

# THE INFLUENCE OF PACKAGING AND PRICES ON CHOCOLATE BAR PURCHASING DECISIONS

A INFLUÊNCIA DAS EMBALAGENS E DOS PREÇOS NAS DECISÕES DE COMPRA DE BARRAS DE CHOCOLATE

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### Abstract

The objective of the study is to analyse the influence of packaging and prices on chocolate bar purchasing decisions. Data collection took place through semi-structured interviews, observation techniques, double blind tests, and questionnaires, with a sample of 294 Spanish consumers. The results indicate that packaging plays a strategic role for brands in generating product consumption experience, improving the experience at the point of sale, and favouring the perception of quality. Furthermore, it was observed that an adequate price design can favour faster decisions and consumer willingness to pay premium prices.

Keywords: Neuromarketing. Packaging. Price. Purchasing decisions.

### Resumo

O objetivo do estudo é analisar a influência da embalagem e dos preços nas decisões de compras de barras de chocolate. A coleta de dados deu-se a partir de entrevistas semiestruturadas, técnicas de observação, test duplo cego e questionário, com uma amostra de 294 consumidores espanhóis. Os resultados indicam que as embalagens apresentam um papel estratégico para as marcas gerando experiência de consumo de produto, melhorando a experiência no ponto de venda, e favorecendo a percepção de qualidade. Além disso, observou-se que um desenho adequado de preços pode favorecer decisões mais rápidas, e disposição do consumidor em pagar preços premium.

Palavras-chave: Neuromarketing. Embalagem. Preço. Decisões de compra.

## Introduction

The chocolate industry is a sector in constant growth, with a highly competitive market that seeks innovations to attract and retain consumers (Passport Euromonitor, 2023). Among the various factors that influence the purchase decision, packaging plays a key role, as it not only protects and preserves the product, but also communicates essential information to consumers, such as brand, quality and price (Rodríguez et al., 2022; Rundh, 2016; Gómez et al., 2015). In this context, understanding the relationship between packaging and price perception becomes crucial for companies in the sector, aiming to gain a strategic position in the market.

The packaging of a product plays a multifunctional role, going beyond its basic protection function (Rodríguez et al., 2023; Rodríguez et al., 2022; Hwang and Kim, 2022; Baptista et al., 2021; Kovač et al., 2019). It can be considered an effective marketing tool, capable of attracting consumers' attention and conveying an impactful visual message (García-Madariaga et al., 2018). In addition, packaging plays an important role in differentiating products and establishing brand identity (Gawasane et al., 2011). In the chocolate market, where competition is fierce, packaging takes on even greater relevance, as it can be the key element in influencing consumers' perception of price.

Price perception is one of the determining factors in consumers' purchase decisions. The packaging of a chocolate, for example, can convey a sense of value and quality, even before the consumer tries the product. Sophisticated, well-designed packaging can create a perception of greater added value, justifying a higher price. On the other hand, simple and common packaging can lead the consumer to associate the product with a more affordable price. Therefore, it can function as a visual indicator of the value perceived by the consumer and, consequently, influence their willingness to pay a certain price (Plassmann, O'Doherty and Rangel, 2007).

It is important to emphasize that the packaging should not only convey an adequate price perception, but also be congruent with the brand positioning and the product's value proposition. Packaging that is not in line with the price charged can generate discrepancies and damage consumer confidence in the brand (Jesus, Silva and Esmaile, 2022). In this context, the present paper analyzes the influence of packaging and prices on chocolate bar purchasing decisions, through the contrast between (i) evidence from the literature and the recommendation of specialists; and (ii) empirical data on consumer preferences, purchase choice criteria, and brand associations for chocolate bars in the Spanish market.

Therefore, the present study uses a predominantly qualitative methodological approach and a theoretical foundation based on evidence from neuromarketing studies on the influence of packaging and prices on the purchase decision (Jesus et al., 2022; Rodríguez et al., 2023; Karmarkar and Plassmann, 2019; Shaw and Bagozzi, 2017; Plassmann et al., 2015) and the impacts that these elements have on the associations that consumers develop in relation to the brand of chocolate bar products (Keller, 2020; Bergkvist and Taylor, 2016; Kumar, Dash and Purwar, 2013).

The results obtained contribute to the product marketing literature as it discusses the packaging strategies adopted by the main chocolate brands in the Spanish market, as well as the factors that influence the price perception by consumers and that are considered in the decision to purchase. For marketing professionals, the results contribute to knowledge about the development of more efficient packaging strategies and congruence between established price and consumers' perception of value, helping companies to obtain a competitive advantage in the chocolate market.

## Cognitive processes, purchase choice and price and packaging neuromarketing

Neuromarketing is understood as the application of neuroscience studies to areas of marketing and with the purpose of developing new strategies that assist in consumer decision-making (Jesus, Silva and Esmaile, 2022). According to Rodríguez, Antonovica and Martín (2023), the expansion and deepening

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of studies that associate neuroscience with studies of consumer behavior and marketing employ concepts linked especially to cognitive processes, neural mechanisms and responses, and purchase choice. To this end, different research techniques are used that can directly measure those aspects that are now considered crucial in the consumption process, such as attention, emotional response, and memory (Stasi et al., 2018).

According to Sánchez-Fernández, Casado-Aranda, and Bastidas-Manzano (2021), understanding and measuring these neuropsychological aspects helps researchers and marketing professionals understand how to assess consumer reactions in real time without relying on subjective self-reports; how to locate neural correlates of consumer behavior constructs (i.e. value, fear, reward, trust, persuasion or memory); how to capture hidden processes through brain imaging data (inaccessible through self-reports); and how to identify the antecedents and consequences of consumer behavior constructs.

However, Plassmann et al. (2015) point out that consumer neuroscience is not a substitute approach to traditional measures of behavior, but complementary to them in the process of obtaining and interpreting behavioral measures. With this, the knowledge obtained through the application of neuroscience techniques to the areas of marketing research should be used as subsidies for investigations aimed at a deep understanding of consumption phenomena, for example, how brands use evidence about the functioning of the human brain and develop strategies to achieve favorable responses to their marketing actions. In this scope, the study by Rodríguez, Antonovica and Martín (2023) presents a broad systematic and specific review on how brand and packaging elements are understood from the point of view of consumer neuroscience and their associated cognitive processes. According to the study, investigations on attention and memory are essential for understanding the recognition of brands and/or packaging by the consumer, and the experience obtained by him with the product. In the brain, attention is activated in the prefrontal cortex region, and is responsible for directing and focusing attention and fundamental to consolidating memory, in addition to allowing focus to be directed to information considered relevant. As for memory, the hippocampus is a key region for processing and consolidating long-term memory, and for storing new memories, making them accessible for later retrieval (Rodríguez, Antonovica and Martín, 2023; Karmarkar and Plassmann, 2019). For emotions, the amygdala is the main region involved in creating the consumer's emotional responses, intervening in the processing of negative emotions, unknown stimuli, and aversive responses to injustice (Rilling and Sanfey, 2011), fear and aversive memory (Maren and Quirk, 2004). Then, the orbitofrontal cortex (OFC) and the anterior cingulate are activated (i) in risk experience and expectations and (ii) in the processing and integration of emotional responses involved in all consumption decision-making (Shaw and Bagozzi, 2017).

In the literature, the discussion on emotional responses to different typologies of marketing actions has already identified, for example, that neural activity differs due to exposure to luxury brands (vs basic brands) that are associated with greater emotional value (Pozharliev et al., 2019) and that there is greater emotional arousal for a newly formed relationship with a brand, but not for relationships already established by the consumer with already known brands (Reimann et al., 2012). Another relevant evidence, presented in the study by Maxian et al. (2013), indicates that no statistically significant differences were found between the psychophysiological responses to the most loved and less loved brands of different product categories. Additionally, Rodríguez et al. (2023) describe that the reward system circuit is activated in response to subjectively attractive desirable experiences and resources, and is associated with the dopaminergic circuit, responsible for triggering desires and pleasure (Shaw and Bagozzi, 2017). For reward systems, the striatum, and its components (putamen, caudate nucleus, and nucleus accumbens) are activated in evaluating actual rewards related to one's expectations (Knutson and Wimmer, 2007) and in social reward processing (Fliessbach et al., 2007). The ventral tegmental area is responsible for the transmission of dopamine to other regions of the brain and allows the modulation of decision-making (Campos et al., 2007).

All these mechanisms are involved in the consumer's purchase decision process and are activated as the consumer processes and evaluates information available or not about products and services. This process is influenced by a variety of factors linked to the dimensions of environment, availability, price, quality, features, benefits, and brand of the product. In the purchase decision, consumers are faced with a wide variety of options, and they reduce the number of available alternatives to the smallest possible set, called the consideration set (Shaw and Bagozzi, 2017).

Given that the way consumers evaluate different packaging alternatives and make their decisions based on the perceived cost/benefit ratio, being among the consideration set is a crucial aspect (Rodríguez, Antonovica and Martín, 2023). A brand or product considered by the consumer corresponds to those which the consumer reveals purchase intention (Baxendale, Macdonald and Wilson, 2015). For this, it is necessary for brands to develop different strategies that use resources to develop the marketing mix and trigger neural responses that positively impact the consumer behavior of individuals. For example, the use of testimonials from satisfied customers with the purpose of building trust and creating positive shopping experiences that bring back good memories.

Overall, evidence suggests that consideration sets are often in the range of 3 to 6 items or marks (Hauser and Wernerfelt, 1990). According to Rodríguez, Antonovica and Martín (2023) cognitive resources, such as deliberation, memory, and attention, are dedicated only to items within the set of considerations. At the neural level, consideration set size appears to be related to activity in the corpus striatum, dorsal anterior cingulate cortex, and insula (Kim, Shin and Han, 2014) and therefore linked to preference, link, predicted value, resolution, choice, and excitement (Karmarkar and Plassmann, 2019).

In the specific case of packaging, they are part of the product strategy and play an important role in creating images that are attractive to the consumer's attention and positive shopping experiences that result in or reinforce good memories in the consumer's mind. According to Jesus, Silva and Esmaile (2022), it is possible to infer the aesthetics of the packaging will significantly influence the choice of products from one brand over another, so that, even if they are well-known brands, if they are in unattractive packaging, probably the consumers will not buy them.

Previous studies have identified that labeling a food as organic led to greater activity in the ventral striatum (Linder et al., 2010); that there are significant differences between the observation of public brands and private brands, with higher prices for both types of brand generating more purchase decisions (Santos et al., 2016); and that differences in impulsive buying tendencies affect the modulation of brain activity when confronted with attractive, unattractive, and neutral packaging images (Hubert et al., 2018).

Important findings from neuroscience and marketing research point out that, among the multiple components of packaging, that is, the visual elements (logos, designs, colors, images, shapes and size) and the verbal components (textual information and specific characteristics, as a producer, country of origin or materials) (Rodríguez et al., 2023), the presence of visual elements increase the attention of the participants (García-Madariaga et al., 2018) and the brand is the element that receives more attention than any other another aspect of packaging design (Gawasane et al., 2011).

From a neuromarketing perspective, price is studied as a stimulus that, when processed by the brain of individuals in a buying situation, links a set of concepts that emphasize the perception of product value (Braidot, 2009). There is evidence that price differences significantly impact product quality-related perceptions (Plassmann et al., 2008), that the order in which price information is presented to the consumer impacts the neural response (Knutson et al., 2007) as well as the willingness to pay for a given product (Plassmann et al., 2007).

For prices, different strategies are used based on consumer perception and neural responses that lead to favorable behavior in relation to product and service offers. According to Herrera and Rosenberg

(2022), projected psychological price strategies are used, whose purpose is to activate certain psychological responses; reference prices, so that similar products can be compared; discounts and promotions, aiming to increase sales and reduce inventories; and tiered pricing designed to make consumers spend more money than expected.

Thus, considering the dynamics of cognitive processes and the evidence of responses arising from the activation of neural correlates that favor the consumer's purchase decision, it is up to brands to assess how to develop their packaging and pricing strategies. It is worth emphasizing that the strategic definitions of price and packaging will be influenced by how much the consumer recognizes the information made available by the brands contained in his consideration set and by the dynamics of the market that guide product marketing decisions. These aspects will be discussed in the next sections.

## Brand associations in low-involvement product categories

In the purchase choice process, consumers often resort to available information about a particular product or brand. From them, they develop perceptions about these same products and brands, or the particular category in which they are inserted, which will be stored in memory as associations (Liu et al., 2017). This process is explained by the associative memory theory considering that, in the consumer's mind, brand associations occur through nodes and informative links loaded with meaning (Teichert and Schöntag, 2010; Keller, 2003, 1993; Aaker, 1991). To trigger the recall of information contained in the consumer's memory, it is enough that one of these nodes is activated and, from it, other interconnected nodes are also activated (Wang and Horng, 2015).

In the literature, brand associations memorized by the consumer are often classified into three main categories of increasing scope: attributes, benefits, and attitudes (Keller, 1993; Low and Lamb, 2000). The attributes correspond to the primary descriptive characteristics directly and indirectly related to a product or service such as format, composition, price information, packaging, for example. Benefits relate to the personal values that consumers attach to a brand's product or services, whether functional, experiential, or symbolic values. Attitudes involve the consumer's beliefs about a particular product or service and the evaluative judgment about them.

Additionally, brand associations can be developed in a secondary way, from the link of a brand with other entities, such as celebrities, countries of origin or causes (Keller, 2020). In general, establishing secondary associations is intended to generate learning and transfer or leverage effects between the focal brand and the linked entity, such that image associations for the linked entity are more likely to affect or create image associations or sentiment for the product or service brand (Keller, 2020; Bergkvist and Taylor, 2016).

In this scope, the favorability, strength, and exclusivity of the information corresponding to the primary and secondary brand associations are the distinctive and determinant dimensions of consumer knowledge about a given brand and play an important role in responding to the marketing actions developed by that same brand when compared to its competitors (Keller, 2003; 2016). In addition, associations are the basis for fundamental dimensions of brand equity: brand recognition and brand recall. According to the seminal study by Keller (1993), brand recognition is related to the ability of consumers to correctly discriminate a brand considering previous exposures to it. Brand recall, on the other hand, is related to the consumer's ability to recover the brand when he hears about a certain product category, reflects on consumer needs met or not, or in response to some other type of inquiry.

Thus, from the point of view of sales strategy and brand positioning, it is important for organizations to develop actions that strengthen the favorable information available about their offers. Creating, developing, and reinforcing favorable associations in the consumer's mind can precede increased sales (Koll and Von Wallpach, 2014), brand loyalty (Vukasović, 2016), recommendations (Lovett, Peres and Shachar, 2013), as well as improvement of brand image and contribution to brand equity (Kumar, Dash

and Purwar, 2013).

For this to happen, different resources and strategies can be used. Among them, innovation in the development of the product itself (Heitmann et al., 2020), advertising and other favorable communications about the product and the brand (Zollo et al., 2020; Buil, De Chernatony and Martínez, 2013), consumption experiences (Schmitt, Brakus and Zarantonello, 2014) and sociocultural connections that attribute and reinforce the meaning of the product or brand among consumers (Swaminathan et al., 2020).

In product categories where low involvement relationships between consumers and brand predominate, that is, the depth, complexity and extension of the purchase choice process are smaller, factors such as the composition of the product mix, promotion, performance general market, the manufacturer's product development and understanding of consumer buying behavior play a central role in the development of favorable associations (Kacen, Hess and Walker, 2012).

In food retail, the focus of this study, elements such as packaging and price represent key interfaces for the development of brand associations that facilitate the consumer's choice of purchase. Packaging, in addition to its functions of protection, conservation and transport, can contribute to the development of associations by communicating product quality and brand identity (Rodríguez et al., 2022), by facilitating product use and by differentiating the experience of the consumer at the point of sale (Rundh, 2016; Gómez, Martín-Consuegra and Molina, 2015).

Complementarily, price can contribute to the development of associations as it makes consumers feel that they are getting the expected value for their money. A price that is too low, on the other hand, can make consumers think that the quality of the product is low. A price that is too high, on the other hand, can make consumers feel uncomfortable with their purchase.

## The Spanish chocolate market

The global chocolate market has shown significant growth and has developed in the face of new consumption and production dynamics. According to the Statista platform (2023a), revenue in the world cocoa market is estimated at US\$ 13 billion for the year 2023, with an expected annual growth of 5.89% (CAGR 2023-2028), with the United States United as responsible for generating most of the revenue (US\$ 1,709 million in 2023). Around the world, Africa, Asia/Oceania, and Latin America are the main cocoa growing regions (Beg et al., 2017) and the United States, Germany, France, the United Kingdom, and China are the top five consumers of chocolate (Statista, 2023a).

Many types of products can be obtained through the fermentation and processing of cocoa beans, such as slurry, or liquor, from which chocolate, cocoa butter and cocoa powder are made (Beg et al., 2017). Specifically, chocolate can be used directly as solid bars for food and bakery purposes, and includes products categorized as bonbons, truffles, tablets, snacks, boxed assortments, bars, and other types, sold at different points of sale (supermarkets, hypermarkets, physical stores, e-commerce, etc.).

From the year 2022, according to data from the Food Report in Spain, published by the public company Mercasa in that same year, the Spanish market showed a reduction in the purchase of chocolates/cocoa/substitutes when compared to the previous year 2021, with decreases of - 9.6% in volume and -3.9% in financial value, which represents a loss of 50.67 million euros for the sector. In addition, per capita consumption of chocolate/cocoa is reduced by 9.6%, reaching a consumption of 3.28 kilos per person per year, which is equivalent to an investment per person of €27.00, this total is 3.8% lower than the previous year.

Still according to Mercasa (2022), positively, even though the average price of these products closed at  $\notin 8.23$ /kilogram, 6.3% higher than the previous year, it remains lower than the increase that the food sector had in general terms in Spain (8.7%). As a result, the cacao and chocolate food category

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accounted for 1.69% of the total budget allocated to the purchase of food for Spanish families and 0.56% of the total volume of kilos/liters of homemade food. As in previous years, the preferred channel for purchasing chocolate and cocoa continued to be the supermarket and self-service, but also recorded a decline, now accounting for 53.5% of sales.

For the year 2023, according to data from Sales of Chocolate Confectionery in Spain by Category, published by Passport Euromonitor International, tablet chocolates represent a significant percentage of sales in Spain, followed by countlines and assorted boxed chocolates (See Figure 1).



Figure 1. Sales of chocolate confectionery in Spain by Category – Current 2023.

Adapted from "Chocolate Confectionery in Spain - Country Report | Jun 2023" by Passport Euromonitor International 2023.

According to the same market report, most of the value in Spanish retail sales of chocolates and cocoa is attributed to the company Nestlé España AS, leading company in 2023, with a retail value share of (17.3%), followed by Ferrero Ibérica SA (15.7%), Lindt and Sprüngli (España) SA (8.6%), Chocolates Valor SA (7.9%) and Mondelez España Commercial SL (6.8%). In addition, retail companies that sell private label brands gain prominence, representing approximately 12% of the sales share (see Figure 2). As for the most sold brands, the study identifies leadership of the brands Extrafino (6.0%), Kinder Bueno (5.5%), Valor (4.5%), Milka (3.9%), Kit Kat (3 .3%) and other brands considered private label (12.1%) (see Figure 3) (Passport Euromonitor International, 2023).

Figure 2. Company Shares of Chocolate Confectionery in Spain

% Share (NBO - National Brand Owner)

8,6%

9.1%

12,1%

7.9%

6,8%

4,9%

4,0%

3.3%

3.2%

15,7%

Figure 3. Brand Shares of Chocolate Confectionery in Spain

% of share (NBO) - Retail Value RSP - 2023

Nestlé España SA

Ferrero Ibérica SA

Chocolates Valor SA

Mondelez España...

Lacasa SA (Grupo)

Mars España Inc y...

Mercadona SA

El Corte Inglês SA 🔲 0,9%

Storck Ibérica SL 🔳 0.6%

Acrimont Foods SL 🔳 0,5%

Chocolates Torra SA 0.3% Dolci Preziosi Srl 🛛 0,2%

Others

Other private label

Centros...

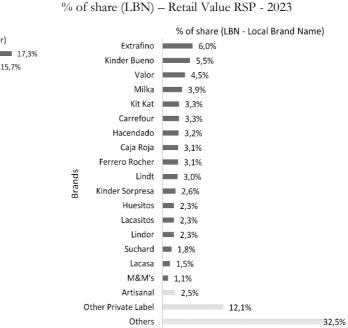
Delaviuda SA 🗰 1.0%

Auchan Retail... 📖 0,9%

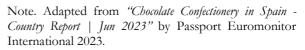
Dia SA 🔳 0,4%

Artisanal 2.5%

Lindt & Sprüngli...



Note. Adapted from "Chocolate Confectionery in Spain - Country Report | Jun 2023" by Passport Euromonitor International 2023.



Considering the context of the chocolate and cocoa products market in Spain, different challenges emerge for the growth of brands and the sector as a whole. The present study has those that reach the category of bar chocolates, despite market leadership and the expressive growth in sales during the pandemic period, have ceased to be the main driver of the industry. Characterized as low-involvement and irregular consumption products (Monzón and García, 2017), tablet chocolates began to face the growth in consumption of private label brand products, which offer more affordable prices and adopt the popular strategy of imitating branded products top sellers; and the changes in consumer behavior that start to prefer other options such as on-the-go countlines and assorted boxes (Passport Euromonitor International, 2023).

As perspectives and opportunities for the growth of the chocolate and cocoa products market in Spain, the study highlights factors linked to the development of new products focused on the diversification of options, including vegan lines, new formulas and shapes; the development of market niches, such as premium adult chocolates; and the change in consumer behavior that emphasizes attention to the impact of purchasing decisions and increasingly demands that producers, distributors and smaller players involved in the cocoa production and marketing chain adopt more ethical and sustainable practices such as the use of ingredients more natural and organic, carbon footprint reduction (Passport Euromonitor International, 2023). In this scenario, bar chocolates can benefit as they adopt strategies that reflect the attributes and strategic positioning of their respective brands.

# Methodological procedures

In order to meet the investigative intent of the present study, a mixed methodological approach was adopted (Broilo et al., 2015). Tashakkori and Creswell (2007) describe mixed approach studies as research in which it is possible to collect and analyze data, integrate results, and draw inferences using qualitative and quantitative approaches or methods in a single study. For Doyle, Brady and Birne (2009) the main reasons or benefits for conducting a mixed methods study are the triangulation of the collected data, a completer and more comprehensive image of the phenomenon under study,

compensating limitations and providing stronger inferences, in addition to responsiveness to different research questions.

The choice of the mixed research approach allowed the present investigation to obtain a comprehensive and in-depth survey on price and packaging aspects related to consumer preferences and purchase choice criteria, as well as associations to the brand of bar chocolates by Spanish consumers. For this purpose, data were collected in 3 stages, using qualitative and quantitative techniques.

In Phase I, with a qualitative approach, the present study aimed to identify the main variables associated with price and packaging that should be considered by professionals working in the chocolate market. Data were collected through open, semi-structured interviews with five specialists in Neuromarketing, active in the market and/or academics with recognized production in the same field of investigation. Data were analyzed using content analysis, as per Bardin's guidelines (2011). In order to preserve the identity of the participants, the codification of the results obtained included the use of a generic identification marker, described by Interviewee A, B, C, D.

In Phase II, with a quantitative approach, the present study aimed to analyze (i) consumption habits of tablet chocolates, through the variables of frequency of consumption, frequency of purchase; as well as (ii) criteria for the purchase decision, through price, packaging, brand, and recommendations variables. Data were collected through an online survey, sent to a non-probabilistic, random sample of 294 Spanish consumers, using Google Forms. To participate in the survey, it was established that the respondent should be a buyer or consumer of chocolates, with at least prior knowledge of one (01) brand of chocolate bars. The sociodemographic characterization of the participating sample is described in Table 1.

Table 1. Sample Profile

Characteristics	Ν	%
Age		
18 – 25 years	59	20,1
26 – 35 years	42	14,3
36 – 45 years	52	17,7
46 – 55 years	84	28,6
56 – 65 years	57	19,4
Older than age 66 years	0	0
Gender		
Male	79	26,9
Female	214	72,8
Non binary	1	0,3
Prefer not to answer	0	0

A structured form containing 8 closed questions was used as a research instrument, in which participants evaluated factors previously related to the objectives of the present investigation. A non-metric scale was used. Data analysis was performed through descriptive analysis.

Finally, in Stage III, also with a qualitative approach, the present study sought to identify the brand associations of tablet chocolates present in the Spanish market. A double-blind test was carried out in the laboratory, in which the participants evaluated the representation of four (04) packages of chocolates, whose explicit information about the brand of each chocolate in tablet was hidden in previous manipulation by two of the researchers responsible for the research.

The test was conducted with 94 participants where, first, the respondent viewed one of the packages for a specified time 30 seconds on a screen and, at the end of the estimated time, advanced to the next one to indicate their packaging associations regarding the recognition of the brand by the elements of

color, format, visual elements: to the perception of high price, low price. The results obtained were analyzed using categorical content analysis (Bardin, 2011).

## Presentation and analysis of results

# Study 1 - Factors associated with price and packaging in the chocolate market according to experts in neuromarketing and observation at points of sale.

In order to achieve the general objective of this study, first, we sought to identify the main factors associated with price and packaging that should be considered by professionals working in the chocolate market, according to the vision of specialists in neuromarketing. To this end, five semistructured open interviews were carried out, focusing on identifying the factors that enhance the effects of price and packaging perception by the consumer, as well as influence the purchase decision and generation of immediate associations, and contribute to the characterization of luxury products. low involvement. Complementarily, through observation of shelves at points of sale, the practices of exposing bar chocolates in hypermarkets were verified. Table 2 presents a summary of the factors identified in the data collected from the specialists.

Table 2. Factors associated with pricing and packaging in the chocolate market according to neuromarketing experts.

Analysis categories	Pricing factors	Packaging factors
Effects on consumer perception	Builds value perception	<ul> <li>Builds brand recognition and memory through design</li> <li>Generate product consumption experience</li> <li>Conveys the brand image</li> </ul>
Influence on the purchase decision	<ul> <li>Favors the perception of product quality</li> <li>Favors faster decisions</li> <li>Favors willingness to pay more</li> </ul>	<ul> <li>Favors the perception of product quality</li> <li>Enhances point-of-sale experience</li> </ul>
Top immediate consumer associations	• Quality	• Quality
Key features among low- involvement products	<ul> <li>It must be defined considering the positioning that the brand wants to achieve, the target audience and the market's perception of value</li> <li>Must use promotional strategies</li> <li>Must be represented numerically by real and decimal values</li> </ul>	<ul> <li>Must have good texture, design and coloring</li> <li>Must prioritize curved shapes</li> <li>Must convey differentiating attributes</li> </ul>

Among those interviewed, it was unanimous that psychological pricing is of great importance in all sectors and product categories, as these will be determined from the value attributed by consumers based on their usefulness or their ability to satisfy needs. and wishes. It is worth noting that low-involvement products, such as chocolate bars, do not imply a large financial investment by the consumer. As a result, for tablet chocolate brands, respondents recommended that the price should be set based on purchasing habits and the budget available by the target market, in addition to production costs and the profit margin that their respective brands desire. obtain, and the comparison in relation to the prices of the competition.

As for the packaging, the interviewees indicated that the adoption of neuromarketing strategies that meticulously contemplate the design of the packaging is essential, as it is present throughout the entire consumption experience, and facilitates brand recognition and memory, in addition to materialize the attributes that characterize and transmit the brand image. Additionally, it was also highlighted that the packaging is the first physical element of direct contact that the customer has with the product. All aspects of its design (colors, smells, sizes, textures, weight, typography, and information) will attract the

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consumer's attention, subsequently ensuring the product's recognition and memory at any other point of sale.

Respondents also cited examples of strategies in which the use of these packaging elements can encourage a favorable customer experience with the product: the sound when opening or handling the product generates neural connections that favor brand memory; scents are used to persuade, provoke emotions, and direct purchases; and the texture allows the buyer to determine attributes and develop tactile maps of the product.

As for the influence of price and packaging on the purchase decision, participants indicated that both have influence through causal relationships and correlation between perception and emotion variables. If the packaging is of good quality and well prepared, a brand may, for example, have a better-defined positioning and it is possible that the consumer will start to associate it with higher prices than the average price for a given product category. With this, the brand can present greater congruence between the real price of a product and the price associated with the consumer's perception of value in relation to this same item.

Additionally, it was highlighted that, at the time of purchase, the consumer makes a quick and unconscious assessment when looking at the packaging and its price: he makes a quick calculation to assess whether the price is fair for what the packaging conveys. Then, it assesses whether or not it pays to buy the product. In this sense, among the most relevant aspects for the practice of professionals in the chocolate market, those that influence, at the same time, the consumer experience, and attitudes in relation to the offers made by brands stand out. According to interviewee B, "Perceptions and sensations allow customers and consumers to select a given product based on its attributes, price and appearance, among others; and define its quality according to these elements".

In this perspective, regarding the generation of immediate associations made by the consumer with the chocolate bar products, the interviewees emphasized that they occur from the modulation of the different physical elements involved, such as light, color, material, typography, which must be guided by brand strategy, and are benchmarks for evaluating the quality of the product by consumers. Regarding packaging, interviewee B points out that the materials used are also relevant in generating immediate associations, which may or may not be favorable. He exemplifies saying that the consumer, if looking for a lower price (and therefore not the highest quality) can resort to plastic packaging. And, if the search is for a higher quality product, there is a tendency to search for packaging made with materials that have a higher added value, such as glass. With that, considering that the packaging is the main interface between the customer's contact with the product, it is also an important source of information, and from it arise the first associations.

Complementarily, the interviewees agree that there is a strong relationship between a certain price and the quality associated with the product. For Interviewee C, when the price is higher, people tend to think that it is because the product is of superior quality. Added to the question is the tendency to associate higher price with higher quality, in a way that influences and changes the consumer experience, which has expectations of product quality. That is, if the consumer is sold exactly the same chocolate with different packaging and price, even if the chocolate flavor is the same, when consuming it tends to understand that the consumption experience of the more expensive chocolate is more satisfactory. Finally, Interviewee A adds that the association between quality and price is due to the fact that (when the product cannot be tested) evaluating its quality by price is the most immediate indicator, under the trend of the higher the price, higher the quality.

As for the main price and packaging characteristics of low-involvement products, respondents agree that in the specific case of chocolate bars, because there is so much supply and competition, it is important for companies to invest in good quality packaging with differentiating attributes. well defined, even if this implies an increase in the final price of the product. For these products, the price will be determined based on the positioning you want to acquire, the characteristics of the target market and the perceived value of the product.

As far as the packaging is concerned, all the elements that make it up must be considered, in particular a good texture and color. According to Interviewee C, *"the packaging design must immediately and clearly convey the differentiating attributes of the product, as it only takes a few seconds to catch the consumer's attention on the shelf"*. Interviewee D emphasizes the need to prioritize the elements that favorably contribute to the formation of preferences in the consumer's brain: simple packaging, with organic curved shapes congruent with the shape of the product, and prices established through promotional strategies and written numerical values in real and decimal numbers.

In addition to the factors raised by the interviewees, the observation in gondolas presented complementary results to the recommended strategies for brands of bar chocolates. Considering that each establishment has a different offer, the offers on shelves of Condis supermarkets (Figure 4) and BonÀrea (Figure 5) and Alcampo hypermarket (Figure 6) were analyzed, in terms of the number of brands and products available, layout in gondola, strategies used at the point of sale. In order for the results of the technique to be more precise, a total of four different observations were made. In other words, one observation was made in Condis, one in BonArea and two in Alcampo: the first during the week, with fewer people in the hypermarket, and the second on Saturday morning when it is more crowded.

**Figure 4** Condis Supermarket



Note. Location: Carrer de Barcelona, 15, 08192, Sant Quirze del Vallès, Barcelona

**Figure 5** BonÀrea Supermarket



Note.Location: Carrer Pi i Margall, 3, 08192, Sant Quirze del Vallès, Barcelona

Figure 6 Alcampo Hypermarket



Location: Autopista C-58 Sortida 12, 08192, Sant Quirze del Vallès, Barcelona

Among the results obtained, it was possible to observe that BonÀrea's offer (Figure 8) is limited, with only its own brand being exposed to the public. Even so, eleven different tablet chocolate products were available on the shelves. It is important to note that the variety on offer converges with the consumption trend: there is a wide variety of pure dark chocolate, milk chocolate, and all its gluten-free and lactose-free variants. On the shelf there was a lot of stock of different types of chocolate. Even so, the tablet section only occupies two shelves on the shelf, with the most visible one for the shopper: the one at eye level.

With regard to the Condis supermarket (Figure 7), the variety offered was greater than BonÀrea: 34 different types of chocolate bars from seven different brands were identified. The section occupies four shelves, the most accessible to the consumer. Specifically, the most visible brand with the most offer is Milka with its various types of chocolate. It follows Nestlé, but with much less items allocated on the gondola. On the lowest shelf, but with good visibility, are the various Lindt chocolates and other brands. And finally, at the top, where it is least likely to grab the consumer's attention, are bars from the Spanish brand Valor.

Figure 7 Condis Supermarket chocolates display **Figure 8** BonÀrea Supermarket chocolates display



Note. Location: Carrer de Barcelona, 15, 08192 Sant Quirze del Vallès, Barcelona



Note. Location: Carrer Pi i Margall, 3, 08192 Sant Quirze del Vallès, Barcelona

**Figure 9** Alcampo Hypermarket chocolates display



Note. Location: Autopista C-58 Sortida 12, 08192 Sant Quirze del Vallès, Barcelona

Finally, the Alcampo hypermarket (Figure 9) had the greatest offer, with a wide variety of products and brands. Specifically, it comprises approximately 260 different products from 25 different brands. On the shelves, the horizontal arrangement highlights the offer and variety of 27 chocolates in tablet form Milka. In the central part, Lindt's largest presence stands out with an offer of 56 types of chocolate bars. It also highlights the number of Nestlé products, even though the number of items on the shelf was significantly low at the time of data collection when compared to the Milka and Lindt brands. Private label Auchan branded pills are found very limitedly on the bottom right of the shelf with poor visibility.

It is important to highlight that, as there is diversification of the offer, the establishment vertically divides the categories of bar chocolates: special, with milk, with nuts, with milk and other ingredients, filled, dark chocolate, children's and without added sugar (in this category also are organic, gluten-free and lactose-free). Even so, it is noteworthy that these divisions are not explicit and can go unnoticed, implying that the consumer does not quickly retain attention for a given product and is induced to observe the entire offer, in order to expand the purchase options with other brands, that have caught his attention.

## Study 2 - Chocolate consumption habits and criteria for purchase decision for chocolates bars.

After identifying the main variables evidenced by neuromarketing studies that should be considered in the process of developing chocolate bars packaging, this research conducted a survey with the objective of analyzing (i) consumption habits of chocolates bars, through the variables consumption frequency, purchase frequency; repurchase of specific brands; as well as the (ii) criteria for the purchase decision, through the pre-defined variables of price, packaging, brand and recommendations.

For consumption habits, consumption frequency, purchase frequency, and repurchase behavior of participants were investigated. As shown in Figure 10, more than half of the sample (55.4%) stated that they consume chocolates bars less than twice a week; 24.1% consume chocolate bars three to four times; 11.2% of respondents eat chocolate bars between 5 and 6 times, 9.2% said they consume more than six times a week.

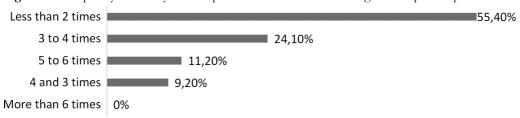
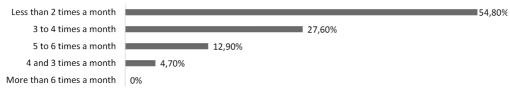


Figure 10. Frequency of weekly consumption of chocolate bars among the sample of Spanish consumers

When asked about the frequency of buying chocolates on a tablet, most respondents (54.8%) stated that they make occasional purchases, that is, less than twice a month. Already 27.6% buy chocolate frequently, between 2 and 3 times a month; while 12.9% make purchases between 4 and 5 times, and 4.7% make purchases more than five times a month (See Figure 11).

Figure 11. Frequency of monthly purchase of chocolate bars among the sample of Spanish consumers



Regarding the repurchase behavior of specific brands, 47.8% always buy the same brand, while 52.2% change brands according to the offer on the shelf. In addition, participants were asked if they compare offers of chocolates bars. It was identified that the majority of the public (53.1%) do not take the time to compare and contrast the supermarket's entire offer and variety. On the other hand, the remaining 45.5% of respondents state that they invest their time in comparing brands and prices, considering factors such as nutritional values, quality of ingredients or if they cannot find the brand they usually buy.

Based on these results, it is possible to identify the low percentage of consumption of chocolate bars in the Spanish market, as well as the low percentage of purchases by consumers. In addition, most respondents reveal a willingness to change brands and, therefore, low loyalty. This behavior can be explained by the fact that chocolates, in general, are not considered essential products and, therefore, their consumption tends to be punctual. At the same time, most consumers say they do not compare offers, which may indicate little differentiation between tablet chocolate brands and the need to improve market positioning.

Then, the participants were asked which factors are most important for the decision to purchase a certain brand of tablet chocolates when there is no possibility to try the product, and why they opt for the brand they normally buy. Considering the pre-defined variables of price, packaging, brand, and recommendations. Most respondents (69.3%) stated that the purchase decision is made based on the brand, 30.4% answered that they buy for the price of the product; 17.1% buy because of the packaging, and 13% buy because of the recommendation of family, friends, and acquaintances. It should be noted that in this question the option was given to specify other purchase decision factors. With this, it was possible to identify that other decision factors included the quality of the product, such as: the purity of the cocoa, whether it was organic, whether or not it contained gluten or lactose, among others.

To answer the question, participants were asked directly about the brand they used to buy among the four options: Nestlé, Lindt, Milka, Auchan and others (to be specified). These brands were previously indicated, considering the analysis of the Spanish chocolate market presented in the theoretical framework, where it was found that these three (not counting the own brand) are the most consumed in Spain. Among the respondents, the most consumed brand, with 24.1%, is Nestlé; followed by Lindt with 22.3%; followed by private label Auchan with 15.8%; and then Milka with 12.4%. It is worth

mentioning that the majority of respondents indicated the consumption of "Other brands", where 11.7% buy the Spanish brand Valor.

Finally, the participants answered how much they would be willing to pay, at most, for a chocolate and tablet that they know to be of good quality. The question only allowed a single answer, with previously established options, similar to the prices charged by the brands selected in the previous question, namely:  $\notin 1.25$ ,  $\notin 2.99$ ,  $\notin 4.94$ , and  $\notin 4.94$  or more. The majority of the sample, 50.5%, assured that the maximum budget would be  $\notin 2.99$ , while 30% maintained the maximum cost at  $\notin 4.94$  and 12.6% said they were willing to pay more than  $\notin 4.94 \notin$  for a good quality chocolate. Finally, the lowest percentage, 6.9%, would pay the maximum  $\notin 1.25$ .

### Study 3 - Associations for chocolate bar brands in the Spanish market.

With the objective of identifying the associations of brands of chocolate bars present in the Spanish market, this research carried out a double-blind test with 294 participants to analyze the four (04) packages of chocolates of the most sold brands in the market Spanish, namely: two intermediate category brands with different positioning (i) Nestlé and (ii) Milka; a 'Premium' brand (iii) Lindt; and a brand (iv) private label Auchan. The variety between the categories allowed for a greater difference in the packaging and its price, and that the respondents had the possibility of distinguishing more the characteristics of each packaging and price.

In order to preserve that the characteristics of the products of the four brands were as similar as possible, it was decided to analyze the milk chocolate bars of each one of them. The description of the products and brands used in the experiment is presented in Table 3.

Milka Milka	Nestle Octrative Mestle Octrative Meddlet yter
Milka Product - Milk Chocolate	Nestlé - Extrafino
Milka is a brand specialized in chocolate with milk from Switzerland. Founded in 1901 by Suchard, it is now produced by Mondelez International (2018)	Nestlé S.A. is a multinational of Swiss origin, which dedicated to the commercialization of food and beverages. En 2014, 2015 and 2016 was elected the biggest food company in the world.
7,37€/kg (1,99€/unit 300g.)	5,93€/kg (1,78€/unit300g.)
-0,44€/kg	-1,15€/kg
Packaging with predominantly curved features. What is appreciated is that the packaging offers 'easy opening', and has marked angles on each side, which soften with the harmony of curves The color is between purple and lavender, which convey balance and serenity, respectively. The contrast with the white of the typography is subtle.	The packaging dominates the color red, which transmits energy, power, and strength. This, combined with the white letters, creates a very striking contrast in the eyes of the consumer. The packaging avoids angles by rounding the tips, and the great presence of curved shapes is also noteworthy (especially in typography): this generates a perception of softness and harmony.
	<ul> <li>Milka is a brand specialized in chocolate with milk from Switzerland. Founded in 1901 by Suchard, it is now produced by Mondelez International (2018)</li> <li>7,37€/kg (1,99€/unit 300g.)</li> <li>-0,44€/kg</li> <li>Packaging with predominantly curved features. What is appreciated is that the packaging offers 'easy opening', and has marked angles on each side, which soften with the harmony of curves The color is between purple and lavender, which convey balance and serenity, respectively. The contrast with the white of the</li> </ul>

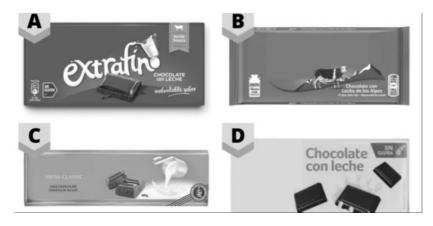
Table 3. Description of the products and brands used in the double-blind test.

Bar Chocolate Brand Packaging Ilustration	Lindle & MISS CASSC MERCENT ALM MERCENT ALM	Chocolate con lecte
Product description	Lindt-Gold	Auchan – Milk Chocolate
Brand description	The Lindt and Sprüngli company was born in Switzerland in 1845 with the purpose of being a brand specialized in the highest quality and luxury chocolate	Auchan is a Brand provided by the Alcampo hypermarkets, who are part of the company Sabeco distribution, owned by the French Auchan group. Alcampo, apart from marketing with all types of brands, markets its own brands such as Auchan, MMM!, Cosmia or InExtenso94.
Price	16,46€/kg (4,94€/unit 300g)	5,00€/kg (0,75€/ unit 150g.)
Difference in relation to the average market price (€7.08/kg)	+9,38€	-2,08€/kg
Packaging charactetristics	The shapes that predominate in the packaging are an intermediate between straight and curved lines, very fine and small, transmitting delicacy and elegance to the product. The predominant color is gold, which, as reflected in the theoretical framework, represents strength.	The packaging design is very simple: it only has the logo, product sample, name, and labels. The curvilinear ones predominate, the only straight lines that exist are those that form the packaging and the chocolate. Regarding the color, pistachio green predominates over the white background, the combination of both colors is not entirely attractive in the eyes of the consumer. White is used to convey purity and innocence, and green for traditionality, moderation, and balance.

Table 3. Cont. Description of the products and brands used in the double-blind test.

The test was carried out in the laboratory and proceeded as follows: first, the participants observed a sample of four printed images of manipulated packages, without explicit identification of the name of their respective brands, for 30 seconds. (see Figure 12) Then, after observation, respondents should respond to a form, and (i) indicate whether they recognized the packaging brand and what it would be, in addition to (ii) associating a price just by evaluating the packaging design and (iii) specify how much they would be willing to pay for each of the products in a hypothetical purchase situation. Throughout the evaluation, the respondents did not have any kind of contact with the product, only with the representation of the manipulated packaging. The process occurred equally for the four packages chosen.

Figure 12. Representation of the bar chocolates packages, previously edited for the double-blind test.



As shown in Table 4, it was possible to identify that the chocolate bar packaging with the highest recognition index corresponded to the Milka brand. For her, 94.9% of respondents correctly associated the packaging with the brand, 2% of the sample associated it with the Lindt brand and 1.7% did not know which company the packaging belonged to. As for the Nestlé Extrafino packaging (78.5%) recognized the brand, 10.9% did not know which company it belonged to and 8.5% associated it with the Auchan brand.

Analyzed edited packagings	% of associations with Nestlé brand	% of associations with Milka brand	% of associations with Lindt brand	% of associations with Auchan brand	% of associations with other brands	% don't recognized the brand
I – Nestle	78,5	0,0	0,0	8,5	2,1	10,9
Extrafino						
II – Milka	94,9	0,0	1,7	1,7	0,0	1,7
III – Lindt	0,0	1,7	54,3	5,0	7,6	31,4
Gold						
IV – Auchan	0,0	0,0	0,0	72,3	1,7	26,0

Table 4. Brand association for the packages representation analyzed in the double-blind test

Regarding the Lindt packaging, the results drew attention due to its controversy: 54.3% of the sample associated it with the company, while another important percentage of 31.4% did not know which brand it belonged to. It is important to highlight that 7.6% of the participants indicated that the packaging would be the chocolates of the Spanish brand Valor, a brand that has the same positioning as Lindt: premium chocolate tablet. Finally, the Auchan chocolate bar was recognized as a private label by 72.3% of the sample. And 26% said they did not know which company the package belonged to.

Considering the results, it is possible to understand that Milka is the brand with the highest recognition rate, probably due to the characteristic color of its packaging, which it does not share with any of its competitors. Second, the significant sample recognized the Nestlé Extrafino package. Its recognition can be explained by the fact that it is the most consumed brand, and therefore it is more present and remembered by consumers. On the other hand, the Auchan chocolate bar has been recognized (largely) as a private label, due to the simplicity of its packaging. Finally, the lower level of brand recognition of the Lindt brand packaging can be explained by its lower presence in consumers' usual consumption, that is, it is a premium product, with sporadic purchase characteristics. In addition, not all Lindt branded chocolate bars have the golden packaging as in the Gold line, and this can make it difficult for consumers to recognize them.

As for price associations, participants were asked what price they thought each product had and what they would be willing to pay for it, just by looking at the packaging representation. The type of response was free, and the results were calculated based on a simple average for each analyzed brand, as shown in Table 5.

Table 5. Average price and the real price associated for each package representation, according to the sample.				
Packaging Brands	Associated Price	sociated Price Real Price Difference betw		
			associated x real prices	
Nestlé Extrafino	1,84€	1,78€	+0,06€	
Milka	2,93€	1,99€	+0,94€	
Lindt Gold	3€	4,94€	-1,94€	
Auchan	2€	0,75€	+1,25€	

**Table 5.** Average price and the real price associated for each package representation, according to the sample.

In general, it was possible to identify significant differences between the average price values that the sample attributed to the chocolates based on the packaging and the actual price practiced by the brands in the market. The packaging that is associated with the highest price is that of Lindt Gold (3€), which is not entirely positive since the difference with the real price is negative: -1.94€. Secondly, the packaging of Milka chocolate has a higher associated average price (2.93€), which is favorable to the

brand, as it revealed an elasticity of 0.94€ in relation to the actual price of the product.

Surprisingly, the Auchan brand had an average associated value of  $2 \in$ , being the brand with the most favorable price perception, as the difference compared to the real price is  $1.25 \in$ . Finally, Nestlé is the lowest price associated with  $\in 1.84$  and the one closest to its real price (with a difference of  $\notin 0.06$ ). This result can be explained by the fact that Nestle chocolates occupy the position of the most consumed brand among the four analyzed and, therefore, with the potential for a higher brand recognition index and price.

In addition to the free association of price and from the observation of the packaging, it was asked what value each participant would be willing to pay for each of the chocolate bars offered by the brands. Also called the reservation price, the maximum monetary amount that a consumer is willing to pay for a given quantity of a product or service reflects the price inherent in the product at which he would be indifferent to buying it or not (Schmidt and Bijmolt, 2020).

The results obtained showed that the tablet with the smallest difference between the associated price and the reserve price corresponds to the Nestlé Extrafino, with only 0.02. This result can be explained as a result of the superior results presented for memory and brand recognition and price of this product. In this scope, the price is part of the information associated with the attributes of the Nestlé Extrafino brand and is retrieved by participants more easily. On the other hand, the other packages of chocolates showed results equal to or close to a 1€ difference between the associated price and the reserve price: Milka with 1.04€ (the biggest difference), Lindt and Auchan with 1€ (See Table 6).

Packaging Brands	Average Associated	Average Reservation	Difference between average
	Price	Price	associated price x
			reservation price
Nestlé Extrafino	1,84€	1,82€	-0,02€
Milka	2,93€	1,89€	-1,04€
Lindt Gold	3€	2€	-1€
Auchan	2€	1€	-1€

Table 6. Average price and the reservation price associated for each package representation, according to the sample.

For the Milka, Lindt and Auchan brands, the difference between the associated average price and the reserve price explains limitations in the use of packaging in the process of distinguishing and recognizing the brand, and consequent favorable price associations made by the consumer. With that, it becomes necessary for these brands to review their strategies and incorporate elements that contribute to the development of product quality and identity associations (Rodríguez et al., 2022). In addition, it converges with the results obtained in the observation of displays in supermarkets, by facilitating the use of the product and by differentiating the consumer experience at the point of sale (Rundh, 2016; Gómez et al., 2015).

# Final considerations

This article analyzed the packaging and price aspects of chocolate bars based on evidence from neuromarketing studies, as well as data collection on consumption habits and purchase choice criteria and brand associations in the Spanish market. With a predominantly qualitative approach, a survey was carried out with specialists to identify the main factors associated with price and packaging that must be considered in the chocolate market; a survey to analyze consumer habits, criteria for purchasing decisions among Spanish consumers; and a double-blind test to identify best-selling chocolate brand associations.

Convergently with the discussion proposed by Braidot (2009) and Plasmann et al. (2008), the experts' view reinforces the central role of prices in building the consumer's perception of product value, especially related to quality. it was observed that an adequate design of prices can favor faster decisions,

and consumer willingness to pay premium prices. For chocolate brands, the experts' recommendations converged to the development of price strategies considering the positioning that the brand wants to achieve, the target public and the perception of value that already exists in the market.

With regards to packaging, the results were congruent with the notes of Jesus, Silva and Esmaile (2022), they play a strategic role for brands. In the experts' view, they materialize aesthetic elements to build recognition, memory, and brand image, generate product consumption experience, improve the experience at the point of sale, in line with the work of Rundh (2016), Gómez, Martín-Consuegra & Molina (2015), and favors the perception of quality, as suggested by Rodríguez et al (2022). In addition, brands must explore the possibilities of texture, design, and coloring, prioritizing curved shapes, and in order to convey differentiating attributes, favoring recognition and memory of the product at any other point of sale.

However, when comparing evidence from the literature and experts' recommendations with the results on consumption habits, purchase choice criteria and brand associations present in the Spanish market, it is possible to infer controversies and mistaken uses of packaging and price strategies adopted by brands of bar chocolates. In the Spanish market, bar chocolates are consumed sporadically, mostly two to three times a week. In this survey, most respondents reported that, as they cannot taste the product, they make their choices considering the brand, price, and packaging. Attention is drawn to the fact that most individuals, when choosing a product, pay attention to the quality of its ingredients, and to conclude the purchase, they always decide based on the price, in accordance with the study by (Kacen, Hess & Walker, 2012).

In the double-blind test, it was possible to prove that the memory of the prices of the different chocolate bars does not fully match the real prices, considering that the majority of the participants associated the product with a price much higher than what it actually has. On the other hand, it was observed that the brands with the highest recognition tendency are those with the most differentiated and unusual colors in the sector, as is the case of Milka. In line with the results obtained from interviews with experts, the correlation between packaging and price leads to a perception of high quality that allows brands to practice premium pricing strategies (Herrera and Rosenberg, 2022).

In this sense, although brand recognition is the main element for the purchase choice (Keller, 2016), when removing its explicit identification from the chocolate tablet packaging, the other elements emphasized through the packaging were insufficient for a more effective brand recognition, especially among Lindt, Auchan that seek to position themselves as a premium brand and a low-cost brand, respectively.

Both the evidence provided by the literature and the recommendations of neuromarketing specialists are useful for improving the sales performance of low involvement products and have implications for the development of product and chocolate pricing strategies. Especially in the chocolate bar sector, where the offer is wide, if product differentiation is not achieved through packaging and price, it becomes more difficult for a given brand to stand out in the face of the set of considerations defined by the consumer. Still according to the study by Jesus, Silva and Esmaile (2022), packaging is a fundamental tool for transmitting the quality level of the product, and based on the perceptions created from it, it is possible to define prices, which must be perceived as fair based on what the packaging conveys.

Furthermore, it should be added that the product on the shelf has just a few seconds to attract the consumer's eye and attention. Therefore, in order for the customer to consider a certain brand, a strategy for working with the limbic brain must be formed. As discussed in the theoretical framework, (Karmarkar and Plassmann, 2019), this is the part responsible for associating specific emotions and feelings with the product. By using packaging strategies that trigger emotional responses, brands can

benefit and become part of the consumer's consideration set.

Another relevant aspect for marketing managers concerns product positioning. From a neuromarketing perspective, the first step in designing a good product is choosing and defining its positioning. From there and what is intended to be conveyed with the brand image, the packaging must be designed considering all the factors that constitute it: weight, colors, smells, materials, textures, fonts, size, shapes, product information product, and sounds that may be part of the consumer's contact experience with the product. Above all, it must be considered that the consumer likes to touch and have direct contact with the product, so handling the packaging, in all its phases, must ensure that it does not deform.

This research has three main limitations. First, the study confronts evidence based on theory and recommendations only with the practices of a single market, the Spanish market. As a result, the results observed in the survey may restrict generalizations to other markets, especially those that are leaders in the consumption of chocolates and cocoa products such as the United States, Germany, France, the United Kingdom, and China. Future studies can reproduce the research in leading and emerging markets, in order to compare and contrast the results obtained for the chocolate tablet trade.

Second, although the product display into account to characterize consumer product touchpoint in supermarkets, emphasis was not given to the experience at the dimension of point of sale as a whole. Bearing in mind that the experience with the product also influences the favorable neural response to the marketing actions of chocolate bar brands, additional research should explore whether the dissonance between evidence and scholars' recommendations also occurs in other points of sale such as company stores, convenience stores, specialty stores, as well as for the experience through digital channels.

Lastly, there is a growing trend towards the consumption of sustainable and natural products. With this, innovations are incorporated throughout the chocolate production and consumption chain, from chocolate formulations and mixtures to packaging disposal processes. Bearing in mind that the present study was developed without the participants being able to taste the chocolates, future studies should investigate how consumers develop their associations of price and packaging with new products, and whether these innovations lead to brands being considered and the purchase choice process.

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