

EFFECT OF PACKAGING DESIGN IN THE PURCHASE DECISION PROCESS: A COMPARISON OF GENERATIONS

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ABSTRACT

The tangible aspects of a determined product can be essential to communicating the positioning of the brand, since these aspects are projected as recognized elements of the product. Therefore, the aim of this research is to assess the relationship between the process of consumer purchases at the moment of acquiring personal care products and the tangible aspects of packaging according to their generational cohort. These tangible aspects of packaging are the visual aspects that a product contains, identified as graphic elements and informational elements. The study looks at consumer decision-making of participants from three generational cohorts: Baby Boomers, Generation X, and Generation Y. The research provides evidence about existing relationships between graphic elements and the generational cohorts, as well as statistical differences between these cohorts in terms of informational elements. The article exposes theoretical and empirical evidence, with the objective to support companies' managers to explore and combine elements to achieve and project positioning and equity at the moment of choosing or transforming their package designs according to their target market.

JEL: M3

KEY WORDS: Purchase Decision Process, Package, Tangible Aspects, Graphic Elements, Informational Elements, And Generational Cohort

INTRODUCTION

The twenty-first century has given rise to increasing levels of competitiveness between organizations, where enterprises face the challenge of developing strategies that allow them to surpass their greatest competitors. Throughout history, organizations have understood that their most valuable resource is their brand, which is associated with their identity (Underwood & Klein, 2002). Due to the importance of the brand, the physical image that the brand projects may be a critical factor in the communication of a certain product. Related to the physical image of a determined product, the role of packaging is also important, in that it is often the first impression the consumers have of the company. According to Rettie and Bruwer (2000) 70% of purchase decisions are made while viewing the products. For this reason, product packaging has been identified as the main method of communication and has evolved over time (Orth & Malkewitz, 2008).

Nevertheless, designing aesthetic packaging is not the key to improving positioning in comparison to competitors (Celhay & Trinqucoste, 2015). Thus, it is essential to identify one of the main gaps. The literature in this area focuses on the importance of the total look of the package design. However, the literature has not paid special attention to specific criteria such as graphic and informational elements according to particular consumers. In order to strengthen the literature, this research focuses on consumer behavior segmented by generational cohorts.

Organizations work innovatively to design or customize products according to their target market's wants and needs. When an organization needs to change the image of its product, a disparity can arise, causing doubts about which segments of the target market, will be affected significantly in their decision-making process by the image of the product, and which elements of the product will compel them to make their decision. This problem must be solved in order to attract the selected target market. According to Bland, Laragy, Giles, and Scott (2006) demographic elements tend to differ significantly by consumers' needs, tastes, and preferences. As a result, it is becoming more common to study consumer behavior through segmentation. The generational cohorts of Baby Boomers, Generation X, and Generation Y form the major consumer groups in the United States. Each generational cohort has its own expectations that influence buying behavior before selecting a specific product (Himmel 2008; Williams & Page, 2011).

According to Kotler & Keller (2006), organizations are responsible for product design in order to communicate its benefits, achieve differentiation, and attract the consumer to identify with the need or desire to achieve satisfaction. As a consequence, consumers can be considered spectators and judges of the task done by an organization. Increasing competition, technological advances, and changes in the consumer's lifestyle are only some aspects that have added a level of complexity to organizations. Organizations focus on questions concerning the development of products that can be recognized and accepted in the market through successful tangible images that demonstrate the safety and value of the product purchased.

It could be valuable to conduct research that presents the opportunity to combine theoretical and managerial aspects. With the objective of evaluating the ability to know the effect of the personal care product's image in the buying process of various consumers according to their generation by evaluating two image aspects that have been found to be significant in the decision-making process of purchasing: graphic elements (colors, format of the fonts, and packaging form) and informational elements (ingredients, amount in ounces or other measure established, indications, usage instructions, benefits, identifications of the best products in the market, among other indicators) (Bloch 1995; Silayoi & Speece, 2004). Personal care products form one of the largest industries worldwide because they are necessity goods. According to the Personal Care Council (2016) the industry has worldwide annual revenue of about \$260 billion. In the United States, the industry includes approximately 850 organizations with combined annual revenue of \$42 billion.

The aim of the research is to determine whether there is a statistical difference between the tangible aspects (graphic elements versus informational elements) of personal care products (dependent variable) and the buying decision-making process of various generations of consumers (independent variable). Specifically this investigation can improve the connection between organizations and customers. The results of this research can present two types of contributions: theoretical and managerial. From a theoretical point of view, the research will study the level of impact on consumer decisions related to the process of purchasing behavior, using a demographic segmentation of Baby Boomers, Generation X, and Generation Y. In this way, it is hoped that this study will be able to add to the growing evidence that market segmentation is an essential strategy to attract customers according to their behavior and responses. From a managerial point of view the research will provide positive information and results to those businesses that want to better understand consumer behavior in order to select the best attributes in their package design in order to achieve acceptability of their product. The physical attributes of a product can play an essential role in building brand equity, but at the same time can be a disaster if the image is not appropriate for the selected market (Keller, 2007; Mohebbi, 2014). The investigation may shed light on the topic for marketing professionals by increasing understanding of whether customers' responses are based on product image and to what degree. Results can support organizations in understanding consumer behavior and exploring and combining suitable strategies to attract and keep customers.

The article is presented in an approach that seeks to identify whether a statistical difference exists in the relationship between the purchase decision process made by consumers according to their generational cohort and the tangible aspects of packaging of personal care products. At the same time, the study presents a theoretical framework, methodology, results and analysis focused on an established hypothesis.

LITERATURE REVIEW

It is essential to delineate the evolution of visual appearance through the time and their implication in the marketing arena. According to Bloch (1995) the product must be considered one of the “four P’s” of the marketing mixture, considering that the “four P’s” are: product, price, place and promotion. The product is an object whose sole medium of identification is through visual representation and appearance. Throughout history, it has been discovered that individuals find pleasure and, at the same time, profound admiration when using the sense of sight (Csikszentmihalyi & Robinson, 1990). Through the sense of sight, the eyes are the axis of the most renowned images in history.

According to Bloch (1995), individuals of all identified cultures find delight through using their sense of sight. As such, humans find visual beauty in diverse objects. However, since 1930, there has been an increase in the awareness of the importance of product design (Bovee, Thill & Mescon, 2007). Before that time, packages were primarily recognized as a means of protecting the product. Since 1930, however, package design has been used as a creative method to obtain a competitive advantage in a global market (Bruce & Whitehead, 1988; Orth & Malkewitz, 2008). Due to this, there seems to be a significant increase in the role of product design as being a vehicle of communication for the brand’s managers (Underwood & Klein, 2002). It appears that consumers show interest in products that represent pleasing aesthetics, thereby making the buying process of interest (Batra & Homer, 2004; Underwood, 2003).

Package Design in the 21st Century. From the beginning of the 21st century, the tangible aspects of products have evolved, as have the lifestyles of consumers.

In order to launch a product to market, the product must possess all the elements that determine its identity as a means of breaking homogeneous parameters. For this reason, each product must possess unique characteristics to be able to compete in the desired market. Incredibly, the main role of the design of a specific product would be to be used as a means of communication and promotion of the brand (Rettie & Bruwer, 2000). According to various authors, (González, Thorhsbury & Twede, 2007; Silayoi & Speece, 2004; Underwood & Klein, 2002) in order to achieve a higher position, it is important to focus part of the market on the identity of the brand. It is through this mechanism that differentiation is achieved and brand equity is acquired. The key elements to developing brand identity are based on the tangible aspects of the product that enable recognition at first impression. When it comes to marketing, however, there is no differentiation in terms of the tendency of people to admire and evaluate products based on their visual attributes. According to Bloch’s model (1995), the visual attributes of a product may be a key element to its success in the market.

Strategic Role of Package Design. Researchers have found that packaging is the central mechanism to promote a design that is the principal axis of communication (Holmes & Paswan, 2012). However, one of the greatest objectives when designing a package to create a new product is to create a unique personality that would be recognized and to make the product preferred in the target market.

Normally a department store or supermarket offers thousands of products in order to be selected by the client. However, many researchers have stated that the selection process of a product, in many cases, occurs at the moment of buying the product (Bloch, 1995). Rettie and Bruwer (2000), however, confirmed that the consumer selects a product at the moment of purchasing it. They state that decisions about acquiring a specific product occur at the moment of purchasing the product, particularly in regards

to health care products. For this reason, it would be challenging to imagine going to a store and finding products with no identification created from one particular mold. Thus, a product can be successful or not based on its image, this being the first impression the consumer has. In Bloch's (1995) Model, the design or the package of the product determines that the selection of the product is based on a psychological response divided into cognitive responses and affective responses. The cognitive response is based on the visual perception that processes the differentiation of elements, while the affective response evaluates the diverse alternatives that a product may present to satisfy certain needs or desires.

In order to strengthen Bloch's model, Silayoi and Speece (2004) divided the image of the product as contained by the package into two categories, both tangible: visual elements and information elements. Among the visual elements, one can find elements such as: colors, graphics, and the shape of the package, material, and the font used. Among the information elements are: general information about the product, production site, the ingredients of the product, quantity of the product, special indications, and the brand of the product. Silayoi and Speece (2007) stated that the visual aspects transmit information, having an effect on the consumer's emotions. The information elements impact cognitive orientation, that is, the aptitude of knowing or understanding.

Package design for special markets. The study of the buying behavior of the consumer and the knowledge of his/her needs, tastes, and wishes is a starting point in order to be able to implement with validity marketing strategies. According to Kotler and Armstrong (2012, 2014) the buying behavior of the consumer pertains to the specific way in which consumers buy on a more personal level. Currently, the market in the United States includes more than 300 million individuals (The United States Census Bureau population Data for Puerto Rico, 2011). However, consumers vary by age, income, education level, and social status, among other characteristics.

A determinant amount of research has been conducted to show how the design of a product affects the consumer according to his/her individual characteristics (Myers & Lubliner, 1998; Underwood & Ozanne, 2010). However, among the contributions of Butkeviciene, Stravinskiene, and Rutelione (2008) they suggest that this determinant, emphasizing that the individual characteristics of a specific consumer or segment, may affect the selection process of a product. Kotler and Keller (2006) point out that the same product in different presentation formats may address diverse segments, for example: different genders, different social status, and different places, among other factors.

Krishnakumar (1974) conducted the first study of product image in which he analyzed the influence of country of origin on the product images of people from selected countries. This study focused on presenting products with distinctive images of manufactured products in underdeveloped countries and products manufactured in the United States of America. The results showed that, in underdeveloped countries, products manufactured in their own countries did not catch the eye of the consumers, as much as those products manufactured in the United States.

Garber, Burke, and Morgan- Jones (2000), conducted a study in which customers aged 18-65 contributed to the research. First, the consumers responded to general questions about their shopping habits. Later, they made a selection from four product categories. The participants/consumers were requested to select one product from each category. Through the study, it was determined that most participants took around 82 seconds to make their selections. At the same time, the results support that new packages whose colors are very different from the old package will attract customers. Both studies, however, supported that the consumers take more time in the selection process when they observe changes in the design.

Underwood and Klein (2002) studied the impact that food packaging imagery may have. This study attempted to evaluate whether a new brand in the market can achieve a high position by comparing it to a more attractive package of the same product. The study consisted of a sample of university students. The

experimental design created three groups. The subjects from one group were presented with two new products in which the packages presented the consumer with an attractive image and the other presented a less attractive image with opaque colors. The subjects of the second group had two packages of famous brands with the same conditions as the first group. The third group had three packages of famous and not so famous brands and some of the products did not have attractive images and one had no image at all. The study determined that the subjects in all three groups made their shopping decision in a visual manner. As a consequence, the products with attractive images obtained the same acceptance that famous brands have had in the market for years.

Contrary to the study of Krishnakumar (1974) where he conducted a comparison of consumers according to their culture, the study focused only in subjects from a large, unidentified university in the United States. Underwood & Ozonne (1998) conducted an exploratory research about the communication between package and consumer perception. In the research they found a recurring theme of duplicity in customers' interpretation.

Limon, Khale, and Ulrich (2009) researched how packaging may be a communication barrier at the moment of selecting a product and how culture can affect the decision-making process. The subjects of the study were adolescents from Germany and Turkey. The subjects completed a questionnaire in which the products evaluated were chocolate and salt. The results indicated that, besides the packaging representing a key factor at the moment of purchasing the product, there might be variations according to the consumer culture and by the shopping behavior of each particular consumer. Holmes & Paswan (2012) researched the consumer reaction in relation to new packages; the results establish that consumers look for easy-to-use products and high quality.

The literature review suggests that the design of a package has a strategic role at the moment of the purchase decision, deriving from the interface between customers and the tangible elements. The literature and existing models emphasize the importance of consumer behavior in relation to the tangible aspects of the product. On the other hand, the essence of segmentation intensifies at the moment to present a product. But, no author or company studies the effect that the tangible aspect of a product can have on a purchasing decision from the perception of various segments.

DATA AND METHODOLOGY

This research was a quantitative study. The proposed quantitative investigation was designed with the intention to study the statistical differences between the independent and dependent variables. The dependent variables selected for this study included: the final scores of the tangible aspects of the personal care product packaging, including graphic elements score and informational elements score. The dependent variables were the responses that were observed in the study and that could have been influenced by the values of the independent variables (Roberts, 2010). While the independent variables were those that were defined by the researcher to be able to establish study groups and classify the results, the independent variables were the generational cohorts: Baby Boomers (born 1946-1964), Generation X (born 1965-1980), and Generation Y (born 1981-2000) (Kotler & Armstrong, 2012; Levy, 2011).

Population sample and analysis. This research study was limited to the western area of Puerto Rico, specifically, the region of Mayagüez and residents who were born between 1946- 2000. According to the Census Office in Puerto Rico (2010) the area of Mayagüez have 21,449 individuals in the category of Baby Boomers; 14,144 individuals pertaining to Generation X; and 23, 145 individuals pertaining to Generation Y, for a total population of 58,738 individuals in the three identified generational cohorts.

The total sample of 437 individuals was established after the pilot test, including the following stratified categories: 162 Baby Boomers, 105 individuals from Generation X, and 170 individuals from Generation

Y. According to Jiang (2010) stratified categories consisted of a previous division of the population or classes that are assumed to be homogenous in terms of one determined characteristic. After concluding a pilot test with a random sample that would not be part of the final study, an interval confidence of 4.67 was calculated. The interval was obtained using the higher average of all the items and calculating the standard error of the sample average (Aaker, Kumar, & Day, 2001; Churchill & Iacobucci, 2010; Hans, Frances, & Paap, 2001). Subsequently, the researcher adds the higher and the lower standard error multiplying with NORMSINV (0.95) and resulting with a 95% level of confidence and a confidence interval of 4.67.

The sample and collected data of 437 anonymous voluntaries was gathered in one location, which is the public plaza in Mayagüez. The sample period recollection was around one month December to January. Due to the accessibility that this would allow for the researcher to obtain a significant representation of the three generational cohorts defined in the study. In Puerto Rico, public plazas are places without any type of jurisdiction. For this reason, a public place does not belong to any specific entity, where each citizen has the freedom of public expression. Each week, the public plaza can have hundreds of citizens belonging to different generations gathering in it.

In quantitative studies, the goal is to obtain specific data that allows the researcher to measure the variables that have previously been established in the hypotheses outlined in the results and analysis section. With this in mind, the measurement instrument selected for this study was a questionnaire. The questions employed were in a Likert scale was used to measure the established values where 5 means “completely agree,” 4 means “agree,” 3 means “neither agree nor disagree,” 2 means “disagree,” and 1 means “completely disagree. The instrument was developed by the researcher with the goal of obtaining an answer to the following research question: Is there a statistical difference in relationship between the purchase decision process according to generational cohort (independent variable) and the tangible aspects of personal care products of graphic elements versus informational elements (dependent variables).

In order to present a research instrument that is reliable, the questionnaire went through different stages of testing apart to the pilot test with the goal of obtaining reliability and validity. A panel of ten experts related to the area of research was selected. The experts who were part of the process included individuals with doctorates in the following arenas: management, marketing, organizational psychology, and statistics. The mentioned areas were selected with the goal of guaranteeing reliability, relevance and validity between the goals of the research study and the measurement instrument.

RESULTS AND DISCUSSION

The researcher used statistical analysis to assess the process of consumer purchase decision-making based on tangible aspects of personal care product packaging (graphic elements versus informational elements) as dependent variables, in relationship to the generational cohorts of the individual participants (Baby Boomers, Generation X and Generation Y) as independent variables. The scores that the respondents reported in the two types of tangible aspects (graphic elements versus informational elements) were utilized in a Multivariate Analysis of Variance (MANOVA) statistical analysis where the researcher was able to test the hypotheses of the research study. The analysis of MANOVA is a statistical method that produces a linear arrangement of the dependent variables and then test for differences in the new variable operating procedures similar to Analysis of Variance (ANOVA) (Aaker, Kumar, & Day, 2001; Churchill & Iacobucci, 2010). According to Hans, Frances, and Paap (2001) MANOVA uses one or more independents variables as predictors, similar to ANOVA, except there is more than one dependent variable. ANOVA tests the differences between two or more groups of data. MANOVA tests the variances in the centroid or vector of means of the multiple interval dependents, for diverse categories of the independents (Cresswell, 2008; Cresswell & Plano- Clark, 2011).

The scores that the respondents reported in the two types of tangible aspects (graphic elements versus informational elements) were utilized in a Multivariate Analysis of Variance (MANOVA) statistical analysis where the researcher was able to test the hypotheses of the research study. No other research used MANOVA to compare purchase decision process according to segmentation.

Research Hypothesis. Then the hypotheses of this research are presented. The working hypotheses arise from the need to answer the research objectives proposed in the introductory part, which are presented with their corresponding results and analysis.

Ho1: There is no statistical difference between the purchase decision process of Baby Boomers versus Generation X and the tangible aspects (graphic elements) of personal care products.

According to the results of MANOVA between the purchase decision process of Baby Boomers versus Generation X and the tangible aspects, specifically the graphic elements the results were ($p= 0.727 > 0.05$) (see Table 1). Comparing these results with the findings of Bland, Lagary, Giles, and Scott (2006) who found that consumer behavior varies according to age, the present study's findings indicated that Baby Boomer and Generation Xers have similar patterns of behavior at the moment of evaluating products based on graphic elements of packaging. At the same time, these findings contrast with Kotler and Keller (2006) who concluded that the same product could be presented in different forms to attract different segments, as it was found that there were no statistical differences between the Baby Boomers and those from Generation Xers in terms of the graphic elements that they evaluated in selecting personal care products at the moment of making a purchase.

Ho2: There is no statistical difference between the purchase decision process of Baby Boomers versus Generation Y and the tangible aspects (graphic elements) of personal care products.

According to the results of the MANOVA between the purchase decision process of Baby Boomers versus Generation Y and the tangible aspects, specifically the graphic elements, the findings were ($p= 0.379 > 0.05$) (see Table 1). In evaluating this hypothesis in terms of the graphic elements of personal care product packaging, it can be assumed that participants from the Baby Boomer generation and Generation Y might have a similar process in terms of selecting a purchase based on graphic elements of the product. Just as when the Baby Boomers were compared with those from Generation X, the theory of Bland, Lagary, Giles and Scott (2006) applied; this is also the case along with Meyers and Lubliner (1998) who reported that consumer behavior changes according to age. In terms of graphic elements of package design, there were no statistical differences between Baby Boomers and respondents from Generation Y in terms of selecting personal care products. At the same time, however, there was some support in identifying that consumers feel the same degree of attraction for the aesthetics of the graphic elements and that this seems to have an influence in the process of making a purchase selection at the moment of purchase (Batra & Homer, 2004).

Ho3: There is no statistical difference between the purchase decision process of Baby Boomers versus Generation X and the tangible aspects (informational elements) of personal care products.

According to the results of MANOVA conducted between the purchase decision process of Baby Boomers versus Generation X and the tangible aspects, specifically the informational elements, the results were ($p= 0.498 > 0.05$) (see Table 2). Due to this score, the researcher failed to reject the null hypothesis. That means that there is no statistical difference between the purchase decision process of Baby Boomers versus Generation X and the tangible aspects of personal care products (informational elements).

Once again it was shown that there was no difference between the purchase decision-making behaviors of personal care products and the tangible aspects of the packaging—in this case, the informational elements—between Baby Boomers and Generation Xers. Due to this reason, this study could not establish that all the

market segments of generational cohorts Generation X and Baby Boomers acted in an unequal manner when making purchase decisions as was described by Bland, Lagary, Giles, and Scott (2006). At the same time, it is still significant to evaluate other findings that reflect a greater punctuation in graphic elements in order to guarantee that the two generational cohorts behave in similar fashion.

Ha₄: There is statistical difference between the purchase decision process of Baby Boomers versus Generation Y and the tangible aspects (informational elements) of personal care products.

According to the results of MANOVA conducted between the purchase decision process of Baby Boomers versus Generation Y and the tangible aspects, specifically the informational elements, the results were ($p= 0.00 < 0.05$) (Table 2). In effect, the null hypothesis four was rejected and the alternative hypothesis was sustained. By rejecting the null hypothesis and lending support to the alternate hypothesis that identifies that there is indeed a statistical difference between the purchasing processes of Baby Boomers versus the purchasing process of Generation Y in terms of informational elements. It can be assumed that consumers with larger ranges of ages between them that are relatively dissimilar focus on different experiences, tastes, and preferences. At the same time, these results support Levy (2011) who assured that Generation Y, a generation that has grown up along with many of the modern technologies, tend to be completely visual in their orientation and less analytical at the moment of making a purchase. Equally, Kotler & Keller (2006) established that the youngest group of buyers in the market, in this case, Generation Y, is not very attracted to focusing on elements that are not of a graphic, visual manner at the moment of making decisions or purchasing certain products.

Ho₅: There is no statistical difference between the purchase decision process of Generation X versus Generation Y and the tangible aspects (graphic elements) of personal care products.

According to the results of MANOVA conducted between the purchase decision process of Generation X versus Generation Y and the tangible aspects, specifically the graphic elements, the results were ($p= 0.913 > .05$) (see Table 1). In analyzing the failure to reject the null hypothesis, it shows that respondents in the Generation X and Generation Y generational cohorts tend to possess a similar behavior in terms of the process of making purchase decisions. Comparing these results it can be assumed that now that both Generation X and Generation Y are composed of two young adult generations within the market, they might have certain homogenous characteristics.

Ha₆: There is statistical difference between the purchase decision process of Generation X versus Generation Y and the tangible aspects (informational elements) of personal care products.

According to the results of Generation Y and the tangible aspects (informational elements) of personal care products, MANOVA conducted between the purchase decision process of Generation X versus Generation Y and the tangible aspects, specifically the informational elements, the results were ($p= 0.00 < 0.05$). This highlights again that consumers from Generation Y tend to present certain challenges to the present market and to organizations that are used to marketing their products to older generations. Consumers from Generation Y tend to have specific tastes and preferences in some aspects that are distinct from older generations, such as Generation X and the Baby Boomers. Silayoi, and Speece (2007) noted that there are some consumers who are able to make purchase decisions based only on visual cues, which might be the case for those from Generation Y, who show some types of buying behavior that is different from the older generational cohorts. That also indicates that Generation Y does not pay significant amounts of attention to verbal elements on packaging for any type of product, since it seems to be sufficient for those from Generation Y to recognize the graphic elements of their favorite brands to make purchase decision.

Tables 1 and 2 represent the scores that the respondents reported in the two types of tangible aspects (graphic versus informational elements). Were utilized in a Multivariate Analysis of Variance (MANOVA) statistical analysis where the researcher was able to test the hypotheses of the research. This analysis was generated through Statistical Package for the Social Sciences (SPSS) version 20. MANOVA tests the variances in the centroid or vector of means of the multiple interval dependents, for diverse categories of the independents (Cresswell, 2008).

Table 1: MANOVA Analysis- Graphic Elements Score

Dependent Variable	(I) Generation Group	(J) Generation Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Graphic elements score	Baby Boomer (1946-1964)	Generation X (1965-1980)	-0.73	0.913	0.727	-2.97	1.51
		Generation Y (1981-2000)	-1.12	0.800	0.379	-3.08	0.85
	Generation X (1965-1980)	Baby Boomer (1946-1964)	0.73	0.913	0.727	-1.51	2.97
		Generation Y (1981-2000)	-0.39	0.904	0.913	-2.61	1.83
	Generation Y (1981-2000)	Baby Boomer (1946-1964)	1.12	0.800	0.379	-0.85	3.08
		Generation X (1965-1980)	0.39	0.904	0.913	-1.83	2.61

*This table shows the results of Multivariate Analysis of Variance (MANOVA) conducted to analyze the relation between the purchase decision process of Baby Boomers, Generation X and Generation Y. Specifically, this table present the purchase decision process in relation to the graphic elements score between the three generational cohorts. The results were used to test hypothesis 1, 2 and 5. Based on observed means. The error term is Mean Square (Error)= 63.555 Significant Level Used 5% [**]*

Other Findings. This research has others interesting findings in relation to most and less considered elements at the moment of the purchase decision process, according to the generational cohorts.

Graphics Elements. The researcher identified that there were certain similarities and differences between each of the participating generational cohorts in terms of the factors that they paid more or less attention to during the process of purchase decision-making of personal care products. These tangible aspects of the packaging design that were considered in the study were classified as graphic elements and informational elements. In terms of the most considered aspects of the three generational cohorts studied, all three generations paid more attention to the recognition of the brand’s logo in terms of graphic elements of the product (Figure 1).

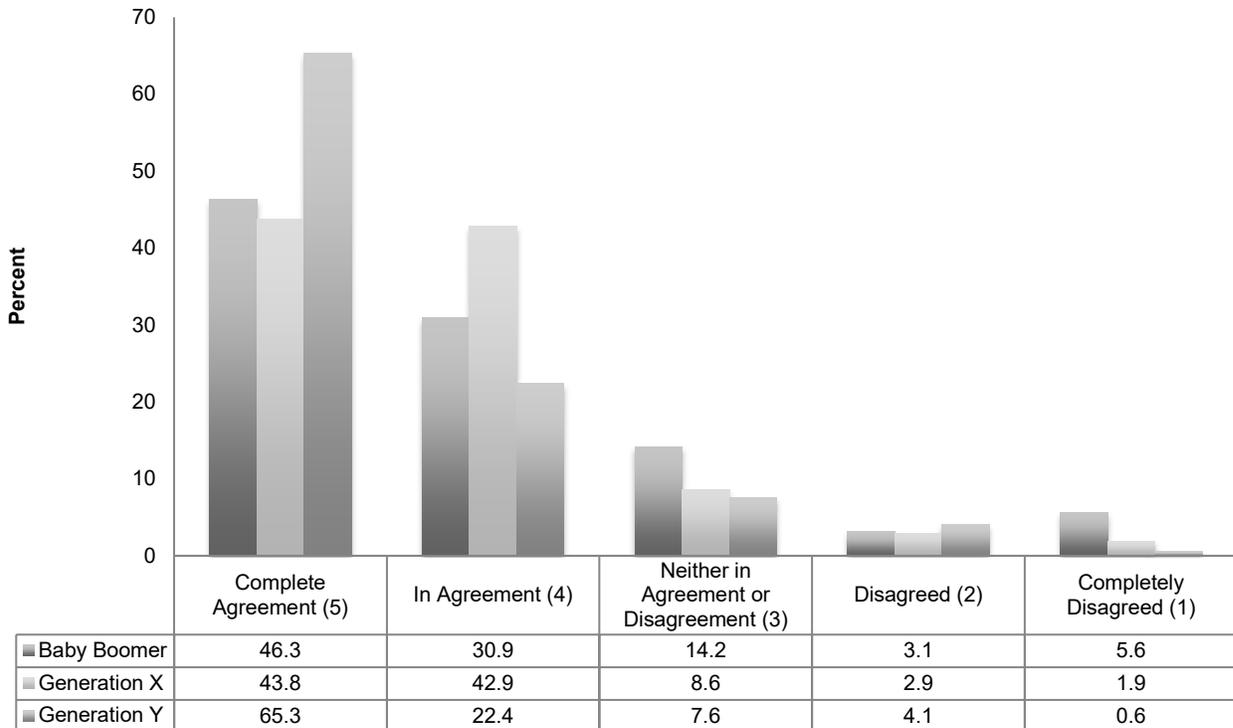
Just as there were some elements that participants paid the most attention to, there were also certain elements that were identified to be less considered than others in the process of purchase decision-making regarding personal care products. In general, all three generational cohorts paid less attention to the colors of the packaging. Baby Boomers and participants from Generation X reflected that they did not pay much attention to neon colors, while Generation Y participants reflected that they did not pay much attention to pastel colors (Figure 2).

Table 2: MANOVA Analysis- Informational Elements Score

Dependent Variable	(I) Generation group	(J) Generation group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Informational elements score	Baby Boomer (1946-1964)	Generation X (1965-1980)	1.18	0.999	0.498	-1.27	3.63
		Generation Y (1977-2000)	9.83*	0.875	0.000	7.68	11.98
	Generation X (1965-1980)	Baby Boomer (1946-1964)	-1.18	0.999	0.498	-3.63	1.27
		Generation Y (1981-2000)	8.65*	0.990	0.000	6.21	11.08
	Generation Y (1981-2000)	Baby Boomer (1946-1964)	-9.83*	0.875	0.000	-11.98	-7.68
		Generation X (1965-1980)	-8.65*	0.990	0.000	-11.08	-6.21

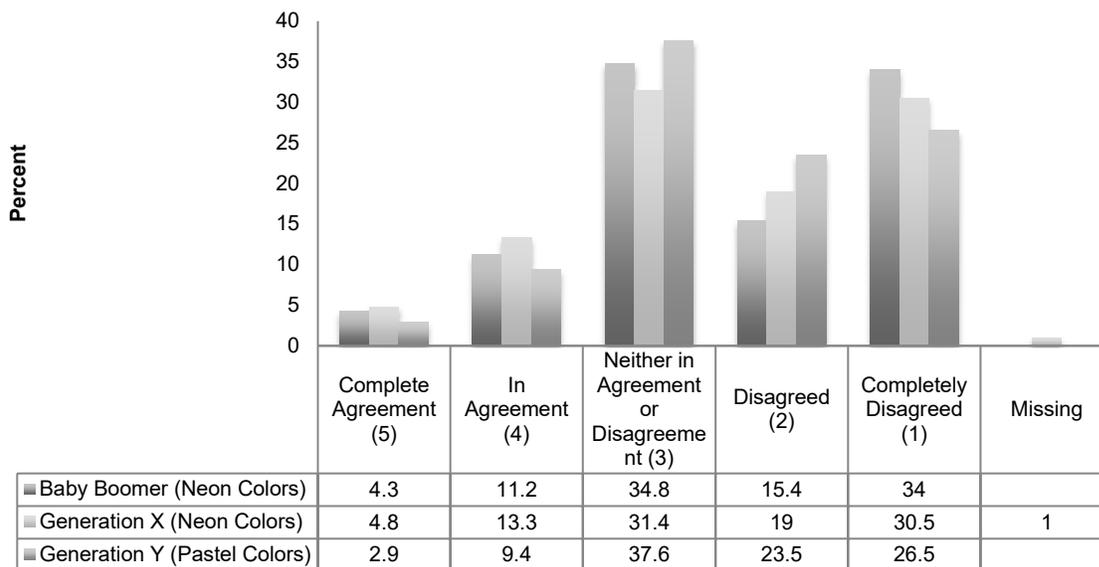
This table shows the results of Multivariate Analysis of Variance (MANOVA) conducted to analyze the relation between the purchase decision process of Baby Boomers, Generation X and Generation Y. Specifically, this table present the purchase decision process in relation to the informational elements score between the three generational cohorts. The results were used to test hypothesis 3, 4 and 5. Based on observed means. The error term is Mean Square (Error) = 63.555. Significant Level Used 5% [**]

Figure 1: The Most Considered Graphic Elements of Generational Cohorts



This figure shows the most considered aspects of the three generational cohorts studied. All three generations paid more attention to the recognition of the brand's logo in terms of graphic elements of the product.

Figure 2: Less Considered Graphic Elements of Generational Cohorts



The Figure shows that baby boomers and participants from generation X reflected that they did not pay much attention to neon colors. While Generation Y participants reflected that they did not pay much attention to pastel colors.

Informational elements. Just like with the graphic elements, the findings from the study regarding the informational elements showed certain similarities and differences. The instrument responses found that there were certain factors of the informational elements that there were different factors of the informational elements to which each generation cohort paid more or less attention. In terms of those aspects that were most paid attention to amongst the informational elements, respondents from both Generation X and the Baby Boomer generational cohorts were found to pay more attention to reading warnings on personal care products at the moment of selecting a product. Respondents from Generation Y identified that they paid more attention to reading the brand name of the product.

In terms of the informational elements, the participants from the three generational cohorts reported that they paid less attention to the country where the personal care product was manufactured. While all three generational cohorts identified this factor as the factor that they paid the least attention to, the proportions of these results differed between the generations. The Baby Boomer generation, expressed that they paid attention to all of the aspects identified as informational elements; reading the brand, recognizing the manufacturing company, identifying the country where the product was manufactured, reading warnings, identifying measurements, reading the instructions, recognizing the ingredients and chemical components, legible wording, and color contrasts that allow wording and promotional messages to be read. At the same time, identifying the country where the product was manufactured was the element with the least scoring in spite of the fact that a majority of the respondents from the Baby Boomer generation identified that the country where the product is manufactured was significant. Due to this, within the Baby Boomer generation, no one element could be considered of least attention. Like the Baby Boomers, those respondents from the Generation X cohort, reported that they paid attention to all of the factors identified as informational elements. At the same time, the recognition of the country where a product was manufactured was identified as the element that the largest group of Generation X respondents indicated not to consider as an important factor, even though there were a significant number of respondents from this generational cohort that did recognize this as an important factor. In terms of the respondent from Generation Y, there were several aspects of the informational elements that were not considered to be of importance at the moment of making a purchase decision. At the same time, however, the country where the product was manufactured was considered even less by individuals from Generation Y than other

factors. From this group, 84.1% were in complete disagreement that the country where a product is manufactured is of importance.

CONCLUSION

Looking at the problem outlined, it has been identified that modern organizations are part of a wild competitiveness, where companies are setting forth their best strategies in the hopes of gaining a competitive advantage. It has been identified that the tangible image of the products has been a very well known topic within the marketplace, where the popular phrase “same product, new image” has been distinguished. The packaging of a product is the primary promoter of communication of the brand in the face of the competition on the shelves at the store. Due to this, it has been found that the physical attributes of product packaging can be the perfect tool to be able to achieve the desired success. That strengthen Bloch (1995) model that emphasize the importance of the image. At the same time, poor planning in the selection of the tangible elements of the packaging can represent an unpredicted failure for the brand. For this reason, companies require more information about consumers and about consumer purchasing behavior in terms of the tangible aspects of product packaging. Naturally, there is not enough research that allows companies to fully appreciate the effect on consumers in their purchase decision-making based on the tangible aspects of product packaging.

According to Keller, Marino, Wallace (2016); Kotler (1999) organizations should create strategies that allow their brand to stand out from the growing competition and to fit in with the particular lifestyles of their consumers. For this reason, the presented research identifies the statistical difference between the individual purchase decisions and the tangible aspects of personal care products (graphic elements versus informational elements), segmenting the consumers according to three generational cohorts. The findings and results of this study are based on the perceptions of a stratified sample that was gathered in Mayagüez, Puerto Rico. The size of the sample was determined in a proportional mode according to generational cohorts and for this reason, the instrument was administered in a voluntary and confidential fashion to 162 individuals from the Baby Boomer generation, 105 from Generation X, and 170 from Generation Y, with a total of 437 individuals who responded to the survey instrument.

After obtaining the results of the present study that was conducted it was determined theoretical and managerial implications. It is an old-fashioned idea to believe that the sole purpose of packaging is for the protection of the product. It is important to note that the findings show that the segmentations of markets can be a strategy to attract consumers according to their behavior and their responses to diverse stimuli. Through the evaluation of the results as seen through the responses of each generational cohort, it is noted that there is a narrow relationship between the preferences of the consumers at the moment of evaluating personal care products between graphic elements and informational elements. By establishing a comparison between the generational cohort groups, the researcher was able to establish that as consumers increase in age, their behavior does tend to incline towards different perspectives. This was seen in the study findings that between Baby Boomers and Generation Xers in the area of evaluating almost all of the informational elements on packages of personal care products, compared to those respondents from Generation Y, the youngest generational cohort in the study, who showed that they did not pay the same type of attention at evaluating the informational aspects of personal care products. Therefore, the results discussed urge organizations to educate themselves about the preferences of consumers in terms of the tangible aspects of products before making the decision to change the packaging of their products. In particular, it was noted that this is true for organizations that manufacture personal care products, where there is a vast and growing competitiveness. It is of note to point out that the global personal care product industry has revenue of about \$260 billion per year (Personal Care Products Council, 2016).

Because of these findings, the present study can shed some light for organizations regarding the purchase behavior of consumers in terms of the process of purchasing personal care products. Taking these findings into account, it is noted that organizations that work with personal care products could better visualize the process that their consumers go through when making personal care product purchase decisions. Organizations can concentrate their strategies in projecting an attractive image in front of the eyes of consumers in terms of both graphic elements and informational elements. In a parallel fashion, it was established that there are similar purchasing behaviors between Baby Boomers and consumers from Generation X, in that both cohorts seem to base their purchasing decisions as much based on graphic elements as on informational elements, based on recognizing the brand and paying attention to the verbal and informational sections of the packaging. Based on this finding, companies should create marketing committees that are charged with promoting the products and making an emphasis focused on providing educational information, such as the benefits of the product, warnings, and other elements that inform the consumer at the moment of making a purchase decision.

However, the findings from this present study related to Generation Y show the challenges and implications for companies. This generation, which is the youngest with major buying power in the market and who have shown a considerable increase in their buying power, seems to be different than the older generations. In comparison with the other generations, consumers from Generation Y do not pay a great deal of attention to the informational elements on product packages at the moment of selecting a product. It is not known at this time, however, if once this generation begins to age and share some of the same life experiences that the older generational cohorts have already gone through if this generation will begin to exhibit a behavior that is more analytical at the moment of making purchase decisions. Due to these findings, organizations need to be sensitive and careful at the moment of selecting the information that they exhibit on their products and they might consider placing a major emphasis in projecting the brand name and logo which seemed to be the factor that Generation Y most took into consideration both in terms of graphic elements and informational elements, at the moment of making a purchase decision.

Each study presents limitations that refer to restrictions that go along with the type of investigation chosen, and generally these are of an external character and usually cannot be controlled by the researcher (Fowler, 2002). The scope of the study presents some limitations that can be classified as being directly derived from the objectives of the study and the research methodology employed. Amongst the limitations identified includes restricting the study to Puerto Rico, in particular to the area of Mayagüez, Puerto Rico. The sample was randomly selected and the study was completely voluntary to people who belonged to the three generational cohorts: Baby Boomers (1946-1964), Generation X (1965-1976), y Generation Y (1977- 2000).

Due to the finding, it is hoped that this present study can become a starting point for new research in this area. It would also be recommended to increase the type of research comparing cultural factors and to include regions not only within Puerto Rico, but also in other regions of the United States and other countries. Culture is the most basic origin of the desires and behaviors in individuals (Kotler & Armstrong, 2014). Identifying the cultural factors that contribute to consumer purchase decisions through increased research in this area would make a contribution specifically for those managers of international organizations, especially those who develop personal care products. Limon, Kahle and Orth (2009) referred to cultural aspects as a variable that directly affects marketing strategies from the development of new products to the way in which these are marketed and published. Further research in this area would specifically contribute to better understanding the particular characteristics that impact the final consumer buying behavior of consumers at the point of sale, consumers who should be the primary target of all modern organizations.

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