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**Visual Merchandising Influence on Fashion Brands' Equity –
Consumer Perspective**

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Abstract

Nowadays brands are spending a lot of money creating its brand image, still, many times they neglect the visual aspects of stores while it reflects the face of brands. Using a descriptive method with Factor Analyses and multiple regressions, the present research suggests that visual merchandising dimensions can influence the value customers attribute to brands. Two main dimensions of visual merchandising and three constructs of consumer-based brand equity were found and their relationships recommend fashion retailers should consider interior and layout aspects in consumers' favourable and strength of associations of their brands, and the exterior window displays in terms of awareness.

Keywords: Visual Merchandising, Consumer-based brand equity, brand image, fashion retail brands, Factor Analysis

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1. Introduction

It is easy to sell anything, difficult is to develop a brand. In modern times, stores are becoming a place where people go to enjoy a different experience that will make them feel good (Hefer & Cant, 2013). Visual merchandising has an essential role in inferring different customers' perceptions and add value to brands. Its main objective is no longer just making products attractive to sell them fast; it is about standing out, building the right brand image and provide the best customer experience possible. In their study on hedonic shopping motivations, Arnold and Reynolds (2003) have an interest view on this by calling it "entertailing", the entertainment facet of retailing (Arnold & Reynolds, 2003). As retail brands strive to succeed in the already saturated market, visual merchandising becomes an important factor of differentiation from retailers in the same category. Consumers make their purchase decisions at the actual point of sale up to 80 percent of the time (Ebster & Garaus, 2011), and it's time for companies to take advantage of that and consider visual merchandising in its retail strategy. It is recognized that many benefits can come from this technique - it communicates directly with the target customers, change their behaviour and hopefully lead to a purchase. If properly used, visual merchandising elements can enter the buyer's consciousness and instigate them to form a positive evaluation of the store, and thus, leverage its brand image (Nistorescu & Barbu, 2008).

Regardless of the strong use of this technique in other sectors, visual merchandising cues are mostly associated with fashion retailing (Ebster & Garaus, 2011). The complexity of fashion branding strategies imposes a need to consider many issues when developing a brand, including the physicality of the store (Davies & Ward, 2005). However, researchers have been studying visual merchandising with an emphasis on sales and purchase behaviour and put little focus on how it may affect the overall brand value. Also, there's a lack of research on customer-based brand equity relating to visual merchandising.

As Portuguese consumers' habits are changing and stimulating the overall retailing environment in Portugal, the consumption of indulgence products is increasing rapidly. Those clearly include fashion products (Euromonitor, 2016). In addition, over 62% of Portuguese young adults are highly involved in fashion (Cardoso, Costa, & Novais, 2010). Still, visual merchandising is a concept that is not very familiar in Portugal. This creates an opportunity to explore the Portuguese fashion consumer in what concerns to visual merchandising dimensions and perceptions of brands.

This research will complement the already existing literature while dealing with brand image and brand awareness as in the point of view of the consumer-based brand equity model, i.e. brand equity seen in a consumer perspective rather than a financial one (Ailawadi & Keller, 2004). Thus, the primary objective is to find out how visual merchandising techniques in-store can influence consumer's perspectives and feelings towards the brand itself.

2. Literature Review

2.1. Visual Merchandising

With modern brand strategies, the concept of visual merchandising has been discussed a lot over the last 10 years. As most purchase decisions are made inside the stores, it makes an ideal marketing tool for brands.

Authors have been defining visual merchandising in numerous ways. It can be seen as an art, a process, and a marketing strategy (Bhatti & Latif, 2014; Ebster & Garaus, 2011; Morgan, 2008) with the purpose of presenting products at the point of sale in the most efficient and attractive way possible, and ultimately lead the costumers to make a purchase. It includes everything the customer sees, feels, and percept of the stimulus around them.

With similar products on the market, there's an increasing competition among clothing and apparel companies and the need to differentiate becomes a top priority for those brands.

Visual merchandising can provide that product distinction, improve its desirability and maintain competitors away (Mehta & Chugan, 2013). However, each store is different, and while grocery stores focus on functionality, apparel stores will put an effort on creating the right atmosphere (Morgan, 2008). With the efficient use of visual merchandising techniques, the products almost sell themselves (Ebster & Garaus, 2011). Fashion retail remains the strongest sector using visual merchandising techniques as a tool in its marketing mix, due to its higher complexity in displaying when compared with other sector's companies (Kerfoot, Davies, & Ward, 2003) with the exception of some airlines, restaurants, and department stores (Kotler, 1974).

Turley and Milliman (2000) divided visual merchandising into five categories: exterior, interior, store layout and design, point-of-purchase and decoration, and human variables (Turley & Milliman, 2000). Other authors identified other aspects such as Window Display (Morgan, 2008; Seock & Lee, 2013). Essentially, the two major areas covered in visual merchandising are the store interior and exterior in which a variety of issues can be addressed to create a favourable shopping atmosphere (Law, Wong, & Yip, 2012).

2.1.1. Interior

When customers walk across the store, they look for brand meanings that can emerge through the interior style and design (Nistorescu & Barbu, 2008). It is the point of impact, the deliverance of expectation. These can be translated from store aesthetics such like the materials used, the walls, lighting, colours, music, signage to layout aspects and overall functionality of the store (Matthews, Hancock, & Gu, 2014; Mehta & Chugan, 2013; Nistorescu & Barbu, 2008). Ralph Lauren's store in New York is a great example on how using themes and props in the interior displays instead of the conventional mannequins can create a narrative that wonders anyone who steps into the store (Matthews et al., 2014).

Some authors highlight the importance of "store atmosphere" or "atmospherics" in this matter (Ebster & Garaus, 2011; Kotler, 1974; Kumar & Kim, 2014). Kotler (1974) defines it as

“the effort to design buying environments to produce specific emotional effects in the buyer that enhance his purchase probability” (Kotler, 1974). Unlike other practices of marketing communication, interior atmosphere appeals to the customers’ five senses (Park, Jeon, & Sullivan, 2015). Of the five senses, several authors emphasize the olfactory sense as the strongest one to have an effect on customers’ mood (Ebster & Garaus, 2011); and visual aspects of the store which can regulate the buyer’s arousal level. There’s some incongruence among authors in what concerns to lighting, while some argue that soft lighting creates a better mood (Meer, 1985), others believe that bright stores lead to a higher excitement level on shoppers, causing more impulse purchases (Ebster & Garaus, 2011). The first visual stimuli a customer sees in a store is colour, which can be an effective tool to attract attention to any point of the store. Colour needs to tell a story, comfort or calm customers, and build brand recognition. A successful example of colour use as a brand identity is Zara, with its monochrome stores and displays, which are very popular in Europe (Oprîş & Brătucu, 2013). Ultimately, it is important to suit the music style to the store’s ambiance and type of customer (Morgan, 2008) as it have the power to connect the customer to the store and influence its perceptions of quality, price and service (Ebster & Garaus, 2011).

There’s no such thing as the perfect atmosphere for each store/brand. But in order to craft the effective one, retailers need to be taking into account the cultural trends, company history, product category and target customer’s needs when creating the adequate scent, music and light present in its stores (Ebster & Garaus, 2011; Kotler, 1974; Turley & Milliman, 2000). As an example, let’s take the international retail brand Abercrombie & Fitch. Their stores, including layout and staff, are visually manipulated to target millennials and American “cool kids” in an effective way.

With the increasing number of stores in the industry with similar prices, atmospherics becomes crucial to retailers as it instantly influences customers’ choice between stores in the

same category (Baker, Grewal, & Levy, 1992; Kotler, 1974). So, it is important that customers perceive the connection between the overall ambience, the products sold and the brand.

The functional aspect of the store must be very well planned as well so customers can feel comfortable while exploring it. It relates to organization and layout of the store and the goal is to provide convenience for the customers' so they can quickly find the product they're looking for, or even get in and out of the store with ease (Baker, Grewal, & Voss, 2002). Equipment, furniture, division of departments, they all have a role in visual merchandising. The use of signage is one of the least costly instruments used to improve customer orientation. Other instruments include props and mannequins which can attract customers over a long distance and clarify the function of the merchandise (Ebster & Garaus, 2011). Eventually, it should be a top priority for brands to incorporate the best store layout possible with the space they have.

2.1.2. Exterior

The store's exterior represents the brand. This is the visual merchandising element that have the power to catch customers' attention and persuade them inside the store. Exterior elements refer to the overall store front: the façade, building architectural style, exterior signs and last but not least, window displays (Nistorescu & Barbu, 2008). This study will be focusing mostly on window displays as they are an exterior technique that has been broadly recognized as a marketing tool over major companies in the fashion industry and often used as brand identification (Guimaraes, 2011). Nowadays, it represents brand image (Morgan, 2008; Opreș & Brătucu, 2013) and convince people to visit the store by using appealing windows. Many retailers often use them to cause a reaction rather than focusing on products to create impact on peoples' minds.

Mannequins are a popular trademark of window displays, and several techniques can be used so people can aspire to look like them (Morgan, 2008). According to Ebster and Garaus (2011), there are three characteristics that draw customers' attention to a display: contrast

(colour and movement), novelty (surprise) and position (Ebster & Garaus, 2011). A good example is the use of unusual fixtures and props or use politics, social statements or other trending themes to get the passers-by attention (Morgan, 2008). This helps a brand to differentiate from the competition and create a sense of uniqueness.

2.2. Brand Equity – A Consumer Perspective

Many researches have been addressing brand equity as an important success factor and a way of differentiating companies in the market (Aaker, 1991; Farjam & Hongyi, 2015; Keller, 2013). Both Aaker (1991) and Keller (1993) defined brand equity from a customer perspective rather than a financial one, still, each concept of brand equity is different.

Aaker (1991) defined brand equity as “a set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or to that firm’s customers”. The author’s model consists of five different assets representing the source of the value creation: brand loyalty, name awareness, perceived quality, brand associations in addition to perceived quality, and other proprietary brand assets (Aaker, 1991).

In his consumer-based brand equity (CBBE) model, Keller the real power and value a brand has is placed in consumer’s minds. What the consumer have seen, felt, heard, and thought about the brand can help to develop strong, unique and favourable brand associations, which can be represented by the consumers’ brand knowledge. CBBE lies then, in consumers’ more favourable reactions to a brand’s marketing strategies, when compared to other similar brands or fictitious brand (Keller, 2013).

Keller’s (1993) conceptual framework explains how brand knowledge can be portrayed through brand awareness and brand image. Brand awareness refers to the consumers’ ability to identify the brand among other brands and recall it in the most varied situations. It is then

composed by brand recognition and brand recall, thus, it also include how the brand name, logo and symbol is connected to a certain association in customers' memory (Farjam & Hongyi, 2015). This is important for brands since highly aware brands are the most considerable in customers' purchase decision cycle even when there's no other brand associations (Rajh, 2002). Brand image is defined here as the consumers' perceptions translated into brand associations in consumers' memory. These can be further composed by the strength, uniqueness and favourability of brand associations (Ailawadi & Keller, 2004). Strength of associations relates to how easily a person can access brand associations held in the memory (Hartman & Spiro, 2005). It depends on how the information enters the consumer's memory and how it is maintained as part of the brand image. The favourability of brand associations is important to understand if consumers believe that the brand has attributes that satisfy their needs and wants (Rajh, 2002). Uniqueness of brand associations refers to associations a brand may or may not share with other competing brands. Furthermore, Silverman, Sprott, and Pascal (1999) provided evidence that CBBE measures assessed through strength, favourability, and uniqueness of brand associations are potential indicators of brand performance (Silverman, Sprott, & Pascal, 1999).

Consequently, and according to CBBE model, brand equity occurs when the customer has a high brand awareness (familiarity) and hold strong, favourable and unique brand associations (Farjam & Hongyi, 2015).

2.3. CBBE and Visual Merchandising

With all the advertisements, magazines and online information readily available, customers get constantly exposed to information about brands. More and more, fashion companies try to communicate and provide the best experience to customers through their stores. This is why sometimes stores are designed not to sell the products, but to inspire, so it

can infer some feelings and opinions about the brand (Morgan, 2008). This in-store experience may improve brand image and eventually have an effect on brand equity (Takahashi, 2014). When faced with stimulus in the store, customers will process it and form an initial mental image that ultimately gets translated into emotions and impact their behaviours toward the store (Mazursky & Jacoby, 1986). Former works added that social, design, and ambient aspects of a store influence cognitive evaluations and eventually approach behaviour toward retailers (Kumar & Kim, 2014). So, with the proper use of visual merchandising elements, store image can contribute to the development of brand image (Nistorescu & Barbu, 2008).

Communication becomes an essential tool here as stores are the place where a direct two-way interaction between customers and the brand occurs, and modern companies need to take in consideration visual merchandising at their point-of-sale (Niazi, 2015). Still, all marketing communication efforts should present the same language and show a consistent image throughout all marketing channels (Guedes & Soares, 2005). Many visual merchandisers use displays to pass a message and enhance certain features of the products of its brand and, consequently, of its consumers (Guimaraes, 2011). The consumer, in the receiver side, is then seduced by the stimulus around him. More than to inform the customers about the products, visual merchandising undoubtedly connects the customer to the brand.

Moreover, different studies concluded that cues on visual merchandising can catch customer's attention inside the stores and create a brand node in their minds. Nistorescu and Barbu discovered that signs, symbols, organization and functionality of the store contribute to brand recognition (Nistorescu & Barbu, 2008); while other researchers emphasize how further elements of visual merchandising can contribute to a more salient brand that then consumers will retrieve faster than other brands (brand recall). Park et al.'s investigation suggests that in-fashion and attractiveness of visual merchandising have a positive effect on brand aesthetic

attributes; and functionality has a significant positive effect on brand utilitarian attributes (Park et al., 2015).

All CBBE drivers' have then, a relationship with visual merchandising constructs as the latest can provide brand uniqueness and distinction from competition, enhance brand recall and recognition, and infer strong favourable feelings associated with the brand. As an important vehicle of fashion branding (Matthews et al., 2014), visual merchandising can, then, become a complex process.

3. Methodology

This dissertation will use a descriptive method, as the objective is to test hypotheses and study how visual merchandising is relevant for the construction of a consumer-based brand equity. It also seeks to understand consumer behaviours and preferences when it comes to store atmosphere and layout. To confirm findings, brand performance assessments will be done as well. Moreover, this study will have a focus on fashion brands and how these constructs affect Portuguese consumers. Visual merchandising will be treated as a "silent sales person" (Hefer & Cant, 2013; Kotler, 1974), and supported by the literature review, it will emphasize the internality (store atmosphere and store layout) and externality of the store (including window display). Aaker's (1991) model does not have clear quantitative measurement estimators and brand image is not distinguished as an element of the brand equity (Bivainiene & Sliburyte, 2008). Instead, Keller's model offers brand equity components that can be easily adapted to any study (Jara & Cliquet, 2007) and thus, it seems to be a more appropriate approach for this research. Data was analysed using the Statistical Package for Social Science (SPSS) software to conduct t-tests, ANOVA's, Factor Analyses (FA), Pearson correlations and Multiple regressions.

3.1. Data Collection

An online survey was created using “Qualtrics” and distributed through Facebook and e-mail to respondents. The study used a convenience sampling, a non-probability sampling technique in which respondents are selected because they are in the right place at the right time (Malhotra & Birks, 1999).

The main purpose of the survey is to understand how visual merchandising dimensions and consumer-based brand equity are linked. The survey was also used to obtain respondents demographics and evaluate consumer attitude towards visual merchandising and preferences as a buyer (see Appendix 1).

To measure each concept, a 5-point Likert-type scale (1-Strongly Disagree to 5-Strongly Agree) was adopted. Out of the other itemized rating scales, the Likert scale seems to be the most adequate to apply in this study considering its suitability for Internet surveys, as well as its ease in understanding how to use. As for disadvantages, it takes longer to complete than other scales since the respondent need to fully read all items and reflect on its answer (Malhotra & Birks, 1999). The questionnaire was kept small and simple, focusing on the main research questions so respondents don't spend too many time answering it. An odd number of categories for the scale was used because it was considered that some items required a neutral option.

The first two questions were made so the respondents could choose the brand he/she would like to answer the questions about, and to understand how familiar these brands are to them. Respondents had to choose between Zara, Bershka and Primark. These brands were chosen due to its popularity amongst Portuguese consumers. A study by Leal (2006) found that Zara is the most well-known and preferred brand in Portugal (Leal, 2006). This brand has a large distribution in Portugal, with stores in every city, which makes it a very popular brand. Bershka was the second brand referred in the study, and since it is a brand with very specific characteristics, it was considered for this questionnaire. Lastly, Primark was chosen due to its

increasing popularity in Portugal. According to Pereira (2013), trendy low-cost brands have been conquering the Portuguese public, and Primark is the major one (Pereira, 2013).

In the third question was asked the frequency of visits to the store in question, so it can give us an insight into how recent people's thoughts are towards the store they selected. The second part of the questionnaire, refers to the main information needed for this research. A group of statements were presented so interviewees could rate their agreement-disagreement level using the Likert scale from 1 to 5, being 1 "totally disagree" and 5 "totally agree". Each item measured visual merchandising and brand equity dimensions. Some of the items for visual merchandising were adapted from previous research by Park, Jeon and Sullivan (2014), and certain items for brand equity were developed using measures created by Rajh (2002). The scale created by Rajh was developed after three studies so it provides a good measure of brand equity (Rajh, 2002). In Park et al. (2014) research, visual merchandising variables were operationalized differently, hence, the items were adapted according to this dissertation objectives. We expect to find three visual merchandising dimensions: exterior (including Window Displays), interior (store atmosphere) and store layout. Brand equity is expected to be composed by brand awareness, strength, favourability and uniqueness of brand associations. An additional construct will be developed, as it is connected to brand equity, which are associations of brand performance.

The third group of questions was composed by two questions with the purpose to identify what might affect consumers' decision to enter or exit the store. These questions will help understanding whether visual merchandising is consciously or subconsciously considered when deciding which store to shop. The last part of the questionnaire was used to classify respondents and compiled classification information such as socio-economic and demographic characteristics.

3.2. Procedures for Data Analysis

After collected all the data necessary, there were 209 valid answers ready for analysis. The most selected brand was Zara (59%), next to Primark (26%) and Bershka (15%) (Appendix 2). After executed a t-test, we can conclude that people who were surveyed had a significant familiarity with the brands selected ($t(207)=20.093$, $p=0.000$) with a mean of 4.32 (Familiar), which means the brands were appropriately selected for this study. Also, respondents were significantly updated with the current aspect of the stores selected ($t(208)=14.569$, $p=0.000$) with a mean of at least one visit per month over the last year. To check for further suitability of data collection, opinions on visual merchandising were tested via ANOVA to make sure the brand chosen by the respondents would give the same results as any other brand. For this test, the variable used to represent visual merchandising was the question INT_1 (“Store image influences my opinion about a brand”) (see Appendix 4). The test is not significant ($F(2,206)=2.633$, $p=0.074>0.05$), hence, the opinion about the store environment overall didn't change depending on the brand choice.

Visual Merchandising and Brand Equity variables were analysed through a Factor Analysis (FA), more specifically, two Exploratory Factor Analysis (EFA) were conducted. When items are used to represent a single concept, factor analysis can confirm it by its identification as a factor (Walker & Maddan, 2013). This statistical technique essentially reduces the number of items and combine them into a single factor without losing information, while redundant information induced by sampling/measurement errors, are removed. EFA is then, a tool that determines if the measures used in the questionnaire have in fact measured what they are supposed to measure (Matsunaga, 2010). Many researchers mix up Principal Components Analysis (PCA) for EFA, though, PCA does not distinguish between shared and unique variance, and EFA focus on common variance among variables (Walker & Maddan, 2013).

Before running an EFA, we need to make sure the variables are measured at an interval level and that an adequate sample size was used (Reinhard, 2006; Walker & Maddan, 2013). All variables studied were measured using a Likert-scale, which is an interval measurement. Our sample size is N=209, which is superior to the minimum criteria of 100 for FA's (Gorsuch, 1974) and the ratio of the sample size to the number of items is over 10 for both analyses (Everitt, 1975), which means the sample is big enough for the analysis. Also, correlations between items were examined and low correlation items were discarded (INT_1 and INT_8) (see Appendix 4). To avoid extreme multicollinearity, the determinant in the correlation matrix was checked and showed values of 0.00001323 and 0.0000134 for visual merchandising and CBBE variables respectively. Both are greater than 0.00001, hence multicollinearity is not a problem (Reinhard, 2006).

The method used for both analyses was Principal Axis Factoring, since it gives the best results for non-normally distributed data and is less likely to produce improper solutions than maximum likelihood methods; and since we expect variables to be correlated, an oblique rotation (promax) was used (Fabrigar, Wegener, MacCallum, & Strahan, 1999).

4. Data Analysis

The sample used is formed by 66 (32%) males and 143 (68%) females with ages evenly dispersed. Most of respondents had a Bachelor degree (45%), and 64% were employed, while 23% were students, 5% unemployed and 6% retired. Annual household income was mostly between 7.000€ and 20.000€ (45%) (see Appendix 2). The last group of questions of the survey asked for a direct opinion on visual merchandising elements, and was not directed to the specific brands provided. We can further confirm the importance of these elements, since respondents expressed the need to leave the store when loud music is played (66%), the store has inappropriate temperature (60%) and when products are disorganized (81%); while buying intentions increase when the overall presentation of the store is adequate (54%) (Appendix 3).

Since CBBE measures can be used as an assessment of brand performance, it is also interesting to analyse performance questions in the survey. Items related to performance had a mean value of 3.28 significantly different from 3 (test value) ($t(208)=5.471, p=0.000<0.05$). This means answers were mainly positive, hence, CBBE measures can be expected to effectively find positive data for brand equity.

4.1. EFA for Visual Merchandising

After all assumptions were checked, the EFA was conducted. The KMO and Bartlett's Test of Sphericity confirmed that the data on visual merchandising was adequate for a factor analysis. KMO minimum criteria was satisfied (>0.5) and the Bartlett's test rejected the null hypothesis and confirmed that the correlation matrix is significantly different from an identity matrix (KMO= 0.888, $\chi^2(66) =1286.173 p<0.01$). This means that the data meets the assumption that correlations are significant (Reinhard, 2006; Walker & Maddan, 2013). Next, factors were extracted. The most commonly used factor-extraction strategy is the Kaiser-Guttman rule, in which we retain the stronger factors (i.e. factors that explain the most variance) represented by eigenvalues larger than 1 (Matsunaga, 2010). The Cattell's scree plot and parallel analysis (PA) results were compared to understand if the extraction is appropriate. Kaiser's criteria suggest the extraction of five factors, though, there's some factors with fewer than three items, which is not the best fit for the data (Distefano, Zhu, & Mîndrilă, 2009). Since Kaiser's criteria is unprecise in some cases (Damásio, 2012) and that PA provides the most accurate approach (Henson & Roberts, 2006), two factors were extracted. This result matched the scree plot result. In the extraction phase, we also need to check communalities. These represent the items' variance that is explained by the extracted factor (Walker & Maddan, 2013) and it must to be greater than 0.3 for the analysis to be reliable (Child, 1970). After eliminating 6 items (INT_6, INT_7, EXT_4, LAY_2, LAY_4 and LAY_5), 12 items were retained and all factors accounted for over 60% of the total variance, proving that the analysis is reliable

(Appendix 4). Next, loadings told us which variables can be combined. Here, rotation made the interpretation easier as some variables loaded on more than one factor (crossloading items) (Walker & Maddan, 2013). The pattern matrix reveals strong loadings (greater than 0.32) (Tabachnick & Fidell, 2012), which indicate solid factors. Although the objective was to find three factors (Interior, Exterior and Layout), FA analysis combined Interior and Layout items in the first factor, which we will call Interior and Store Layout; and Exterior items correctly loaded together, hence, Factor 2 represents Exterior and Window Display (see Table 1). Reliability was checked and the extracted factors revealed Cronbach's alphas greater than 0.7 (0.871 and 0.874 for Factor 1 and 2, respectively), which means the items loaded on the correct factors and the analysis was considered to have produced the correct factor structure (Distefano et al., 2009).

Construct	Cronbach's Alpha	Item	Loading	Eigenvalue	Variance Explained
Total	0.881				62%
Interior & Store Layout	0.871	INT_3	.846	5.333	44%
		INT_5	.843		
		LAY_6	.817		
		INT_4	.780		
		INT_2	.583		
		LAY_3	.559		
Exterior & WD	0.874	LAY_1	.498	2.155	18%
		EXT_2	.878		
		EXT_6	.792		
		EXT_3	.746		
		EXT_5	.744		
		EXT_1	.591		

Table 1 – Factor Analysis (FA) for visual merchandising variables

4.2. EFA for CBBE

The EFA for consumer-based brand equity variables, revealed great values for suitability (KMO= 0.919, $\chi^2(153) = 2256.632$ $p < 0.01$), therefore, data meets the assumptions required to run a FA. All three factor-extraction strategies' results (Kaiser rule, scree plot and PA), suggested the extraction of three factors. Communalities are all greater than 0.3 and all 18 items were retained by the factors and accounted for 65% of the total variance explained by

CBBE. The three factors are solid with loadings above 0.5 and Cronbach's alphas indicate good reliability (0.918, 0.872 and 0.837, for factor 1, 2 and 3 respectively), and hence FA constructed the correct factor structure. Although we expected the extraction of four constructs, it is understandable why brand awareness and strength of brand associations were loaded together in one factor, as there were only three items dedicated to strength associations. Factor 1 represents Favourability of brand associations; Factor 2 refers to Brand Awareness and Strength of brand associations; and Factor 3 defines Uniqueness of brand associations (see Table 2). We can now define hypothesis based on the factors extracted (See Table 3).

Construct	Cronbach's Alpha	Item	Loading	Eigenvalue	Variance Explained
Total	0.925				65%
Favourability of brand associations	0.918	FAV_6	.890	8.181	45%
		FAV_2	.826		
		FAV_5	.814		
		FAV_4	.788		
		BA_3	.739		
		FAV_3	.731		
Awareness and Strength of brand associations	0.872	FAV_1	.696	1.992	11%
		BA_5	.773		
		BA_2	.758		
		BA_1	.739		
		STR_2	.673		
		BA_4	.666		
		STR_1	.616		
Uniqueness of brand associations	0.837	STR_3	.573	1.505	8%
		UNI_2	.855		
		UNI_3	.790		
		UNI_1	.703		
		UNI_4	.625		

Table 2 – Factor Analysis (FA) for consumer-based brand equity constructs

Hypothesis
H1. Favourability of brand associations is significantly influenced by store's interior and layout
H2. Favourability of brand associations is significantly influenced by store's exterior and window display
H3. Brand awareness and strength is significantly influenced by store's interior and layout
H4. Brand awareness and strength is significantly influenced by store's exterior and window display
H5. Brand uniqueness is significantly influenced by store's interior and layout
H6. Brand uniqueness is significantly influenced by store's exterior and window display

Table 3 – Proposed Hypothesis

4.3. Hypothesis Testing

To test the hypothesis proposed, Pearson's correlation and regression tests were assessed to confirm the relationships between the two factors of visual merchandising and three dimensions of CBBE found. Additionally, three multiple linear regressions were conducted to confirm the findings of Pearson's correlations and understand how each independent variable (visual merchandising) influences the dependent variable (CCBE). However, there's several problems when performing regression analyses on factor scores. Zuccaro (2010) describes three reasons for this: First, linear regression assumes that both independent and dependent variables have a normal distribution. FA transforms a set of variables into factor scores and it doesn't always produce a normal distribution. Second, linear regressions standardize both independent and dependent variables. Factor scores are standardized by nature, using it as an independent variable will standardise the variable twice. Third, FA assumes that factors possess measurement errors, while linear regression models are based on the assumption that variables are free of measurement error (Zuccaro, 2010). This means that performing this type of analysis on factors will produce results that have no statistical meaning. Consequently, and as a solution, specific items will be selected to represent each factor, which means surrogate variables will be used in regression analysis. These are the variables of each factor with the highest loading (Malhotra & Birks, 1999). For the variable *Interior and Store Layout*, item INT_3 is the variable with the highest loading (.846); EXT_2 (loading of .878) is the selected variable to represent *Exterior and Window Display*; For CBBE variables, FAV_6, BA_5 and UNI_2 are the items with higher loadings for *Favourability* (.890), *Awareness and Strength* (.773) and *Uniqueness* (.855) respectively (see Table 1 and 2).

SPSS software considers the sample size when stating that a correlation coefficient is statistically significant. Since the sample size is bigger than 200, all correlations show an

accurate reflection of the population correlation coefficient. All variables hold significant relationships at the 1% alpha level (Table 4), therefore, the probability of obtaining a value of r purely by chance, is less than one in a thousand (Field & Hole, 2003).

Correlations		
	Interior	Exterior
Favourability	.507**	.212**
Awareness	.436**	.239**
Uniqueness	.362**	.230**

** . Correlation is significant at the 0.01 level (2-tailed).

Table 4 – Pearson correlations between factors

Hypothesis 1: *Favourability* of brand associations is strongly correlated to *Interior and Store Layout* ($r=.507$, $p<.01$) (Table 4); those who develop favourable brand associations place significant importance on store atmospherics and store layout. In consistence with this result, the regression analysis found that *Interior and Store Layout* significantly influence *Favourability* associations of brands, with a p-value smaller than alpha level ($p<.05$), thus, supporting the researcher’s hypothesis (see Table 5).

Hypothesis 2: On the other hand, even though the Pearson correlation test revealed a significant relationship between *Exterior* and *Favourability* ($r=.212$, $p<.01$) (Table 4), the regression analysis suggested that the exterior aspect did not significantly influence *Favourability* ($p=.613$) (see Table 5). Thus, the researcher’s hypothesis was not proven.

$$\text{Favourability of brand associations} = 3.218 + (0.191 \times \text{Interior})$$

Hypothesis	R ²	F-test significance	Intercept	B (Slope)	Beta	t	p-value
H1	.056	.003	3.218	.191	.227	3.283	.001
H2				.027	.035	.507	.613
H3	.073	.000	3.031	.176	.199	2.910	.004
H4				.121	.147	2.152	.033
H5	.019	.138	2.437	.115	.124	1.763	.079
H6				.035	.041	.584	.560

Table 5 – Multiple Regression Analyses

Hypothesis 3: People who are highly *aware* of the brand and hold strong brand associations towards show a linear relationship with *Interior and Store Layout* aspect of visual

merchandising ($r=.436$, $p<.01$) (Table 4). Regression analysis supports these results with a p-value of 0.004 (see Table 5), hence, the interior aspect of the store significantly influences brand awareness and overall strength of associations, supporting H3.

Hypothesis 4: As for *Exterior and Window Display*, the relationship is weaker ($r=.239$, $p<.01$) (Table 4), but still valid. According to the regression results, there's sufficient evidence to affirm that there's a significant directional relationship between Interior and Exterior aspects of visual merchandising and brand awareness ($p\text{-value}=.033$), therefore, the null hypothesis is rejected (Table 5).

$$\text{Brand Awareness and Strength of brand associations} = 3.031 + (0.176 \times \text{Interior}) + (0.121 \times \text{Exterior})$$

To better understand this issue, the beta coefficient can be used to find out which of the independent variables have a greater effect on this CBBE dimension. The beta coefficient shows that the Interior contributed the most in explaining brand awareness and strength of associations, followed by the exterior aspect (Beta=0.199; 0.147 respectively) (see Table 5).

Hypothesis 5: *Uniqueness* of brand associations show a significant correlation with *Interior* ($r=.362$, $p<.01$)(Table 4). However, the p-value of this construct in the regression analysis is greater than the alpha level ($p\text{-value} =.079>0.05$), hence, the null hypothesis was not rejected (Table 5).

Hypothesis 6: Pearson's correlation test confirms a significant correlation between uniqueness of brand associations and the exterior dimension of visual merchandising ($r=.230$, $p<.01$) (Table 4). Although there's a significant relationship between the constructs, no directional relationship was found in the regression analysis ($p=.560>0.05$), consequently, we cannot reject the null hypothesis (Table 5).

This would mean that the effective use of visual merchandising dimensions tends to a higher sense of brand uniqueness, however, the significance of the overall regression equation

suggests that none of the visual merchandising aspects significantly influence brand associations of uniqueness.

5. Results

5.1. Visual Merchandising effects on Brand Favourability

Previous literature validates H1 results, stating that interior design cues increase consumers' perceptions of favourable and convenient shopping in stores (Mazursky & Jacoby, 1986). Also, several studies provide sufficient evidence to support that visual merchandising can affect desirability and help customers to build favourable attitudes (Kim, 2003; Moayery, Zamani, & Vazifehdoust, 2014). Though, the same didn't happen for exterior aspects, since H2 was rejected. This may be happening because, as correlation tests indicate, consumers inferred more importance on the overall experience inside the store, where the actual two-way communication occurs, which can have a higher impact on favourable associations.

5.2. Visual Merchandising effects on Brand Awareness and Strength

H3 and H4 results are supported by previous research that mention signage, organization and functionality of the store are great contributors to brand recognition; and how the exterior aspect of visual merchandising contributes to the construction and strengthening of the feelings towards a specific brand (Nistorescu & Barbu, 2008). Park et al. findings also confirms this. Their results revealed that visual merchandising can contribute to brand salience and brand recall (Park et al., 2015). This is reasonable since even if a passer-by doesn't have any buying intentions, attention catching displays and overall exterior façade holding a strong logo, for instance, can help them to remember it later when having actual shopping decisions.

5.3. Visual Merchandising effects on Brand Uniqueness

Researchers' findings state that visual merchandising can provide product distinction and maintain competitors away (Mehta & Chugan, 2013). Accordingly, Niazi's study

concluded that, among other perks, visual merchandising elements are crucial to gain the competitive advantage against competitors (Niazi, 2015). Surprisingly, H5 and H6 were rejected, which means the current investigation's results do not comply with past literature. This may be happening because this sampling focused on Portuguese consumers, which is a different cultural context than the samples in other researches. Maybe Portuguese consumers' associations of uniqueness are influenced by other external variables. Still, visual merchandising should not be neglected as findings, although do not show a directional influence on uniqueness, suggests that there's a positive relationship with both visual merchandising cues.

5.4. Discussion of Results – Can Visual Merchandising influence CBBE?

Results indicated that although all three constructs of CCBE showed good relationships with both aspects of visual merchandising, greater importance was placed in the interior aspect, as correlations were stronger (above .3) than exterior aspects.

We should keep in mind that this may be happening because several cues are associated to store's interior. It combines store atmospherics, overall ambience and layout planning. And as was previously mentioned, a substantial percentage of respondents valued all different interior details. Respondents gave weight to interior with 90% of respondents considering that the presentation of the products are important to them when deciding where to shop and 87% feeling the need to leave the store when the store layout is confusing (Appendix 3).

However, exterior elements deserve special attention as results revealed that exterior displays can contribute to the creation of awareness and strength of associations with a brand. It generates the first impression about a store or brand and if these elements are not managed well, the overall interior may not matter (Turley & Milliman, 2000).

This research found several relationships between visual merchandising elements and brand equity factors. Thus, we can assume that visual merchandising can lead to some strong, favourable and unique feelings towards retail brands.

6. Conclusions and Recommendations

This research explored how visual merchandising dimensions can influence the value customers attribute to brands. After finding the best variables to represent each concept, results provided sufficient evidence to say that customers' brand associations are influenced by visual merchandising. Although exterior displays did not significantly influence favourability of brand associations, the study still suggested that these variables are correlated. The same happens with both visual merchandising variables and uniqueness of brand associations. Additionally, the relationships found recommend fashion retailers should consider interior and layout aspects in consumers' favourable and strength of associations of their brands, and the exterior displays in terms of awareness. Essentially, atmospherics can provide a pleasant experience inside the store; layout guides the customer across the store from product to product in the most efficient manner; and on the other hand, the exterior is one of the most important dimensions as it is the first impression customers' get of the store and this is crucial for entry-decision. When consumers are exposed to these visual stimulations, they are more likely to hold strong, favourable and unique brand associations, that they will recall faster than other brands. Therefore, fashion brands need to make an effort to connect visual merchandising and retail branding.

This research differentiates from previous researches in many ways. Visual merchandising cues have been studied independently. Though, consumers see visual merchandising as a whole, and this study considers the influence of those dimensions as related to each other. Also, previous studies fail to study how visual merchandising elements can help to build brand equity, as it focuses mostly on buying behaviours effects. Finally, literature on

fashion branding is highly concentrated on advertisements and no data related to visual merchandising on the Portuguese context was found.

Adapting to change is the biggest challenge fashion retail brands face nowadays. This dissertation can help both national and international multi-chain fashion brands operating in the Portuguese market understand how consumers react to this kind of stimulus, and adapt accordingly. Moreover, these results can be useful to marketers in the creation and development of brand strategies and in the improvement of marketing and communication strategies.

7. Limitations and Directions for Future Research

The present research has some limitations to be considered when analysing the results. First, even though factor analysis has the objective of diminishing the number of factors, only two variables of visual merchandising – *Interior and Store Layout* and *Exterior and Window Display* - were studied, different from what was expected in the beginning of the report. Future research should take in consideration a wider range of items when accessing visual merchandising cues, so more conclusions and more accurate results will be given. Next, the survey used a convenience sampling, which means that the sample may not be representative of the entire Portuguese population. Furthermore, the survey was only distributed over Portuguese consumers. Future research should employ this study in other markets as there might be differences between consumers in different cultural contexts. Also, this research focused on fashion retail brands and only three fashion brands were provided to respondents as an option to answer the survey. More detailed research on which brands to use on this specific investigation should be addressed in the future. The present study focused on the consumer perspective, and neglected retailers' thoughts and opinions on how visual merchandising influence their brand equity. It would be interesting to consider this in future conduction of researches for a more complete assessment on the efficiency of implementing these techniques. Nonetheless, the current dissertation is believed to have achieved the goals it has set itself.

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