# Consumer Choice Tactics for Common, Repeat Purchase Products: Using Tissues and Deodorant to Predict and Understand Consumer Behavior 

Alicia Elizabeth Dixon<br>Butler University

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# Consumer Choice Tactics for Common, Repeat Purchase Products: Using 

 Tissues and Deodorant to Predict and Understand Consumer BehaviorA Thesis<br>Presented to the Department of Marketing and Management<br>College of Business<br>and<br>The Honors Program<br>of<br>Butler University<br>In Partial Fulfillment<br>of the Requirements for Graduation Honors

Alicia Elizabeth Dixon
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#### Abstract

Currently there is limited research on the consumer decision-making process for low involvement products. The purpose of my study was to better understand the consumer decision-making process for common, repeat purchase products. Specifically, I was looking at how gender and generational differences impacted the decision-making process when purchasing two low-involvement products, tissues and deodorant. One hundred and ten students, staff and faculty were asked to look at a constructed store aisle and purchase both a box of tissues and stick of deodorant and complete a questionnaire responding to questions regarding their decision choice. The questionnaire collected information regarding six dependent variables including brand loyalty, involvement level, and four choice heuristics: performance, price, affect, and normative. Through openended and closed-ended questions as well as observational data that was collected, I developed a better understanding of each participant's decision-making process. There was support for my hypothesis that Millennials would be more influenced by normative and affective choice tactics than Baby Boomers or Gen Xers. Overall we found that Millennials tended to be the most influenced by the choice heuristics while Baby Boomers were the least influenced. Data suggested that this might have occurred because the decision-making of Baby Boomers was more influenced by brand loyalty. There were also few statistically significant differences found between the dependent variables measured based on gender.


## Literature Review

## Introduction to Common, Repeat Purchase Products

Brand expert, Martin Lindstrom's "Buy-ology: Truth and Lies About Why We Buy" contains an intriguing chapter about Skippy ${ }^{10}$ peanut butter. Martin recounts what an average consumer's thought process most likely is while taking the twenty or so seconds to decide which peanut butter to buy:
"I associate Skippy with childhood...it's been around forever, so I feel it's trustworthy... Same goes for Peter Pan, plus the name is so childish. And I'm not buying that generic brand. It costs 30 cents less, which makes me suspicious. In my experience, you get what you pay for... Jif...what's that old advertising slogan of theirs: "Choosy Mothers Choose Jif" (Lindstrom, 2008, p. 48).

This example sounds rather humorous, but think about it. Think about the last purchase you made of an everyday item, and try to remember why you bought it. While it may be tempting to say either, "I don't know" or "Just because", if you really think about why you bought that particular item, a number of factors, many of which you were not consciously aware of, probably affected your decision. According to Lindstrom, there is no single reason you bought it but rather a lifetime of associations that led to your decision (Lindstrom, 2008). Several consumer behavior studies (Hoyer, 1984; Leong, 1994; Lindstrom, 2008) have tried to describe the decision-making process for low involvement, common repeat purchases and have come to similar conclusions.

## Consumer Behavior Overview

## Understanding Consumer Behavior

The literature has several definitions of consumer behavior, all including, either directly or indirectly how consumers make decisions about which products or services to consume. The consumer buying process and the forces that shape it, all contribute to
consumer behavior. Shiffman and Kanuk (1991) identify these forces as past experiences, personality, and attitudes as well as marketing and situational influences. Understanding and interpreting how these factors become decisions is easier said than done. O'Connor (2004) notes that today, as never before, business should not be taken for granted, and therefore it is imperative that business owners understand consumer behavior so that they can anticipate and influence customer purchasing decisions.

## Consumer Decision-Making Styles

A major component of consumer behavior is understanding how consumers make decisions about which products or services to purchase. In order to better understand consumers, researchers have attempted to identify commonalities in the approaches consumers use in making decisions, referred to as "decision-making styles". These decision-making styles describe how consumers make choices based on emotional and mental states (Durvasala et al. 1993).

The literature has identified three different models to describing consumer decision-making styles: the consumer typology approach (Westbrook \& Black, 1985), the psychographics/lifestyle approach (Lastovicka, 1982), and the consumer characteristics approach (Fan \& Xiao, 1998; Sproles \& Kendall, 1986). Each decision-making approach places consumers into different groups based on similar characteristics. The consumer typology approach places consumers in groups related to retail patronage (Leng \& Botelho, 2009); the psychographics/lifestyle approach attributes consumer behavior characteristics based on personality traits, activities, interests, and values (Leng \& Botelho, 2009); and the consumer characteristics approach looks at the cognitive and affective orientations towards decision-making purchases (Leng \& Botelho, 2009). For
the purpose of this study, the focus will be on the consumer characteristics approach, which emphasizes the cognitive and affective orientations toward purchasing (Leng \& Botelho, 2010; Fan \& Xiao, 1998; Sproles \& Kendall, 1986).

## Decision-Making Literature

## Models

An important issue in consumer behavior is how consumers make decisions about which products to purchase (Shiffman \& Kanuk, 2000). A substantial amount of research has examined consumer decision-making (e.g. Leng \& Botelho, 2009; Babutsidze, 2006; Biswas, 2009). The research suggests that consumer decision-making proceeds through a five-step process: (1) problem recognition, (2) information search (internal and external), (3) evaluation of alternatives, (4) purchase selection, and (5) post-purchase evaluation (Hawkins et. al., 2007). The problem recognition stage is when consumers acknowledge a need or desire for a good or service. This could be realizing that the person has run out of toothpaste, or, after seeing an advertisement for a new iPod, deciding that he wants to go buy the item. Once the person has identified the problem, he will conduct an information search to gather information about how to obtain the good or service. This can be an internal search such as looking back on past experiences or the unconscious use of somatic markers (Dunn, Dalgleish, \& Lawrence, 2006), or an external search such as researching online or asking friends and family. Once the person obtains the necessary information, he will evaluate alternatives. Evaluating alternatives can include alternative substitution products or brand alternatives. The process of evaluating alternatives forces consumers to evaluate all possible solutions to their product need. Once the alternatives have been evaluated, a person will make a selection. This could be deciding what to buy
or deciding not to buy the item. After the person makes a selection, there is always a post-purchase evaluation. Again, this could be conscious or subconscious. Typically if an item is effective and good, there is little conscious post-purchase evaluation, but if the product was unsatisfactory there will be a more conscious thought, acknowledging that the particular product should not be purchased again. Although there are multiple models of consumer decision-making that have been proposed (Sproles \& Kendall, 2009; Hoyer, 1988; Leng \& Botelho, 2010, Shiffman \& Kanuk, 1991) this five-step model is the most common.

## Somatic Markers and Neural Correlates

Several studies have attempted to describe the neurological basis for consumer decision-making. As stated previously, a consumer's decision-making process may not necessarily be easy to articulate because the brain makes a rapid series of associations and choices to help make the choice with seemingly little thought. For example, Dunn, Dalgleish, and Lawrence (2005) examined how somatic markers impact the decisionmaking process. Dunn et al. (2005) explains that the main decision-making processes are made through a person's frontal lobe. If the frontal lobe is impaired, a person will not be able to connect previous experiences to current situations. Somatic markers apply to all decisions, and are typically more emotional than rational (Dunn et al., 2005).

Also relating to neurological effects on decision-making was a study done by McClure et al. (2004). This study tried to explain why consumers have such strong preferences for either Coca Cola or Pepsi even though the chemical composition of the two products is almost identical. The study was done by instructing participants to taste both products blindly without knowing which product they tasted. Ironically, the parts of
the brain that were stimulated during both tests were different. This suggested that when making decisions, the brain not only uses the frontal lobe, but an emotional part of the brain. Therefore, once a person's brain processes his or her lifetime of associations with a given product, typically it is an emotional reason why a consumer chooses the end product, not a rational reason.

## Types of Consumer Decisions and Products

Decision-making styles and models can be used for all types of products, but it is important to understand that not all product purchase decisions involve the same level of cognitive thought process. The literature classifies products based on involvement level. Involvement is how relevant an object is perceived to be based on a person's needs and values (Zaichkowsky, 1985; Howard \& Sheth, 1969). Higher involvement with a purchase leads a person to search for more information (internal and external) and to spend more time searching for the right selection (Zaichkowsky, 1985). Product involvement therefore affects the consumer decision-making process (Te'eni-Harari \& Hornik, 2010) and is categorized into low, medium and high. For example, according to a study conducted by Zaichkowsky (1985), a low level of product involvement was found for instant coffee, soap, and breakfast cereal. A medium level of product involvement was found for facial cream and headache remedies. A high level of product involvement was found for automobiles.

Research suggests that there are three decision-making approaches that consumers use that are a function of their involvement level with the product. These approaches are extended, limited and nominal decision-making approaches (Crotts, 1990). Utilizing the five-step decision-making model, extended decision-making involves an extensive
internal and external information search followed by a complex evaluation of multiple alternatives and significant post-purchase evaluation (Crotts, 1990). Extended decisionmaking involves substantial cognitive efforts and would be used for higher priced products such as homes, personal computers, and complex recreational items such as backpacks and stereo systems.

Limited decision-making involves internal and limited external search, few alternatives, simple decision rules based on a few product attributes, and little postpurchase evaluation (Crotts, 1990). There is recognition of a need, but instead of knowing what to purchase, a person may do a scan of the aisle to evaluate his alternatives and quickly make a decision. The limited decision-making model might also be used when a consumer becomes complacent with a brand that stems from an emotional or situational need. Under these circumstances, a person may evaluate alternatives with some research and make a decision simply out of newness or novelty of the alternatives. In general, limited decision-making involves recognizing a problem where there are several possible solutions.

Nominal decision-making, also called habitual decision-making, essentially "involves no decision per se" (Crotts, 1990). The decision-making process is simple and involves limited thought in the five-steps of the decision-making model. There is no consideration of the "do not purchase" alternative. Nominal decisions can be broken into two distinct categories: brand loyal decisions and repeat purchase decisions (Crotts, 1990). Brand loyalty is defined as a biased behavioral response in choosing one or more alternative brands consistently over an extended period of time (Jacoby, Chestnut and Kyner, 1973). A consumer who is brand loyal will not make a purchase if his desired
brand is not available at a particular store. The brand is just as important as the product itself. A brand loyal purchase is, therefore, habitual and involves very little actual decision-making.

Repeat purchase decisions have no commitment to a specific brand, but are purchases a consumer makes on a regular basis. For example, a person may believe all ketchup is the same and after trying Del Monte, continue to buy Del Monte. The person is not purchasing Del Monte because of their loyalty to the brand but because they have been satisfied with their choice and the decision is not important enough to consider other alternatives. If for some reason that person encounters a problem with purchasing Del Monte (e.g., it is out of stock, raises it price, etc.), he will only require limited decision process to decide on another brand. Repeat purchase decisions differ from brand loyal decisions, because although both involve buying the same brand on multiple occasions, the brand loyal purchaser does so because he has an emotional attachment to the brand while the repeat purchaser buys the same brand out of habit, because it is readily available, because it is the lowest price, or for some other superficial reason.

## Decision-making for Common Repeat Purchase Products

Collectively, purchases for low involvement, common repeat purchase products represent a sizeable proportion of a consumer's total annual purchases. Thus, it is important to better understand how these types of purchase decisions are made.

Surprisingly, only a few studies have examined the consumer decision-making process for common repeat purchase products (Hoyer, 1984; Leong, 1994; MacDonald \& Sharp, 2000).

Hoyer (1984) examined common, repeat purchases by observing consumers in several different mass merchandising stores. One hundred and twenty subjects were observed while they made their decision about which laundry detergent to purchase; observations were made of the amount of time it took individuals to make a decision, which product was chosen, as well as the number of brands looked at or picked up and the number of shelf tags examined. Hoyer found that four choice heuristics (price, affect, performance and normative) accounted for most of the decisions about which laundry detergent to purchase. More specifically, he found that performance was cited by $34 \%$ of participants as the primary reason they purchased that particular brand of laundry detergent, $27 \%$ indicated that price was the most important factor, $24 \%$ identified affect as most important while only $13 \%$ selected normative tactics. The average total time in the aisle was only 13.16 seconds.

Leong (1994) replicated and extended Hoyer's study by adding an additional product, shampoo, and by examining consumers in Singapore. Using a methodology similar to Hoyer (1984), Leong interviewed approximately 200 subjects, 100 for each product. Similar to Hoyer, Leong also found that performance was most commonly identified as the primary reason for the purchase decision, but Leong found that a larger percentage, $56 \%$ of the sample, chose performance tactics as the primary reason they selected the laundry detergent. The other three choice tactics were cited as the primary reason for the purchase decision less frequently, with only $15 \%$ using price tactics, $9.5 \%$ utilizing normative tactics and $5 \%$ choosing based on affective tactics. Results for shampoo mirrored the results of laundry detergent. Consumers took an average of 12.18 and 13.80 seconds for laundry detergent and shampoo respectively. These results are
similar directionally to Hoyer's study with respect to the choice tactics, and with respect to the total time it took to make the decision. However, participants in Leong's study reported using performance tactics more often and price, normative and affect tactics less than did participants in Hoyer's study. Overall, the results the results of these two studies suggest that consumers make in-store purchase decisions very quickly, and that their decisions can be attributed to four primary choice tactics.

## Hypothesis Development

This study is a continuation of Hoyer (1984) and Leong's (1994) studies on analyzing consumer's decision-making process for common, repeat purchase products. The study analyzes consumers' decisions when purchasing tissues and deodorant, two product categories that have yet to be analyzed. This study differs from previous research on common repeat purchases by looking at generational and gender differences in consumer decision-making for common repeat purchase products. Determining if purchase decisions for these products differ across genders and generations is important for companies in determining how to target and specialize marketing strategies in the most effective manner.

## Generational Differences

When attempting to predict consumer behavior, it is important to identify common characteristics consumers share. Consumers can be categorized in terms of their gender and their generation. Although most of the information about generational differences is anecdotal in nature, some research (e.g. Clare, 2009; Salahuddin, 2010; Hall \& Richter, 1990) suggests that there may be consistent differences between people who were born during different time periods. For generational differences, this study
analyzes three recent generations: Baby Boomers, Generation X, and Millennials (Clare, 2009). Baby Boomers consist of all people born in 1946-1964, Generation X consists of all people born from 1965-1980, and Millennials consist of all people born from 1981 through 2000 (Miller, 2009; Cross Cultural Toolkit, 2002)

The Baby Boomer generation is commonly described as having a strong focus on self, a need for autonomy, optimism, and team orientation (Hall \& Richter, 1990; Salahuddin, 2010). Baby Boomers need authority and fairly consistent performance evaluations; they enjoy team activities (Salahuddin, 2010). They were defined by events such as the Vietnam War and the Civil Rights movement (Salahuddin, 2010).

Gen Xers are described as diverse, balanced, fun, informal, self-reliant, and global thinkers (Salahuddin, 2010). Gen Xers are very adaptable, enjoy a work/life balance, and are very independent and creative (Arnold, 2010; Salahuddin, 2010; Twenge, 2010). For Gen Xers, the most notable characteristic is that they are the best-educated generation (Miller, 2009). This would lead marketers to assume that this generation will be more conscious of product content, take more time to buy a product, and do research on a product before buying. This generation strives for work/life balance more than their parents did (Cross Cultural Toolkit, 2002).

Millennials are described as having high confidence, and as valuing achievement, sociability, and civic duty (Salahuddin, 2010). Millennials typically need more structure and supervision, like Boomers, but primarily because of their inexperience (Deal et al., 2010; Salahuddin, 2010). Millennials are recognized as being technologically savvy, and it is noted they spend almost fifteen hours a day interacting with various media and communications (Miller, 2009). This generation is important because they influence
household purchases within a family. Research shows $81 \%$ of families' apparel purchases and $52 \%$ of car purchases are influenced by 13-21 year olds (Miller, 2009). As one of the wealthiest generations, Millennials have reduced their spending less than other generations (Yarrow \& O'Donnell, 2009).

Despite how commonly these generational differences are discussed in the popular press and/or used by marketers for segmenting the population, very little academic research has been done documenting actual differences in behavior between the generations. Studies have been done showing generational differences in purchasing wine (Qenani-Petrela, Wolf, \& Zuckerman, 2007), leadership styles (Salahuddin, 2010), and overall cross-cultural differences (Yi et al., 2010). The focus of this study is on shopping behavior, a topic on which surprisingly little academic research has been done.

## Generation Hypotheses

As the literature notes, Millennials have the largest disposable income of the three generations and have reduced spending less than the other generations (Yarrow \& O'Donnell, 2009). Although the literature also notes that Millennials consider themselves bargain shoppers, I believe Baby Boomers and Gen Xers will be more price sensitive because they have less disposable income. Therefore, I hypothesize that:

> H1: Baby Boomers and Gen Xers will be more influenced by the price heuristic when making purchase decisions for common repeat purchase products than will Millennials.

The literature consistently describes Baby Boomers as valuing a good work ethic and hard work more than the other generations (Cross Cultural Toolkit, 2002). Because of this, I believe Baby Boomers will be the more concerned about product performance
when making their purchase decisions than will the other two generations. This leads to my second hypothesis:

H2: Baby Boomers will be more influenced by the performance heuristic when making purchase decisions for common repeat purchase products than will Gen Xers and Millennials.

Because Millennials are the youngest generation, and fairly new to purchasing products, I believe they will be heavily influenced by parents, friends and the media when making purchasing decisions. Millennials are said to use word-of-mouth as a main form of advertising, which further suggests that they are likely to emphasize the normative choice tactic. Based on this, I believe Millennials will be more influenced by normative tactics compared to the other generations. Therefore, I hypothesize that:

H3: Millennials will be more influenced by the normative heuristic when making purchase decisions for common repeat purchase products than will Gen Xers and Baby Boomers.

Millennials are also described as being the most concerned about products that are aesthetically pleasing both in terms of the appearance of the product and its packaging and the scent of the product. These reflect the affective choice tactic, which leads to my next hypothesis:

H4: Millennials will be more influenced by the affective heuristic when making purchase decisions for common repeat purchase products than will Baby Boomers and Gen Xers.

## Gender Differences

Not only is it important to understand generational differences, but this study is also looking at consumer decision-making from the perspective of gender. A vast literature on gender differences has developed over the past several decades, documenting gender differences in such diverse areas as leadership styles (Eagly \&

Johnson, 1990; Eagly, Johannesen-Schmidt and van Engen, 2003), career advancement (Pfeifer, 2011), health risks (Behan, 2011), income (Wang, 2011), childcare responsibilities (Garcia-Mainar et al., 2011), and even general knowledge level (Dolan, 2011). Despite the substantial amount of research on gender differences that has been conducted, as with generational differences, very little has focused specifically on shopping behavior. The few studies examining male and female shopping behavior have focused on such issues as purchase decision time (Otnes \& McGrath, 2001), brand loyalty (Barber, 2009) and impulse buying (Coley \& Burgess, 2003). It is important to understand differences in the shopping behavior of men and women because research has indicated that there are substantial differences in behavior that should be addressed when marketing products to each demographic.

Underhill (2008) specifically studied gender differences in the shopping behavior. His research found that 86 percent of women look at price tags when they shop compared to only 72 percent of men, suggesting that women are likely to be more price sensitive than men are. He argued that this difference might have occurred because historically, women have had primary responsibility for making these everyday purchases and because they take pride in their ability to shop prudently. It has also been shown that men move faster than women through a store's aisles, and spend less time looking at the different product options. Consistent with this, Underhill found differences in the average shopping time of women depending upon who they were shopping with:

Woman shopping with a female companion: 8 minutes, 15 seconds
Woman with children: 7 minutes, 19 seconds
Woman alone: 5 minutes, 2 seconds
Woman with man: 4 minutes, 41 seconds

## Gender Hypotheses

The literature discussed above suggests that men will spend less time than women in make purchasing decisions (Underhill, 2008). Because of this, I hypothesize that

H5: Men will take less time than women to make their purchasing decisions.
The literature also suggests that women are more price sensitive and pride themselves on being prudent shoppers (Underhill, 2008). Therefore it can be argued that men will consider price less than women will. Furthermore, because men make these purchases less often, they may not have a price reference to allow them to assess whether a particular item is priced high or low, resulting is less emphasis on price when making a purchase decision. This leads to the following hypothesis:

H6: Men will be more influenced by the price heuristic when making purchase decisions for common repeat purchase products than women will be.

## Method

## Participants

Participants in this study were 110 faculty, staff and students at a small
Midwestern university. Participants ranged in age from 18 to 76-years old, with a mean of 36.1 and a median of 26.5. The sample included 58 Millennials (52.7\%), 9 Gen Xers (8.2\%), and 31 Baby Boomers (28.2\%). Four participants did not give their year of birth and thus, were not included in the data analysis. Eight participants are considered older than Baby Boomers, but were included in the Baby Boomer generation because the average age of these eight participants placed them on the cusp of the Baby Boomer generation and thus, suitable to include with Baby Boomers. Forty-five participants were male and sixty-five participants were female.

Of the 110 participants, 52 were students and 56 were staff/faculty (2 participants did not provide whether they were student, staff or faculty). The sample included students
from all 6 academic colleges at the university, and thus, represented a wide range of majors. Staff and faculty were predominantly from either the College of Business or a part of the Honors Program.

## Product Selection and Shelf Arrangement

In previous studies (Hoyer, 1984; Leong, 1993; Lindstrom, 2008) researchers have used laundry detergent, peanut butter and shampoo to test consumer decisionmaking behavior for low involvement products. This study focuses on deodorant and tissues because of the similarity in involvement level and product type. Due to the very large number of product choices available for both tissues and deodorant, it was not possible to include one of every option available. However, every effort was made to ensure that there was a representative sample for each product. For tissues, to ensure that there was a substantial representation of all the products available, at least one of each of the three possible brands (Kleenex ${ }^{\circledR}$, Puffs ${ }^{\circledR}$, and private label) as well as a variety of box shapes (cubes and rectangles), colors and patterns, and added features (anti-bacterial, plus lotion, or extra strong) were selected. For deodorant, at least $90 \%$ of the brands were represented. Within brands, every effort was made to ensure there was a good representation of forms (spray, gel, solid, or roll-on), scents, and quality (clinical strength, antiperspirant). In total, there were approximately 25 boxes of tissues and 70 deodorants from which participants made their purchase decision.

Several factors influenced the reconstruction of the store aisle, with the most important being how they were actually placed on the shelves at the store. Product placement is very important to manufacturers, and they often pay a substantial amount to get the most advantageous position on the shelf. In order to ensure that the arrangement
of the products on the shelves in this study was as similar as possible to the in-store shelf arrangement of the products, several pictures were taken of how the products were arranged on the shelves at a large national retailer. These pictures were used to match the product placement in the simulated shopping aisle used in this study with the product placement in the actual store as closely as possible.

A secondary consideration in determining product placement was making it possible to accurately determine when participants looked at different brands. Adjusting the number of products per shelf and how many shelves to use allowed for an easier way to observe participants while they made their purchase decisions. For tissues, one bookcase with five shelves was used, and for deodorant, two bookcases with five shelves each were used. Because there are only three brands of tissues and a fairly limited selection, it was easier to have a shelf designated to each brand. The bottom two shelves had tissues that were in cube-shaped boxes and were a variety of all three brands. The deodorant section was a more complicated section because of the large variety of scents and textures, and because there were many products designed exclusively for men or for women.

The display mirrored, as accurately as possible, actual shelf placement in the store. For instance, Secret ${ }^{\circledR}$ and Old Spice ${ }^{\circledR}$ were at eye-level because in-store, they were also placed at eye-level. Consistent with placement in stores, the top shelves had the most expensive products, typically a clinical version of a popular brand. The bottom shelf had the more generic, unisex options as well as the aerosol cans. Pictures of the simulated shopping aisle used in this study can be found in Appendix A.

## Procedures

The study was conducted in two small conference rooms on campus. Before completing the observational portion, participants were seated in a separate room from the store aisle and were told that this was an honors thesis study for a senior marketing major and that the study focused on consumer behavior. The second conference room had three sets of shelves containing the tissues and deodorant choices available. Participants were told that they would be reenacting a shopping experience in which they needed to choose the deodorant and tissues they would purchase if they were at the store today. In providing these instructions, care was taken not to suggest to participants that they ought to purchase what they did the last time they were at the store, but rather that they should purchase whatever product they would if they needed some today. Participants were also told that they should spend as much or as little time as they typically would when deciding which deodorant or tissue to purchase. The intent was to encourage participants to approach their decision here exactly as they would if they were at the store. To ensure that all participants were provided the same introductory information, a script was prepared in advance and read to each participant. A copy of the script used can be found in Appendix B

After making their product selections, participants returned to the first conference room and completed a questionnaire. The questionnaire measured the dependent variables in the study with both open and closed-ended questions based on the selections they made that day.

## Dependent Measures

## Brand Loyalty

Brand loyalty was assessed with three questions originally developed by Knox (2001). The first item to measure brand loyalty was, "I have a strong preference for this brand of tissues (or deodorant)." This item was measured on a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree". Participants were also asked their commitment level to buying a certain brand of tissues and deodorant on a 5-point scale ranging from "Not committed at all" to "highly committed". A third question assessing brand loyalty asked subjects what they would do if they could not get their favorite type of deodorant (or tissues) at the store. Ratings were made on a 5 point scale, ranging from "Happily buy a different brand" to "Keep trying different shops until you got the brand you wanted".

The three items to measure brand loyalty for tissues and the three items to measure brand loyalty for deodorant were combined to create an overall brand loyalty scale. The coefficient alpha reliability for the combined brand loyalty scale was .63 .

## Involvement Level

Two items assessed involvement level. These items were measured on 5-point Likert scales ranging from "Strongly Agree" to "Strongly Disagree". A sample item used on the involvement level scale included "I take a long time to decide what brand of deodorant to buy". As with brand loyalty, there were 2 involvement scales, one for each product, and they were combined to create an overall measure of product involvement. The coefficient alpha reliability for the overall scale was .61 .

Four Choice Tactics

Four decision-making choice tactics that consumers might use were measured. These choice tactics reflect factors that might be important to consumers in deciding which product to purchase. The choice tactics measured were price, performance, normative and affective. To measure each choice tactic, I adapted the scales developed by Hoyer (1984). All items were measured on 5-point Likert scales ranging from "Strongly Agree" to "Strongly Disagree". In addition to the items developed by Hoyer, a few additional items were developed for some choice tactics.

Price

Two items measured the extent to which the price of the product was an important factor in the product chosen. These items asked participants whether they purchased the item because it was on sale or because it was the cheapest. For example, "I chose this deodorant (or tissues) because it was the cheapest" and "I chose this deodorant (or tissues) because it was on sale". There were separate items for each product, but items were combined across the two products to create an overall price scale. The coefficient alpha reliability for this scale was .75 .

## Performance

The performance choice tactic measures how important the overall quality of the product was in delivering a certain function. Performance was assessed using three items. A sample item was, "I chose this deodorant because it is the highest quality." Similar to the price scale, there were separate items for each product, but they were combined across the two products to create an overall performance scale. The coefficient alpha reliability for this scale was .72 .

Affect

Affect measures the extent to which the product was chosen because it was appealing to one or more of the five senses; for these products, the primary senses involved were touch, smell, and sight. Three items assessed the affect choice tactic. Participants were asked whether they chose the item because of how it felt, how it was looked (i.e., was packaged), or, in the case of deodorant, how it smelled. The items used to measure the affect tactic for each product were combined to create an overall affect scale. The coefficient alpha reliability of this scale was .65 .

## Normative

The normative choice tactic refers to the extent to which the use of the product by other people influenced their decision to purchase the product. Specific items in this scale asked participants whether they purchased the product because of friends or family, because of advertisements, or because it was well known. Four items measured the normative choice tactic. A sample item was "I chose this deodorant because someone I know buys it." As with the other choice tactics, the items for each product were combined across the two products to create an overall normative scale. The coefficient alpha reliability was .78 . A complete list of the items used to create each dependent variable scale is included in Appendix C.

## Behavioral Variables

Three behavioral variables were measured while participants made their product choice decisions: (1) how many different brands participants examined; (2) how many different brands participants actually picked up to examine; (3) the total amount of time the participants took to make their decision. The actual box of tissues and deodorant selected were also noted.

## Results

Table 1 reports the means and standard deviations for the dependent variables. Data for all hypotheses were analyzed using a 2 (gender: male/female) by 3 (generation: Baby Boomers, Generation X, and Millennials) ANOVA for each dependent variable. For each hypothesis involving one of the choice tactics (price, performance, affective and normative), the results are reported for the choice tactic combined across the two products first and then for each product separately.

## Generation

The first hypothesis was that Baby Boomers and Gen Xers will be more influenced by the price heuristic when making purchase decisions for common repeat purchase products than will Millennials. Support for this hypothesis would be shown by a significant generation main effect for the price choice tactic. The first hypothesis was not supported. Although the generation main effect was marginally significant for the price tactic combined across both products $(\mathrm{F}(2,96)=2.85, \mathrm{p}=.06)$, the results were not in the direction hypothesized. Specifically examining the direction of the means shows that Millennials $(X=2.78)$ were more influenced by price than Gen Xers $(X=2.23)$ or Baby Boomers $(X=2.06)$. The results showed a similar pattern for each product separately. Specifically, the generation main effect was marginally significant for both deodorant price $(\mathrm{F}(2,96)=2.28, \mathrm{p}=.11)$ and tissue price $(\mathrm{F}(2,96)=2.410, \mathrm{p}=.09)$, but examining the means for deodorant shows that, contrary to the hypothesis, Millennials indicated that price was a more important factor in their decision-making $(X=2.37)$ than did either Gen Xers $(X=1.85)$ or Baby Boomers $(X=1.74)$. Examining the direction of the means for tissues shows a similar pattern of results with Millennials indicating that
price is a more important factor $(X=3.19)$ than Gen Xers $(X=2.38)$ or Baby Boomers ( $\mathrm{X}=2.62$ ).

The second hypothesis was that Baby Boomers will be more influenced by the performance heuristic when making purchase decisions for common repeat purchase products than will Gen Xers and Millennials. Support for this hypothesis would be shown by a significant generation main effect for the performance choice tactic. This hypothesis was not supported. For the performance tactic combined across both products, the generation main effect was not significant $(\mathrm{F}(2,96)=.071, \mathrm{p}=.93)$. Broken down by product, the generation main effect was not significant for either deodorant performance $(\mathrm{F}(2,96)=.12, \mathrm{p}=.88)$ or for tissues performance $(\mathrm{F}(2,96)=.45, \mathrm{p}=$ .64). These results show that the three generations placed a similar emphasis on performance when making their purchase decisions.

The third hypotheses was that Millennials will be more influenced by the normative choice tactic when making purchase decisions for common repeat purchase products than will Gen Xers and Baby Boomers. Support for this hypothesis would be shown by a significant generation main effect for the normative choice tactic. This hypothesis was supported. The results for the normative choice tactic combined across both products showed a significant generation main effect $(\mathrm{F}(2,96)=9.54, \mathrm{p}=.00)$. Examining the direction of the means shows that, as expected, Millennials $(X=2.90)$ indicated that the normative choice tactic had a greater impact on their decision-making than did either Gen Xers $(X=2.17)$ or Baby Boomers $(X=2.00)$. Examining the results separately for each product shows a similar pattern with the generation main effect being significant for deodorant normative $(F(2,96)=10.18, p=.00)$ and tissue normative $(F$
$(2,96)=5.42, \mathrm{p}=.01)$. Examining the direction of the means for tissues shows that normative choice tactics had a greater impact on the product choice for Millennials ( $\mathrm{X}=$ 3.01) than for Gen Xers $(X=2.42)$ and Baby Boomers $(X=2.20)$. Similarly, when examining the direction of the means for deodorant, results again show that Millennials $(\mathrm{X}=2.78)$ placed more emphasis on the normative choice tactic than did Gen Xers $(\mathrm{X}=$ 1.92) and Baby Boomers $(X=1.77)$.

The fourth hypotheses was that Millennials will be more influenced by the affective choice tactic when making purchase decisions for common repeat purchase products than will Gen Xers and Baby Boomers. Support for this hypothesis would be shown by a significant generation main effect for the affect choice tactic. This hypothesis was supported. The results for the affect choice tactic combined across both products showed a significant generation main effect $(\mathrm{F}(2,96)=11.09, \mathrm{p}=.00)$. Examining the direction of the means shows that, as expected, Millennials $(X=3.5)$ indicated that the normative choice tactic had a greater impact on their decision-making than did either Gen Xers $(X=3.0)$ or Baby Boomers $(X=2.58)$. Examining the results separately for each product shows the generation main effect being significant for deodorant affect $(\mathrm{F}(2,96)=24.92, \mathrm{p}=.00)$, but not for tissue affect $(\mathrm{F}(2,96)=1.02, \mathrm{p}=$ .37). Examining the direction of the means for deodorant, results again show that Millennials $(X=2.78)$ placed more emphasis on the affect choice tactic than did Gen Xers $(X=1.92)$ and Baby Boomers $(X=1.77)$.

## Gender

The fifth hypothesis was that men will take less time than women to make their purchasing decisions for tissues and deodorant. Support for this hypothesis would be
shown by a significant gender main effect for total decision time. This hypothesis was not supported since the gender main effect was not significant for total decision time ( F $(1,96)=.18, \mathrm{p}=.68)$.

The sixth hypothesis was that men will be more influenced by the price choice tactic when making purchase decisions for common repeat purchase products than will women. Support for this hypothesis would be shown by a significant gender main effect for the price choice tactic. This hypothesis was not supported. Contrary to the hypothesis the gender main effect was not significant for the price choice tactic combined across both products $(\mathrm{F}(1,96)=.00, \mathrm{p}=.99)$. The gender main effect was also not significant for deodorant $(\mathrm{F}(1,96)=.24, \mathrm{p}=.62)$ or for tissues $(\mathrm{F}(1,96)=.15, \mathrm{p}=.70)$.

## Other Findings

Although I did not have hypotheses about gender differences for any of the other choice tactics, results showed a significant gender main effect for the affective choice tactic $(F(1,96)=6.41, p=.01)$. Not surprisingly, women $(X=3.30)$ placed more emphasis on the affective tactic than did men $(\mathrm{X}=2.76)$. There was also a significant generation main effect for brand loyalty $(\mathrm{F}(2,96)=5.1, \mathrm{p}=.008)$ and a marginally significant generation main effect for total decision time $(\mathrm{F}(2,96)=2.5,=.08)$. Examining the direction of the means for brand loyalty shows that Baby Boomers $(\mathrm{X}=$ 3.46) were more brand loyal than were Gen $\mathrm{Xers}(\mathrm{X}=3.19)$ and Millennials $(\mathrm{X}=3.00)$. Examining the direction of the means for total decision time shows that Baby Boomers $(X=61.64$ seconds $)$ took longer to make their purchase decision than did Gen Xers $(X=$ 40.85 seconds) and Millennials ( $X=47.85$ seconds).

## Discussion

This study aimed to understand consumer decision-making behavior for lowinvolvement, common, repeat-purchase products. Specifically the purpose of this study was to identify differences and similarities between three generations (Millennials, Generation X, and Baby Boomers) and between men and women in the way they make purchase decisions for two common repeat-purchase products, tissues and deodorant.. The literature suggests that men and women and people born in different generations might make purchase decisions for common repeat products differently. This study examined this possibility by looking at gender and generation differences in shopping behavior and in the importance of four decision-making heuristics identified in the literature: (1) price heuristic, (2) performance heuristic, (3) affect heuristic, and (4) normative heuristic (Hoyer, 1984; Leong, 1994).

I hypothesized that Millennials would be more influenced by the normative and affective choice heuristics and the results I found supported this hypothesis. Consistent with the literature, this suggests that Millennials are more influenced by other people in making their purchase decisions and that they emphasize the aesthetic attributes of a product more than do the other two generations.

I anticipated that the performance choice tactic would be emphasized by Baby Boomers more than the other generations but found that the results were contrary to this. Specifically, I found that performance was equally important to all three generations when making their purchase decisions. The basis for my hypothesis that the performance choice tactic would be more important to Baby Boomers than Gen Xers and Millennials was the description of Baby Boomers in the literature indicating that they
place more value on hard work and having a good work ethic than do the other two generations. While this may be true, it appears that this value does not necessarily carry over to the product attributes that consumers value and emphasize in their purchase decisions. Even though Baby Boomers were influenced by the performance choice tactic more than the other tactics, so were Gen Xers and Millennials. In fact, the results found in this study show that performance was the most influential factor in the purchase decisions for all participants, regardless of generation or gender. Given the functional nature of the products used in this study, this finding is not surprising.

I also expected that the price choice heuristic would be more influential in the decision-making for Baby Boomers and Gen Xers than it would be for Millennials. However, the results I found were the opposite of this, with price actually being more important for Millennials than for the other two generations. The literature indicates that Millennials have more disposable income than do the other two generations and that they have reduced their spending less which is why I anticipated that they would place less emphasis on the price choice tactic. It is possible that the reason the Millennials in this sample actually considered price a more influential factor than the other two generations is because most of the Millennials in the sample were students in college, rather than, for example, young working individuals (up to age 30 ) without children who would also fit into the Millennial generation. College students typically do not have a lot of extra money and thus, may feel the need to be more cost-conscious when making their purchase decisions.

It is interesting that overall, my results showed that Millennials were influenced significantly more by all of the choice heuristics (except performance) than were Baby

Boomers or Gen Xers. This finding could have occurred because Millennials are new shoppers and thus, may not have developed a loyalty to any particular brand for these common repeat purchase products. Consistent with this possibility, my results showed that Baby Boomers were significantly more brand loyal than were Millennials. Because Baby Boomers are more brand loyal, they may be less likely to be influenced by the choice heuristics while Millennials, who are less brand loyal, take into consideration the choice heuristics more in making their decisions. Also consistent with this, my results showed that Baby Boomers took significantly more time to make their purchase decisions than the other two generations. Although one might expect a brand loyal decision to be made more quickly than a decision that considers multiple choice heuristics, the fact that the Baby Boomers were likely looking for a particular product in an unfamiliar setting could have caused their total decision time to be longer.

I expected there to be gender differences in both decision-making time and use of the price heuristic, but found that this was not the case. The results showed that men and women are equally affected by the price of the product and took the same amount of time to make their purchase decision. The only choice heuristic that had a statistically significant difference between men and women was the affective choice heuristic. Not surprisingly, the results showed that women were more influenced by the affective heuristic than men. This finding suggests that women tend to care more about the aesthetic value of a product more than men do.

There are two possible reasons for the limited number of gender differences in shopping behavior found in this study. One possibility is that there are actually few real gender differences and that men and women shop similarly for these low involvement,
common, repeat, purchase products. This argument is consistent with recent research by Underhill (2008) which shows that men are beginning to shop more like women. Part of the reason Underhill (2008) argues men are beginning to shop like women is because they are waiting longer to get married. In the past, mothers would buy the deodorant, tissues and other similar products for their sons until they got married, after which their wife would make these purchases. Since men are now waiting longer to get married they are forced to shop for these products on their own. And since men likely observed their mothers making these purchase decision while growing up, they may have modeled their own shopping behavior after hers, which would tend to result in men and women shopping similarly.

It is also possible that while there actually are gender differences in shopping behavior for common repeat purchase products, I was unable to detect them because of low statistical power, resulting from the fairly small sample size in this study. In a similar vein, a fairly large percentage of the males in the sample for this study (68\%) were Millennials who, as noted above, are fairly new shoppers and thus, may not have developed typical male shopping behavior yet. With such a small number of males in the other two generational groups, it may not have been possible to detect gender differences in shopping behavior that actually exist.

Although I did not have any hypotheses about the overall relative importance of the four choice heuristics, I found that the performance heuristic was the most important choice tactic of the four, followed by affective, then normative and finally price, which was the least emphasized choice heuristic. Directionally, these results are similar to those found by Hoyer (1984) and Leong (1994) except that they both found that price was the
second most important choice heuristic while I found that it was the least important. This difference could have occurred because of the difference in the products examined in my study compared to their studies. Although both are low involvement common repeat purchase products, the products in my study were much less expensive than the laundry detergent examined in their studies.

## Practical Implications

Overall, the results found in this study suggest that there may be more generational differences in purchasing behavior for common repeat purchase products than gender differences. The results of this study are encouraging for marketers and manufacturers of common, repeat purchase products because they suggest that taking into account generational differences by marketing common repeat purchase products differently to, for example, Millennials and Baby Boomers might be a way for manufacturers of these products to enhance product sales. As noted previously, results showed that Baby Boomers were more brand loyal than Millennials, and likewise that Millennials were more influenced by the choice heuristics than Baby Boomers. This suggests that marketers of common, repeat purchase products should attempt to capture consumers at a young age so that they can become brand loyal customers. My results also suggest that focusing on normative and affective choice tactics may be a way to accomplish this. For example, to emphasize the normative heuristic, an advertisement could show a group of people talking about the product. In a similar vein, the company might consider providing trial size samples of their products to groups of people through, for example, student social organizations on college campuses to increase awareness of their product and to encourage students to talk about their products with each other. To
utilize the affective heuristic, marketing campaigns could profile the product in print media where a sample scent of the product could be provided or simply highlight the aesthetic value of the product in an advertisement.

Disregarding generational and gender differences I found that the performance and affective choice tactics were most important while the normative and price tactics were the least important. It is not surprising that price was found to be the least important heuristic due to the fact that the two products chosen for this study (tissues and deodorant) are very inexpensive, typically ranging in price from $\$ 1.00-\$ 4.00$ per item. Based on these results one can argue that price would not be the best selling point for inexpensive common repeat purchase products and that marketers should focus instead on the other choice heuristics. Specifically, they should focus their marketing campaigns first around the performance of the product, followed by the product's affective qualities. The normative and price heuristics may be less likely to influence the consumer's final choice so they should probably be de-emphasized in the company's marketing efforts for common, repeat purchase products. Consumers are faced with a multitude of choices at the aisle, all with relatively similar price points, and they are looking for what makes one product better than the others. The results of this study suggest that the performance and aesthetic attributes of the products appear to be the most likely to differentiate between competing options.

Based on the similarities between men and women in shopping behaviors that was observed in this study, marketers should utilize a uniform marketing campaign focusing on the four choice heuristics because they appear to be equally important factors for both genders. The one choice heuristic that marketers can use as a selling differential
concerning gender would be based on the affective qualities of a product, which I found to be more important for women than men.

## Limitations and Direction for Further Research

The results of this study suggest that there may be generational differences in how people make purchase decisions for common repeat purchase products. However, these findings should be interpreted with some caution due to limitations in the methodology employed in this study. Specifically, this study took place in a simulated shopping environment rather than in an actual store, as was the case with previous research on common repeat-purchase products. Therefore, this study lacks some authenticity in actual decision choices and behaviors because it is not a real store where people had intentionally gone to make an actual purchase of these items. Furthermore, while the recreated aisle did have a large representation of the products potentially available, it did not have every possible product variety. This could have caused people to take more or less time making a decision or impacted their overall purchase decision. Both of these factors could have reduced the ability to generalize the results found in this study. I included questions on the questionnaire to assess the extent to which this might have affected the purchase decisions of study participants. These questions were in the form of open-ended responses asking participants if the brand or variety they wanted to purchase was available and, if not, what brand or variety they would have chosen. The responses to these questions indicated that most participants were able to find their desired product; only a limited few indicated that the brand and variety they wanted was not available. This was primarily and issue for deodorant and not tissues.

Specific recommendations for future research include alterations to the study's overall content as well as how the data should be collected. The first recommendation would be addressing the price heuristic differently. As discussed above, there are several reasons that the price heuristic might have been the least influential factor in this study. In addition to those factors, another factor could have been the fact that participants did not have to actually spend their money to purchase the product. By replicating the study in a real store where people are actually spending their money, as done in the research by Hoyer (1984) and Leong's (1994), or by making people actually pay for the product (even though the study utilizes a reconstructed store aisle, as my study did), the generalizability of my finding with respect to the impact of price on the purchase decisions for common repeat purchase products can be determined. Future research should also include a larger sample size with a more even representation of each generation and gender. This would provide a better assessment of the impact of gender on purchase decisions and allow a determination of whether the lack of gender differences found in this study were the result of having too small of a sample size to detect the differences or because males and females really do shop similarly for these products.

Another interesting issue that could be addressed in future research would be to replicate this study using different product categories. Most previous research on common repeat purchase products (e.g. Hoyer, 1984; Leong, 1994), including my study, used low involvement, common repeat purchase products. It would be interesting to look at the medium, or high, involvement level products to see if these four choice heuristics are similarly influential for products in this category or not. It is possible that the relative importance of the choice heuristics might differ for medium or high involvement
products. It is also possible that the impact of gender and/or generation might be different for medium and high involvement products. Both of these would be fruitful areas for future research.

Finally, it might be interesting to examine other possible ways in which the shopping behavior of men and women might differ. For example, research could examine how secondary placement of a product impacts incremental purchases for men and women. It is possible that women are more likely to make incremental purchases (i.e., purchase an item that they did not intend to purchase when they came to the store) than men are, especially if they see the product in a secondary store location (e.g. at the end of an aisle). This and other ways in which men and women shop differently would be interesting issues to examine in future research.

This study differs from previous research because it specifically addresses gender and generational differences in purchasing behavior for low-involvement products. There has been research on gender differences in general, generational differences in general, and low-involvement products, but this is the first study to address all the three. Ultimately, this study provides support to Hoyer (1984) and Leong's (1994) studies on common, repeat purchase product as well as laying a foundation for future research. In today's economy, more than ever, it is important for companies to understand the decision-making processes of its consumers. This research has provided some key differentiating factors between how generations and genders make these seemingly quick decisions, using an enormous amount of information.

## References

Arnold, M. (2010). Young adults don't listen to experts. Medical Marketing \& Media, 45(7).

Babutsidze, Z. (2006). How do Consumers Make Choices? A Summary of Evidence from Marketing and Psychology. Working Paper Series: United Nations University. Barber, N. (2009). Gender differences in information search: implications for retailing. Journal of Consumer Marketing, 26(6), 415-426.

Behan, B. (2011). Gender Differences in the Boardroom. Retrieved from BusinessWeek.com, 2/12/2011.

Biswas, D. (2009). The Effects of Option Framing on Consumer Choices: Making Decisions in Rational versus Experiential Processing Modes. Journal of Consumer Behavior, 8, 284-299.

Clare, C. (2009). Generation Differences. Journal of Property Management, 74(5), 4043.

Coley, A. and Burgess, B. 2003. Gender differences in cognitive and affective impulse buying. Journal of Fashion Marketing \& Management, 7(3), 282-295.

Cross Cultural Toolkit. (2002). Philadelphia: LaSalle University.
Crott H. W., Szilvas K., Zuber, J. A. 1991. Group decision, choice shift, and polarization in consulting, political and local political scenarios: an experimental investigation. Organizational Behavior and Human Decision Processes, 49, 22-41.

Deal, J., Altman, D., and Rogelberg, S. (2010). Millennials at Work: What We Know and What We Need to Do (If Anything). Journal of Business \& Psychology, 25(2), 191-199.

Dolan, K. (2011). Do Women and Men Know Different Things? Measuring Gender Differences in Political Knowledge. Journal of Politics, 73(1), 97-107.

Dunn, B., Dalgleish, T., and Lawrence, A. (2006). The somatic marker hypothesis: A critical evaluation. Neuroscience and Behavioral Reviews, 30, 239-271.

Durvasula, S., Lysonski, S. and Andrews, J.C. (1993). Cross-Cultural Generalizability of a Scale for Profiling Consumers' Decision-Making Styles. Journal of Consumer Affairs, 27(1), 55-65.

Eagly, A. H., Johannesen-Schmidt, M. C., and van Engen, M. L. (2003).
Transformational, Transactional, and Laissez-Faire Leadership Styles: A MetaAnalysis Comparing Women and Men. Psychological Bulletin. 129(4), 569.

Eagly, A.H. and Johnson, B.T. (1990). Gender and leadership style: A meta-analysis. Psychological Bulletin. 108(2), 233.

Fan, J. X., and Xiao, J. J. (1998). Consumer decision-making styles of young-adult Chinese. The Journal of Consumer Affairs, 32(2), 275-293.

Garcia-Mainar, I., Molina, J.A., and Montuenga, V.(2011). Gender Differences in Childcare: Time Allocation in Five European Countries. Feminist Economics, 17(1), 119-150.

Hawkins, D. I., Best, R.J., and Coney, K.A.. (1983). Consumer Behavior: Implications for Marketing Strategy, Plano, Texas: Business Publications Inc.

Howard, J.A. and Sheth, J.N.. (1969). The Theory of Buyer Behavior. New York: Wiley. Hoyer, W.D. (1984). An Examination of Consumer Decision Making for a Common Repeat Purchase Product. Journal of Consumer Research, 11(3), 822-829.

Leong, S. (1994). Consumer Decision Making for Common, Repeat-Purchase Products: A Dual Replication. Journal of Consumer Psychology, 2(2), 193.

Lindstrom, M. (2008). Buyology: Truth and Lies About Why We Buy. New York : Doubleday.

Knox, S. (2001). Measuring and Managing Brand Loyalty. Journal of Strategic Marketing, 9(2).

Kyner, D., Jacoby, J. and Chestnut, R. (1973). Dissonance Resolution by Grade School Consumers. Advances in Consumer Research, 3(1), 134-137.

Lastovicka, J.L. (1982). On the validation of lifestyle traits: a review and illustration. Journal of Marketing Research, 19(1), 126-138.

Leng, C. and Botelho, J. (2009). How Does National Culture Impact on Consumers' Decision-making Styles? A Cross Cultural Study in Brazil, the United States and Japan. Brazilian Administration Review, 7(3), 260-275.

MacDonald, E. and Sharp, B. (2000). Brand Awareness Effects on Consumer Decision Making for a Common, Repeat Purchase Product: A Replication. Journal of Business Research, 48(1), 5-15.

McClure, S., Li, J., Tomlin, D., Cypret, K., Montague, L., and Montague, P. (2004) Neural Correlates of Behavioral Preference for Culturally Familiar Drinks. Neuron, 44, 379-387.

Miller, R. and Washington, K. (2009). Generational Comparisons. Consumer Behavior, 196-199.

Otnes, C. and McGrath, M.A. (2001). Perceptions and realities of male shopping behavior. Journal of Retailing, 77(1), 15.

Pfeifer, C. (2011). Handicaps in Job Assignment: Insiders, Outsiders and Gender. Journal of Labor Research, 32(1), 1-20,

Salahuddin, M. (2010). Generational Differences Impact On Leadership Style And Organizational Success. Journal of Diversity Management, 5(2), 1-6.

Shiffman, L. and Kanuk, L. (1991). Consumer Behavior. $4^{\text {th }}$ edition. New Jersey: Prentice Hall.

Sproles, G., and Kendall, E. L. (1986). A methodology for profiling consumers' decisionmaking styles. Journal of Consumer Affairs, 24(1), 134-147.

Te'eni-Harari, T. and Hornik, J. (2010). Product Involvement Among Young Consumers: An examination of the factors influencing young people's productinvolvement. Working Paper. Henry Crown Institute of Business Research, Israel.

Twenge, J. (2010). Generational Differences in Work Values: Leisure and Extrinsic Values Increasing, Social and Intrinsic Values Decreasing. Journal of Management, 36 (5), 1117-1142.

Underhill, P. (2008). Why We Buy: The Science of Shopping. New York: Simon \& Schuster.

Wang, A. (2011). Younger Generations' Investing Behaviors in Mutual Funds: Does Gender Matter? Journal of Wealth Management, 13(4), 13-23.

Westbrook, R. A., and Black, W. C. (1985). A motivation-based shopping typology. Journal of Retailing, 61(1), 78-101.

Yarrow, K. and O' Donnell, J. (2009). Gen BuY: How Tweens, Teens and TwentySomethings Are Revolutionizing Retail. California: Jossey-Bass.

Wang, Y.H., Chiang, D.A., and Chen, S.P. (2010). Analysis on repeat-buying patterns. Knowledge-Based Systems, 23 (8), 757-768.

Zaichkowsky, J. (1985). Measuring the Involvement Construct. Journal of Consumer Rescarch. 12(3), 341-352.

## Table 1

## Means and Standard Deviations for the Dependent Variables

| Variables | $\underline{\mathrm{M}}$ | $\underline{\mathrm{SD}}$ | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1. Total DM Time <br> (seconds) | 51.65 | 30.21 | - |  |  |  |  |  |  |
| 2. Brand Loyalty | 3.22 | 0.66 | -0.18 | - |  |  |  |  |  |
| 3. Involvement <br> Level | 2.38 | 0.83 | 0.39 | -0.26 | - |  |  |  |  |
| 4. Price | 2.56 | 1.32 | 0.17 | -0.37 | 0.15 | - |  |  |  |
| 5. Normative | 2.62 | 1.02 | -0.05 | 0.11 | 0.03 | 0.37 | - |  |  |
| 6. Affective | 3.26 | 0.92 | -0.04 | 0.14 | -0.03 | 0.37 | 0.72 | - |  |
| 7. Performance | 3.84 | 0.81 | -0.32 | 0.49 | -0.06 | -0.29 | 0.17 | 0.33 | - |

Appendix A


Example of Deodorant Aisle


Example of Tissues


Example of pricing and set up. Also note the variety of deodorants represented.

Appendix B

## Script to Introduce Study to Participants

Thank you for participating in my thesis project. My name is Alicia Dixon and I am a senior marketing major here at Butler University. My project is focused on learning more about how you as a consumer choose everyday products. Most consumers do not think much about why they choose their everyday items, but it is very important to marketers that they understand the different thought processes that occur during a typical shopping trip.

Today you will be buying tissues and deodorant. I would like you to imagine you have just run out of your tissues and deodorant and are at the store to buy these items. I want you to buy the item you would buy in the store, given the situation. Most brands and varieties are represented, and prices are true to the retail price. If for some reason a variation of your brand is not at represented, choose the most similar product and there is a place to note this on the survey.

Participation in this study is voluntary, and you can withdraw at any time. There is no right or wrong choice. Please spend the same amount of time you would normally spend making your decision, do not feel rushed. At the end of your shopping trip there will be a questionnaire. Please answer questions honestly and accurately, and remember your answers will be held in confidentiality. Thank you.

## Butler University College of Business Student Thesis - Consumer Behavior Survey

This study is designed to help me better understand consumer behavior through commonly repeated purchase items. I want you to answer these questions to the best of your ability, knowing that there is no right or wrong and that your answers will remain confidential. I am just curious about your purchase behaviors.

Part I: Product Selection
*The following questions are in regards to the tissues you chose:

1. Briefly describe why you chose the specific box of tissues you selected today.
2. How many years have you been purchasing tissues?

3. Approximately how many times have you purchased this brand of tissues?

*The following questions are in regards to the deodorant you chose:
4. Briefly describe why you chose the specific type of deodorant you selected today.
5. How many years have you been purchasing deodorant?

6. Approximately how many times have you purchased this brand of deodorant?

7. Please indicate how much you agree/disagree with the following statements.

Circle the number that corresponds to your opinion.

|  | Strongly <br> Disagree | Disagree | Neutral | Agree | Strongly <br> Agree | I Don't <br> Know |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| I have a strong <br> preference for this brand <br> of tissues | 1 | 2 | 3 | 4 | 5 | X |
| I have a strong <br> preference for this brand <br> of deodorant | 1 | 2 | 3 | 4 | 5 | X |
| I take a long time to <br> decide what brand of <br> deodorant to buy | 1 | 2 | 3 | 4 | 5 | X |
| I take a long time to <br> decide what brand of <br> tissues to buy | 1 | 2 | 3 | 4 | 5 | X |
| I always look at the <br> difference between | 1 | 2 | 3 | 4 | 5 | X |
| multiple brands of <br> deodorant | 1 | 2 | 3 | 4 | 5 | X |
| I always look at the <br> difference between <br> multiple brands of tissues | 1 |  |  |  |  |  |

8. When buying the tissues and deodorant, how committed are you to buying your favorite brands, rather than an alternative brand? Circle the number that corresponds to your opinion.

|  | Not <br> Committed At <br> All | Not very <br> Committed | Neutral | Somewhat <br> Committed | Highly <br> Committed |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Tissues | 1 | 2 | 3 | 4 | 5 |
| Deodorant | 1 | 2 | 3 | 4 | 5 |

9. If you could not get your favorite brand(s) of deodorant at the store you went to would you:

Happily buy a different brand
___ Reluctantly buy a different brand
___ Not buy the product until the next time you shopped
___Try a different shop
$\qquad$ Keep trying different shops until you got the brand you wanted
10. If you could not get your favorite brand(s) of tissues at the store you went to would you:
$\qquad$ Happily buy a different brand
___ Reluctantly buy a different brand
$\qquad$ Not buy the product until the next time you shopped
$\qquad$ Try a different shop
$\qquad$ Keep trying different shops until you got the brand you wanted
11. As you think about your purchase of deodorant, please indicate the extent to which you agree or disagree with each of the following statements. Circle the number corresponding to your opinion.

|  | Strongly <br> Disagree | Disagree | Neutral | Agree | Strongly <br> Agree | No <br> Opinion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I chose the deodorant because <br> it was the cheapest. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the deodorant because <br> someone I know buys it. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the deodorant because <br> it smells good. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the deodorant because <br> it is the best. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the deodorant because <br> I have seen it advertised. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the deodorant because <br> it is the highest quality. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the deodorant because <br> it was on sale. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the deodorant because <br> it performs better than the <br> other brands. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the deodorant that my <br> friends buy | 1 | 2 | 3 | 4 | 5 | X |
| I chose the deodorant because <br> it feels good. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the deodorant because <br> it had the most attractive <br> packaging. | 1 | 2 | 3 | 4 | 5 | X |
| it is the most well-known. |  |  |  |  |  |  |

12. As you think about your purchase of tissues, please indicate the extent to which you agree or disagree with each of the following statements. Circle the number corresponding to your opinion.

|  | Strongly <br> Disagree | Disagree | Neutral | Agree | Strongly <br> Agree | No <br> Opinion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I chose the tissues because it <br> was the cheapest. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the tissues because <br> someone I know buys it. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the tissues because it <br> feels good. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the tissues because it <br> is the best. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the tissues because I <br> have seen it advertised. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the tissues because it <br> is the highest quality. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the tissues because it <br> was on sale. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the tissues because it <br> performs better than the other <br> brands. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the box because it is <br> the most attractive. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the tissues that my <br> friends buy | 1 | 2 | 3 | 4 | 5 | X |
| I chose the tissues because it <br> was the softest. | 1 | 2 | 3 | 4 | 5 | X |
| I chose the tissues because it <br> is the most well-known. | 1 | 2 | 3 | 4 | 5 | X |
| m | 1 | 1 | 2 | 3 | 5 | 5 |

## Part II - Classification and Background Information:

13. What year were you born? $\qquad$
14. What is your gender: $\qquad$ M $\qquad$ F
15. Marital Status: $\qquad$ Single $\qquad$ Married $\qquad$ Divorced/Widowed

## 15. Number of Children:

$\qquad$ 0 $\qquad$ 1 $\qquad$ 2 $\qquad$ 3 $\qquad$
16. What is was your approximate annual income in 2009 :
_Less than $\$ 10,000$ $\qquad$ \$10-\$24,999 $\qquad$ \$25-49,999 $\qquad$ $\$ 75,000$ or more
17. Which of the following best describes your position here at Butler?
$\qquad$ Faculty
$\qquad$ Staff $\qquad$ Student $\qquad$ I Do Not Work at Butler

## 18. If you are faculty:

How many years have you worked at Butler? $\qquad$
What department are you in?

## 19. If you are staff:

How many years have you worked at Butler?
What is your position at Butler?

## 20. If you are student:

Please circle which of the following best describes the year in school you are at Butler.

| First Year | Second Year | Third Year | Fourth Year | Fifth Year | Sixth Year |
| :--- | :--- | :--- | :--- | :--- | :--- |

What is(are) your major(s)?

Thank You Very Much for Your Participation in my Honors Thesis!

Appendix C

## Items Used to Measure Dependent Variable

1. Brand Loyalty

- Preference for the brand
- Commitment to buying favorite brand
- If favorite brand was unavailable what would you do

2. Involvement Level

- Time taken to make purchase
- Look at difference between multiple brands

3. Price Heuristic

- Cheapest
- On sale

4. Performance Heuristic

- Brand is the best
- Highest quality
- Performs better

5. Affect Heuristic

- Feels good (tissues and deodorant)
- Is the softest (tissues)
- Attractive packaging

6. Normative Heuristic

- Most well-known
- My friends buy it
- Someone I know buys it
- Seen it advertised

