EMOTIONAL IMPACT OF BRANDED CONTENT AND TRADITIONAL ADVERTISING FROM A NEUROSCIENCE PERSPECTIVE

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KEYWORDS	ABSTRACT			
Branded Content	This study analyses the emotional impact of branded content compared to			
Advertising	traditional advertising from a neuroscience perspective, using the			
Neuroscience	Sociograph© technology, a biometric neuromarketing tool based on			
Engagement	Electrodermal Activity (EDA), to measure attention, emotion, and brand recall.			
Brand recall	The results confirm that branded content significantly outperforms traditional			
Advertising effectiveness	advertising across all evaluated metrics. This marketing technique achieves			
Sociograph	sustained attention, generates greater emotional engagement, and consolidates more effective brand recall compared to traditional advertising. Additionally, it is perceived as less intrusive, which enhances its acceptance among consumers.			

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1. Introduction

1.1. Purpose and Justification of the Research

This descriptive study aims to comparatively evaluate the effectiveness of branded content versus traditional advertising, focusing on three key dimensions: attention, emotion, and brand recall.

Content creation lies at the heart of the transformation of modern advertising towards less intrusive and more participatory practices. Jenkins (2006) introduced the concept of "convergence culture," which explains how brands adapt to a media environment where audiences migrate across platforms in search of relevant content. In this context, branded content has evolved into a model where brands not only compete for public attention but also seek to establish themselves as legitimate sources of entertainment and value. However, the challenge lies in demonstrating its effectiveness with empirical data to justify investments and optimise its impact.

According to the latest Scopen report (2022), the majority of stakeholders involved in the creation, production, and distribution chain of branded content in the advertising industry consider the measurement of effectiveness to be highly important, with a rising trend from 2015 to the present. Nevertheless, existing methods are not deemed reliable or highly reliable.

From a theoretical perspective, studies over the past fifteen years have explored whether this advertising format offers competitive advantages over traditional advertising. Based on a literature review of measurement approaches, authors such as Bermejo-Berros, (2015), Grinta (2017), Regueira (2012) and Rodríguez-Rabadán et al. (2023) highlight the lack of consensus or a standard measurement system and underscore the importance of advancing research in this area.

Brands must begin by establishing a clear definition of the concept of effectiveness. According to Nelli (2012), it is understood as a comparison between the objectives set and the results achieved. To this end, brands need baseline reference values for comparison, enabling them to identify, at the conclusion of a branded content campaign, a distinctive value that reflects its level of effectiveness. Meanwhile, Liberos et al. (2013) emphasise the importance of considering efficiency, understood as the ability to achieve established objectives using the least amount of resources possible. In this regard, key institutions within the sector have highlighted the need for a more structured approach in this field. The ROI Research organisation (Haiges and Lewis, 2011) indicates that while brands tend to calculate return on investment (ROI) based on allocated budgets, there is currently no standardised measurement system. Haiges and Lewis (2011) notes that the primary challenge lies in assigning specific metrics to each measurement component, tailored to the particular objectives of each campaign, to enable uniform analysis. Kendall (2013) aligns with this perspective, arguing that it is essential to precisely identify which elements will be evaluated and which indicators will be used to determine a campaign's success.

This research considers the latest contributions in the field, particularly those from BCMA (Sociograph, 2021), which propose an innovative approach to measuring the effectiveness of branded content. This method evaluates both conscious and unconscious variables in audiences, considering audiovisual and audio formats, as well as traditional advertising, such as commercials. Furthermore, Rodríguez-Rabadán et al. (2022, 2023) contribute studies on the feasibility of a standardised measurement system to assess the effectiveness of branded content, addressing the lack of metrics, homogeneity, and evaluation criteria that would allow brands and academia to establish a common framework for systematising this process. Additionally, these authors examine the emotions elicited by Estrella Damm's branded content campaigns in the audiovisual entertainment typology and analyse the level of emotion and purchase intention generated among audiences.

The study presented below incorporates the main theoretical contributions from the last ten years in this field and, as a novel approach not previously seen, proposes research that integrates the use of neuroscientific tools, specifically the Sociograph© technology, a marketing science consultancy specialised in the audiovisual sector. In this regard, the added value of collaborating with this entity lies in the use of patented technology that measures electrodermal activity of the skin to assess variables such as attention, emotion, and engagement, achieving greater precision and depth in the results (Sociograph, 2022). This approach enables the recording of emotional and attentional responses in real time, providing objective and empirical data (Martínez, 2005) and determining with greater certainty the effectiveness of these advertising formats in terms of impact, recall, and emotional perception towards the brand. By overcoming the limitations of surveys, this study seeks to contribute to the academic body of knowledge on advertising effectiveness. Secondly, the research provides an empirical

foundation based on neuroscience and big data to guide brands and agencies in making strategic decisions within the contemporary advertising environment.

1.2. Objectives

The aim of this study is to evaluate the effectiveness of branded content compared to traditional advertising in terms of attention, emotion, and brand recall.

The specific objectives of the research address the following points:

Firstly, to measure and compare the levels of attention and emotion generated by both formats using applied neuroscience techniques.

Secondly, to analyse the brand recall associated with each format through opinion questionnaires.

Lastly, to provide recommendations for optimising advertising strategies based on the findings obtained.

1.3. Theoretical Framework

The advertising landscape has undergone significant changes due to digitalisation, content saturation, and the rise of social media (Del Pino-Romero and Castelló Martínez, 2015). These factors have diminished the effectiveness of traditional advertising formats, fostering scepticism among consumers who perceive them as intrusive and manipulative (Rogel del Hoyo and Marcos Molano, 2020).

Advertising has historically been a key tool within the marketing mix, constantly adapting to market demands and available channels (García-Uceda, 2011). Its traditional definition as paid mass communication with persuasive aims (Lasker, 1994) has evolved from print formats in the era of the printing press to television campaigns during the golden age of mass consumption in the 1950s and 1960s (Aguilera et al., 2016).

However, the advent of digitalisation and the proliferation of channels and formats have profoundly transformed this landscape. The internet has multiplied consumer touchpoints, enabling unprecedented access to user-generated data and opinions (Rogel del Hoyo and Marcos Molano, 2020). This transformation has led to a shift in audience behaviour, with consumers now seeking personalised experiences and being more critical of messages perceived as manipulative (Núñez, 2007). In an environment characterised by information saturation and fragmented audiences (De Pino and Reinares Lara, 2013), brands strive to reconnect with audiences. To achieve this, they provide active communication that goes beyond persuasion, creating positive and valuable experiences (Aguilera et al., 2016) to capture consumer attention.

Branded content is considered an alternative that seeks to deliver added value through emotionally relevant content. This innovative communication strategy moves away from interruption, presenting itself through informative, educational, entertainment, or purpose-driven proposals, achieving relevance and engagement with audiences (BCMA, 2024; IAB Spain, 2021). This approach has proven effective in generating emotional commitment and building strong connections between brands and their target audiences (Rodríguez-Rabadán, 2021). Over the past decade, it has gained significant prominence, with entertainment and audiovisual formats being the preferred choices (Scopen, 2022).

In this context, storytelling plays a fundamental role, defined as the art of telling stories that emotionally connect with audiences (Guisado Rodríguez, 2017). This technique allows brands to convey their values in a more authentic and memorable way, humanising them and fostering a closer relationship with consumers (Pulizzi, 2012). Moreover, storytelling leverages emotions to influence purchasing decisions and customer loyalty, strengthening the bond between the brand and its audience (Aguilera et al., 2016).

Audiovisual content, as an integral part of storytelling, has proven particularly effective in capturing attention and generating emotions (Bezbaruah and Trivedi, 2020). For this reason, audiovisual branded content has become one of the most popular and high-potential strategies in contemporary marketing, as evidenced by its growing presence in campaigns by leading global brands (Rodríguez-Rabadán, 2021; Scopen, 2022).

Advances in neuroscience have revolutionised the understanding and measurement of advertising effectiveness. Neuromarketing, a discipline combining neuroscience and marketing, enables the analysis of brain processes related to attention, emotion, and memory, offering more precise insights into how consumers process advertising stimuli (Braidot, 2005). This discipline relies on tools such as

electrodermal activity (EDA), which objectively measures emotional and cognitive responses in real time (Martínez, 2005). The application of neuromarketing to branded content has facilitated the identification and optimisation of elements that generate greater impact and engagement with audiences (Kumar, 2015). For instance, recent studies have shown that advertising stimuli effectively combining attention and emotion not only achieve greater brand recall but also foster a lasting emotional connection (Martín Guerra, 2018). This approach has been particularly useful for measuring the effectiveness of branded content compared to traditional advertisements, providing objective data that support the superiority of the former in terms of impact and emotional perception (Plassmann et al., 2007).

While branded content offers numerous advantages, its implementation also presents challenges. On the one hand, the need to evaluate its effectiveness more precisely requires the integration of innovative methodologies, such as neuroscientific techniques (De Balanzó and Sabaté, 2006). On the other hand, developing authentic narratives that connect with consumer values and reflect current social concerns demands a strategic and collaborative approach among advertisers, agencies, and content creators (Rodríguez-Rabadán, 2021).

Additionally, the high cost of neuromarketing technologies, along with ethical barriers associated with their use, represent significant limitations to their widespread adoption (Monge and Fernández, 2011). However, the increasing accessibility of tools such as EDA and the growing acceptance of these techniques among industry professionals suggest a promising future for the application of neuroscience in advertising.

2. Design and Methodology

This research proposes a descriptive quasi-experimental analysis to compare branded content and traditional advertising formats to determine which channel has a greater impact on its target audience. To this end, a combination of quantitative methodology, including opinion surveys and neuroscience, is employed, using Sociograph© technology, which measures electrodermal responses to capture nonconscious reactions of a group of individuals. Additionally, this research incorporates opinion questionnaires.

Sociograph© technology is an innovative technique originating from Electronic Engineering, initially developed to measure collective reactions (Martínez, 2005). It uses an electronic device that records the electrodermal activity of a group. Through the constant current method, which expresses values in kiloohms, it enables the evaluation of cortical activation levels and emotional responses while the group engages in an activity or is exposed to a stimulus. This technology provides objective group data by employing a proprietary algorithm that eliminates individual and subjective data, focusing solely on what impacts the entire group simultaneously (Guerrero Pérez et al., 2025).

The Sociograph© technology operates with a portable device, allowing participants to engage in various activities while being monitored. This feature facilitates the collection of data on non-conscious group responses, aiming to determine the emotional and attentional impact generated by each piece under study in the analysed sample. This study relies on this methodological approach as it provides a deeper understanding of attention and emotion dynamics in the context of branded content compared to traditional advertising. The study involved 69 participants aged between 18 and 30 years, with 51% male and 49% female.

Sociograph© technology enables real-time evaluation of participants' cortical and emotional attention levels in response to an audiovisual stimulus. The methodology is justified by prior studies conducted by the company, such as the research for BCMA's research and measurement department on the emotional impact of branded content on viewers' emotions (Sociograph, 2021). The Sociograph algorithm eliminates individual data and focuses on patterns that affect the majority of the group simultaneously, yielding representative group values. Based on this information, for this type of study, a group of 30 individuals is sufficient to detect, with an adequate level of representativeness, variations in electrodermal activity, allowing extrapolation to the target population. In various studies conducted with groups of 20 to 30 individuals, confidence intervals for measures related to attention and emotion were obtained at a 95% confidence level, reliably distinguishing whether the group's electrodermal activity increased or decreased. In this study, the sample consists of 69 participants.

Additionally, opinion questionnaires are used to assess the degree of spontaneous recall (indicating the advertisements remembered without any prompting) and the evaluation of the pieces under study (rating each piece on a scale from 1 to 7).

This combination of technologies enables the identification of both conscious and non-conscious reactions of participants towards the selected branded content pieces, categorised as follows:

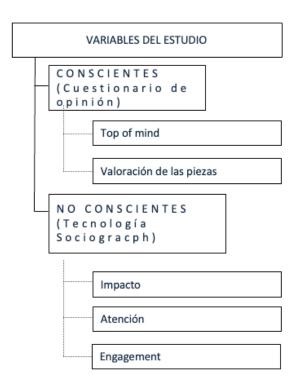
Conscious Variables (Opinion Questionnaire):

- 1. Top of Mind: Percentage (0–100) indicating the ability to recall brands without assistance. A value close to 100 suggests high brand recall.
- 2. Evaluation of Pieces: Participants' opinions on the presented pieces, rated on a scale from 0 to 7.

Non-Conscious Variables (Sociograph Technology):

- 1. Impact: Percentage value (0–100) that allows comparison of similar stimuli, relating attention and emotion data. An index of 50% represents the average of the evaluated products, while 0 and 100 correspond to the products with the least and greatest impact, respectively.
- 2. Attention: Percentage measure (0–100) reflecting the stimulus's level of attractiveness, calculated based on the Electrodermal Level (EDL). A higher attention level indicates a better predisposition to receive and process information.
- 3. Engagement: Percentage indicator (0–100) evaluating the level of emotional connection generated by the stimulus, based on the Electrodermal Response (EDR). This value reflects the amount of engagement, without considering its quality.

Figure 1. Summary of the variables considered in the research



Source: Own elaboration, 2024

These variables enable an understanding of how stimuli affect participants' attention and emotional connection, which in turn can influence the effectiveness of communication strategies.

For the research, on the one hand, traditional advertising pieces analysed by the Sociograph© consultancy and available in its database were selected. On the other hand, 31 audiovisual branded content pieces were chosen, segmented according to the classification developed by the Branded Content Marketing Association (BCMA, 2022). In this study, both traditional advertising and branded content pieces were shown to the same group to analyse how different branded content techniques impact the audience.

Firstly, participants viewed 7 minutes of audiovisual advertising pieces to create a preconditioning effect. Secondly, the test was conducted, during which respondents watche d the 31 pieces under study. These are detailed in the table below:

 Table 1. List of Branded Content Stimuli Analyzed

ТҮРЕ	Brand	Name	rnaea Cor Year	tent Stimuli Analyzed Link
Feeding	White Hen	La Resopa	2012	https://www.youtube.com/watch?v=KKniabyhrZ8
Association	UNHCR	Mano a mano: #MyLastMeal	2015	https://www.youtube.com/watch?v=UzTutAdG8t0&list=P L v5uJ0TqIFccrOwmBwACHLpEAck4snVK&index=5
Automotive	Smart	Smart Electric Love	2017	https://www.youtube.com/watch?v=jljECxyAa-A
Automotive	Land Rover	The Pop Wizard - Spacegate	2015	https://www.youtube.com/watch?v=NLM9UDNTgZg
Automotive	BMW	The Escape Trailer		https://www.youtube.com/watch?v=SR0mGrUT09k
Automotive	Mitsubishi	Back to sport	2018	https://www.youtube.com/watch?v=tA-0wZ6wzPA
Banking	Santander Bank	How much. Beyond money (2017)	2017	https://www.youtube.com/watch?v=xVfu-i1clig
Beverages	Mixta	Mixed Debatex	2017	https://www.youtube.com/watch?v=N8C8FGK-EN0
Drinks	Ballentine's	Carlos Jean's Ballentine's Plan	2012	https://www.youtube.com/watch?v=UcFJYCY9pFw
Drinks	Ballentine's	40 PRINCIPALES_BAL LANTINES_AWAR DS #BATTLE OF TWEETS	2014	https://www.youtube.com/watch?v=4pzdwnrVc5o
Drinks	Ballentine's	B-Music	2015	https://www.youtube.com/watch?v=G-59Ffqx- Y&feature=youtu.be&has verified=1
Drinks	Bezoya	Baby on board	2015	https://www.youtube.com/watch?v=HLx9[tefDD0
Beverages	Coca-Cola	Project Tour	2014	https://www.youtube.com/watch?v=g0MmLqx6ff8&featu re=youtu.be
Drinks	Hendrick's Gin	Enajenatorium	2015	https://www.youtube.com/watch?v=xHFdYvtsIJc
Drinks	Hacienda Santa Teresa	Alcatraz Project		https://www.youtube.com/watch?time continue=1&v=X7 Y2WEHbOgo
Beverages	Seagram's Gin	American Portraits	2014	https://www.youtube.com/watch?v=8VIBB_6vWUM
Drinks	Solan de Cabras	Drops of solidarity	2016	https://www.youtube.com/watch?v=QL2iFdBGWAo
Drinks	AMSTEL	#ElPelotariYLaFall era by Julio Medem for Amstel		https://www.youtube.com/watch?v=NGxCPDjDKbM
Drinks	Vichy Catalan	Messages in a bottle	2017	https://www.youtube.com/watch?v=Pi_XrxWWt_w
Editorial	Editorial Planeta	We are not crazy	2014	https://www.youtube.com/watch?v=onSdm3Kwzdk
Electronics	Fnac	The Freak	2014	https://www.youtube.com/watch?v=FjNPDHSIvhM&featu re=youtu.be
Energy and gas	Natural Gas	Cinergy	2014	https://www.youtube.com/watch?v=8SygNIf0pmo
Energy and gas	GALP	Positive Energy Day with Galp	2014	https://www.youtube.com/watch?v=XDI68MsvzQw
Pharmaceutical s	Merk	Merk Blue or Pink	2017	https://www.youtube.com/watch?v=7JqeLbfVPmo

Fashion and cosmetics	Dollar Shave Club	DollarShaveClub.c om - Our Blades Are F***ing Great		https://www.youtube.com/watch?v=ZUG9qYTJMsI
Fashion & Cosmetics	Chubbies Shorts	Chubbies Shorts Swim Promo 2017	2017	https://www.youtube.com/watch?v=PttFmWkQsNI
Fashion and cosmetics	Chubbies Shorts	THE CHUBBIES MAN MODEL SEARCH	2018	https://www.youtube.com/watch?v=0cS8ZFEqbBE
Fashion and cosmetics	Fenty Beauty	FENTY FACE: THE SECRET TO RIHANNA'S KILLER RADIANCE	2017	https://www.youtube.com/watch?v=a-pryeiR6GA
Recycling	Ecovidrio	Recycling Verses	2017	https://www.youtube.com/watch?v=uUEpjgTItno
Insurance	Verti	Disconcerts	2011	https://www.youtube.com/watch?time continue=1&v=MI
	insurance			<u>jY4o E1kE</u>
Telecommunic ations	Movistar	The new and unexpected adventures of Enjuto Mojamuto	2010/20 11	https://www.youtube.com/watch?v=4f9LZYpdGQo
Telecommunic ations	Movistar+	La Peste: The Transmedia Universe A Movistar+ production in collaboration with El Cañonazo		https://www.youtube.com/watch?v=Zebj xNu7oI

Source: Own elaboration, 2024

2.1. Execution

Participants attended a screening room, signed a data protection consent form (LOPD), and were connected to the Sociograph© technology.

Once seated, the procedure was explained without revealing the type of audiovisual content to be viewed. Subsequently, the various stimuli were projected on the screen while non-conscious reactions were recorded. After the viewing, participants completed the questionnaire.

2.2. Statistical Treatment of Data

The statistical treatment of the data combines a mixed approach, utilizing the Sociograph© technology described earlier and opinion questionnaires administered to the 69 participants following exposure to the stimuli. These results were statistically processed through descriptive analyses, enabling a comparison between declarative perception and neurobiological responses. This dual approach provides a comprehensive insight into the emotional effectiveness of the branded content pieces analysed in this study.

3. Results

Overall, branded content pieces demonstrate superior effectiveness compared to traditional advertising, as evidenced by the data presented in Figure 2. This superiority is attributed to their greater appeal, making them effective formats for capturing audience attention.

Figure 2. Impact and attention data for branded content pieces versus traditional advertising pieces



Source: Sociograph Marketing Science, 2024.

The majority of the analysed pieces exceed the average impact, which stands at 52.63%, a value considered positive. However, it is important to note that these pieces do not particularly stand out in terms of emotional connection; rather, their strength lies in their capacity to attract attention.

As shown in Figure 3, the highest recorded impact is 94.7% for the Fenty Beauty piece, which, despite achieving a high level of attention, has an engagement level that only slightly exceeds the average, reaching 50.7%. This suggests that, while effective in attracting consumers, it is not as successful in building a strong brand image. In contrast, the second quartile shows an impact of 24.92%, while the third quartile reaches 84.4%.

1.00 90 80 70 60 10 Movistar+: La Peste Chubbies Shorts: MAN MODEL SEARCH Chubbies: Swim Promo 2017 ditorial Planeta Vichy Catalan Ballantine's Santa Teresa GALP lendrick s Gin BMW Smart tine's: PREMIOS 40 PRINCIPALES Gas Natural Jollar Shave Club Ballantine's: Bmusic Aovistar: Enjuto Mojamuto

Figure 3. Ranking of impact of branded content pieces.%.

Source: Own elaboration, 2024.

A total of 38% of the pieces surpass the 70% impact threshold, a notable score in the audiovisual domain, classifying them as successful. These include brands such as Fenty Beauty, Merk, Solan de Cabras, Banco Santander, Galp, Land Rover, Gallina Blanca, Editorial Planeta, Hendricks Gin, BMW, Smart, Vicky Catalán, and Ballantine's.

Conversely, only 19% of the pieces exhibit impact values below 20%. The analysis of engagement reveals that this is where branded content shows its greatest weaknesses, as, despite capturing attention, its ability to evoke emotions in the audience is significantly lower for most stimuli. Nevertheless, the data are quite dispersed. In the impact ranking, as shown in Figure 4, pieces such as Fenty Beauty, Merk Azul y Rosa, Banco Santander's Cuánto, Más allá del dinero, and Solan de Cabras stand out, achieving results significantly above the average. All these pieces employ storytelling, making them effective tools for connecting with the target audience.

The pieces with the lowest impact include Verti, Chubbies, and Movistar's *La peste*, which perform well below the average. The perception of brands in branded content, often diffuse, leads participants to experience greater emotion when presented with elements closer to their personal lives. An example is Ballantine's B-Music, which, despite achieving only 21.4% attention, attained an emotional intensity of 96.3%. In contrast, culturally distant narratives, such as Santa Teresa rum's Proyecto Alcatraz, record very low engagement levels at 3.6% and similarly reduced attention at 29.8%, due to their more impersonal approach.

The uniqueness of characters in branded content also plays a crucial role. For instance, Movistar+'s *Enjuto Mojamuto* increased the emotion experienced by participants from 24.6% to 68%. In the positioning map analysis, which considers the variables of attention and engagement, a success quadrant is identified where pieces with the highest levels of attention and emotional connection are grouped, revealing significant dispersion in the results, with a standard deviation of 30.75% in the impact variable.

Within this success quadrant, the piece achieving the highest engagement is Banco Santander's *Más allá del dinero*, which resonates positively with younger audiences. Meanwhile, the piece generating the most attention is Fenty Beauty's. No significant differences were observed between campaigns presented in English and those in the participants' native language, as Land Rover's *SpaceGate* achieved the sixth highest impact, while *Man Model* ranked second to last, with the remaining campaigns distributed across various intermediate positions.

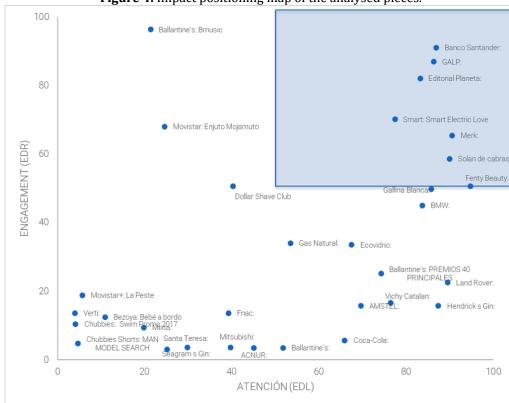


Figure 4. Impact positioning map of the analysed pieces.

Source: Author's own elaboration, 2024.

Regarding the questionnaire responses, participants were asked to indicate the brands they recalled (prompted recall) and to rate the pieces they had viewed on a 7-point scale.

With respect to the evaluation of the pieces, the average score is 3.22 out of 7, which is considered favourable, as shown in the distribution presented in Figure 5 below:

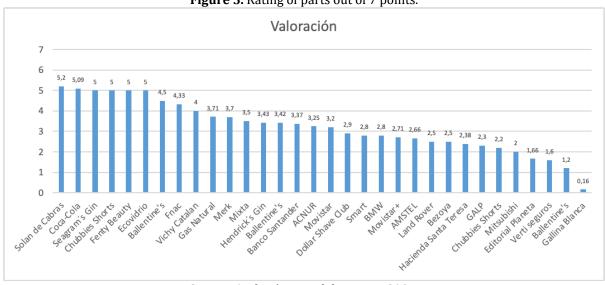


Figure 5. Rating of parts out of 7 points.

Source: Author's own elaboration, 2024.

On the other hand, the score assigned to brand recall is 69%, above the average, as shown in Figure 6. This indicates that more than half of the pieces are recalled, except for those by Hendrick's Gin, Land Rover, Gallina Blanca, and Editorial Planeta. The latter, despite having an above-average impact (84.8%), does not effectively link the branded content action to the brand, as it receives an evaluation score of 1.66 out of 7 and the lowest recall percentage (14%).



Source: Author's own elaboration, 2024.

4. Discussion

The results obtained highlight the effectiveness of branded content compared to traditional advertising, demonstrating its ability to capture audience attention more effectively. However, a significant limitation is observed in its capacity to establish deep emotional connections with the audience, representing an area for improvement to enhance the construction of a robust brand image.

The analysis revealed that 38% of the pieces surpassed a 70% impact threshold, positioning them as successful cases within the audiovisual domain. Among these, brands such as Fenty Beauty, Solan de Cabras, and Banco Santander stand out, having employed strategies like storytelling to connect with their target audience. Conversely, pieces with lower impact, such as those by Verti or Chubbies, showed a more evident disconnect between the content and the audience's emotions. This underscores that, in branded content, mere visual or narrative appeal does not guarantee success, particularly if the content does not resonate culturally or emotionally with the audience. In this regard, pieces like Ballantine's *B-Music* stand out as exceptions, demonstrating that high emotional intensity (96.3%) is possible even with low attention levels (21.4%). This finding suggests that personalisation and thematic proximity can be determining factors in content perception.

The data on brand recall and piece evaluation suggest that, while branded content can capture audience attention, its ability to generate clear brand associations still faces challenges. This is exemplified by Editorial Planeta's piece, which, despite achieving an impact of 84.8%, recorded the lowest recall percentage (14%) and a very low evaluation score (1.66 out of 7). This case highlights the importance of reinforcing brand identity elements within the content to maximise its effectiveness.

These findings can be applied to specific advertising strategies, for example, by using neuroscientific tools in the pre- and post-evaluation of advertising pieces to identify which elements generate greater engagement and recall, thereby optimising advertising investment. These methodologies facilitate a more precise content design tailored to consumers' non-conscious responses, enhancing campaign effectiveness.

The results obtained in this research provide significant implications for formulating effective advertising strategies in the current environment. Firstly, the evidence that branded content generates greater attention and emotional response suggests that brands should focus their campaigns on creating visual and audiovisual narratives that emotionally connect with their audience, prioritising storytelling as a central technique. Additionally, the use of neuroscientific tools in the pre- and post-evaluation of advertising pieces allows for the identification of elements that generate greater engagement and recall, optimising advertising investment. These methodologies enable a more precise content design adapted to consumers' non-conscious responses, enhancing campaign effectiveness. Lastly, incorporating relevant values and meaningful experiences into content can strengthen audience identification with the brand, fostering long-term relationships and improving the perception of non-intrusiveness, a key aspect in a context of increasingly critical and advertising-saturated consumers.

While branded content positions itself as an attractive and effective alternative to traditional advertising, its success depends on a balance between visual impact, emotional connection, and clear brand association. These results suggest that future strategies should focus on optimising engagement capacity and strengthening narratives that facilitate audience identification with the brand, thereby maximising the format's potential. Although the findings of this research offer interesting insights into the effectiveness of branded content in terms of attention and emotionality, it is important to acknowledge that the sample's representativeness has limitations, as it primarily consisted of a young, academic audience. This characteristic limits the generalisability of the results to other demographic segments, such as older groups, different socioeconomic levels, or diverse cultural contexts. Emotional responses and attention may vary significantly across populations with different characteristics, suggesting the need for complementary studies with more heterogeneous samples to validate and expand these conclusions.

5. Conclusions

In conclusion, the results obtained in this research demonstrate that branded content is a more effective communication strategy than traditional advertising, particularly in terms of attention, emotion, and brand recall. These findings are based on the application of neuroscientific techniques and surveys, which provide a comprehensive analysis of consumers' conscious and non-conscious responses.

The study thus makes several contributions to the field of measuring effectiveness in attention and emotion. Data obtained through Sociograph® technology show that branded content pieces generate higher levels of attention and emotional engagement compared to traditional pieces. This is related to the ability of branded content to integrate into engaging and meaningful narratives, as noted in previous studies (Martín Guerra, 2018; Rodríguez-Rabadán, 2021).

The results also demonstrate that branded content facilitates stronger and more enduring brand recall, aligning with the established relationship between emotion and memory in neuroscientific research (Plassmann et al., 2007). This format stands out for generating significant emotional impact, a characteristic that contributes to consolidating the association between the message and the brand's identity.

Furthermore, the dispersion of data, where the most effective pieces depend on a balance between visual impact, emotional connection, and clear brand association, suggests that future strategies should focus on optimising engagement capacity and strengthening narratives that facilitate audience identification with the brand, thereby maximising the format's potential.

Finally, the results derived from the questionnaires confirm that branded content is perceived as less intrusive and more relevant by participants, in contrast to traditional advertising, which is often considered excessive or manipulative (IAB Spain, 2021; Rogel del Hoyo & Marcos Molano, 2020). This attribute enhances its acceptance in a context of increasingly critical and advertising-saturated consumers and is consistent with other experiments referenced in this research.

6. Contributions

This study contributes to the development of the field of advertising communication by demonstrating the utility of neuroscientific methodologies in evaluating the effectiveness of advertising formats. The results support the need for a multidimensional approach to advertising analysis, where empirical quantitative and qualitative methodologies are complemented by non-conscious data that capture emotional and attentional responses with greater precision (Martínez, 2005; Torreblanca Díaz et al., 2012).

In terms of the theoretical framework, this research reinforces the importance of storytelling as a key tool in branded content, confirming its ability to emotionally connect with audiences and promote consumer identification with brand values (Guisado Rodríguez, 2017; Pulizzi, 2012).

The findings have significant implications for the advertising industry, particularly in a context of digital transformation and audience fragmentation. Brands and agencies can benefit from using branded content as a comprehensive strategy that not only enhances attention and brand recall but also improves the consumer experience by avoiding intrusive formats.

Moreover, this study provides empirical data that can guide advertising planning. The results propose a new approach focused on user experience rather than mere exposure. The pieces with the greatest emotional impact share narrative, aesthetic, and contextual elements that align with audience values. This finding encourages the design of content that not only informs or entertains but also fosters sustained emotional connections with the audience.

It is also recommended to integrate neuroscientific tools into the creative testing phase. The combination of conscious and non-conscious metrics enables a more accurate assessment of a piece's true effectiveness before its widespread dissemination, minimising risk and optimising the return on advertising investment. This methodology facilitates refining the selection of insights, key narrative moments, and ideal duration, as well as comparing alternative versions of the same campaign.

Another relevant implication is the opportunity to redefine key performance indicators (KPIs) for branded content. In contrast to traditional metrics such as reach or frequency, this study supports the inclusion of psychophysiological variables, such as sustained attention or emotional intensity, as critical dimensions of success. This suggests a paradigm shift in measurement models, which could lead to new, more qualitative metrics linked to spontaneous recall, emotional engagement, and brand perception.

Finally, the findings reinforce the notion that branded content should not be considered solely as a creative product but as a cross-cutting strategy. Its development requires collaboration between marketing, content, data, and user experience departments, advocating for a more integrated and less fragmented approach to brand management. For agencies, this implies an evolution towards models of co-creation and continuous consumer testing; for advertisers, it highlights the need to rethink their briefs in terms of cultural and emotional value, beyond immediate commercial objectives.

7. Limitations and Proposals for Future Research

Although this research presents significant findings, there are limitations related to the composition of the sample, which consisted of a young and academic audience. This could restrict the generalisation of the results to other demographic segments. Additionally, the use of a single neuroscientific tool, such as Sociograph©, could be complemented with other technologies, such as functional magnetic resonance imaging (fMRI), to obtain more detailed data on individual responses.

Future research could focus on exploring the effectiveness of branded content in different cultural contexts, as well as evaluating its long-term impact on variables such as brand loyalty and purchasing behaviour. Furthermore, it would be relevant to investigate the return on investment associated with this format from a longitudinal and multichannel perspective.

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