

The Effect of Visual and Verbal Elements of Food Product Packaging on Consumer Buying Decision

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ABSTRACT: In today's business world, marketers operate in a highly competitive and dynamic environment. Competition for consumer attention at the point of purchase has become more intense. Marketers are now fully aware that product packaging plays a critical role in a brand's marketing strategy to influence shopping behavior at the point of purchase, where most buying decisions are made. Indeed, packaging has become a critical element in product marketing strategy to distinguish a company's product and deal with the competition. The purpose of this study is to identify consumers' attitudes toward the visual and verbal elements of food product packaging and to examine its impacts on their buying decision. The main findings indicate that the visual elements of packaging (Color – Design – Shape) affect positively consumers' buying decisions for food products. However, no meaningful relationship was found between the consumer buying decision and the visual elements of packaging regarding size and materials. The results also demonstrate that the verbal elements of packaging (Product Information – Product Name) affect positively consumers' buying decisions, While the element of (Country-of-origin) has no effect on their decisions.

KEYWORDS: Product packaging- Packaging elements- Consumer purchase decision

1. Introduction

Packaging has become an essential tool for marketing communication mix and a crucial part of the sales process, especially at the points of sale. The packaging is no longer just a container to protect and preserve the product, but rather it has become a promotional tool that replaces the salesmen by attracting the consumer's attention, giving a good impression of the product, and providing information as well. It becomes an ultimate selling proposition stimulating impulsive buying behavior, increasing market share, and reducing promotional costs (Chitturi, Londono and Amezcua 2019, 42; Neupane 2018, 141; Alhamdi 2020, 1191). Moreover, the product packaging acts as a communication message that the marketer sends to the consumer through its visual and verbal elements. Therefore, it is a significant factor in defining the product and determining its identity, and it is the only communication message that differentiates and distinguishes between one product and another (Raheem, Vishnu and Ahmed 2014, 125; Olalekan and Adewale 2017, 302).

Additionally, consumers look at packaging as a criterion to judge product quality, and they tend to buy products with good packaging, especially in light of intense competition between brands, the changing lifestyle of individuals, and their desire for uniqueness and distinction. Hence, companies have realized the importance of packaging in influencing the purchasing decision of consumers, as high-quality materials will attract customers more than low-quality materials. Therefore, organizations have been keen to design their product packaging in an innovative and distinctive style, according to the needs of the target market, and in line with their marketing strategy (Mercado 2017, 12; Banerjee and Kedia 2018, 42).

The main purpose of this paper is to identify the effect of product packaging elements on consumers' buying decisions. It discusses whether the visual or verbal elements of the food product packaging have a greater impact on the consumers' buying behavior.

2. Literature Review

2.1 Definition of Product Packaging

Packaging is all actions of designing and producing the container for a product (Olalekan and Adewale 2017, 302). It is a product protection method from the external environment (Waheed, Khan, and Ahmed 2018, 97). It is also defined as a material that contains a consumer good with the aim of keeping it clean and ensuring that the product can be attractively presented (Fadzil et al. 2015, 29). In another context, Neupane (2018, 141) defined the packaging from the perspective of its marketing function as a promotional tool that has become important at the point of purchase, which permits companies to be diverse from each other. Complementing the previous definition, the study of Raheem, Vishnu and Ahmed (2014, 125) demonstrated that packaging has become an effective product promotion tool for all companies.

2.2 Types of Packaging

The type of packing depends on various factors such as product features, production process, quality of the product, assumed shelf life, and transport considerations. According to the study of Olalekan and Adewale (2017, 302), there are major types of packaging as follows:

- Primary packaging; is the basic material that is frequently used in product packaging.
- Secondary packaging; is the container used to provide an additional package for a product.
- Display packaging; is the outer shell used to display the product at the point of purchase.
- Transportation packaging; is the material used to package the product to ensure ease of transport and storage.

There is another classification of packaging types according to their functions. The logistical function of packaging is mainly to protect the product during storage and distribution operations. Otherwise, the marketing function aims to deliver positive messages to consumers about the characteristics of the product at the point of sale (Ansari and Siddiqui 2019, 1055). Additionally, the study of Orzan et al. (2018, 1) referred to a different type of packaging, which is environmentally friendly or (eco- packaging), it has multiple benefits for the consumer, as it is safe and healthy for the individual and society, as its components can be recycled to be renewable energy sources, and it can be reused safely. In this context, the packaging has an important role in the healthy lifestyle of the consumer, especially the packaging of food products, due to the increase in consumer interest in health and diet matters (Arslanagić, Peštek, and Maglajlić 2014, 79). The eco-packaging is now considering one of the factors that helped spread the concept of green marketing, which has become a major trend for companies recently, driven by the change of consumers' lifestyle (Lado, Martínez-Ros and Martos-Partal 2012, 364).

2.3 Product Packaging Functions

According to Akabogu (2013, 49-50), the packaging design is evaluated through its ability to perform four basic functions: Visibility, Information, Emotion, & Workability (VIEW model) as follows: Attracting attention through visual elements, information that can be conveyed to the consumer, the emotion that can arise in the customer's psyche and creating the desire to buy, the functional tasks that it performs. In addition, the packaging performs an advertising function, as most advertising campaigns focus on the product packaging and the extent of its distinction, whether through size, shape, design, or the benefits of use (Fadzil et al. 2015, 29). Complementary to this context, Lado, Martínez-Ros and Martos-Partal (2012, 364) indicated that product packaging is a form of advertising, because it carries a strategic communication message, such as information, logo, and slogan. Besides, the messages reach the consumer through design, colors, and shapes.

Another function of the packaging is to stimulate the consumer's memories about the product and the brand by automatically pushing ideas, knowledge, and feelings into the consumer's awareness during the shopping process (Raheem et al. 2014, 465). The packaging also reflects the brand's values and its market position, and to achieve this, it must be integrated with the rest of the product's marketing communications, and compatible with the tendencies and culture of the target audience (Silayoi and Speece 2004, 607).

2.4 The Elements of Packaging

Packaging is a very vital marketing element that affects consumer buying behavior (Raheem et al. 2014, 466). According to Silayoi and Speece (2004, 610), there are major elements of product packaging that influence consumer buying decisions, which are separated into two categories: visual and informational. The visual elements are graphics, shape, size of the package, and colors, which are related to the emotional side of the decision-making. Otherwise, the informational elements affect the cognitive part of decisions.

2.4.1 Visual Elements

According to several studies that will be displayed, five main elements must be considered by the package designer to make it attractive and effective as follows: shape, size, color, graphics, and materials.

- *Design*: The Packaging Design has a complex impact on the business environment due to technological development, the necessity of availability of new materials and logistical requirements, as well as the change in consumer preferences (Fadzil et al. 2015, 30). According to Ashaduzzaman and Mahbub (2016, 24) packaging design, varies from brand to brand and product to product. It also plays a vital role in brand differentiation, attracting consumers, and influencing their purchasing behavior. In the same context, Silayoi and Speece (2004, 611) demonstrate that product design includes images and graphics, the type and technology of printing, and product photography. These elements contribute to influencing the consumer's perceptions of the product, and hence his purchasing decision. From another perspective, Mercado (2017, 14) pointed to the importance of considering consumer characteristics when designing product packaging, as the degree of design impact on consumer perception and preferences varies with different age groups, gender, and other demographic factors.
- *Shape and Size*: The shape and size of the packaging are an influencing component of consumer behavior. For example, several studies conducted on the packaging shape concluded that innovative packaging might assist the consumer in choosing a product. It also indicated that the straight-shaped product had a positive effect on consumer choices compared to the curved-shaped product, and the same result was observed for classic packaging, unlike the colorful design (Ansari and Siddiqui, 2019: 1058; Chitturi, Londoño & Henriquez 2022, 729). It also noted that the shape of the packaging, especially of the bottles, has an impact on customers' perception of the brand since it conveys the characteristics of the product. Additionally, customers tend to judge the suitability of a product based on its size and shape, especially in food packaging (Chitturi, Londono and Amezcua 2019, 44). Moreover, the shape of the packaging that meets the needs of the consumer represents an added value to the product such as easy-open, easy-store, easy-carrying, non-breakability, and reuse for other purposes (Ampuero and Vila 2006, 103; Ashaduzzaman and Mahbub 2016, 25). In another context, innovative packaging adds value to a product if it meets the needs of the consumer and provides benefit such as safe packaging reuse, ease of storage, portability, and non-fragility. Therefore, manufacturers seek today to use packaging to

emphasize product characteristics and brand characteristics (Ashaduzzaman and Mahbub 2016, 25).

- *Color*: The color of the packaging attracts consumers' attention to the product and distinguishes it from competitive brands (Neupane 2018, 142; He & Guang Lv 2022, 758). Besides, colors are used to give different impressions of the product. Pharmaceutical companies, for example, use white and light colors in their packaging to express purity, cleanliness, and health, while eco-packaging uses green colors to express health and nature. Furthermore, colors should be used carefully because their meanings differ according to the cultures and values that govern them (Raheem et al. 2014, 466; Waheed, Khan, and Ahmed 2018, 100). Complementary to the previously mentioned, Ashaduzzaman and Mahbub (2016, 23) demonstrated that color psychology is used effectively in advertising and product packaging design. For example, red symbolizes activity and movement, blue symbolizes purity and distinction, and black symbolizes luxury and sophistication, and so on. According to Fadzil et al. (2015, 30-31), colors can enhance product and brand image through visual media. Hence, businesses must understand customers' color preferences. In addition, color pictures contribute to improving the effectiveness of signaling and perception in mental processes. It helps to define the brand's identity and distinguish it from competing brands, and increase the degree to which consumers are aware of it, remember it, and recall it when purchasing. Additionally, audience characteristics must be considered when choosing product-packaging colors. For example, in children's product packaging there are three preferred colors for product backgrounds such as red, blue, and brown, as children get older, their color preferences will change from warm colors to cool colors.
- *Materials*: The packaging material keeps products from being damaged. In general, cardboard, glass, and plastic are used in the packaging of most products. For example, it was evident that customers were attracted to glass containers due to their transparency and hygienic nature (Ashaduzzaman and Mahbub 2016, 20). Besides, the packaging material is the first property of the product that is in direct contact with the consumer. Therefore, consumers tend to judge product materials by their visual attractiveness and packaging design. When consumers see packaging made from low-quality materials, they assume that the product's quality will also be low. So packaging materials have a strong influence on consumer buying behavior. (Rheem et al. 2014, 467; Waheed, Khan, and Ahmed 2018, 100). According to Orzan et al. (2018, 2), consumers are becoming more aware of changes in the environment and the impact of their consumption behavior on it. Thus, the consumer has prioritized the packaging of products that are made from environmentally friendly materials and contribute to improving the quality of life; therefore, packaging material has become one of the factors affecting consumers' purchasing decisions. Because of the growing concept of corporate social responsibility and its role in sustainable development, many companies have turned to the production of packages made of lighter weight and recyclable materials, considering the environmental and health dimension, which is called the "green package", it performs four main functions: reduce, reuse, reclaim, and recycle (Zhang and Zhao 2012, 902).

2.4.2 Informational elements

Despite the importance of visual elements of the packaging in the process of attracting the consumer's attention and arousing his interest, the verbal elements such as information related to the characteristics, components of the product, instructions for use, validity, and limitations of use, and the country of origin has a crucial role in the process of making the purchasing decision. Therefore, the information written on the packaging can assist consumers in determining their

preferences carefully, as it informs them of the key product features and expected benefits (Akabogu 2013, 47). In this context, a study by Lado, Martínez-Ros, and Martos-Partal (2012, 364) pointed out the importance of the content written on the packages of food products (for example, low fat, number of calories, calcium percentage), as such nutrition facts that have a great impact on the consumer's purchasing decision. (Arslanagić, Peštek, and Maglajlić (2014, 81) discovered that there are differences between males and females in terms of their perception of the information credibility of healthy food products, as it was found that males more believing of the packaging information than females.

In addition, the verbal elements of the packaging perform the same function as the advertisement by adding a sentence or phrase that distinguishes the product or its trademark and gives them a specificity (Slogan), and links the packaging with other marketing communication efforts. Nonetheless, packing information can create contrary results, if misleading and inaccurate information is conveyed, or because of using very small fonts and densest writing patterns to present comprehensive information on the label, resulting in poor reading and sometimes confusion (Silayoi and Speece 2004, 612; Neupane 2018, 142).

2.5 Consumer Buying Decision

In today's business world, marketers operate in a highly competitive and dynamic environment. Competition for consumer attention, at the point of purchase, has become more intense. Marketers are now fully aware that product packaging plays a critical role in a brand's marketing strategy to influence shopping behavior at the point of purchase, where most buying decisions are made. Indeed, packaging has today become a vital element in product marketing strategy to distinguish a company's product and deal with the competition.

Consumer buying decision relates to a series of activities that the consumer undertakes before purchasing the product, starting from searching for and evaluating the product until choosing and buying it, with the aim of satisfying his needs and desires (Olalekan and Adewale 2017, 304). According to Chitturi, Londono, and Amezquita (2019, 45), the effect of the packaging on the consumer's purchasing decision begins first by influencing his perception of the product through the visual elements of the package such as design, color, size, and shape, then stimulating the emotional areas of his brain to influence his preferences and choices. While Raheem et al. (2014, 466) demonstrated that product packaging affects the consumer's purchasing decision by supporting the brand image, maintaining the likeness of the product in-store, establishing the relationship with customers, and raising awareness of new products.

From the managerial perspective, the packaging is related to the strategic marketing decisions, while from the consumer point of view, it plays a major role, as it is the last thing that he sees before making the final purchase decision, and the last chance for the producers to sway the customer towards their products. In addition, the spread of major retailers also led to the emergence of the concept of self-service, which made the consumer depend on himself in choosing the product. Thus, the information delivery function switched from the salesperson to advertising and packaging (Ampuero and Vila 2006, 101).

There are intermediate variables that influence a consumer's buying decision, such as when the consumer is pressured in time during the buying process. This causes the visual elements of the packaging to be more effective in the consumer's choice of the product. On the other hand, verbal elements are more effective when the consumer has plenty of time to shop (Silayoi and Speece 2004, 611).

3. The Research Hypothesis

Based on the above literature review, the importance of product packaging is evident as one of the key elements of marketing communications in influencing consumer behavior, especially,

because of competition between brands, changing the lifestyle of consumers, and increasing their aspirations and the diversity of their needs. In this context, this study aims to identify the effects of the visual and verbal elements of food product packaging on consumers' buying decisions. It proposed a model that explains the correlation hypothesis of the study as shown in Figure 1.

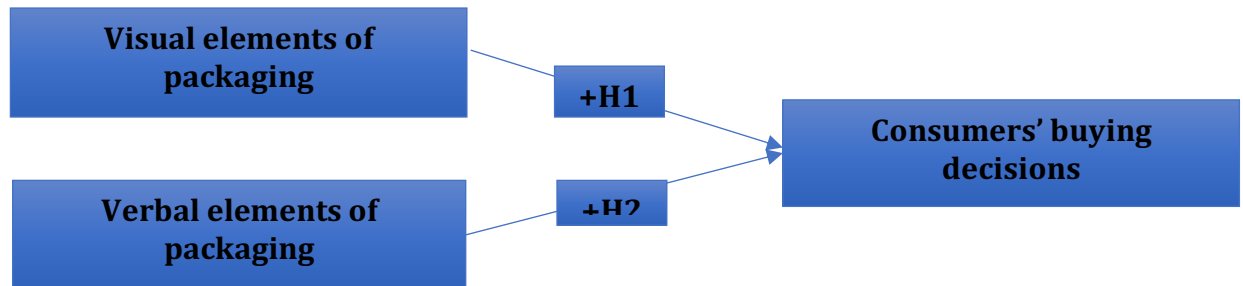


Figure 1: The Proposed Research model

H1: The visual elements of the food product packaging (a. design – b. color- c. size- d. shape- e. material) have positive effects on the consumers' buying decisions.

H2: The verbal elements of the food product packaging (a. product information- b. brand name – c. country of origin) have positive effects on the consumers' buying decisions.

4. Methodology

The United Arab Emirates represents a very suitable context for testing the impact of food product packaging on consumers' buying decisions, as it is an open and highly competitive market, especially in the field of food products. It is also witnessing an increasing growth of modern retail stores, as it is spread by the most important and famous retail chains in the world.

The population of this study was the consumers in UAE. Participants were asked to answer an online survey based on their past or current experience with food products shopping and the extent to which the product's packaging influences their buying decisions. The total sample was determined based on the number of participants in the online survey. A total of (200) questionnaires were submitted back and used in the final analysis.

An online questionnaire was used for collecting data in order to test the validity of the research hypotheses. The questionnaire consisted of three separate parts; the first part was regarding participants' demographic characteristics. The second part regards the visual and verbal elements of food product packaging. The visual elements measured by 23 five-point items (1=strongly disagree/ very unsatisfied to 5=strongly agree/ very satisfied) included the effects of package design (5 items), package color (5 items), package size, package shape (6 items), and package materials (3 items). Also, the verbal elements measured by (10 items) (1=strongly disagree to 5=strongly agree), including the effect of product information (4 items), brand name (4 items), and country of origin (2 items). The third part included (6 items) to measure the effects of packaging elements on the consumers' buying decisions.

5. Data Analysis

5.1 Characteristics of the Sample

Information regarding the respondents' demographic characteristics is presented in Table 1. It can be observed that respondents in the study are mostly “women” (68.5%) and “married” (70.0%). They are predominantly between the ages of “20 and 30” (43%) and educated at the “university level” (72.5%). Economically, (41.0%) of the respondents had a monthly income between “5000 and 10000” AED. Table 1 summarizes the detailed results as follows.

Table 1: Demographic characteristics of respondents

Gender	Frequency	Percentage %
Male	63	31.5
Female	137	68.5
Total	200	100
Age Group	Frequency	Percentage %
20-30	86	43.0
31-40	57	28.5
41-50	48	24.0
Above 50	9	4.5
Total	200	100
Marital Status	Frequency	Percentage %
Single	60	30
Married	140	70
Total	200	100
Educational Level	Frequency	Percentage %
High School	22	11
University level	145	72.5
Postgraduate	33	16.5
Total	200	100
Monthly Income	Frequency	Percentage %
Less than 5000 LE	7	3.5
5000 LE- less than10000 LE	82	41
10000 LE- less than15000 LE	49	24.5
15000 LE- less than 20000 LE	52	26.0
Above 20000 LE	10	5.0
Total	200	100

5.2 Reliability Test

Cronbach's alpha was used to test the reliability of questionnaire statements, Table 2 summarizes the results of this test as follows.

Table 2: Reliability Test

	Variable	Reliability Statistics Cronbach's Alpha	NO. of items
Visual Elements of Packaging	Package Design	0.803	5
	Package Color	0.828	5
	Package Shape	0.812	6
	Package Size	0.824	3
	Package Material	0.795	4
Verbal Elements of Packaging	Product Information	0.786	4
	Brand Name	0.767	4
	Country-of-Origin	0.819	2
Consumers' buying decisions		0.807	6

5.3 Hypothesis Testing Results

H1: The visual elements of the food product packaging (a. design – b. color- c. size- d. shape- e. material) have a positive effect on the consumers' buying decisions.

Table 3: Stepwise Regression to test the effect of visual elements of the food product packaging on the consumers' buying decisions

Model	variable	R	R ²	β	t-value	t-Sig.	f.value	df	f.Sig
Model.1	(Constant)			2.283	7.076	0.000			
	Package Design	.460	0.236	0.396	5.434	0.000	29.525	1 198	0.000
Consumers' buying decisions= 2.283 + (0.396) Consumer attitudes towards Package Design									
Model.2	(Constant)			1.849	5.472	0.000			
	Package Design	.587	0.322	0.336	4.596	0.000	21.614	2	0.000
	Package Color			0.186	3.476	0.001		197	
Consumers' buying decisions= 1.849 + (0.336) Consumer attitudes towards Package Design + (0.186) Package Color									
Model.3	(Constant)			1.646	4.797	0.000			
	Package Design	.0771	0.346	0.238	4.773	0.006	16.173	3 196	0.000
	Package Color			0.183	3.445	0.001			
	Package Shape			0.152	2.126	0.035			
Consumers' buying decisions= 1.646 + (0.238) Consumer attitudes towards Package Design + (0.183) Package Color + (0.152) Package Shape									
Excluded Variables	Package Size	t-value= 1.225		t. seg= 0.083		(Not statistically significant)			
	Package Material	t-value= 1.465		t. seg= 0.096		(Not statistically significant)			
N=200									

Dependent Variable: Consumers' buying decisions

Predictors: (Constant), Design – Color- Shape- Size- Material

Stepwise regression was used. There are three models to explain the effect of the visual elements of food product packaging on the consumers' purchasing decisions, as follows:

- By reviewing table 3, the findings showed that **Model.1** is significant ($P < .001$), and indicated that Package Design ($R^2 = 0.236$, $\beta = 0.396$, $t = 5.434$) represents 23.6% of the elements affecting the consumers' purchasing decisions. It also demonstrated that there is a positive and moderate correlation ($R = 0.460$) between consumers' perceptions of packaging design and their purchasing decision.
- **Model.2** is significant ($P < .001$) also, the results indicated that Package Design ($\beta = 0.336$, $t = 4.596$) and Package Color ($\beta = 0.186$, $t = 3.476$) respectively, have a significant positive effect on consumers' purchasing decisions. The ($R^2 = 0.322$), so the two variables together affect the purchasing decision of consumers by 32.2%.

- In **Model.3** the findings showed that the model is significant ($P < .001$). The results indicated that Package Design ($\beta = .238$, $t = 4.773$, $p < 0.006$) has the most impact on consumers' purchasing decisions, followed by Package Color ($\beta = .183$, $t = 3.445$, $p < 0.001$), and Package Shape ($\beta = .152$, $t = 2.126$, $p < 0.035$), respectively. The ($R^2 = 0.346$), so the three variables together affect the purchasing decision of consumers by 34.6%. The results also demonstrated that there are positive and strong correlations ($R = 0.771$) between consumers' perceptions of packaging design and their purchasing decision.
- The variables Package Size ($t = 1.225$) and Package Materials ($t = 1.465$) were excluded as they are not statistically significant, which means that these two variables do not affect the purchasing decision of consumers towards food products.

Therefore, H1 was supported partially. The sub-hypotheses (a-b-d) were supported, which assume that visual packaging elements (a. design -b. colors, d. shape) positively affect consumers' purchasing decisions. While the two sub-hypotheses (c-e), which assume that the package size, and the package materials, have a positive effect on consumers' purchasing decisions, were not supported.

H2: The verbal elements of the food product packaging (a. product information- b. brand name – c. country of origin) have a positive effect on the consumers' buying decisions.

Table 4: Multiple Regression to test the effect of verbal elements of the food product packaging on the consumers' buying decisions

Dependent Variable: Consumers' buying decisions							
Model	Variables	Coefficients (β)	R	R Square	t-Values	Sig.	Outcome
1	(Constant)	3.020	.796	.434	14.550	.000	
	Product Information	0.377			5.883	.000	(H2a)*** Supported
	Brand Name	0.247			4.905	.000	(H2b)*** Supported
	Country-of-Origin	0.116			0.437	0.662	(H2c) Not Supported
F = 19.438			df = (2, 197)		Sig = .000		
MODEL: Consumers' buying decisions = β (3.020) + β_1 (0.377) Product Information + β_2 (0.247) Brand Name							

Dependent Variable: Consumers' buying decisions

Predictors: (Constant), Product Information- Brand Name - Country-of-Origin

According to the above regression weights in Table (4), H2 is partially supported. The results indicated that verbal elements of the food product packaging; Product information ($\beta = .377$, $t = 5.883$, $p < 0.001$), and brand name ($\beta = .247$, $t = 4.905$, $p < 0.001$), have significant positive effects on consumers' buying decisions; as Product information received the highest positive effect followed by brand name, while the country of origin variable ($\beta = .116$, $t = 0.437$, not statistically significant) has not any effect consumers' buying decisions.

Accordingly, H2 was supported partially; as the sub-hypotheses (a-b) were supported, which assume that verbal packaging elements (a. product information -b. brand name) positively affect consumers' purchasing decisions., while the sub-hypothesis (c), which

assumes that the country of origin has a positive effect on consumers' purchasing decisions, was not supported.

6. Conclusion

Recently, many marketers have tended to pay attention to product packaging as one of the strong and direct means of communication with the consumer, as it delivers free communication messages about the product. In addition to its role in preserving the product, attracting attention to it, distinguishing it from competing products, and most importantly stimulating the purchasing decision of the consumer at various points of sale.

In this context, this study concluded many important practical findings. The results of the analyses highlighted the importance of visual packaging elements. It turns out that the design, colors, and shape of the food packaging are the most powerful visual elements affecting the consumers' buying decisions toward food products. Therefore, these results give product designers and marketing managers insights on how to use design, color, and shape to gain consumer preference and achieve the maximum effectiveness and impact of the visual elements on consumer choices and decisions.

The findings also showed that the information related to the product's characteristics and the brand name were the most powerful verbal elements in affecting the consumer buying decision. Therefore, the integration between the visual and verbal elements of the package must be considered, in order to combine the impact of both the emotional and cognitive sides of the package, to make the product more attractive and effective in influencing the purchasing decision of the consumer.

It is important for marketers to consider product packaging as a marketing tool and a competitive advantage for the product and the brand, by increasing the budget for packaging design and development. In addition to identifying the latest trends in the field of product packaging in proportion to the product type and the tendencies and preferences of the target audience, which leads to increasing its effectiveness in stimulating the purchasing decision of the consumer. It should be also noted the importance of integration between packaging and other marketing activities, in order to enhance their effectiveness by focusing on the product packaging in advertisements to make it easier to remember and recall at the time of purchase.

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