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## Faculty of Business Economics

Master of Management

### **Master's thesis**

**Visual storytelling: How color saturation affects customer responses to luxury ads**

**Fatima Zahrae Berniche**

Thesis presented in fulfillment of the requirements for the degree of Master of Management, specialization  
International Marketing Strategy

### **SUPERVISOR :**

Prof. dr. Allard VAN RIEL

### **MENTOR :**

Mevrouw Olesia NIKULINA



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**2024**



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## **Abstract:**

In a world of overcrowded advertising space, storytelling has emerged as a powerful tool to engage customers. Luxury brands use it to highlight the symbolic qualities of their products and services and create an experience that enriches the world of luxury. Therefore, using visual storytelling effectively is crucial, as oral storytelling techniques may be insufficient due to the fast pace of modern life and lack of attention, greatly improving the clarity and immediate appeal of visuals. This thesis explores the effect of color saturation on purchase intentions through visual storytelling. We focus on color because it is one of the key visual elements that strongly influence customers' perceptions and behaviours. A particularly saturated color can add clarity and intensity to products, making it an attractive factor for customers. Furthermore, considering the emphasis on luxury products, we examine possible moderating effects of the need for status. We conduct an online survey of 175 people to measure the relationship. Results indicate that there is a statistically significant difference in purchase intention between ads with high and low saturation levels. This means that an increase in color saturation leads to the predictable outcome of an increase in purchase intention. The research, however, demonstrates that visual storytelling does not mediate the relationship between color saturation and purchase intention. Equally, high need for status does not necessarily moderate the relationship between visual storytelling and purchase intention. In general, this study will be useful for marketing managers of luxury brands and ad producers and researchers in the area of luxury visual marketing and storytelling. It provides guidelines on creating appealing visual ads that motivate customers to purchase.

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## **1. Introduction:**

Luxury brands rely heavily on the power of visual information. Advertising data show that luxury brands spend up to 73% of their budgets on print ads, mostly in magazines, with the remainder split between billboards and TV advertising, and only an average of 16% left for digital ads (Handley, 2017). Therefore, the real challenge for brands is not only to create appealing images, but also to move viewers to action (Mogaji et al., 2017). This can be accomplished by enhancing the effectiveness of visual communication, such as their storytelling power, as visuals can provide more vivid and concrete representations of information than text (Huang & Ha, 2020). Visual communication can draw viewers' attention and incite emotions, ultimately leading to changes in viewers' attitudes and behaviours (Kujur & Singh, 2020).

Visual content can drive customer engagement (Azer, Blasco-Arcas, & Alexander, 2024) through communicating brand stories (Gurzki, Schlatter, & Woisetschläger, 2019). Storytelling has been used increasingly in brand communication, as it has proven effective in capturing customers' attention and creating a strong and memorable brand personality that can differentiate the brand from its competitors (Amălăncei, 2021). In the field of luxury goods marketing, emotional differentiation of a product and brand is required to create a holistic brand experience (Mascarenhas et al., 2006). Accordingly, visuals and their ability to convey stories are becoming an important component of a brand's equity (Lightfoot & Gerstman, 1998).

This thesis seeks to examine the intersection between psychology of color, visual storytelling and customer behaviour in luxury brands. According to a recent report by McKinsey & Company (2023), the luxury marketplace is likely to increase ranging from 2% to 4% in 2024. This has led to a change in the luxury sector due to rising global demand for luxury products (Kapferer & Bastien, 2012). Although middle-class consumers may not have as much money as rich customers do, they are becoming more involved in the consumption of luxury goods as shown by the considerable expansion of luxury brands (Shukla et al., 2022).



The research interest in luxury brand marketing has also been increasing following the growth of the global luxury market (Eunju Ko., Ian Phau., & Gaetano Aiello., 2016). Luxury brand advertising often employs rich imagery portraying the lifestyle, values, and attitudes of people as its message strategy (Kim, Lloyd & Cervellon, 2016). Customers can get involved with luxury visual ads and become transported - a psychological state where individuals become deeply absorbed in the content, feeling emotionally connected to the narrative into the story world they portray, leading to engaging behavior toward these ads (Phillips & McQuarrie, 2010).

Colors of images, specifically, are known to have a psychological impact on customers' behavior and decisions (Bytyçi, 2020). In particular, the high importance of color in visual communication stems from its strong emotional loading (Panigyrakis & Kyrousi, 2015). Color, as a fundamental visual feature, can thus be used as an effective communication tool for luxury ads, which can increase their persuasiveness (Singh & Srivastava, 2011). We focus specifically on color saturation because it is known to promote positive advertising attitudes and purchasing intentions toward luxury products specifically (Kim et al., 2020).

Building on previous research findings, our study seeks to explore the interplay between color saturation, visual storytelling, and customer need for status to shape luxury purchase intentions. Previous research has shown that customers respond better to advertisements with saturated colors (Sharma, 2021). And indicates that advertisements with high color saturation evoke excitement, which positively affects viewers' attitudes towards the ads (Gorn et al., 1997). Thus, we explore the direct effect of color saturation on the intent to purchase, positing that higher saturation may evoke stronger emotional responses that facilitate luxury brand success by affecting a person exposed to a visual ad.

Furthermore, we extend our inquiry into the mediating role of the variable “visual storytelling” by examining how it transforms the impact of color saturation into a compelling narrative that engages customers.

This approach not only advances the understanding of narrative persuasion in marketing, but also highlights the relationship between visuals and storytelling in shaping customer preferences. Crucially, our research also investigates the role of a customer's need for status as a potential moderator, examining how personal preferences for need of status might enhance or diminish the impact of visual elements on the purchase decision. Since individuals with a higher need for status are frequently exposed to luxury advertisements and may thus become less affected by the high-status visuals due to overexposure (Bambauer-Sachse & Heinzle, 2018). Through our research, we offer strategic directions for luxury brands to refine their visual communication tactics in a way that is both scientifically grounded and tailored to the preferences of their target audience.

To fulfill the aims of our research, our research methodology uses a quantitative method. We develop a structured questionnaire to explore how color influences customer behavior.

Our findings reveal interesting results in the impact of color saturation on visual storytelling and customer purchase intention. Specifically, while we expected that visual storytelling would mediate the relationship between color saturation and purchase intentions, the data suggest that the mediation effect is insignificant. This indicates that while color saturation directly affects purchase intentions, visual storytelling may not significantly enhance this effect.

Additionally, the study examines if the need for status by an individual affects the relationship between visual storytelling and purchase intention, the results show that this effect only happens at high levels of need for status, but the data provided does not, however, fully support this.

## **2. Literature Review and Hypothesis Development**

### **2.1. Storytelling and Transportation Theory**

#### **2.1.1. Usage and Importance of Storytelling for Brands**

Stories and storytelling are central to achieving a deep understanding of customer psychology (Escalas & Stern, 2003; Holt, 2004). Storytelling for brands also means a remarkably valuable communication tool (Herskovitz & Crystal, 2010), it has been found to have a strong effect in stimulating attitudes and intentions because of the narrative processing it induces (Van Laer et al., 2013; Lund et al., 2018). Narrative processing refers to a condition that can evoke deep customer involvement (Kang, Hong & Hubbard, 2020) into a story.

According to Escalas (2004), the comprehensiveness and richness of brand's storytelling can differentiate it from other brands with a more analytical and simpler introduction. Stories evoke more natural cognitive processing and convey more sensitive emotions for customers, who then ascribe positive attitudes to brands through a process called "narrative transportation".

Narrative transportation refers to the immersion into a story experienced by a customer. We will view visual storytelling through the lens of narrative transportation, through which customers experience cognitive and affective engagement with the stories, including narrative ads of brands (Dessart, 2018).

Storytelling in ads is a form of advertising that communicates about a brand (Woodside, Sood, & Miller, 2008), a product, or a service in a story-like format (Wentzel, Tomczak, & Herrmann, 2010). Using storytelling in ads does not always feature the product but rather focuses on conveying the brand values through emotion-laden stories. Because people think narratively rather than argumentatively (Weick, 1995), storytelling in ads can be a powerful tool to engage customers, as evidenced by customer behavior research (Woodside et al., 2008). Thus, brands can leverage storytelling in ads to transport audiences into immersive narratives. "Transportation" is conceptualized as a distinct psychological process, which involves a combination of attention, imagery, and feelings (Anaza et al., 2020; & Lim and Childs, 2020).

It refers to the extent to which story receivers are immersed in a story or conveyed into a narrative such that they become absorbed in the actions happening in the narrative (Green et al., 2004). Additionally, storytelling enables rational, emotional, and relationship-building experiences. Through these relationship-building experiences, story receivers are often moved to action (Pera & Viglia, 2016; & Lim and Childs, 2020). Subsequently, transportation into narratives can influence their beliefs and attitude and establish the grounds for stronger bonds and relationships (Halton, 1992). This, in turn, can result in strong emotional experiences and personal identification with characters in the narrative (Green et al., 2004).

Transportation applies to the advertising context, too. When an ad adopts narrative components, audiences go through narrative processing to respond to the ad (Kang, Hong & Hubbard, 2020). Thus, ads with storytelling elements are effective due to their ability to create mental imagery and concisely communicate information (Gilliam & Flaherty, 2015). This is because people tend to store information in the form of stories (Halton, 1992), which facilitates recall (Lundqvist, Liljander, Gummerus, and Van Riel, 2013). Storytelling advertising can also evoke customer emotions as it links stories to personal experiences (Escalas, 2007).

The impact of storytelling in advertising already appears in various contexts, such as in terms of purchase intention (Van Laer, de Ruyter, Visconti & Wetzels, 2013). Escalas (2004) suggests that customers could generate positive emotions through storytelling and evaluate the product more favorably. As such, customers who have positive emotions toward a brand tend to have a higher purchase intention (Kim & Lennon, 2013). This is supported by previous research suggesting that when storytelling has a powerful attachment to the brand, the story creates positive brand associations with customers, leading to a higher purchase (Hsiao et al., 2013; Lundqvist et al., 2013).

Within the realm of storytelling's impact, luxury brands distinguish themselves by focusing on experiences, storytelling around purpose and values, heritage, and authenticity to remain relevant to the customers (Alves, 2020).

The core focus of luxury brand communication is to captivate the customer into the dream world of the brand to create desire and, ultimately, sales (Kapferer & Bastien, 2012). Thus, luxury brands are using storytelling to construct their symbolic value and create persuasive brand stories for customers (Aaker & Aaker, 2016). They also use more intense storytelling in their ads, which may potentially facilitate the aesthetic immersion of the customer into the created fiction (Gurzki, Schlatter & Woisetschläger, 2019).

### **2.1.2. Storytelling in a Visual Context**

In this study, we explore how storytelling principles are applied to the creation and reception of visual ads. Accordingly, this subchapter examines how the recipient experiences being "transported" into a visual story through visual ads.

While the term "storytelling" is often used for verbal stories, narratives are not limited to the use of language. It is also possible to tell stories without words; these stories are usually conveyed through images (Sibierska, 2017), for example, in the form of visual narrative ads (Stackelberg & Jones 2014).

Through visual stories, customers can visualize the events and actions portrayed in an image in their imagination (Woodside, Sood & Miller, 2008). The study by Megehee & Spake (2012) highlights that narrative content in a visual format, especially in the luxury segment, helps revise and deepen sense-making about the story events, as well as what the complete story implies about the individual and others.

This creates a uniquely satisfying visual, sensory, and holistic experience for the customer (Caroline et al., 2010). This can be achieved by making the visual advertisement of luxury brands a consuming and desirable experience for their customers, which would then alter into a compelling visual story (Kim et al., 2016) and aspirational creative luxury images (Gurzki, Schlatter & Woisetschläger, 2019).

### 2.1.3. Color as a Tool for Storytelling

Color can be a form of non-verbal communication, and each color has its own characteristics and meaning. In fact, the recognition and perception of colors are connected not only to eyes but also to brain, emotion, and experiences (Leichtling, 2002). Despite being often overlooked in marketing and storytelling research, colors can be essential for storytelling due to their salience (Barker, 2014) and to convey both embodied and referential meaning through communicating various psychological cues that can enhance narrative depth in marketing content (Labrecque, Lauren I., 2020).

Research on color saturation has largely explored its psychological effects and implications in areas such as customer goods, suggesting that it can influence customer attitudes and behaviors (Fu, Cheng, Bilgihan & Okumus, 2024; Labrecque & Milne, 2012). More research is needed because of the strong effects of saturation, especially in luxury marketing and storytelling.

Related research showed that colors with different saturation could influence an individual's cognition and behavior, specifically high saturated colors, which are the sensory stimulus that can induce higher emotional arousal to impact customer's judgment (Xiao, Zhu, Wang & Wu, 2021). This provides an opportunity for further research to understand how luxury brands can use saturated colors to enhance visual storytelling and customer response.

Color saturation corresponds to the degree of intensity, richness, strength, or purity of a color (**Figure 1**). In simple terms, as a color's saturation increases, the color's appearance becomes more pure and intense; as the saturation decreases, the color's appearance begins to look pale or washed out (Labrecque, 2020).

Existing literature indicates that certain color characteristics in an ad may influence the purchase intent of customers (Labrecque & Milne, 2012). Since color has a great impact on the image appearance (You, Sun, Yang & Yang, 2019), we study color characteristics, particularly saturation, and its impact on customer purchase intention.

Prior work has found generally favorable customer responses to saturated color (Bellizzi et al. 1983). Results from the literature also show that ads with high saturation prompted feelings of excitement, which favorably influenced attitude toward the ad (Gorn et al., 1997). Moreover, high saturation of an advertisement's dominant color affects the level of pleasure induced by the ad's visualization, increasing positive attitudes toward the ad. Consequently, purchase intention increases (Biers & Richards, 2005; Wilms & Oberfeld, 2018). With luxury ads, studies show that high color saturation promotes positive advertising attitudes and purchasing intentions toward luxury products (Wang, Wang, Mu & Sun, 2022).

However, it is worth highlighting that not all studies in marketing and psychology indicate that high color saturation increases purchase intention. On the contrary, some show that stimuli with low saturated colors could draw customers' attention (Hagtvedt & Brasel, 2017), which in turn affects customers' evaluation of the product and their willingness to pay (Li, Li, Zhao & Atipanya, 2023).

This confirms that further research is needed to confirm or refute this relationship. Hence, this hypothesis is proposed:

*H1: Higher (vs. lower) saturation of luxury brand's visual ads will lead to higher (vs. lower) customer purchase intention.*

**Figure 1:** Overview of color characteristics (saturation).





An experiment by Camgöz et al. (2002) shows that colors of maximum saturation and brightness also attract the most attention. In the advertising context, too, high color saturation grabs customer attention, enhancing ad's visual appeal and memorability (Labrecque & Milne, 2012). Furthermore, a study by Singh & Srivastava (2011) examined how color saturation affects customers' responses and emotions towards ads. The findings suggest that colors with a high saturation level can trigger a strong emotional response, increasing the bond between customers and brands such that color saturation may be able to trigger narrative transportation through emotion stimulating, effectively enhancing visual storytelling by deeply immersing viewers in the story world.

Building upon these insights, the existing studies have shown that visual storytelling is an important factor in evoking customer purchase intention and have examined visual storytelling as a mediator.

Specifically, in the luxury brand sector, Kim et al. (2016) demonstrated how consumers attach their personal meanings to imagery in the brand's ad, suggesting an image's stand-alone ability to convey stories. Furthermore, another study reveals that visual storytelling drives customers to acquire experiences related to products, services, and brands as props/tools and expressions of self (Megehee & Spake, 2012). Based on this evidence, we expect that recipients will be more intent to purchase when confronted with marketing visuals that trigger storytelling.

Additionally, research indicates that persuasive resistance will decrease when customers get immersed into a story. The number of negative thoughts reduces (Escalas, 2004) meaning that stories are able to affect purchasing decisions by engaging consumers at a somewhat more individual and emotional stage (Escalas & Stern, 2003; Green & Brock, 2004). In line with this, Helle (2011) shows that the colors of an image conjure a viewer's reflective attention, and the viewer visualizes him/herself in the presented image, thereby being transported mentally into the displayed story. Consequently, we expect that visual storytelling, the variable that is defined as a story conveyed through images (Sibierska 2017), positively mediates the effect between color saturation and customer purchase intention.



By doing so, we add the studies that have already underscored the mediating effect of visual storytelling (Kim et al., 2016; Megehee & Spake, 2012) and suggest that color saturation can trigger this phenomenon (Labrecque & Milne, 2012; Hagtvedt & Brasel, 2017). Hence, we propose:

*H2: Visual storytelling will mediate the relationship between color saturation of a luxury brand's visual ad and customer purchase intention, so that higher levels of visual storytelling will lead to higher purchase intention.*

To take a holistic view of visual storytelling, we additionally examine moderating influences. In doing so, we address the characteristics of the story recipient, examining how the customers' degree of visual storytelling changes based on their need for status in a luxury context.

The need for status can be defined as people trying to distance themselves from those in a lower class (Pierre, 1987). Accordingly, luxury consumption typically involves aspirations of elite status or is viewed as an attempt to gain symbolic dominance over others (Dion & Arnould, 2011). Luxury brands offer to "transport" the customer from the ordinary and into the magical world of the brand (Dion & Arnould, 2011). Within the framework of visual storytelling theory, compelling and captivating visuals that are able to evoke emotions through stories result in deeper engagement with the audience and drive customers to a decision, such as buying a product or service (Nguyen, 2021).

Based on this, we hypothesize that individuals with a strong need for status will be more immersed in a story that expresses that need and thus have an increased potential for purchase (Megehee & Spake, 2012). Thus, the positive relationship between visual storytelling and customer purchase intention will be enhanced for individuals with a heightened need for status. Hence, this hypothesis is proposed:

*H3: An individual's need for status will moderate the effect of visual storytelling on customer purchase intention, so that higher levels of the individual's need for status will lead to higher purchase intention.*

To further elaborate on recommendations on creating visuals that prompt storytelling, we focus on the following research question that serves as a comprehensive framework for this thesis:

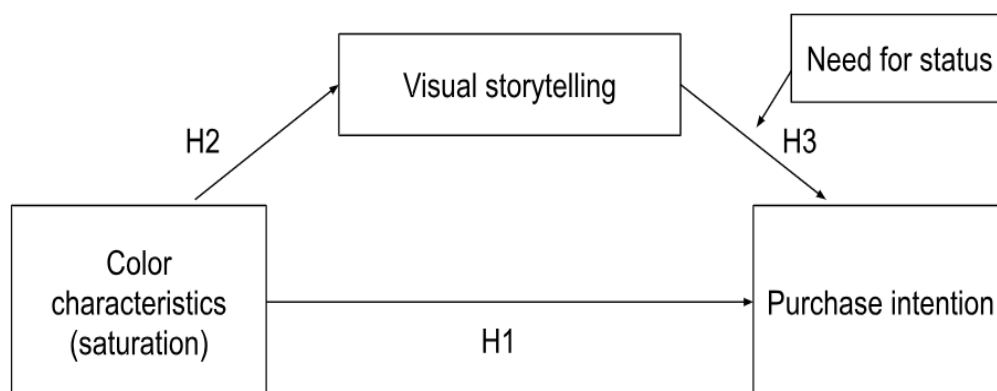
*How does color saturation affect visual storytelling and subsequent customer responses (e.g., purchase intention)?*

We deepen the existing research and attempt to 1) validate the findings for luxury advertising communication and 2) find the underlying processes of this effect (visual storytelling). Therefore, this paper focuses on the visual storytelling of the following factors: individual preference (need for status), and color characteristics (saturation).

## 2.2. Conceptual Framework

Figure 2 illustrates the conceptual framework of this study, which shows the relationship between color saturation (independent variable) and customer purchase intention (dependent variable), in addition to visual storytelling acting as a mediator object, which examines the influence of customer level needs on the moderating relationship between visual storytelling and purchase intentions. The subsequent chapters draw on the existing literature to explain this integration, providing a theoretical foundation for expected relationships in a luxury brand context.

**Figure 2:** *Conceptual Framework.*



### 3. Methodology

#### 3.1. Study

##### 3.1.1. Stimuli and Procedure

The effects of color saturation on customer purchase intentions will be examined in this study, with a focus on the luxury brand segment, and visual storytelling investigated as a mediator. The survey was done online and shared through various social networks. For an authentic evaluation of consumer behavior, we had only opted for those who showed interest in luxury brand products to participate. Our study employed a 2 x 1 (color saturation: high vs. low) between-subject design (**Figure 3**)

To this end, we asked a screening question at the beginning of the survey (“Are you interested in luxury brand products?”). Only participants who answered “yes” could participate in the study. The survey received 175 valid responses with respondents mainly between the ages of 18 and 24, and provided a balanced mix of both genders (70% females, 30% males), which included students and working professionals. In terms of income, 70% of participants received less than 2000 euros monthly, and the rest between 2000 and 3999 euros. Our research focuses on the effect of color saturation on purchase intentions - through visual storytelling - and the possible role of needs for status as a moderator.

**Figure 3:** *the visual stimuli from the survey.*



Participants were randomly assigned to one of two conditions: high color or low color saturation in luxury brand advertisements. Manipulation tests were conducted to assess the effectiveness of our manipulation of visual stimuli (Paas, Dolnicar & Karlsson, 2018). Specifically, participants were asked to rate the intensity of the colors in the ad they saw. This question served to confirm whether participants noticed the manipulation of color saturation.

### 3.1.2. Scales and Measures

Data were collected using 7-point Likert-scales, each designed to assess different aspects of the participants' reactions to the ads. The scales are provided in **Table 1**.

**Table 1:** Variable Measurements and Internal Consistency.

Variable	Reference	Scale items	Cronbach's alpha
Visual Storytelling	Kim et al. (2016); Green and Brock (2004); Lundqvist, Liljander, Gummerus, and Van Riel (2013); Stackelberg and Jones (2014)	<ul style="list-style-type: none"> <li>- I could picture myself in the scene of the events described in the ad.</li> <li>- While viewing this ad, I was mentally transported into the world of the advertisement.</li> <li>- I was emotionally involved in this ad.</li> <li>- Remembering the ad in the future.</li> <li>- The ad effectively tells a story.</li> </ul>	0.81
Purchase Intention	Kim and Lennon (2013);	I consider purchasing the product featured in the ad.	0.86
Need for Status	Dion and Arnould (2011)	<ul style="list-style-type: none"> <li>- Owning luxury items makes me feel more esteemed among my peers.</li> <li>- The brands of my possessions help define my social status.</li> <li>- How would you rate the intensity of the colors used in the advertisement you just viewed?</li> </ul>	0.83

### 3.1.3. Analysis and Results

The analysis involves several statistical tests. First, we run:

ANOVA to establish the main effects, that is, compare the means of purchase intention and the perceived effectiveness of visual storytelling based on the saturation level. Then, Process Macro analysis is used to integrate both mediation and moderation analyses (Hayes & Rockwood, 2020). With this, we assess the indirect effect of color saturation on purchase intention through visual storytelling and how it changes at different levels of customers' need for status.

These analyses will help determine the direct effects of color saturation, the mediating role of visual storytelling, and the moderating impact of need for status on customer behavior toward luxury brand products.

In the following paragraphs, we test the hypotheses with the statistical tests. We first analyze the main effects of high vs. low color saturation on purchase intention and the perceived effectiveness of visual storytelling, then examine the mediating effect of visual storytelling, and finally consider the moderator variable. Visual storytelling in the ads was rated with ( $M = 3.81$ ,  $SD = 1.56$ ). Purchase intention towards luxury brands showed ( $M = 3.81$ ,  $SD = 2.03$ ), and the need for status ( $M = 4.02$ ,  $SD = 1.61$ ).

#### 3.1.3.1. Direct Effects

This section analyzes how high or low color saturation influences visual storytelling and purchase intention of luxury products.

Before modeling, we examine manipulation success. Here, the perceived levels of color intensity serve as manipulation checks. For this purpose, a t-test is performed to determine the significant difference between the groups based on color saturation is significant. The results of this test (**Table 2**) show significant differences between high and low color saturation. ( $M_{\text{low saturation}} = 3.37$ ,  $M_{\text{high saturation}} = 4.53$ ,  $M_{\text{diff}} = 1.16$ ,  $p < 0.01$ ). Thus, we can conclude that the manipulation is successful, and we can, therefore, continue with the following analysis.

**Table 2: Manipulation Check.**

		N	mean	p-value
Saturation	High saturation	88	4.53	0.00**
	Low saturation	87	3.37	

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

Since we later test for both moderation and mediation, we analyze the main effects using ANOVA, which tests the differences in means of purchase intention and visual storytelling based on high versus low color saturation of the image customers see. For both purchase intention (PI) and visual storytelling (VS), the ANOVA results show a statistically significant difference in customer purchase intention between higher and lower saturation levels of luxury brand's visual ads (as indicated by the  $p$ -values  $< 0.05$ ).

The results indicate a significant difference in purchase intention between the low ( $M = 3.49$ ,  $SD = 2.02$ ) and high ( $M = 4.11$ ,  $SD = 2.00$ ) conditions ( $p = 0.044$ ). Similarly, there is a significant difference of color saturation on visual storytelling between the low ( $M = 3.56$ ,  $SD = 1.47$ ) and high ( $M = 4.07$ ,  $SD = 1.62$ ) conditions ( $p = 0.030$ ). Therefore, these findings do support hypothesis H1 that states higher color saturation leads to increased purchase intention.

**Table 3: ANOVA Analysis H1.**

		N	Mean	St. Deviation	p-value
Purchase intention	low	87	3.49	2.02	.044
Purchase intention	high	88	4.11	2.00	.044
Visual storytelling	low	87	3.56	1.47	.030
Visual storytelling	high	88	4.07	1.62	.030

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

### 3.1.3.2. Mediating Effects

To examine the mediation hypothesis, hypothesizing that visual storytelling will mediate the relationship between color saturation of a luxury brand's ad and customer purchase intention, so that higher levels of visual storytelling will lead to higher purchase intention, we employ the Hayes PROCESS macro model 7. Based on the analysis, we find that visual storytelling has a significant positive impact on purchase intention ( $\beta = 0.90$ ,  $p < .0001$ ), indicating that effective visual storytelling significantly enhances the likelihood of purchase intention. Furthermore, we aim to investigate the possible role of visual storytelling as a mediator in examining the mediator mechanism by which color saturation affects purchase intention. Our data shows an insignificant effect showing that purchase intention is not affected by color saturation through visual storytelling (effect = -0.88, BootSE = 0.27, BootLLCI = -0.85, BootULCI = 0.21). This is because the interval of confidence includes zero thus confirming that the mediation effect is insignificant. As such, it cannot be concluded with certainty that visual storytelling serves as a mediator between color saturation and purchase intention.

**Table 4:** *PROCESS Macro Model 7 Analysis H2.*

Effect	Coefficient	Standard	t-value	p-value	95% IC Lower	95% IC Upper
	( $\beta$ )	Error (SE)				
Cond => VS	-0.98	0.55	-1.78	0.07	-2.07	0.10
VS => PI	0.90	0.07	12.71	<0.00	0.76	1.04
Indirect effect (Cond=>VS=>PI)	-0.88	0.27	-	-	-0.85	0.21

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

### 3.1.3.3. Moderating Effects

In addition, we test how an individual's need for status moderates the effect of visual storytelling on purchase intention. We expected that higher levels of the individual's need for status will lead to higher purchase intention (H3).

Table 4 shows the results of the PROCESS macro model 7 for moderation analysis, which tests the need for status as a moderator. The variable "Need for Status" (NFS) was divided into three levels by employing the quantile split method in our study: low (below 33rd percentile), medium (between 33rd and 66th percentiles), and high (above 66th percentile). We report that need for status at a low NFS level (2.33), the effect was negative (-0.35) but not statistically significant ( $t = -1.19$ ,  $p = 0.23$ ), with a confidence interval from -0.93 to 0.23. At a medium NFS level (4), the effect was slightly positive (0.10) but still insignificant ( $t = 0.48$ ,  $p = 0.62$ ), with a confidence interval from -0.30 to 0.50. However, at a high NFS level (5.66), the effect increased to 0.55, approaching significance ( $t = 1.86$ ,  $p = 0.06$ ), with a confidence interval from -0.03 to 1.13, suggesting that NFS could positively influence the relationship between visual storytelling and purchase intention, but is not fully supported by the data.

**Table 5:** *PROCESS macro model 7 analysis H3.*

Effect Upper	Coefficient ( $\beta$ )	Standard Error (SE)	t-value	p-value	95% IC Lower	95% IC Upper
NFS Effect at 2.33	-0.35	0.29	-1.19	0.23	-0.93	0.23
NFS Effect at 4	0.10	0.20	0.48	0.62	-0.30	0.50
NFS Effect at 5.66	0.55	0.29	1.86	0.06	-0.03	1.13

\*  $p < 0.05$ . \*\*  $p < 0.01$ .



### 3.1.4. Discussion

The study used is a controlled online survey investigating customer responses to high versus low color saturation in luxury brands ads and its effect on purchase intention, assessing the mediating role of visual storytelling. Our hypothesis states that the use of high color saturation in luxury brands ads can lead to increased purchase intention. In addition, we explored how individual preferences, such as the need for status (NFS), may moderate the relationship between visual storytelling and purchase intention.

The results of this study suggested that high color saturation could boost purchase intentions. **Hypothesis H1 is thus supported by our data.** These outcomes could be attributed to the impact of ads' usage of high saturated colors. Previous research conducted by Kim et al. (2020) has already demonstrated that high color saturation promotes positive advertising attitudes and purchasing intentions toward luxury products. However, as a mediator, visual storytelling represents non-significant indirect effects. Visual storytelling does not mediate the relationship between color saturation and purchase intention. Therefore, we **reject hypothesis H2.** This could be due to the complexity of how visual storytelling and narratives interact in luxury ads and their impact on customer behavior; this means that while visual storytelling is important, its effectiveness can depend on how color saturation is managed in those ads.

We additionally tested for the moderating factor that influences the relationship between visual storytelling and purchase intention. Generally, our findings did not support that individual's need for status can positively influence the relationship between visual storytelling and purchase intention. Thus, **hypothesis H3 is not supported by our data.** However, we find indications that while individual's need for status does not have a statistically significant moderating effect across the board, at higher levels, it could positively influence the relationship between visual storytelling and purchase intention. Therefore, further investigation with a larger sample might provide clearer insights.

#### **4. General Discussion and Conclusion**

The aim of this research was to answer the following research question:

*How does color saturation affect visual storytelling and subsequent customer responses (e.g., purchase intention)?*

Initially, our investigation focuses on examining the direct impact of color saturation on customer purchase intention. To investigate the relationship between color saturation in luxury ads and customer purchase intentions, we conducted a controlled experiment with a questionnaire that relied on participants' responses after seeing luxury ads. In this study, we conducted an online survey among 175 participants, presenting them with two visual ads (high vs. low color saturation) from a luxury brand's ad.

The results differed in the study across different variables. These differences in results may be due to differences in measurement methodology as well as the sample's size. Therefore, it is important to interpret the findings from the survey with caution because of the sample. We conclude that using high saturated colors on a luxury ad led to high purchase intention. However, contrary to our expectations, visual storytelling did not mediate the relationship between color saturation and purchase intention.

The analysis indicated an insignificant indirect effect, suggesting that while visual storytelling itself has a direct impact on storytelling, it does not mediate the influence of color saturation on purchase intentions. Additionally, the need for status was hypothesized to moderate the effect of visual storytelling on purchase intention. The results showed that higher status needs as a moderator, tended to increase purchase intentions, although this was not statistically significant in general. This comprehensive study allows us to conclude that although color saturation directly affects purchase intentions, further research is needed to better understand the role of visual storytelling and individual's need for status, and their impacts on luxury brand marketing.

In general, the disparities between the results of the study, specifically the mediating and moderating effects of visual storytelling and need for status, could be from the complexity of how participants absorb storytelling. Another factor could be participants' focus on visuals rather than the storytelling content, affecting its role as a mediator between color saturation and purchase intention. Moreover, for the need for status, its impact might not be strong or consistent enough across different status levels to show a significant moderating effect of the relationship between visual storytelling and purchase intention.

## **5. Limitations and Further Research**

The study explores the effect of color saturation on customer's purchase intention, while providing insights into the outcomes of visual storytelling as a mediator and individual's need for status as a moderator. However, due to the limited scope of this study, there are opportunities for future research to address the current limitations that we address below.

First, increasing the sample size could improve the depth of the study results, especially when considering that participants got the survey from different social networks randomly. Targeting more specific groups, such as luxury brands customers, could provide more relevant insights and enhance the statistical power of the study.

In addition, future research would benefit from adopting a comprehensive two-stage approach to examine the conceptual framework as a whole. Although our study focused on comparing analysis outcomes between variables of the study, a deeper understanding can be achieved by conducting two studies incorporating each dimension of the conceptual framework. Third, visuals from a real luxury brand were used with the online survey, therefore limiting the generalizability of the results. Thus, studies of this nature may be carried out with a conceptual brand to counter perhaps biased perceptions and experiences associated with the existing brand. Also, it should be noted that sample studied in research of this study has limited diversity in sociodemographic characteristics. The majority of respondents were

Generation Z (76%), which limits the ability to make meaningful comparisons with other age groups.

However, given the anticipated significant differences in luxury brand consumption among age groups participating in this study, this population provided us with a reasonable sample size. However, to address a notable research gap, it would be useful to conduct a detailed study on the effectiveness of color saturation and visual storytelling on customers who actually purchase luxury items instead of the ones who are only interested in luxury brands.

The primary objective of this study is to narrowly examine the visual content in luxury ads. This is bounded by the relationships amongst color saturation, visual storytelling, need for status and purchase intentions in the context of luxury brand. Future research should possibly investigate the use of visual storytelling across different formats such as video ads content because it may have differential impacts on consumers compared to images' format.

Additionally, our study primarily examines the effects of needs for status on customer responses to visual storytelling. Future research could enhance this research by considering for example the effects of storyteller characteristics, such as the relationship between luxury products and ads messages.

This extended research could provide a more comprehensive understanding of how those elements visually affect customer behavior towards luxury brands.

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## Appendix

### Questionnaire of the study

#### GDPR



Dear respondent,

I'm a student in the Master of Management 2023/2024 programme, specialising in International Marketing Strategy at the University of Hasselt.

You are about to participate in a study on the Impact of Visual Elements in Luxury Brand Advertising. This survey aims to explore how color saturation and visual storytelling influence your perception of luxury brands and your intention to purchase their products. This study is conducted as part of my master thesis under the supervision of Olesia NIKULINA and Prof. Allard VAN RIEL.

Under the General Data Protection Regulation (GDPR) (EU) 2016/679, we have a legal duty to protect any information we collect from you. Information contained in this survey is confidential and is intended for the exclusive use of the thesis.

You will need around 5 minutes to complete the entire survey. There are no right or wrong answers.

Thank you in advance for your time, we appreciate your help!

Kind regards,

Fatima Zahrae Berhniche

### Screening question

Are you interested in luxury brand products?

☐ Yes

☐ No

### Stimuli

Each participant is randomly assigned to one of the following conditions of color saturation.

Low



High



## **Visual Storytelling**

Please rate your agreement with the following statements after viewing this ad:

"I could picture myself in the scene of the events described in the ad."

☐ Strongly disagree

☐ Disagree

☐ Somewhat disagree

☐ Neither agree nor disagree

☐ Somewhat agree

☐ Agree

☐ Strongly agree

Please rate your agreement with the following statements after viewing this ad:

"While viewing this ad, I was mentally transported into the world of the advertisement."

☐ Strongly disagree

☐ Disagree

☐ Somewhat disagree

☐ Neither agree nor disagree

☐ Somewhat agree

☐ Agree

☐ Strongly agree

Please rate your agreement with the following statements after viewing this ad:

"I was emotionally involved in this ad."

☐ Strongly disagree

☐ Disagree

☐ Somewhat disagree

☐ Neither agree nor disagree

☐ Somewhat agree

☐ Agree

☐ Strongly agree

How likely are you to remember this advertisement in the future?

☐ Extremely unlikely

☐ Moderately unlikely

☐ Slightly unlikely

☐ Neither likely nor unlikely

☐ Slightly likely

☐ Moderately likely

☐ Extremely likely



How effectively do you think this ad tells a story?

- ☐ Not effective at all
- ☐ Barely effective
- ☐ Somewhat effective
- ☐ Moderately effective
- ☐ Very effective
- ☐ Extremely effective
- ☐ Completely effective

### **Purchase Intention**

Based on the ad you viewed, how likely are you to consider purchasing the product featured in the advertisement?

- ☐ Extremely unlikely
- ☐ Moderately unlikely
- ☐ Slightly unlikely
- ☐ Neither likely nor unlikely
- ☐ Slightly likely
- ☐ Moderately likely
- ☐ Extremely likely

## **Need for Status**

Please rate your agreement with the following statements regarding the importance of owning luxury products:

"Owning luxury items makes me feel more esteemed among my peers."

☐ Strongly disagree

☐ Disagree

☐ Somewhat disagree

☐ Neither agree nor disagree

☐ Somewhat agree

☐ Agree

☐ Strongly agree

Please rate your agreement with the following statements regarding the importance of owning luxury products:

"The brands of my possessions help define my social status."

☐ Strongly disagree

☐ Disagree

☐ Somewhat disagree

☐ Neither agree nor disagree

☐ Somewhat agree

☐ Agree

☐ Strongly agree

## **Manipulation Check**

How would you rate the intensity of the colors used in the advertisement you just viewed?

- ☐ Very low intensity
- ☐ Low intensity
- ☐ Slightly low intensity
- ☐ Neutral
- ☐ High intensity
- ☐ Very high intensity
- ☐ Extremely high intensity

## **Sociodemographics**

### **Age**

Please select your age

- ☐ Under 18
- ☐ 18 - 24
- ☐ 25 - 34
- ☐ 35 +

---

### **Gender**

Please select your gender

- ☐ Male
- ☐ Female
- ☐ Non-binary / third gender
- ☐ Prefer not to say

## **Occupation**

Please select if you study or work

☐ study

☐ work

---

## **Income**

if you work, What is your approximate monthly income?

☐ Under €2,000

☐ €2,000-€3,999

☐ €4,000-€5,999

☐ €6,000+

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## SPSS Analysis

### ANOVA Analysis

#### Descriptives

PI

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Low saturation	87	3.49	2.028	.217	3.06	3.93	1	7
High saturation	88	4.11	2.002	.213	3.69	4.54	1	7
Total	175	3.81	2.033	.154	3.50	4.11	1	7

#### Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
PI	Based on Mean	.189	1	173	.664
	Based on Median	.016	1	173	.901
	Based on Median and with adjusted df	.016	1	172.350	.901
	Based on trimmed mean	.220	1	173	.639

#### ANOVA

PI

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.784	1	16.784	4.133	.044
Within Groups	702.611	173	4.061		
Total	719.394	174			

### ANOVA Effect Sizes<sup>a,b</sup>

			95% Confidence Interval	
Point Estimate			Lower	Upper
PI	Eta-squared	.023	.000	.084
	Epsilon-squared	.018	-.006	.079
	Omega-squared Fixed-effect	.018	-.006	.078
	Omega-squared Random-effect	.018	-.006	.078

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

### Oneway

#### Descriptives

VS

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Low saturation	87	3.556	1.4736	.1580	3.242	3.870	1.0	6.4
High saturation	88	4.070	1.6211	.1728	3.727	4.414	1.0	7.0
Total	175	3.815	1.5665	.1184	3.581	4.049	1.0	7.0

### Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
VS	Based on Mean	.606	1	173	.437
	Based on Median	.564	1	173	.453
	Based on Median and with adjusted df	.564	1	168.715	.454
	Based on trimmed mean	.601	1	173	.439

### ANOVA

VS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.564	1	11.564	4.816	.030
Within Groups	415.397	173	2.401		
Total	426.961	174			

### ANOVA Effect Sizes<sup>a,b</sup>

		Point Estimate	95% Confidence Interval	
			Lower	Upper
VS	Eta-squared	.027	.000	.090
	Epsilon-squared	.021	-.006	.085
	Omega-squared Fixed-effect	.021	-.006	.084
	Omega-squared Random-effect	.021	-.006	.084

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

## Mediation Effect

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Version 4.2 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D. [www.afhayes.com](http://www.afhayes.com)  
Documentation available in Hayes (2022). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model : 7  
Y : PI  
X : Cond  
M : VS  
W : NFS

Sample  
Size: 175

\*\*\*\*\*

OUTCOME VARIABLE:  
VS

Model Summary

R	R-sq	MSE	F	df1	df2	p
.5534	.3062	1.7323	25.1572	3.0000	171.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.2036	.8351	3.8360	.0002	1.5551	4.8522
Cond	-.9865	.5513	-1.7893	.0753	-2.0747	.1018
NFS	.0986	.2046	.4822	.6303	-.3051	.5024
Int_1	.2716	.1278	2.1257	.0350	.0194	.5238

Model Summary

R	R-sq	MSE	F	df1	df2	p
.7045	.4964	2.1065	84.7553	2.0000	172.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	.1214	.4095	.2964	.7673	-.6870	.9298
Cond	.1540	.2225	.6924	.4896	-.2851	.5932
VS	.9051	.0712	12.7100	.0000	.7645	1.0457



\*\*\*\*\* DIRECT AND INDIRECT EFFECTS OF X ON Y \*\*\*\*\*

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.1540	.2225	.6924	.4896	-.2851	.5932

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

Cond -> VS -> PI

NFS	Effect	BootSE	BootLLCI	BootULCI
2.3333	-.3192	.2704	-.8466	.2130
4.0000	.0905	.1867	-.2679	.4556
5.6667	.5002	.2822	-.0391	1.0642

Index of moderated mediation:

Index	BootSE	BootLLCI	BootULCI
NFS .2458	.1223	.0067	.4870

\*\*\*\*\*

## Moderating Effect

Test(s) of highest order unconditional interaction(s):

R2-chng	F	df1	df2	p
X*W .0183	4.5186	1.0000	171.0000	.0350

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Focal predict: Cond (X)

Mod var: NFS (W)

Conditional effects of the focal predictor at values of the moderator(s):

NFS	Effect	se	t	p	LLCI	ULCI
2.3333	-.3527	.2963	-1.1904	.2356	-.9376	.2322
4.0000	.1000	.2056	.4863	.6274	-.3058	.5057
5.6667	.5527	.2956	1.8693	.0633	-.0309	1.1362