics covered in this literature review are as follows: brand awareness, brand loyalty, hedonic value, utilitarian value, the need for cognition theory, risk avoidance theory, and the elaboration likelihood model.

**Brand Awareness**

Brand awareness is the strength of a brand’s presence in the consumer’s mind (Conradie, 2014). Brand awareness has much to do with how consumers make purchase decisions. In fact, brand can be defined as “…a buyer’s ability to identify a brand within a category in sufficient detail to make a purchase (Percy, 1992)”.

Brand awareness is
created when a customer becomes increasingly familiar with a brand through repeated exposure and formation of associations with the brand that allow for better recall (Conradie, 2014).

**Brand Recognition.** Brand awareness can be broken into two parts: brand recognition and brand recall. Brand recognition refers to the situation in which a consumer recognizes a brand at the time of purchase. The consumer may not be able to recall the brand outside of the purchase environment, but visual cues at the time of purchase (such as packaging or logos) allow the consumer to buy products using brand as the purchase determinant (Percy, 1992)

**Brand Recall.** Brand recall refers to an almost opposite situation. Brand recall occurs when a category need is experienced, and the consumer relies on memory to think up product or service solutions (Girard, 2013). For context, think of a fast food restaurant. It is unlikely that the consumer would drive around until they see a restaurant they would like to attend. Instead, the consumer chooses among the recusants that can be recalled from memory (Percy, 1992). Brand recall can involve multiple levels. For instance, first to mind is a higher level of brand recall in which a particular brand is the first one to be recalled in a category. Another kind of brand recall called brand dominate occurs when a brand is the only one recalled in the category (Brewer, 2010).

**Brand Loyalty**

Brand loyalty is the tendency of customers to make repeat purchases of a particular brand (Liu-Thompkins and Tam 2013). These repeat purchases are made with little or not though given to alternatives regardless of price or other factors (Chaudhuri and Holbrook 2001). According to Oliver (1999), brand loyalty is “…a deeply held
commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior.” Brand loyalty can be future subdivided into two categories: attitudinal loyalty and habit, also known as behavioral loyalty (Liu-Thompkins and Tam 2013).

**Attitudinal Loyalty.** Attitudinal loyalty is brand loyalty that is formed by a customer’s positive evaluation of a brand. Attitudinal loyalty has a large psychological component and involves beliefs of product/service superiority and positive reactions to brands (Liu-Thompkins and Tam, 2013). Although this evaluation can stem from a number of different factors, satisfaction and perceived value play a key role in its formation (Johnson, Herrmann, and Huber, 2006). Stronger positive feelings correlate with repeat purchases. In other words, the more positive that a brand is viewed by consumers, the more likely it is that the brand will be repurchased (Liu-Thompkins and Tam, 2013).

**Habit.** Habit is the second type of brand loyalty. Consumers who exhibit this behavior make purchase decisions automatically. Habit is formed through associative learning (Liu-Thompkins and Tam, 2013). This simply means that repeat purchases in a given context increase the chances of more repeat purchases in the same context (Duhigg, 2012). For example, if a consumer bought Wonder Bread the last several times he or she visited the grocery store, then the consumer is likely to pick Wonder Bread when shopping at the same store. When this preference for and purchase of Wonder Bread becomes automatic, then the consumer is said to have developed habitual brand loyalty (Ji Song and Wood, 2007).
**Context Cues.** Repeat purchases by habit are elicited automatically by context cues. In the case of the Wonder Bread example, location is the context cue that is triggering the repeat purchase. There are four context cues that are most associated with habit. These cues are time, location, social setting, and preceding events (Wood and Neal, 2009). When one or more of these cues is present, the habit occurs and the repurchase decision is made automatically (Ji Song and Wood, 2007).

**Hedonic and Utilitarian Values**

Hedonic and utilitarian describe two different values and shopping motivations. Hedonic purchases are based off entertainment or emotional worth. For this reason, hedonic benefits tend to be emotionally based (Ahtola, 1985). Examples of hedonic benefits include sensory aspects, escapism, and arousal. On the other hand, utilitarian purchases are based off of rational thought and tend to be task related (Dahr and Wertenbroch, 2000). In other words, consumers attempt to find products that best solve a particular need or needs. Therefore, utilitarian purchases are made for practical reasons while hedonic purchases are made for luxury purposes.

**Need For Cognition**

Need for cognition is psychology term that explains the extent to which people are inclined to effortful cognitive activities. Essentially, the principle states that some people strive for more thought stimulation than others (Cacioppo and Petty, 1982). This in turn affects how people receive messages, including advertising. Those with a high need for cognition are more likely to be persuaded by relevant arguments through central route persuasion. Those with a low need for cognition are more likely to be influenced by peripheral cues (Cacioppo and Petty, 1982). So, a person with a high need for
cognition will listen to the content of a message while a person with a low need for cognition will pay more attention to other factors such as the characteristics of the source of the message. One other main difference between the two categories is that people with a low need for cognition tend to use more heuristic biases when making decisions.

**Risk Avoidance**

Risk avoidance is the tendency for people to avoid risks. Everyone has risk avoidance; however, it is more prevalent in some people than others (Tversky and Kahneman, 1974). For instance, it is found that people with a Type A personality tend to take more risks than people with a Type B personality (Grable, 2000). Other factors than influence risk include gender, age, income, and education. Men tend to be riskier than women. While age is negatively correlated with risk tolerance, income and education are both positively correlated (Tversky and Kahneman, 1974). There are five types of perceived risk that people tend to avoid. These risk are functional risk, social risk, financial risk, physical risk, time risks, and psychological risks (Dontigney, 2017). Functional risk is one of the most common types of perceived risk. Functional risk is the concern that a product or service will not perform according to its expectations. For instance, consider a person buying a party gift off of Amazon Prime that was needed in two days. A functional risk might be that Amazon may not keep its two-day delivery promise (Dontigney, 2017). A social risk on the other hand, is a fear of losing status by using a product or service. Financial risk quite simply means that a person is concerned with the price or potential costs with a particular product or service. Physical risk is the fear of bodily harm resulting from a product or service. Time risk is the risk of losing time due to a product failure or some other reason (Lake, 2016). Psychological risks deal
with risks relating to consumer moral principles (Dontigney, 2017). For instance, consider a consumer buying clothing of an unknown origin. One psychological risk might be that the clothing is made by child labor, which the consumer does not wish to support.

**Elaboration Likelihood Model**

The Elaboration Likelihood Model (ELM) refers to the two types of ways that people process information: central and peripheral. When people use central persuasive routes such as evaluation, recall and critical judgment the person is said to be using cognitive abilities. This is called high elaboration. Low elaboration, on the other hand, is when peripheral cues are used to process information. Low elaboration often utilizes heuristics (Petty and Caciopo, 1986).

**Research Hypotheses**

It is theorized that whether a consumer is brand dependent or brand sensitive is based on four major factors. These factors are (1) the hedonic or utilitarian value of the brand, (2) consumers’ need for cognition, (3) consumers’ level of risk avoidance and (4) the brand’s level of message integration. There are four hypotheses that make up the brand dependence and brand sensitivity study.

**H1: Hedonic vs. Utilitarian**

Hedonic products are based off entertainment and emotional worth (Kazakeviciute and Banyte, 2012). When consumers purchase a hedonic product they choose a brand that is the most congruent with the experience they desire (Matthews, Ambroise, and Brignier, 2009). Since different brands represent different experiences, it
is thought that the consumer decision process will often rely on brand dependency when products bought for more hedonic reasons.

As utilitarian products are often task related purchases, consumers tend to attempt to pick the product that best fits their needs. Although consumers may use brand as a consideration for these purchases, it is likely that they will search for alternatives to find the product that is the best fit. For this reason, products that are bought for utilitarian reasons will be more likely to rely on brand sensitivity.

H1: Purchases that rely on brand dependency will be more hedonic than purchases that rely on brand sensitivity.

H2: High vs. Low Need for Cognition

People with a low need for cognition are less interested in effortful cognitive processes and are more likely to rely on stereotypes and heuristics to make decisions (Cacioppo and Petty, 1982). This may mean that consumers with a low need for cognition are more likely to purchase products based on their personal beliefs and biases about a brand. For this reason, it is thought that brand is used more heavily as a decision maker for consumers with a low need for cognition.

A high need for cognition is an intrinsic trait that is likely to cause consumers to be brand sensitive rather than brand dependent. Consumers with a high need for cognition are more likely to engage in effortful cognitive activities which is associated with idea evaluation and problem solving (Cacioppo and Petty, 1982). This means that consumers with a high need for cognition are more likely to seek external information when making a purchasing decision. This search for information leads to more informed purchases that use rational thought rather than reliance on brands to make decisions.
H2: Consumers who experience brand dependence will have a lower need for cognition than consumers who experience brand sensitivity.

**H3: High vs. Low Risk Avoidance**

If a consumer is not concerned with risk, it is unlikely that the consumer will do extensive research to determine the best product (Tversky and Kahneman, 1974). Without this research, especially for small purchases, consumers are more likely to buy products that have top of mind awareness (Perreau, 2015). This means that purchases may be heavily influenced on the basis of brand for consumers with low risk avoidance.

Much like consumers with a high need for cognition, those with a high-risk avoidance will search for external information to minimize the risk in their purchases. However, those with a high-risk avoidance will also actively use internal information based on past experiences (Tversky and Kahneman, 1974). So although consumers will use external information to mitigate risk, they are heavily influenced by positive and negative past experiences. For this reason, a high-risk avoidance consumer is likely to be brand sensitive. The consumer will make mostly rational decisions, but will be swayed by past experiences with specific brands. Also, in an environment where the consumer is only familiar with a few brands, the consumer is more likely to choose a recognizable brand as it is deemed safer than an unrecognizable alternative (Perreau, 2015).

H3: Consumers who make brand sensitive purchases will be more risk avoidant than consumers who make brand dependent purchases.

**H4: Integrated Message vs. Divided Message**

A consistent message leads to development of a brand image (Hunt, 2014). Consumers then use the brand image to make stereotypes about the brand that influence
their purchases. For instance, Volvo is widely known for being safe. Therefore, a customer seeking safety is likely to choose Volvo because of this reputation even though some of the cars may not be the safest option on the market.

A brand message that is not unified leads to discrepancies that bar the use of heuristics (Petty and Cacioppo, 1986). In other words, an inconsistent message may force consumers to use the central route of persuasion. Engaging in central route persuasion means that more rational thinking needs to be used. In general, unless a brand is clearly superior to alternatives, the more customers think rationally about products, the more open they are to substitutes.

H4: Product purchases that experience brand dependency will have a higher integrated message than product purchases that experience brand sensitivity.

Methodology

Preliminary Interviews

In order to understand the role that brand plays in purchases, preliminary interviews using the questions in the following table were conducted with 13 random participants aged 19 through 79.

<table>
<thead>
<tr>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are your most important considerations when making a purchase?</td>
</tr>
<tr>
<td>How big of a role does the type of brand factor into your purchase decisions?</td>
</tr>
<tr>
<td>Are there any products in which brand plays a bigger role than others in your purchase decisions than others? If so why? Examples?</td>
</tr>
<tr>
<td>Are there any product categories in which you exclusively purchase based on brand rather than any other factors? Why? Examples?</td>
</tr>
<tr>
<td>How old are you?</td>
</tr>
</tbody>
</table>
Where did you grow up?

What do you and your parents do for a living?

Describe your lifestyle including shopping habits.

The sample provided some interesting insights. In every interview, price was voiced as one of the five considerations when making a purchase decision. Six people claimed that price was the top consideration. This makes sense since many people immediately associate making a purchase with spending money. This is especially true for necessary purchases (i.e. food or maintenance costs) and is even more prevalent where functionality is essentially the same.

The quality of the product was another top consideration. Among those surveyed, seven indicated that the quality of the product was substantial in their consideration of a product purchase. Quality was cited as being the top consideration three times and as the second most important consideration three times. This shows that the quality of the product, in addition to the price is an important attribute that can largely influence purchases.

Some of those who were surveyed judged their purchase on hedonic or utilitarian reasons. Of the thirteen people surveyed, seven people cited hedonic reasons as one of the criteria important to the purchase decision. Some hedonic reasons cited were included product attributes such as “color”, “look”, “design”, or “attractiveness”. Others were more concerned about how much they would enjoy the product or if their friends liked the product. Seven people made purchase decisions based off of utilitarian reasons. Four people said that how much they needed the product was an important consideration when making a purchase. Other people based their purchase decision based on how
much they would use it, how long the product will last, or the usefulness of the product. Interestingly, some of the participants cited both hedonic and utilitarian considerations in purchases. This makes sense since even products that are bought for hedonic reasons often are designed with utilitarian purposes in mind.

When asked about the role that brand played in purchase decisions there was a wide range of answers. Seven people said that brand played a very large role when making purchases. Two people said that brand plays a small role or does not matter at all. Three people, on the other hand said that importance of the brand depended on what was being purchased. Clearly, the importance of brand is dependent on the individual, but it also may be dependent on the product.

There were two categories where brand played a big role in purchase decisions among those surveyed. These two categories were clothing and electronics/technology. Five people claimed that brand played a bigger role in electronics/technology. Of the five, three cited that brand was important because electronics/technology is expensive and certain brands would last longer. The consumers, in this case, were worried about the risks of buying a product that was not a certain brand. These survey takers were more interested in the longevity of the product, a utilitarian feature, than other, hedonic features. This shows a perceived functional risk that certain brands may not maintain the quality promised by the product.

Of the six people who responded that brand was important for clothes, there were mixed reasons. Two people said that clothes brand was important because of the status. As one respondent said “it’s a social thing, people judge you by what you wear.” For these respondents, brand was important because it signified a fulfillment of a hedonic
need. However, others who said that the brand of clothes was significant mentioned more utilitarian reasons. Two people mentioned that certain brands of clothes are better quality and last longer.

Respondents were asked if they bought any specific products solely because of the brand. Five people said that there were not any. Two people mentioned that they bought watches and purses based on the brand alone. When asked why, one respondent mentioned that they bought certain brands of watches and purses because of the status that the products brought them. However, another respondent said that they bought particular brands of watches and purses because of the better quality. So, once again, there are some respondents who are making their purchase decision on hedonic reasons while others are using utilitarian reasons. Three participants mentioned that they based their phone purchase on brand only. However, the reasons for this seemed to include a mixture of utilitarian motives, hedonic motives, and brand loyalty.

When asking the participants to describe their lifestyle, including shopping habits, the pattern of hedonic seekers and utilitarian seekers emerged again. Some participants would only buy only what they need, often for utilitarian purposes. They sometimes labeled themselves as “frugal” or being a “minimalist”. As one person put it, “I’m pretty laid back. The only thing I shop for is vinyl records. I just buy whatever else I need.” Other participants claimed to love shopping and to be spontaneous buyers. They were characterized by the attitude of this response, “I spend way too much on clothes and shoes, rather than groceries and things I need. Online shopping gets me every time.”

**Qualitative Synthesis**
Based on the initial responses from the interviews, two theories were developed to explain how brand influences purchase decisions. Through looking at the interview responses, it is clear that some people consider brand to be more important than others. Brand sensitivity and brand dependency are the two theories that were developed to explain this difference. Brand sensitivity is the amount of influence or effect that a brand has on swaying consumer purchase decisions after the customer has analyzed the objective characteristics of alternative products or services. Consumers who are brand sensitive allow brand to influence their purchase decision, but also rely on outside factors: such as price, quality, and appearance. Brand dependency, on the other hand, is the action of using brand as the main search criteria in a purchase decision. The search for alternatives only occurs if the preferred brand is not available.

Several factors called determinants were created to explain the concepts of brand dependency and brand sensitivity. Based on the responses, it was clear that there was a pattern of consumers seeking either utilitarian or hedonic features. For this reason, a measure of utilitarian versus hedonic was included in the theory as a determinant. Risk avoidance is also incorporated in the theory. This is because it was theorized that participants sought out certain attributes in order to avoid certain risks. For example, those who wanted quality products wished to minimize the functional risk. Respondents who were concerned about price were attempting to minimize financial risk and participants who were fascinated by the status level of certain brands were attempting to mitigate social risk. The concept of need for cognition was also added to the theory because a person’s need for cognition is thought to influence how people shop. A person with a higher need for cognition is more likely to search for alternatives than a person
with a lower need for cognition. The final determinant, message integration, was added to explain why certain brands were seen as more favorable than others. This concept of helps explain how individual brands could affect the level of brand dependency or sensitivity.

**Qualitative Experience Survey**

In trying to understand the concept of the brand dependency and brand sensitivity, participants of the quantitative survey were asked several qualitative questions on the online Qualtrics survey platform. However, before the questions could be analyzed, some respondent’s had to be removed due to quality control concerns. The first criterion for removal was the completion time of the survey. According to Qualtrics, the survey was estimated to take ten minutes to complete. Many of the participants completed the survey in less time. Participants that completed the survey in substantially less time were eliminated. In order to remove any bias in the removal process, all respondents that took less than two minutes to complete the survey were eliminated. Also, those who did not complete the entire survey were thrown out.

Next, respondents were judged on their written responses. Those who had responses that showed obvious carelessness or lack of effort were removed. Thoughtless responses were recognizable in a number of ways. Some respondents put answers that did not answer the question. For example, one respondent simply repeated the word “blah” over and over again for every written response. Yet another respondent did the same with the word “meow”. Obviously, these respondents did not put much effort into the survey, so all of their answers were thrown out. Other respondents would repeat the same answers for different questions, even if the answers did not make sense for a given
question. In the survey, respondents were first asked to consider a product that they bought because of the brand. They were then asked, “In this case, why was brand so important in your purchase decision?” Later, when the participant was supposed to answer questions based of a product they had bought for reasons other than brand they were asked, “In this case, why are factors other than brand important in your purchase decision?” One respondent answered both of these questions with the response, “I like the brand very much.” Although this answer makes sense for the first question, it clearly does not make sense for the second. In fact, it blatantly contradicts the request to consider a purchase decision made for reasons other than brand. There were actually several respondents who had thoughtful answers but admitted to using brand as the main criteria in the second example when they were specifically asked to consider a purchase scenario where brand was not as important as other factors. Occasionally, a participant would say that brand was not an important consideration in the first half of the survey. In these instances, half of the survey became unusable and all of the respondents’ answers were thrown out.

For the same two questions in the example above, respondents answered questions that did not make sense such as “vstar” or “good.” Yet another said that the price of the Samsung phone that he bought was “washing machine.” These respondents and others with answers that did not make sense were all eliminated. Additionally, respondents who used the same product as an example in both halves of the survey were thrown out. Obviously the same product cannot simultaneously be purchased mainly because of brand and mainly because of other factors.

**Quantitative Survey**
**Research Instrument.** The quantitative approach aimed to test the concepts developed in the qualitative study. As mentioned before, brand sensitivity and brand dependency are made up of four independent attributes. After the determinants were chosen, it became necessary to find a way to test them. To do this, scales were needed to measure each determinant. Existing marketing scales were adapted to fit the needs of this study. In the survey, participants were asked to think of a purchase a decision that was based mostly or entirely off of brand. Then, the person was asked a series of questions to measure each of the four determinants for the purchase they had chosen. Afterwards, participants completed the same survey but for a purchase decision that was made mainly for reasons other than brand. The full survey given to participants can be found in Appendix A.

The scale used for measuring utilitarian and hedonic scales was based on a scale that originally came from Wakefield and Inman (2003). The original scale uses seven-point semantic differentials to determine whether a product is generally used for hedonic or utilitarian uses. The scale used three differentials, which were the following:

1) practical purposes/ just for fun
2) purely functional/ pure enjoyment
3) for a routine need/ for pleasure

Although this scale had no recorded validity in the original study, it did have alphas of .80 and .90 (for Study 1 and Study 3 respectively). This scale was adapted and modified for this study. Much like the original, three seven-point semantic differentials were used. In this study, the following scale was used:
The modifications made on the original scale were intended to better highlight the differences between utilitarian and hedonic products. The wording of the scale was changed to better reflect the extremes between hedonic products and utilitarian products. This way, participants would be able to better rank the brand’s use.

In order to measure the need for cognition, an adaption of the scale used in Cacioppo, Petty, and Kao (1984) was used. This scale, or modifications of it, has been used or referenced in 39 different studies with alphas consistently ranging from .80 to .90 (Bruner, 2015). The scale uses eighteen Likert-type items, which are included below.

1) I would prefer complex to simple problems.
2) I like to have the responsibility of handling a situation that requires a lot of thinking.
3) Thinking is not my idea of fun. (r)
4) I would rather do something that requires little thought than something that is sure to challenge my thinking abilities. (r)
5) I try to anticipate and avoid situations where there is a likely chance I will have to think in depth about something. (r)
6) I find satisfaction in deliberating hard and for long hours.
7) I only think as hard as I have to. (r)
8) I prefer to think about small, daily projects to long-term ones. (r)
9) I like tasks that require little thought once I have learned them. (r)
10) The idea of relying on thought to make my way to the top appeals to me.
11) I really enjoy a task that involves coming up with new solutions to problems.
12) Learning new ways to think doesn’t excite me very much (r).
13) I prefer my life to be filled with puzzles that I must solve.
14) The notion of thinking abstractly is appealing to me.
15) I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.
16) I feel relief rather than satisfaction after completing a task that required a lot of mental effort. (r)

The scale was shortened for this study in order to prevent survey fatigue. If a survey becomes too long, participants will often put in less effort or become less focused (National Research Center, 2016). This can result in inaccurate results. For the same reason, reverse items were eliminated or reworded. Reverse items have a tendency to trip up survey takers. Although reverse items can be a useful tool for removing participants that are not paying attention, they can also lead to survey fatigue, and thus, less accurate results (National Research Center, 2016). The scale items were also edited to better reflect the purchase of a brand. This was done because the study is interested in the need for cognition involved in purchase scenarios and not overall need for cognition. The modified scale used for this study is included below.
Measuring risk avoidance utilized another seven-point item scale. The scale was based off of the one used in Kushwaha and Shankar (2013). The scale was used to measure the risk of buying an unfamiliar brand in that study. The original had an alpha of 0.893 and used the five items below.

1) What are the chances that there will be something wrong with an unfamiliar brand in this product category or that it will not work properly?

2) What are the chances that you stand to lose money if you try an unfamiliar brand in this product category, either because it won’t work at all, or because it costs more than it should to keep it in good shape?

3) What are the chances that an unfamiliar brand in this product category may not be safe; that is, it may be harmful or injurious to your health?

4) What are the chances that an unfamiliar brand in this product category will not fit in well with your self-image or self-concept or the way you think about yourself?
5) What are the chances an unfamiliar brand in this product category will affect the way others think of you?

The scale above was adjusted to measure the risk perception of the product being purchased. The first half of the questionnaire asks the participant to answer questions based on a purchase made mainly on brand, so the participant should know the brand. Some wording had to be changed to account for this. Otherwise, this scale was left largely unchanged. The edited version of the scale used in this survey is included below.

<table>
<thead>
<tr>
<th>Answer each question according to your thoughts and perceptions of the brand you purchased.</th>
<th>Extremely Unlikely</th>
<th>Moderately Unlikely</th>
<th>Slightly Unlikely</th>
<th>Neither Likely nor Unlikely</th>
<th>Slightly Likely</th>
<th>Moderately Likely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the chances that there will be something wrong with the product?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>What are the chances that you stand to lose money for this product because it won't work at all?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>What are the chances that the product will have a safety issue?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>What are the chances that the product will not fit in well with your self-image or self-concept or the way you think about yourself?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>What are the chances that the product will affect the way others think about you?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

The final scale used in the survey measured message integration. Since message integration is a concept developed as a part of this study, there were no prior scales. However, there was a similar concept called conceptual fluency of the brand, which was used in Sirianni et al. (2013) and had an alpha of .95 and .94 in the studies it was used.
Conceptual fluency of the brand measures the ability of a consumer to understand what a brand represents to other consumers. In reality, this is an indirect measure of message integration. A highly integrated message should be more recognizable to consumers than a divided message. For message integration, the scale for conceptual fluency was used almost verbatim. The scale uses three statements measured with seven points. The scale used in this survey is shown below.

Data Collection. After the scales had been developed, they were inserted in to Qualtrics, an online survey platform. Now that the survey was on an online platform, it needed to be distributed. In order to do this distribution, Amazon Mechanical Turks (often know as MTurk) was used. MTurk allows people known as requesters to pay workers for completing tasks. In this study, a survey link was posted to MTurk. Workers clicked on the link and took the Qualtrics survey. When the survey was completed, they were provided a code that they put into MTurk, which made them eligible for payment of $0.50. The first few workers in this system were used as a test run. Tests of ten to thirty participants were done at a time. The tests ensured that the system ran properly, and edits were done to the survey as needed to ensure clarity and optimal data collection. After
five rest runs, the data used for the survey was collected. The first batch of data collected had 500 participants. Then a second batch of 600 participants was collected.

Now that all of the data was collected, it needed to be cleaned and looked through. A comma-separated (CSV) file containing all of the answers for each respondent was downloaded. In this file, questions were coded with numeric responses to represent the answers. Then each respondent and their answers were looked at manually. Respondents were eliminated on a number of factors. Many of the respondents were already eliminated through the qualitative screening processes since both the qualitative and quantitative questions were asked on the same survey. After these processes, each respondent’s answers were looked at once scale at a time. In theory, questions belonging to the same scale should have similar answers. In practice, this means that questions in the same section of the survey involving the same determinant should have similar numbers. Just looking at these numbers allowed for the elimination of respondents who did not take the survey with due diligence. For instance, there were some people whose answer would vary drastically for the same scale. In several respondents’ answers, a one and a seven would appear in the same scale. Clearly these answers are conflicting. Since the questions in the each scale essentially test the same thing, there should not be a huge variance between answers. If there a clear pattern of conflicting numbers emerged within a scale, the respondent would be eliminated. This is especially true if there were conflicting patterns across more than one determinant. Sometimes, there would be a conflicting numbers for one scale, but the rest would follow an expected pattern. In these cases, the respondent would usually be kept in the study. However, if the troubling numbers in the one determinant was especially bad and there
was no consistency, the respondent would be removed. In other cases, respondents would be removed if the same number appeared across the survey. For example, one respondent had answered four to every quantitative question. This respondent was removed since there is reason to suspect that the respondent was just clicking through the survey without reading the questions. These cases were less frequent than the inconsistent numbers and made up a very small percentage of the people removed from the study.

**Sample.** After extensive review, the initial 1100 participants were reduced to 580 usable participants. Most of the people in the survey (49%) fell between the ages of 26-35. However, another 21.4% of participants were aged 36-45. A full chart of the ages recorded in the survey can be seen below.

<table>
<thead>
<tr>
<th>Age</th>
<th>Percent</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not answer</td>
<td>.2</td>
<td>1</td>
</tr>
<tr>
<td>18-25</td>
<td>14.1</td>
<td>82</td>
</tr>
<tr>
<td>26-35</td>
<td>49</td>
<td>284</td>
</tr>
<tr>
<td>36-45</td>
<td>21.4</td>
<td>124</td>
</tr>
<tr>
<td>46-55</td>
<td>7.4</td>
<td>43</td>
</tr>
<tr>
<td>56-65</td>
<td>6.6</td>
<td>38</td>
</tr>
<tr>
<td>&gt;65</td>
<td>1.4</td>
<td>8</td>
</tr>
</tbody>
</table>

The gender of the participants was decidedly skewed male. A total of 58.3% of the participants in this survey were male and .7% of people abstained from answering. In contrast, income level of the participants was particularly diverse. However, over half of
participants had incomes less than $50,000. This may be partially due to the fact that surveys were paid for their work. Those with higher incomes would be less incentivized to do a survey for pay. A full chart of income ranges can be found below.

<table>
<thead>
<tr>
<th>Income (in dollars)</th>
<th>Percent</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not answer</td>
<td>.3</td>
<td>2</td>
</tr>
<tr>
<td>&lt;25,000</td>
<td>22.8</td>
<td>132</td>
</tr>
<tr>
<td>25,000-49,999</td>
<td>31.9</td>
<td>185</td>
</tr>
<tr>
<td>50,000-74,999</td>
<td>18.4</td>
<td>107</td>
</tr>
<tr>
<td>75,000-99,999</td>
<td>14.3</td>
<td>83</td>
</tr>
<tr>
<td>100,000-149,000</td>
<td>8.8</td>
<td>51</td>
</tr>
<tr>
<td>150,000-200,000</td>
<td>1.0</td>
<td>6</td>
</tr>
<tr>
<td>&gt;200,000</td>
<td>2.4</td>
<td>14</td>
</tr>
</tbody>
</table>

In terms of education, most people had a college degree. 25.7% of people had completed some college or an associate’s degree. Another, 47.1% had a bachelor’s degree and 17.2% had a graduate degree. With regards to ethnicity, an overwhelming majority was white (66.9%). Asians also made up a large percentage of participants at 21.6%. Marital status was mostly evenly split between those who were single and those who were married. 46.2% of participants said they were single and 46.0% percent said that they were married. 5.9% of people said that they were divorced. In addition to these demographics, shopping frequency for non-food items was also measured. Shopping habits varied, but 86.1% of people shopped between once a month and once a week. Specific shopping habit percentages can be seen in the table below.
<table>
<thead>
<tr>
<th>Shopping Frequency</th>
<th>Percent</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not answer</td>
<td>.3</td>
<td>2</td>
</tr>
<tr>
<td>Once a Month</td>
<td>24.3</td>
<td>141</td>
</tr>
<tr>
<td>1-3 Times a Month</td>
<td>34.0</td>
<td>197</td>
</tr>
<tr>
<td>Once a Week</td>
<td>27.8</td>
<td>161</td>
</tr>
<tr>
<td>Twice a Week</td>
<td>10.2</td>
<td>59</td>
</tr>
<tr>
<td>More than Twice a Week</td>
<td>3.4</td>
<td>20</td>
</tr>
</tbody>
</table>

In addition to recording shopping frequency, respondents were also asked how important brand was when shopping. Only 3.3% of people said that brand was not at all important. 73.6% of people admitted that brand was either slightly or moderately important. 23.2% or people said that brand was very or extremely important.

**Construct Reliability.** The scale for the hedonic and utilitarian scale was determined to be reliable. It had a Chronbach’s Alpha of 0.878, which is greater than the 0.7 needed for the scale to be considered reliable. Need for cognition was also reliable with a large Chronbach’s Alpha value of 0.942. Risk Avoidance had a similarly high Chronbach’s Alpha of 0.919. The scale for message integration was also determined to be reliable with a Chronbach’s value of 0.939.

**Results**

**Qualitative**

The qualitative survey focused on two parts. The first part focused a past purchase by the participant in which brand was the main deciding factor. The respondent was then asked, “In this case, why was brand so important in your purchase decision?” A lot of
consumers bought certain brands because of experiences with the brand in the past. As one consumer buying an Asus video card stated, “I've had past experience with the brand I went with. Familiarity with the brand and the many products I've purchased in the past made my decision easier”. This shows that oftentimes consumers buy products purely based familiarity and past experiences with a brand. In these instances, consumers are using heuristics based on past purchases to make new purchase decisions. This corroborates the theory that consumers who are more brand dependent have less of a need for cognition. Many times consumers used heuristics to make their choice, even if they had not purchased the product before. For example, one consumer who bought an Apple tablet explained the purchase by saying, “It was a known and reliable brand, that made the purchase much easier/simpler.” For this person, need for cognition was not needed as the heuristic that Apple is reliable was used to make a decision. How the heuristic was developed is hard to say, but it is quite possible that Apple’s integrated messaging had a role. Apple has advertised its reliability for years, especially with its concentrated advertising campaign focusing on protection from viruses. More recently, Apple had an iPad Pro advertising campaign centering on why the tablet was better and more reliable than a PC computer. It even reintroduced the protection from viruses focus used in previous advertising campaigns (Matyzczyk, 2017). A different respondent bought Bose headphones largely based off his heuristics developed from past purchases rather than research or need for cognition. The person said,

“In this case, I was looking for a set of in-ear noise canceling earbuds to help me concentrate and block out external noise at work. I have owned other Bose products in the past and really liked them, and a friend had told me that these particular Bose earbuds were very good. They were expensive at $300 but I gave them a shot anyway, largely based on my past experiences with Bose. There were
other brands with comparable products at cheaper prices that I didn't consider because I wasn't familiar with their brand.”

This person was aware of cheaper alternatives. However, the participant would rather buy the Bose brand using heuristics to make his choice rather than think or do research to find the best product. This is an example that typifies many of the responses. People who were brand dependent for a purchase would often rather rely on heuristics than cognitive processing. Another person who was buying a Sony TV stated,

“I have other Samsung products. They have been reliable and I think Samsung is a good trustworthy brand. So far the brand has not let me down so I took a chance on a 70" inch flat screen tv. The price was right and I felt like I got a great deal for what I purchased.”

Again, the person could have done a little bit of research to see if this television was the best choice. However, this person decided that the brand was a good enough indicator of reliability to make the purchase.

Frequently, people claimed that name brands are more reliable, or stand for good quality. One example of this is a person who bought a name brand washer because, “I needed a washer but wanted a name brand since I knew it would work better and for longer than an off brand.” Based on these examples, it appears that the theory that people have less need for cognition when they are brand dependent is well supported. It seems that most people follow the line of thinking, “A branded product give us the required or expected features” and as such, other research is unnecessary.

Interestingly, like the examples above, many people cited reliability and quality as the main reasons for buying a certain brand. This is especially true with electronics. For instance one person who bought a Sony television stated, “This brand is very good though it is expensive it is the best brand in quality.” The focus on reliability and quality
is probably due to the price of the object. This aligns with the findings of the preliminary interviews. However, there were also many people who bought a brand for hedonic reasons. One person stated that, “The brand Louis Vuitton was important because it signified a standard of living because of the brand itself.” In other words, the brand itself provided a hedonic benefit that could not be satisfied by other handbags. Another person who bought a Coach purse claimed to do so because the purse was a status symbol. Like the preliminary survey, it seems that purses are often bought solely off of brand for mainly hedonic reasons. However, other products were also bought for hedonic reasons.

A consumer who bought Nike shoes did so because Nike sponsored athletes that consumer liked. One person bought an iPhone because everybody was buying iPhones and he wanted to fit in. There was another participant that bought a BMW car because he thought that having a nice car would make him look “put together.” So clearly some people are brand dependent because of hedonic reasons. However, based on the qualitative study, it does not seem to be as prevalent as anticipated.

There also seemed to be a large proportion of people who bought a certain brand due to brand loyalty. For instance one person claimed that, “I only trust Dell for desktop computers, no one else.” Some demonstrated brand loyalty in the form of habit such as this consumer who buys Rebook shoes because, “The first time I bought this brand, I was happily surprised at how satisfied I was with it. I've been buying it ever since, although sometimes I have to wait for a discount sale.” Or this consumer who stated, “I like gaming on Sony PlayStation consoles, and have done so since the late 90s.” Brand loyalty can be a type of brand dependency, but this is not always the case. For instance, the person who only buys Dell does not demonstrate brand dependency. Brand
dependency, by definition, means that one is willing to consider other brands if their first choice is not available. In cases of extreme brand loyalty, this is not the case.

The second open question dealt with products that were bought for reasons other than brand. One top consideration for this was price. Some cited price as the only reason for their purchase. Most however, cited price in conjunction with other features. Usually, respondents found products that had better prices than name brand and with similar or better features. As one person buying a graphic card said,

“This was an Nvidia GPU. Since all partner cards made by companies like Zotac, EVGA, Gigabyte, and others are based off of the same reference board, they all have the same basic design and similar specs. Zotac brand was the cheapest and reviews weren't terrible so I went with that one.”

In this example, the person had certain features that he wanted in a product. Instead of buying a name brand that contained the features, the person decided to look at the choices available and choose the best product for the price. This illustrates that the person used cognitive processing, (had a higher need for cognition) to find alternatives. This held true across product categories. One person who was buying a shirt said, “I wanted a flannel shirt of a certain level of quality and a certain color, and within a price range. It didn't matter much what the brand was.” The concern with price shows a second part of the theory, which is that those who are brand sensitive have higher risk avoidance. The consumers were trying to minimize the financial risk by searching for alternatives that would have the same features but a lower price. Some held the same attitude as this person who said that products are “expensive just because of the brand name, not because their performance is any better.”

Of course, price was not the only reason people bought products for reasons other than brand. Many people bought products because of a key features. One person buying
dog food said, “We were looking to switch dog foods and picked the best nutritional product we found”. In this situation, the person was more concerned about the nutritional value than the brand or price and picked a product accordingly. As another example, a person bought an Apple MacBook Air because it was the product that would make him the most efficient at work. In these cases, people were buying products due to utilitarian value. In fact, there were very few cases that mentioned hedonic reasons for the purchases in the second part of the qualitative survey.

Quantitative

In order to get results, ANOVA testing was used on each of the four determinants. Each determinant was split into two groups. Answers in the first half of the survey were based off a purchase decisions made mostly because of brand. For this reason, these answers were put into the brand dependent group. Answers in the second half of the survey were based of a purchase decisions made mostly for reasons other than brand. These answers made up the brand sensitivity group. In looking at each determinant, it needed to be determined if the difference between each group was significant. A p value less than 0.05 was determined to be significant. F values were also considered. Then, the actual difference between groups was analyzed by comparing mean values in each determinant. Looking at the difference between the brand dependent group and the brand sensitive group allowed for the determination of whether hypotheses were supported or unsupported.

The hedonic determinant was looked at first. The difference between the brand dependent and brand sensitive groups was significant with a p value of 0.000 and a f value of 158.870. The next step was to look at the means for each group. The brand
dependence group had a mean of 4.6167. With a minimum possible mean of one and a maximum mean of seven, the products bought in the brand dependent group were mostly bought for hedonic reasons. The brand sensitivity group had a mean of 3.3598. This mean is near the middle of the hedonic and utilitarian scale, but ends up on the lower end of the hedonic scale. This means that the items bought among the brand sensitive group are more utilitarian than hedonic. The brand dependent groups had a mean that was 1.2569 higher than the brand sensitive group. This represents a huge difference. So although the brand sensitive group is near the middle of the hedonic and utilitarian scale, products bought in the brand dependence group are considerably more hedonic than the products bought in the brand sensitive group. This supports H1, which states that products bought out of brand dependency will be more hedonic than products bought out of brand sensitivity.

The difference between groups in the need for cognition determinant had a p value of 0.078 and a f value of 3.113. This value represents a somewhat significant difference. Looking at the brand dependence group, the need for cognition mean was 3.2055. This represents a low need for cognition. The need for cognition mean for the brand sensitivity group had a mean of 3.3803. This is also represents a low need for cognition. However, that the brand sensitivity group did have a higher need for cognition than the brand dependent group. This support H2, which states, consumers who experience brand dependence will have a lower need for cognition than consumers who experience brand sensitivity. However, with only a somewhat significant difference and a small difference between means, the hypothesis is only marginally supported.
The risk avoidance determinant was analyzed next. The difference between the brand dependent group and the brand sensitive group had a p value of 0.002 and an f value of 9.908, which means that the difference is significant. The brand dependent group had a mean of 2.4724. This mean represents low risk avoidance. The brand sensitivity group had a mean of 2.7386, which is also represents low risk avoidance. However, this is a higher level of risk avoidance than the brand dependence group, thus proving that those who are brand sensitive are more risk avoidant than those who are brand dependent. This confirms H3, which states that consumers who are brand sensitive will be more risk avoidant than consumers who are brand sensitive.

The difference between groups for message integration had a p value of 0.000 and an f value of 124.560. This is a significant difference. In the brand dependence group, the mean for message integration was 5.6891. This represents a very large level of message integration. The brand sensitivity group had a message integration mean of 4.8805. Although the mean is still high, it is substantially less than the mean for the brand dependence group. This proves that the level of message integration is much larger for brand dependence purchases than brand sensitive purchases. Therefore H4, which states that people will be more brand dependent towards brands with a higher integrated message, is supported.

**Discussion**

The hypotheses presented in the study were largely supported. However, some of the result for each of the determinants was surprising. For instance, although the level of message integration was considerably higher for brand dependent purchases, the level of message integration for brand sensitive purchases was still quite high. This shows that
brand sensitivity is not necessarily characterized by a divided message, but rather a lower degree of message integration. Likewise, although need for cognition was higher for the brand sensitive group than the brand dependent group, both had low need for cognition.

From the study, it can be concluded that the determinants do influence brand dependency and brand sensitivity, but only in relation to each other. For instance, just because a brand has a high degree of message integration does not mean that the consumers will be brand dependent for the product. However, it can be said that brand dependence is characterized by a higher degree of message integration than brand sensitivity. In this sense, there is little to no way to distinguish a purchase as brand dependent or brand sensitive by the measurements of the determinants alone. The determinants do show a pattern among brand dependency and brand sensitivity, but the measurements of the determinants themselves cannot be used to predict the category of the purchase.

This study has results that could prove useful in many commercial settings. If a brand has consumers who are brand sensitive, it can look at the determinants in this study and figure out the best ways to sway consumers to become brand dependent to a specific brand. For instance, if a brand seeks to make consumers brand dependent, it may work on its advertising or public relations campaign to increase its level of message integration. Or, a brand may wish to focus on the hedonic properties of the product to try to get more consumers to be brand dependent. Likewise, a brand can look at competitors and find ways to increase their brand dependence by differentiating from competitors on each of the determinants. However, it should be noted that a brand has the most potential to change the determinant of integrated message, and properties relating to the
hedonic/utilitarian determinant. Determinants directly controlled by the consumer such as need for cognition, risk avoidance are harder to change.

Overall, there are three different categories that the categories represent. These categories are the product, the message, and the consumer. Each of these categories has at least one determinant. The degree of the determinants decides whether one is brand dependent or brand sensitive. From the results, it can be seen that brand sensitivity rather than brand dependency, occurs when products are more utilitarian in nature, the customer has a higher need for cognition and higher risk avoidance, and the marketer presents a less integrated message.

On the flip side, brand dependence generally occurs when products are more hedonic, consumers have a lower need of cognition and risk avoidance and there is a higher integrated message.
However, the Elaboration Likelihood Model is the process that ties together all of the dimensions. In the case of brand dependency, consumers use low elaboration. As shown through the determinants, brand dependency relies more feelings and stereotypes rather than reasoning and intellect. On the other hand, the determinants for brand sensitivity encourage more cognition and evaluation of arguments for and against products. Consumers, who are brand sensitive then, have their attitudes mainly shaped by high elaboration. In essence, the dimensions for brand dependence and brand sensitivity show how high elaboration or low elaboration is used in different situations to make a purchase decision using either brand sensitivity or brand dependence.
The figure above shows how ELM ties in with the dimensions that make up the product, message, and consumer categories. The other four dimensions determine whether a person is likely to be brand sensitive or brand dependent in a given scenario but ELM influences each of the dimensions and ultimately determines whether a consumer will be brand sensitive or brand dependent.

So, although individual brands can change characteristics relating to determinants of the product and the message, it is the consumer who interprets these changes. Ultimately, the consumer determinants and the consumer’s interpretation of the product and the message is the deciding factor in any purchase decision. In this case, the old saying that “perception is reality” holds true.

When looking at the results of the quantitative study it is important to put them in context of the study as a whole. Looking at the means of the responses represents the average response, and not each individual response. In looking at the qualitative section,
it is clear that some people felt more strongly about certain features and determinants than others. For these people, one determinant may have a much larger impact on their purchase. In a commercial setting, this means that accommodating determinants may increase brand dependency among certain consumers rather than the consumer base as a whole.

**Conclusion**

The purpose of this study was to determine how the four factors of hedonic vs. utilitarian goods, need for cognition, risk avoidance, and integrated message affected the consumers’ brand dependency or brand sensitivity. It was found that brand dependent purchases were more hedonic, experienced lower need for cognition, and lower risk avoidance but higher message integration than brand sensitive purchases. However, even though brand sensitive purchases were more risk avoidant than brand dependence purchases, the overall risk avoidance level was low. Likewise, the level of message integration for brand sensitive purchases was still quite high despite being considerably lower than message integration for brand dependent purchases. It was found that while each of the four determinants did have an influence on brand dependency and brand sensitivity, the influence was not as pronounced as expected.

**Limitations and Future Research**

This study was affected by several limitations. One limitation of this study was the inability to compare brands across similar product categories. Allowing participants to choose their own purchase scenarios meant that a wide variety of products were covered. This meant that relatively trivial purchases, such as snacks and soft drinks, were compared to larger purchases such as computers and cars. This is not a fair comparison,
because larger purchases are more likely to involve higher levels of need for cognition and risk avoidance behavior. A future study could test if certain determinants are more pronounced in different brand categories. Determinant levels could be measured in a given product category for brand dependent and brand sensitive purchases using a process similar to the one used in this survey. Then, the determinant levels could be compared to the determinant levels of other brand categories. This would allow the researcher to see the variance of the determinants between categories.

Another limitation of the study is that it assumes that the participant experienced brand dependency and brand sensitivity. In the survey, participants were asked first to think of a product that they bought because of mainly due to brand. In the second part, participants were asked to think of a product that was bought for reasons other than brand. These questions were used as a way to separate brand dependent and brand sensitive purchases. However, not everyone has the same brand experiences. This allows for the possibility that not everyone experiences brand dependence or brand sensitivity. One other limitation is that the study does not measure the degree of brand dependency and brand sensitivity. The amount of influence that brand has on a purchase decision is sure to vary person-to-person and brand-to-brand. Future research could come up with a way to measure different degrees of brand dependency.

The way that the study was conducted limited the quality of the responses. While the online survey was fast and efficient, there was a tradeoff of response quality. In future studies, using a mall intercept strategy could allow for better insights. Mall intercept methodology may make respondents more willing spend more time answering
questions. This could lead to better quality responses that may change or augment the results and conclusions captured in this study.
Appendix A

Product Introduction

We are conducting an academic survey to study the degree of influence that brand plays in consumer purchase decisions.

Make sure to answer questions carefully and thoughtfully. You must provide full and reasonable answers to all questions related to two buying scenarios. Surveys that are judged to be rushed, taken carelessly or are otherwise inadequate will not be eligible for payment.

The detail of this survey is as follows:
- This survey is anonymous, but will ask about your demographic background.
- This survey contains some Likert-type questions (e.g., to agree or disagree) and a number of demographic questions. There is no right or wrong answer, but please provide your true evaluation.
- This survey takes roughly 10-15 minutes to complete.

Make sure to leave this window open as you complete the survey. When you are finished, you will return to this page to paste the code into the box.

Q17

Please think of a recent purchase in which you made your decision largely or entirely due to brand.

What was the brand?


Q18

What product category did the brand belong to? For instance, a Macbook would fall under the product category of laptop.


Q19

How much did the product cost? If you do not remember the price, your best estimate is fine.


Q20
### Q2

**For each of the questions below, select the response that best describes your attitudes towards the brand you purchased.**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>In buying this brand, I needed to anticipate negative situations arising from the product.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buying this brand required me to think a lot in order to make a decision.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In buying this brand, making a decision was difficult because it required a great deal of mental effort.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In buying this brand, I ended up deliberating about many issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buying this brand required intensive information search.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Q3

**Answer each question according to your thoughts and perceptions of the brand you purchased.**

<table>
<thead>
<tr>
<th>What are the chances that there will be something wrong with the product?</th>
<th>Extremely Unlikely</th>
<th>Moderately Unlikely</th>
<th>Slightly Unlikely</th>
<th>Neither Likely nor Unlikely</th>
<th>Slightly Likely</th>
<th>Moderately Likely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the chances that you stand to lose money for this product because it won't work at all?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What are the chances that the product will have a safety issue?</td>
<td></td>
<td></td>
<td></td>
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<td>What are the chances that the product will not fit in well with your self-image or self-concept or the way you think about yourself?</td>
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</tr>
</tbody>
</table>
Now please answer each question based on your familiarity and understanding of the brand.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
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<td>○</td>
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</tbody>
</table>

Answer each question below in the context of your purchase decision.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
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</tr>
</thead>
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</tr>
</tbody>
</table>

In this case, why was brand so important in your purchase decision?

Product Intro2

Please think of a recent purchase in which you made your decision largely due to a reason other than brand.

What was the brand?
Q46
What product category did the brand belong to? For instance, a MacBook would fall under the product category of laptop.

Q47
How much did the product cost? If you do not remember the price, your best estimate is fine.

Q48
Think of the situations that the brand you bought is typically used. For each of the three factors, mark the number you believe most closely corresponds to the brand’s use.

- For basic needs: 1 2 3 4 5 6 7
- For lower cost: 1 2 3 4 5 6 7
- Product only has practical use: 1 2 3 4 5 6 7
- For higher social and psychological needs: 1 2 3 4 5 6 7
- Higher benefit: 1 2 3 4 5 6 7
- Product brings social well-being and enjoyment: 1 2 3 4 5 6 7

Q49
For each of the questions below, select the response that best describes your attitudes towards the brand you purchased.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>In buying this brand, I needed to anticipate negative situations arising from the product.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buying this brand required me to think a lot in order to make a decision.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>In buying this brand, making a decision was difficult because it required a great deal of mental effort.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>In buying this brand, I ended up deliberating about many issues.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Buying this brand required intensive information search.</td>
<td></td>
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</tr>
</tbody>
</table>
### Risk Avoidance

**Q50**

**Answer each question according to your thoughts and perceptions of the brand you purchased.**

<table>
<thead>
<tr>
<th>Question</th>
<th>Extremely Unlikely</th>
<th>Moderately Unlikely</th>
<th>Slightly Unlikely</th>
<th>Slightly Likely</th>
<th>Moderately Likely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the chances that there will be something wrong with the product?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>What are the chances that you stand to lose money for this product because it won't work at all?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>What are the chances that the product will have a safety issue?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>What are the chances that the product will not fit in well with your self-image or self-concept or the way you think about yourself?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>What are the chances that the product will affect the way others think about you?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

### Message Integration

**S1**

**Now please answer each question based on your familiarity and understanding of the brand.**

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have a clear understanding of what the brand stands for.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>It is easy for me to identify what the brand means for me.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>It is easy for me to describe what the brand represents to customers.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Answer each question below in the context of your purchase decision.

<table>
<thead>
<tr>
<th>Brand played a big role in my purchase decision.</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price played a big role in my purchase decision</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Product features played a big role in my purchase decision.</td>
<td>○</td>
<td>○</td>
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</tr>
</tbody>
</table>

In this case, why are factors other than brand important in your purchase decision?

Demographics

How old are you?

- 18-25
- 26-35
- 36-45
- 46-55
- 56-65
- Over 65

What is your gender?

- Male
- Female
- Confidential
Q11. What is your household income?
- Under $25,000
- $25,000 - $49,999
- $50,000 - $74,999
- $75,000 - $99,999
- $100,000 - $149,999
- $150,000 - $200,000
- Over $200,000

Q12. What is the highest level of education you have achieved?
- Some high school or less
- High school graduate, diploma or equivalent
- Some high college, no degree
- Associate’s degree
- Bachelor’s degree
- Master’s or doctorate degree

Q13. What is your ethnicity?
- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander

Q14. What is your marital status?
- Single, never married
- Married or domestic partnership
- Widowed
- Divorced
- Separated

Q15. How often do you go shopping (non-grocery)?
- Once a month or less
- Between one and three times a month
- Once a week
- Twice a week
- More than twice a week
In general, how important is brand to you when shopping?

- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important
References


Oliver, Richard L. (1999), "Whence Consumer Loyalty?" *Journal of Marketing*, 63 (Special Issue), 33-44.


