



UNIVERSIDADE CATÓLICA PORTUGUESA

Brand Logo and Brand Gender

How brand logo elements influence brand gender perceptions and affect towards the logo

by

Maria Ana Álvares de Barros Freire Barraca

Católica Porto Business School
2020



UNIVERSIDADE CATÓLICA PORTUGUESA

Brand Logo and Brand Gender

How brand logo elements influence brand
gender perceptions and affect towards the logo

Final Dissertation presented to
Universidade Católica Portuguesa
to obtain the master's degree in Marketing

by

Maria Ana Álvares de Barros Freire Barraca

under the supervision of
PhD Joana César Machado

Católica Porto Business School
May 2020

Acknowledgements

I intend to show my deepest and sincere gratitude for my advisor, Professor Joana César Machado, for always being supportive, showing her patience throughout this project, and most of all, for sharing her wise knowledge. Due to her guidance, I was able to conceive this dissertation, never giving up, building a relevant work for both academic and also managerial purposes.

To Católica Porto Business School, I would like to present my appreciation for supporting my research, yet also for giving me the tools to become a good professional and the moral values to be a kind and integral person.

My biggest thank goes to my parents, Teresa and António, not only for giving the chance to participate in this programme, but also for the unconditional support, no matter the circumstances and the challenges ahead. Thank you for everything you made until this day and for never cutting my wings off.

To my sister, Caetana, my partner in life, thank you for showing me that happiness is the simplest things. You are my drop of sun on a cloudy day.

Abstract

Brands, as humans, may be different when it comes to their personality. Among the several traits building brand personality, brand gender is one of the most critical ones. Brand logos, as the primary design elements of a brand and as a critical communication cues, may significantly influence brand gender perceptions. With this research, we aim to examine how different brand logo design elements, more specifically the naturalness of logo design (organic and cultural designs), logo shape (angular and rounded), logo boldness (heavier and slender) and colour hue (light pink and dark blue) influence brand gender perceptions and, if, ultimately, brand-design-induced gender perceptions lead to positive affect towards the logo.

First, an in-depth literature review is presented, where the variables analysed in this study are discussed. Based on this literature reviews, a research model was developed and research hypotheses were formulated. Subsequently, to investigate these topics, a quantitative research was held through an online survey. This relied on a sample of unknown and manipulated logos, used as stimuli for the analysis. This study counted with a total of 357 completed surveys, to a range of 32 manipulated logos. Results suggest that logo design elements significantly evoke brand gender perceptions, when properly combined and that affect towards the logo is enhanced by the congruence between the consumer perceived gender and the logo perceived gender, in the masculine gender perception.

Keywords: brand logo; logo design; logo colour; logo shape; brand gender; consumer response

Resumo

À semelhança dos seres humanos, as marcas possuem personalidade, o que as caracteriza como únicas. A personalidade da marca é constituída por diversos subconstrutos, sendo o género da marca um dos mais relevantes. Como primordial elemento visual de uma marca, ocupando uma posição de destaque no que diz respeito à estratégia de *branding*, o logótipo de uma marca possui, segundo a literatura, a capacidade de influenciar as perceções do género da marca.

Com este estudo, pretendemos analisar a relação entres alguns elementos fundamentais do design do logótipo e a perceção de género da marca, e verificar se as perceções de género induzidas pelo design do logótipo levam a um afeto mais positivo para com a marca detentora desse logótipo.

Esta dissertação apresenta uma análise crítica da revisão da literatura, onde as variáveis do estudo são detalhadamente analisadas. Com base nessa revisão da literatura, é apresentado um modelo de investigação e são formuladas hipóteses. De modo a confirmar essas hipóteses e responder, assim, às questões de investigação, é desenvolvido um estudo quantitativo. Os dados foram recolhidos através de um inquérito online. Um total de 32 logótipos foram utilizados como estímulo e analisados por 357 inquiridos. Os resultados demonstram que combinações adequadas de elementos de design do logótipo invocam, positivamente, perceções de género da marca. Adicionalmente, concluímos que o resultado da congruência entre o género percebido do logótipo e do consumidor se trata de um maior afeto do consumidor para com o logótipo.

Palavras-chave: Logótipo; design do logótipo; forma do logótipo; cor do logótipo; género da marca; resposta do consumidor

Index

Acknowledgements	v
Abstract.....	vii
Resumo	viii
Index.....	xi
Figure Index.....	xiv
Tables Index.....	xv
Chapter I	17
Introduction.....	17
1.1. Theme of research and relevance of the topic	17
1.2. Identification of the research gaps	20
1.3. Research Questions.....	22
Chapter II.....	25
Literature Review.....	25
2.2 Brand Gender.....	27
2.2.1. Brand Gender vs Brand Sex.....	29
2.3 Congruence between brand gender and consumer gender	31
2.4 Brand Logo	33
2.4.1. How brand logo design elements can contribute to the creation of brand gender perceptions.....	33
2.4.2 Positive consequences of enhancing brand gender through logo	35
2.5 Logo elements and brand gender perceptions	35
2.5.1 Naturalness of logo design and brand gender perceptions	35
2.5.1 Logo shape and brand gender perceptions	39
2.6.3 Logo colour and brand gender perceptions	41
Chapter III.....	46
Methodology	46
3.2 Sample and procedure.....	48
3.3 Stimulus Selection.....	48
3.3 Measures.....	51
Chapter IV	55
Results	55

4.3 Statistical Analysis.....	59
4.3.1 Coding	59
4.3.2 Reliability.....	60
4.3.3 Hypothesis testing.....	63
4.3.4 Model Fit	67
Chapter V.....	70
Discussion.....	70
Chapter VI	75
Conclusion	75
6.1 Summary and Implications.....	75
6.2 Managerial Implications.....	78
6.3 Limitations and suggestions for further research	79
References.....	82
Appendix	98
Appendix 1 – Questionnaire – Random Example	98
Appendix 2 – Logos used.....	111

Figure Index

Figure 1: Research Model	47
Figure 2: Stimuli Design	50
Figure 3: Interaction between Consumer Perceived Masculinity, Logo Perceived Masculinity on Affect Towards the Logo	67

Tables Index

Table 1: Brand Personality Model.....	26
Table 2: Definitions and examples of logos included in each category	37
Table 2: Definitions and examples of logos included in each category	37
Table 3: Summary of literature regarding differences in graphical production by males and.....	38
Table 4: Characteristics of Gender-bases Imagery Preferences.	38
Table 5: Logo shape and brand gender.	40
Table 6: Example of the manipulations conducted on the logos used to this study.....	50
Table 7: Gender Dimensions of Brand Personality	52
Table 8: Sample characterization.....	58
Table 9: Variables Coding.....	59
Table 10: Definition of the variables in the study	60
Table 11: Measurement Model: items means and standard deviations; construct reliability (CR) and Cronbach alpha (α).....	63
Table 12: Hypothesis Testing.....	64
Table 13: Results of the hierarchical linear regression model.....	68

Chapter I

Introduction

1.1. Theme of research and relevance of the topic

Brand gender is gaining an increasing importance among researchers, as it is a critical construct in the marketing literature. Simultaneously, one of the primary design elements of a company's visual brand strategy is the brand logo, which, according to the marketing literature has the power to influence consumer's brand gender perceptions (Lieven et al., 2015). This research will focus on deepening the results of previous studies on the effects of the brand logo on consumers' perception of the brand gender and, in particular, on analysing the influence of logo design (organic and cultural designs), logo shape (heavier and more angular versus slender and rounder forms) and logo colour (light pink and dark blue) on brand gender perceptions. With this experiment we attempt to investigate if there is a relationship between brand-design and the gender perceptions yet ultimately impacting affective reactions to logo.

Among the research conducted in consumer behaviour, a considerable amount of attention has been given to the construct of brand personality, which refers to the set of human characteristics associated with a brand (Aaker, 1997). Recently, and reinforcing the attention given, there has been an increasing stream of research focusing on this construct (e.g. Aaker, 1997; Blackston, 1993; Das, 2014; Kaplan et al., 2010). In previous studies, researchers have focused on how the personality of a brand enables a consumer to express his or her own self (Belk, 1988), an ideal self (Malhotra, 1988), or specific dimensions of the self (Kleine et

al., 1993). These studies suggest that consumers map different human personality characteristics onto brands and that brand personality associations will influence consumer-brand responses (Aaker, 1997; Fournier, 1998).

Brand gender is a relevant component of brand personality, which, as well as human personality, is a multidimensional construct, comprising masculinity and femininity (Grohmann, 2009). These dimensions are independent and mirror the orthogonality of masculinity and femininity as human personality traits (e.g., Bem, 1974; Freimuth & Hornstein, 1982). More recently, especially since the seminal work from Grohmann (2009) on brand gender, several studies have been developed on the gender dimension of brand personality (e.g. Azar et al., 2018; Machado et al., 2019; Yorkston & De Mello, 2005). The development of these researches can be related to the fact that a strong brand gender positioning can lead to several positive consumer-brand responses (Azar et al., 2018; Grohmann, 2009; Lieven et al., 2015; van Tilburg et al., 2015; Ulrich, 2013), and ultimately it can result into a relevant source of consumer-based brand equity (CBBE) (Lieven et al., 2014; Lieven & Hildebrand, 2016; Machado et al., 2019).

The symbolic interactionists (Mead, 1934) theorized that the meaning of a symbolic gesture, such as the use of a brand, is a social product revealed in an audience's response to it. Meaning is dynamic and socially constituted (Avery, 2012), and the meanings attached to a brand are common knowledge and a necessary condition for the use of the brand as an identity marker; consumers not only have to interpret the brand's identity meanings, as simultaneously they should also be aware that other people in their relevant social audiences will interpret these meanings in the same way (Avery, 2012).

Gender still takes centre stage in many brand narratives, despite consumer's gender-bending consumption, it appears to remain an important organizing construct in branding (Avery, 2012). Consumer researchers argue that we are in a post-gender period in which the stark lines that have historically divided men's

and women's consumption are blurring (Firat, 1994; Patterson & Elliott, 2002). Are we now able to ask ourselves if we have finally reached a time when gender does not matter in consumption? Can brands transcend their gendered roots and become neither masculine nor feminine, but an androgynous mixture of both (Avery, 2012)? In addition to this, previous research also shows that when male-gendered brands target the opposite sex, their male consumers can and do fight back (Avery, 2012). When the boundaries between groups of unequal status and power become more permeable and when the status hierarchies become unstable, the members of higher status groups are motivated to maintain clear the status distinctions by increasing ingroup identification and also increasing outgroup discrimination (Sachdev & Bourhis, 1991). In contemporary society, these conditions are in place (Avery, 2012); the boundaries between men and women are becoming more permeable in many scenarios, such as in the workplace, at home, and in consumption situations, thus the prevailing of the patriarchal power structure is being threatened not only by women, but also by gay men and alternative definitions of manhood. Testi and Kimmel (1997) claim that rather than becoming more androgynous in response to the movements that are blurring gender boundaries, men, in an angry response to a world in which the attainment of hegemonic masculinity remains out of reach, are responding to the attacks by regressing toward behaviours that reinforce the traditional definitions of their masculinity. This behaviour that is representing the call for help of masculinity in nowadays men, make gendered consumption more important. With that being said, we can conclude that masculine and feminine identity markers are more valuable to consumers when gender roles are considered as more permeable, making gendered consumption as not only a flag of the representation of the individuals' beliefs but also as a powerful instrument in the postmodern era.

With this research, we intend to analyse if consumer logo-induced brand-gender perceptions still have an impact on consumers preference, as results from previous studies (e.g. Fonseca, 2018) demonstrate that a logo design that conveys a clear brand gender positioning leads to positive affective responses towards the logo. Considering also the findings of previous research, this study will focus on three particular elements of the brand logo, namely logo design, shape and colour, attempting to analyse a possible relationship between these elements and the brand-gender perceptions of the logo. In addition to this, this research will also focus on the understanding of a possible congruence between the perceived gender of the respondents and the perceived brand logo gender and how it influences consumers affect towards the logo. Therefore, this research should provide guidelines on how brands should design their logos using the appropriate gender cues to achieve their desired brand gender positioning, regarding the choice of design elements.

1.2. Identification of the research gaps

As brands play an important role in building relationships with consumers (Aaker et al., 2004; Allen & Olson, 1995; Fournier, 1998; Gummesson, 2002), the link between brand personality and the nature of the relationship that consumers develop with brands has previously been established (Aggarwal, 2004). In terms of antecedents, several researchers have suggested that brand personality is created by a variety of marketing variables (e.g., user imagery, advertising, and packaging) (Batra, Lehmann, & Singh, 1993; Levy, 1959; Plummer, 1985). However, the extent to which these variables independently and

interdependently influence brand personality has yet to be determined (Aaker, 1997).

Further research regarding potential antecedents of brand personality, such as brand name, symbols, marketing communications, pricing, and distribution (Aaker, 1997; Batra, Lehmann, & Singh, 1993), is necessary (Grohmann, 2009). Being brand gender a subconstruct of brand personality, perceptions are influenced by various brand identity cues (e.g., colour, typeface, logo shape) and marketing activities (e.g., spokespeople) that are associated with the brand over time (Grohmann, 2016). Nevertheless, their joint effects are not well understood and could benefit from further research. Jun and Lee (2007) highlight the relevance of visual elements to generate corporate identity but there is still scarce cross-cultural marketing research in existence, and few empirical studies address this issue (Machado et al., 2015). Previous research also pointed out the need to study the impact of specific brand design elements and their potential interactions (Lieven et al., 2015).

Aesthetic design plays a central role in strategic marketing decisions, yet a thorough understanding of cognitive and non-cognitive reactions evoked through aesthetic design is absent from the literature (Hoegg, & Alba, 2008). Colour carries meaning and can influence consumers' thoughts, feelings, and behaviours (Labrecque et al., 2013). It is also used as a tool that allows objects to become more nuanced and meaningful, through its richness and beauty (Rawsthorn, 2010), though numerous research questions linked with colour remain unaddressed. Thus, colour is clearly an important issue across various areas of marketing and several other disciplines (e.g., neuroscience, psychophysics, visual cognition, and biology), yet there is little research on colour in the field of marketing (Labrecque et al., 2013). Frequently, practitioners are hesitant to explore the use of different colours (Rawsthorn, 2010) and many confess that they lack updated theoretical knowledge upon which to base their decisions (Gorn et

al., 1997). Despite the limitations of previous marketing research on colour, studies highlight the potential of this topic and the need for a more rigorous operationalization of colour in future research (Lieven et al., 2015). Considering the findings of prior research (Fonseca, 2018; Labrecque & Milne, 2012; Lieven et al., 2015), in this study, we will focus on analysing how navy blue and light pink influence consumers brand logo gender perceptions. We will also analyse the ability of different types of natural logo designs (i.e. organic and cultural designs) to elicit perceptions of masculinity and femininity (Fonseca, 2018). Furthermore, we will extend the findings of previous studies (Lieven et al., 2015), by investigating if the presence of natural designs in different shapes (heavier and more angular versus slender and rounder) enhances brand masculinity and brand femininity perceptions. Therefore, in this research we will try to deepen the study of logo colour, logo naturalness design and shape in the brand gender perception domain.

1.3. Research Questions

This research advances the brand personality literature by addressing the following questions:

1) How do brand logos elements influence consumers' brand gender perceptions?

1.1) Does the use of specific types of natural logo designs (i.e. organic and cultural designs) induce brand gender perceptions?

1.2) Does logo shape enhance consumers' brand gender perceptions?

1.3) Does the specific use of colours, namely navy blue and light pink, induce consumers' brand gender perceptions?

2) Do consumers prefer a brand logo congruent with their own gender?

2.1) Do female consumers prefer a brand that is considered by them as having a feminine brand personality?

2.2.) Do male consumers prefer a brand that is considered by them as having a feminine brand personality

Chapter II

Literature Review

2.1 Brand Personality

A considerable amount of focus has been given to the brand personality construct, in consumer behaviour research domain (e.g. Aaker, 1997; Johar et al., 2005; Phillips et al., 2014; Swaminathan et al., 2009). This attention is linked to the fact that brand personality is a vehicle for consumer self-expression (Belk, 1988; Swaminathan et al., 2009). Furthermore, there are several positive consequences in creating and enhancing a strong brand personality, which will be described in this research. As a consequence, a growing number of researchers focused on the study of brand personality's antecedents and outcomes (e.g., Aaker, 1997; Huang et al., 2012; Lieven et al., 2014; Park & John, 2010; Sung & Kim, 2010).

Brand personality is defined formally here as "the set of human characteristics associated with a brand" (Aaker, 1997, p. 327) and serves a symbolic or self-expressive function (Keller, 1993) contrasting to "product-related attributes". The conceptualization of Aaker (1997) on brand personality argues that the notion of personality differs between the context of brands (consumer behaviour) and the context of people (psychology). Aaker (1997) also considers brand personality as a multidimensional and multifaceted construct, which enables consumers to express themselves along several dimensions. According to the author, brand personality, similarly to the "Big Five model" of human personality (Goldberg, 1993), is measured along five dimensions (sincerity, excitement, competence, sophistication and ruggedness) that exclusively apply to the consumers'

characterization of brands. “Sincerity” embodies characteristics such as being down-to-earth, honest, wholesome and cheerful; “excitement”, is connected to a daring, spirited, imaginative and up-to-date personality; “competence” represents reliable, intelligent and successful features; “sophistication” is linked to upper class and charming; and “ruggedness” characterizes outdoorsy and tough aspects of the personality (see Table 1). We can think of brand personality as a metaphor that is used to illustrate what personality a brand would have if it were a person (Huang et al., 2012), including associations with inner and outer human characteristics (Aaker, 1997).

Brand Personality				
Sincerity	Excitement	Competence	Sophistication	Ruggedness
Down to earth	Daring	Reliable	Upper Class	Outdoorsy
Honest	Spirited	Intelligent	Charming	Tough
Wholesome	Imaginative	Successful		
Cheerful	Up-to-date			

Table 1: Brand Personality Model.
Source: Aaker (1997)

As consumers enhance or reflect their self-identities through consumption (Belk, 1988; Levy, 1959), they use brands to support their self-identity (Kleine et al., 1993), and brand personality can be a key vehicle in expressing consumers actual self, or ideal self (Belk, 1988). Thus, consumers tend to prefer and use brands that are similar to their own personalities (Huang et al., 2012). Indeed, consumers can easily think about brands as if they were celebrities or famous historical figures (Rook, 1985) or extensions of their self-concept (Fournier, 1994). This may be due in part to the strategies used by advertisers to imbue a brand with personality traits, such as anthropomorphization (e.g., M&Ms), personification (e.g. Mr. Muscle), and the creation of user imagery (e.g., old people performing energetic activities for vitamins ads). Furthermore, the

personality traits associated with a brand tend to be relatively enduring and distinct (Aaker, 1997). Nevertheless, in order to build the appropriate brand personality, marketers need to pay attention to the co-creation process between consumers and the brand, and coordinate the information consumers receive via three sources: (1) brand marketing communications; (2) potential interaction among the dimensions of brand personality and (3) consumers' experience of the brand (Huang et al., 2012).

Previous research shows that brand personality significantly influences brand affect (Sung & Kim, 2010), increases consumer preference (Sirgy, 1982), evokes positive brand emotions (Lee et al., 2009; Yik & Russell, 2001) and influences emotional attachment to brands (Fournier, 1998; Orth et al., 2010). The reason that brand personality is important to building strong brands lies in emotional aspects that are able to distinguish and differentiate a brand from the competition (Freling & Forbes, 2005a). Research has shown that brand personality provides consumers with emotional fulfilment, thereby increasing purchase probability (Freling & Forbes, 2005b). Also based on previous research we can state that brand personality has a positive impact on brand loyalty (Carroll & Ahuvia, 2006; Roy et al., 2016) and willingness to pay (Kim et al., 2001), relevant dimensions of consumer-based brand equity.

2.2 Brand Gender

As brands can be attached to personality characteristics, it should also be possible to link them with a certain level of masculinity or femininity (Lieven et al., 2011). The masculine/feminine categorization process is still one of the first classification systems learned by children (Powlishta et al., 2001) and it is used by adults unconsciously (Schneider, 2004). As masculinity and femininity are

important aspects of human personality (Constantinople, 1973), people often use masculine and feminine personality traits to describe others (Lippa, 2005). Thus, as gender is central to the way we see the world, it naturally and consequently affects our perception of products and brands (Ulrich, 2013), and therefore, it is likely that along with other personality traits, consumers also associate masculine and feminine personality traits with brands (Grohmann, 2009). In such way, a consideration of gender dimensions of brand personality arises from consumers' need to express themselves along multiple dimensions (Aaker, 1997). Having this said, brand gender is an extremely relevant brand personality characteristic that complements Aaker's model of brand personality (Aaker, 1997; Grohmann, 2009; Machado et al., 2019).

According to Grohmann, (2009, p. 106), brand gender is defined as “the set of human personality traits associated with masculinity and femininity applicable and relevant to brand”. This definition is consistent with the previously stated definition of brand personality (Aaker, 1997). A consideration of masculine and feminine brand personality traits appears to be warranted for two reasons: (1) the multidimensional nature of brand personality and accessibility of masculinity and femininity as human personality dimensions and (2) consumers' need to express their masculinity or femininity through brand choice and consumption (Grohmann, 2009).

Brand gender is a bi-dimensional construct, composed by two independent dimensions: Masculine Brand Personality (MBP) and Feminine Brand Personality (FBP) (Grohmann, 2009). As consumers draw on human personality traits when attributing a brand with personality (Aaker, 1997), the dimensionality of MBP and FBP is expected to mirror the two dimensional structure of masculinity and femininity supported in the psychology literature (Bem, 1974; Constantinople, 1973; Freimuth & Hornstein, 1982), which suggests that people possess simultaneously both masculine personality traits (e.g., self-

assertion, dominance) (Deaux & LaFrance, 1998) and feminine personality traits (e.g., nurturance, interpersonal warmth, communion) (Deaux & LaFrance, 1998) to varying degrees. Hence, based on the findings of previous research, a brand can be perceived as masculine (if it is rated high in masculinity and low in femininity), feminine (if it is rated high on femininity and low on masculinity), androgynous (if it is rated high on both femininity and masculinity) or undifferentiated (if it is rated high on both femininity and masculinity) (Azar, 2015; Grohmann, 2009; Lieven et al., 2014).

2.2.1. Brand Gender vs Brand Sex

In the 1950s and 1960s, British and American psychiatrists and medical personnel developed the English-language distinction between the words sex and gender (Moi, 2005). In this study it is important to clearly distinguish these two concepts that are often used interchangeably.

The most salient and central identity in the multitude of identities that define us as a human individual is the sense of ourselves as being male or female (Avery, 2012). We rely on gender to define who we are but also to classify and better understand others (Deaux & LaFrance, 1998). The concept of gender has been viewed from two perspectives: biological sex (e.g. Chang, 2006; Worth et al., 1992) and gender identity (e.g. Gould & Weil, 1991).

In accordance to the first school of thought, gender refers to biological sex, i.e. males versus females (Kolyesnikova et al., 2009), whereas gender identity refers to psychological sex, a bi-dimensional construct – FBP and MBP (Grohmann, 2009; Palan, 2001). Unlike sex, gender is not biologically determined, as it is culturally constituted and an ongoing construction (Avery, 2012). We perform our gender through situated, symbolic social interaction (West & Zimmerman, 2013), as gender is not granted to us at birth. In fact, it is constructed in a social environment, through interactions with others and by tailoring our actions to

conform (or not) to the normative conceptions of masculinity and femininity that exist in our culture (Gherardi, 1995), meaning that the social vision of gender is what stresses the social learning of what it actually means to be a man or a woman (Bourdieu, 1998). As we live in a multicultural world, we also need to choose from a cultural repertoire of gendered behaviours (Wetherell & Edley, 1999) the normative conceptions that will (or not) adequate our choices. These practices, in turn, create a social gender display that reinforces (or resists) the prevailing conceptions of masculinity and femininity (Butler, 1990; Lorber, 1994). Even though many different forms of masculinity and femininity exist concurrently in a particular culture (Carrigan et al., 1985), one form is held as the established hegemonic standard. Not all people might adhere to the hegemonic definitions, but these definitions turn consumers not only capable to take information on other people's actions but also get to know in advance how others interpret theirs (Spence & Helmreich, 1979).

In order to better understand the brand personality construct, it is important to know how it is conceived in the consumers' mind. Although human and brand personality share a similar conceptualization, these concepts differ in terms of how they are formed (Epstein, 1977). Perceptions of human personality traits are inferred on the basis of not only the individual's behaviour, but also on the physical characteristics, attitudes and beliefs, and demographic characteristics (Park, 1986). Moreover, the perceptions of brand personality can be formed and influenced by any direct or indirect contact that the consumer has experienced with the brand (Plummer, 1985). The direct way to associate a brand with its personality traits is associating people with that brand, through brand's user imagery associations but also through the people who work for the brand, namely the company's employees or CEO; and the brand's endorsers (Aaker, 1997). Hence, the personality traits of the brand are a result of the direct transfer of the personality traits of the people associated with the brand (McCracken,

Grant, 1989). Levy (1959, p.121) argued that in addition to personality characteristics, brand personality includes demographic characteristics such as biological sex, age, and social class. Considering the findings of previous research, we conclude that consumers rely on every aspect they have access to judge a brand when deciding if it has a feminine brand personality or a masculine brand personality. The indirect way of brand personality traits formation occurs through product-related attributes, product category associations, through the brand identity signs (brand name, logo or packaging), advertising style, price and distribution strategies (Batra, Lehmann, & Singh, 1993).

2.3 Congruence between brand gender and consumer gender

Prior studies have shown the preference of masculine (feminine) consumers for brands with a masculine (feminine) image (Alreck et al., 1982; Fry, 1971; Vitz & Johnston, 1965; Worth et al., 1992). Others indicate that gender could be transferred to a brand through advertising, showing that women would rather choose the feminine brand and men the masculine (Bellizzi & Milner, 1991), thanks to the biological sex of the endorser, which influenced the gendered perception of the brand (Debevec & Iyer, 1986). Furthermore, research suggests that consumers feel “out of face” (Goffman, 2016) when their reflection is not a pure representation of who they want to be. This feeling is considered to be psychologically uncomfortable and galvanizes identity practices to alleviate the incongruence felt by the consumer (Burke, 1991). The sense of distress increases when the identity in question is a central part of the person's overall identity and when the person is highly committed to the identity, as it is often the case with gender (Burke, 1991; Swann & Ely, 1984). In order to fight this sense of “out of

face” (Goffman, 2016), brands should use practices to influence the audience, so that their appraisals move back into congruence with the desired identity. In today's world, “saving face” is likely to be both an individual and a collective practice undertaken in brand communities (Avery, 2012).

The need to express masculinity and femininity through brand choice (e.g., Dolich, 1969) is based on the notion that gender is part of consumers’ self-concept (Freimuth & Hornstein, 1982). We create, enhance, and accomplish our gender identities through consumption and, thus, our possessions function as symbolic gender identity markers (Avery, 2012). Thus, consumers rely on masculine brand personality/feminine brand personality to enhance their own degree of masculinity or femininity when they use such brands for self-expressive purposes (Fournier, 1998; Sirgy, 1982), and that reflect their gender identity (Palan, 2001; Stern, 1988). This theme has been developed in previous research and the results suggest that there are separate masculine and feminine consumer cultures that define what is appropriate (and, consequently, inappropriate) for each gender to purchase and consume, while others support that possessions, brands, and consumption behaviours and practices are gendered (Fischer & Arnold, 1990; Peñaloza, 1994; Sherry et al., 2004; Wallendorf & Arnould, 1988). In practice, marketers support consumers’ need for self-expression by creating masculine or feminine brand associations—for example, using different type fonts (Lieven et al., 2015) or using packaging colour (e.g., bold versus pastel colours in deodorant packaging) (Grohmann, 2009).

2.4 Brand Logo

2.4.1. How brand logo design elements can contribute to the creation of brand gender perceptions

A logo is a brand identity sign, which can refer to a variety of graphic or typeface elements, ranging from word-driven, i.e., including word marks or stylized letter marks, through to image-driven, i.e., including pictorial marks (Henderson & Cote, 1998; Wheeler, 2003). Logos are generally the most visible and prominent brand identity signs, as they may influence consumer attitude towards the brand “at first sight” (Henderson & Cote, 1998), as well as after repeated exposure (Janiszewski & Meyvis, 2001).

According to previous research (Henderson & Cote, 1998; Schechter, 2010), logo design influences affective reactions to the logo and to the product or the company the logo represents. Bloch (1995) and Goldman (2005) suggest that brands with a greater aesthetic appeal not only provide the pleasure of visual gratification as they also are more likely to facilitate the formation of emotional bonds between the company in question and its customers. Moreover, brand logos can convey relevant brand associations, including brand personality traits (Batra, Lehmann & Singh, 1993). Indeed, consumers indirectly associate personality traits with a brand through the brand name or logo, advertising style, price and distribution channel (Batra, Lehmann, & Singh, 1993). Since logos are a critical component of the brand visual identity, they should consistently convey the brand desired positioning (Phillips et al., 2014). Thus, brands characterized by consumers as having a male (female) brand personality should have a logo that effectively conveys MBP (FBP) associations. With that being said, we can assume that brands characterized by consumers as having a male brand personality should choose a logo design that generates that same idea on consumers’ minds, meaning that logos should enhance consumers brand gender

perceptions. At this respect, Lieven et al. (2014) highlight that as consumers rely on gender perceptions in their categorization of brands, this should lead to a pairing of masculine and feminine (but not undifferentiated or androgynous) brands with highly masculine and feminine stimuli, respectively. According to this notion, brands created using gendered design elements, such as brand names, fonts, colours and brand logos, tend to be associated with femininity and masculinity (Grohmann, 2016; Lieven et al., 2014). Furthermore, Phillips et al. (2014) suggest that nonverbal elements play a prominent role in branding. Hence, marketers should support consumers' need for self-expression and create masculine or feminine brand association through visual brand design (e.g., using packaging colour (e.g., bold versus pastel colours in deodorant packaging).

"Gendered brands contain either masculine or feminine identity meanings that are socially shared among the members of a culture" (Avery, 2012, p. 323) and consequently, consumers adorn their gender displays with these brands using them as tangible markers, as gendered brands help them materializing their gender, enhancing who they are as men or women. Thus, brands offer consumers a wide range of options when expressing their own gender, and according to account previous research (Avery, 2012; Palan, 2001; Stern, 1988), both men and women tend to generally prefer and choose brands that reflects their gender identity, reflecting a congruence between the brand gender and the consumer gender. In consequence, we hypothesize:

H1.1: The congruence between consumers' perceived masculinity and brand logo masculinity perceptions favourably influences affective responses to the brand logo.

H1.2: The congruence between consumers' perceived femininity and brand logo femininity perceptions favourably influences affective responses to the brand logo.

2.4.2 Positive consequences of enhancing brand gender through logo

Brand gender leads to relevant consumer-brand responses (Grohmann, 2009; Machado et al., 2019). Indeed, according to previous research, a clear brand gender positioning (i.e., high levels of brand masculinity or brand femininity) is positively related with brand equity (Lieven et al., 2014), a central brand-related outcome with important implications for brand management. The results of this study suggest that brand gender influences brand equity because it is easy for consumers to categorize gender-typed stimuli (i.e., highly masculine and highly feminine), and this ease of categorization triggers more positive responses to brands with a strong gender positioning (i.e., highly masculine or highly feminine brands). Furthermore, research on the gendered dimensions of brand personality has shown that a clear brand gender positioning should positively influence affective responses to the brand (Grohmann, 2009; Machado et al., 2019), including brand affect, brand love and brand preference (Grohmann, 2009). Accordingly, we propose:

H2.1: Brand logos with higher levels of perceived masculinity evoke more positive affective responses

H2.2: Brand logos with higher levels of perceived femininity evoke more positive affective responses.

2.5 Logo elements and brand gender perceptions

2.5.1 Naturalness of logo design and brand gender perceptions

Companies invest significant amounts of time and money promoting, updating and changing their logos (Colman et al., 1995; Henderson & Cote, 1998;

Spaeth, 1999), and marketing managers could benefit considerably from understanding the principles of designing, selecting and modifying logos. Nevertheless, despite the high managerial relevance and important recent research on brand and product design or marketing aesthetics (Grohmann et al., 2013; Henderson et al., 2004; Orth & Malkewitz, 2008; Reimann et al., 2010; Shapiro & Nielsen, 2013), insufficient systematic research has been undertaken to examine the effect of logo design on affective response toward the brand (Machado et al., 2015). Literature on this topic has demonstrated that this positive affective response results from the use of natural logos, that is, logos that depict commonly experienced objects (Henderson & Cote, 1998; Machado et al., 2015). The learning efforts for logos depicting characters, places, animals, fruits or other objects from the sensitive or real world is significantly lower (Henderson & Cote, 1998). On the contrary, research has also found that recognition of abstract and meaningless logos may be poor, as abstract designs are harder to interpret (Koen, 1969; Nelson, 1971; Seifert, 1992). Consequently, we can state that the importance of logo naturalness is well established. Previous research conducted by Machado et al. (2015) has contributed to literature on the naturalness of logo design, by differentiating between cultural and organic designs. Cultural designs refer to logos depicting “manufactured objects (e.g. house, table and boat) or other cultural symbols (e.g. punctuation marks or the Christian cross)” (Machado et al., 2015, p. 79), meaning that these are objects that do not have a direct biological origin, such as buildings, ordinary objects, written symbols, among others. On the contrary, organic designs refer to logos depicting biological objects, such as fruits, vegetables, flowers, faces, landscapes, etc. (Machado et al., 2015) (Table 2).







	Abstract	Cultural	Natural Organic
	A logo that has no connection with the real world is artificially constructed and non-representative (i.e. squares, rectangles, triangles, horizontal or vertical stripes, circles and dots, ovals, arcs, swooshes, etc.)	A logo representing manufactured objects (i.e. buildings, furniture, transport vehicles, everyday objects) or other cultural symbols (i.e. written symbols)	A logo representing objects from the natural world (i.e. flowers, fruits, vegetables, animals, faces, bodies, landscapes, etc.)
Known			
Unknown			

Table 2: Definitions and examples of logos included in each category
Source: Machado et al., 2015

Prior studies on EP and logo strategy show that female and male may have different preferences for cultural and organic logo designs. Indeed, Moss et al., (2007) investigated whether biological sex influenced graphical production and discovered that females tend to draw less technical drawings than males. Moreover, they state that females tend to depict people, flowers, butterflies and other natural details, while males tend to depict machinery, technology or vehicles (see Table 3). When once again analysing differences between drawings made by boys or girls, a research developed by Iijima et al. (2001) found boys tend to use more moving objects, such as vehicles, trains, aircrafts and rockets, while girls like to draw flowers, butterflies, the sun and human motifs, such as girls or women. Furthermore, in respect to preferences in terms of imagery, girls tend to favour images of people and the human face, holiday imagery, plants and animals, but also detailed landscapes (Rogers, 1995). On the other hand, boys most often prefer images of conflict and power struggles, sea animals, exotic locations and sport scenes (Table 4). In addition, (Machado et al., 2015) found a higher preference among females for organic logo designs.

Differences found between male and female graphic production	Male	Female
Form	Vertical lines; Technical; Not colourful; Three-dimensional; Formal typography; Absence of detail.	Rounded lines; Less technical; Colourful; Less-emphasis on 3D; Informal typography; Abundance of detail.
Themes	Vehicles and self-propelling objects; Technology and machines; Males	Static objects; Females; Flowers, butterflies, sun.

Table 3: Summary of literature regarding differences in graphical production by males and females.
Source: Moss et al. (2007) p.318

High Appeal for Girls	High Appeal for Boys
Detailed images of people, plants, and animals. Use of a variety of colours. Including female characters. Including female characters. Peaceful images.	Images implying actions. Including images of vehicles. Including male characters Including male characters. Images of suspense/danger/rescue.

Table 4: Characteristics of Gender-based Imagery Preferences.
Source: Rogers, 1995

Therefore, having as a basis the preferences of different biological sexes, we assume that cultural logo designs and organic logo designs will evoke masculine and feminine traits of brand personality, respectively. Therefore, we propose the following hypotheses:

H3.1: Cultural brand logo designs elicit masculine brand gender perceptions.

H3.2: Organic brand logo designs elicit feminine brand gender perceptions.

2.5.1 Logo shape and brand gender perceptions

Evolutionary psychology (EP) can be used to explain the influence of physical brand design characteristics on consumers' perceptions of brand gender (MBP and FBP) (Lieven et al., 2015). EP perspective considers that psychological processes that influence preferences and behaviours are the result of evolution by selection (Buss, 1995; Lieven et al., 2015). According to EP, the gender perceptions of design and shapes can be linked to the human body, as "the more prominent physical features signalling masculinity (or femininity) in an individual, the greater may be their perceived genetic fitness (...) and attractiveness as a potential mate" (Lieven et al., 2015, p. 148). The physical body shape of a man which is perceived as attractive can be described as edged and sharp as well as solid and bold (Lieven et al., 2015). Also, the physical facial shape of a man which is perceived as attractive is described as edge and sharp (Cunningham, 1986). Therefore, previous EP research examining male and female preferences in terms of design shapes and forms, suggests that male tend prefer more vertical lines (Alschuler & Hattwick, 1969; Moss et al., 2006) and more technical shapes (Moss, 1999), and that female tend to prefer more rounded lines (Alschuler & Hattwick, 1969; Majewski, 1978; Moss et al., 2006) and less technical forms (Moss, 1995). Franck and Rosen (1949) also found that men tend to "close off" stimuli, to enlarge images (mainly by extending the image upwards), and to emphasize sharp or angular lines, while women tend to leave the stimulus areas "open", to elaborate the drawing within the confines of the presented lines and to blunt or roundoff any angular lines. According to the findings of Björntorp (1987) and Sheldon and colleagues (1940), the

characteristics bold/solid and airy/delicate form the end points of a continuum, and the same applies to the characteristics edged/sharp and curved/smooth.

Lieven and colleagues (2015) have conducted a research on how logos influence the perception of brand gender and found that the shape of a brand logo affects brand gender perceptions. The authors concluded that consumers perceive a more edged/sharper logo as masculine, whereas a logo with a curved/smooth form conveys a sense of femininity. If a logo is not only edged/sharp but also bold/solid, masculinity is significantly enhanced. Conversely, a logo that is curved/smooth as well as airy/delicate signals a particularly strong sense of femininity for the brand (See Table 5). The dimension bold/solid vs. airy/delicate has no significant influence on brand gender on its own but it interacts with the dimension edged/sharp vs. curved/smooth such that bold/solid vs. airy/delicate amplifies the effect of edged/sharp vs. curved/smooth on brand gender perceptions (Lieven et al., 2011) .





				
Masculinity	5.18	4.49	3.86	3.34
Femininity	2.63	3.09	3.91	4.44
Masculinity – Femininity (Gender)	2.55	1.40	-0.05	-1.09

Table 5: Logo shape and brand gender.
Source: Lieven et al. (2015), p.152.

Moss et al. (2007) in an experiment using adults found that females are more likely than males to use rounded rather than straight shapes.

Considering the findings of previous research, we assume that:

H4.1.: Brand logo designs with more angular shapes will enhance masculine brand perception.

H4.2.: Brand logo designs with more rounded shapes will enhance feminine brand perception.

2.6.3 Logo colour and brand gender perceptions

Marketers tend to use colour as an aesthetic tool for advertisements (Gorn et al., 1997; Lohse & Rosen, 2001; Meyers-Levy & Peracchio, 1995), package design (Garber, Burke & Jones, 2000), product customization and design (Moreau & Herd, 2010), logos (Bottomley & Doyle, 2006), and store atmospherics (Kotler, 1973) to grab consumers' attention (Schindler, 1986), offer cues about product attributes, to differentiate brands from competitors and encourage connections between consumers and brands (Labrecque et al., 2013). Thus, the colour of a logo often becomes a key component of a brand's identity and extends to other marketing contexts such as package design and advertising, even to the point that the brand may become intrinsically linked to a colour (e.g. Coca-Cola with red), and attempt to trademark this colour (Abril et al., 2009). Colour logo studies provide evidence that the colour of a brand logo can offer inherent and immediate brand value (Labrecque et al., 2013). In this sense, colour becomes an important component of a brand's visual equity and the value derived from this "look and feel" contributes to brand recognition and image (Simonson & Schmitt, 1997).

One of the main focus of this research is to understand the influence of logo colour on brand gender perceptions. In order to do so, and again having EP perspective as basis, it is relevant to understand the aesthetic preferences of male and female consumers.

According to the findings, of previous EP studies, in terms of colours, females' drawings are likely to be more colourful, with a greater range of colours used,

and more intermittent use, than males' designs (Moss, 1995, 1996, 1999). There is also a tendency on the part of females to prefer warmer colours (e.g. pink and red) to cooler colours (e.g. blue and green) (Minamoto, 1985). In the same line, Iijima et al. (2001) also found differences in the colour used by girls and boys, as boys tend to use more cold colours, while girls like to use warm and much more colours. In the same experiment the authors have shown that boys use one or specific colour(s) in one area, whereas girls use each colour rather diffusely. Thus, we propose the following hypotheses:

H5.1: Colour used in one area, on a brand logo, influences the brand perception as being characterized by having a masculine brand personality

H5.2: Colour used diffusely on a brand logo, influences the brand perception as being characterized by having a feminine brand personality.

The only colours which boys use more frequently than girls are grey and blue. Sex difference in colour is most marked in the colour pink (Iijima et al., 2001), as girls decidedly prefer pink and flesh colours. These differences in visual preferences for particular colour hues, having gender as a regulator of the decision, have been demonstrated to become very clear in boys and girls by the age of 3-4 months of age (Zemach et al., 2007). Another experiment, conducted by Picariello et al. (1990), found that children from 3- to 7-year old choose their favourite felt pig from a choice of pigs coloured in either stereotypically masculine colours (navy blue, brown, maroon) or stereotypically feminine colours (light pink, bright pink, lavender), and that they were likely to choose a pig in a colour stereotyped as being linked with their own sex. Another study focused on kids' colour preferences (using the Luscher colour test, which consists of eight cards with different colours), concluded that biological sex-based colour difference is meaningful for the blue, green, pink, and black colours (Mohebbi, 2014). These well-defined sex-typed colour preferences appear to persist into adulthood. Indeed, Hurlbert and Ling (2007) examined the colour preferences of

adults using a forced choice colour picking task and concluded that females prefer reddish purple and males prefer blue-green. Another experiment in adulthood (Moss et al., 2007), found that women are prompt to use more colours for typography and more of specific colours, such as white, yellow, pink and mauve. Also the results from research conducted in adults (Aspara & Van Den Bergh, 2014), classified dark and cold colours (such as grey, brown, black, green and blue) as being rated towards the masculine pole, while light and warm colours (such as red, yellow, orange, purple, light blue and light red) being rated towards the feminine pole.

Lieven et al. (2015) suggest that EP provides a partial explanation for the relationship between colour and masculinity/femininity in that face colour may serve as a marker of masculinity and femininity: women tend to be more light-skinned than men (Jablonski & Chaplin, 2000) due to the higher levels of estrogen (Perrett et al., 1998). This suggests that lighter colours may be strongly linked to femininity, while darker colours, on the contrary, may be more associated with masculinity (Lieven et al., 2015). Thus, if a brand uses light colours in its visual identity, it should increase brand femininity perceptions, while on the other hand, with the usage of dark colours, it might increase brand masculinity perceptions (Lieven et al., 2015). The emphasis on colour found in females' work may reflect sex differences in sensitivity to colour stimuli; reflecting the differences in cortical response to blue light stimulation and red wavelengths found between men and women (Cowan et al., 2000; Mollon, 1986).

Hence, considering the findings of previous research, we assume the following hypotheses:

H6.1: The presence of a dark blue colour in brand logos elicits masculine brand gender perceptions.

H6.2: The presence of a light pink in brand logos elicits feminine brand gender perceptions.

Chapter III

Methodology

3.1 Conceptual Framework and Research Design

Lieven et al. (2015) studied the effect of brand design on brand gender perceptions and brand preference. However, this study did not cover other relevant variables, such as the presence of natural designs in different shapes (heavier and more angular versus slender and rounder). Moreover, few studies provided insights regarding the extent to which the several marketing variables (e.g., related with user imagery, different elements of advertising or packaging) (Batra, Lehmann & Singh, 1993; Levy, 1959; Plummer, 1985) independently and interdependently influence brand personality (Aaker, 1997). Indeed, the majority of the studies focused only on studying these variables separately and not their possible positive joint effect. Fonseca (2018) focused on the effects of brand logo design on brand gender perceptions. Yet, this study focused only on colour hue and on the naturalness of logo design. To complement the findings of prior research, the present study introduces the variable of logo shape, and will analyse the separate and combine effect of logo design, logo shape, logo boldness and logo colour on brand gender perceptions (see the conceptual model in Figure 1).

Following the seminal work from Grohmann (2009) on brand gender perceptions, EP literature and prior studies analysing how gender perceptions are influenced by various brand identity cues (e.g., colour, typeface, logo shape) (Lieven et al., 2015; van Tilburg et al., 2015), this study assumes that the naturalness of logo design, logo shape and colour hue, will elicit brand gender perceptions, namely masculine brand personality (MBP) and feminine brand

personality (FBP) associations. Furthermore, we assume that brand-logo gender induced associations will favourably influence affect towards the logo. Ultimately, we assume that the congruence between consumers gender perceptions and brand logo gender perceptions will positively influence affective responses to the logos.

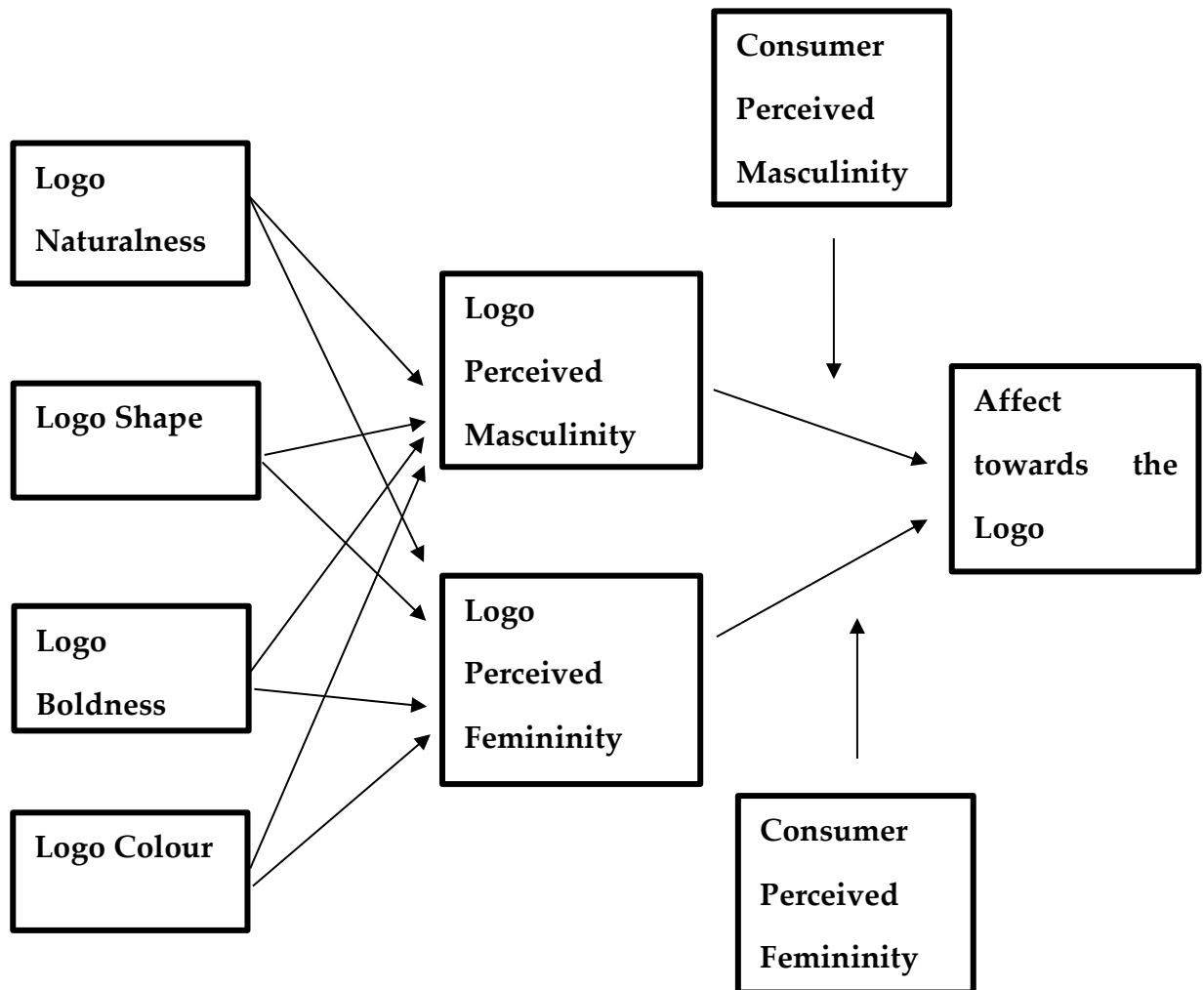


Figure 1: Research Model
Source: Own construction

As previously mentioned, and as we can identify from Figure 1, logo naturalness (cultural vs organic logos), logo shape (from angular to rounded shapes), logo boldness (heavier vs slender) and logo colour (navy blue and light pink) are the design elements selected for this research, therefore being the fixed

variables of this study. Since affective reactions to the logo are highly linked to responses to the brand itself (Henderson & Cote, 1998), we considered the affect towards the logo to be the dependent variable of this research.

3.2 Sample and procedure

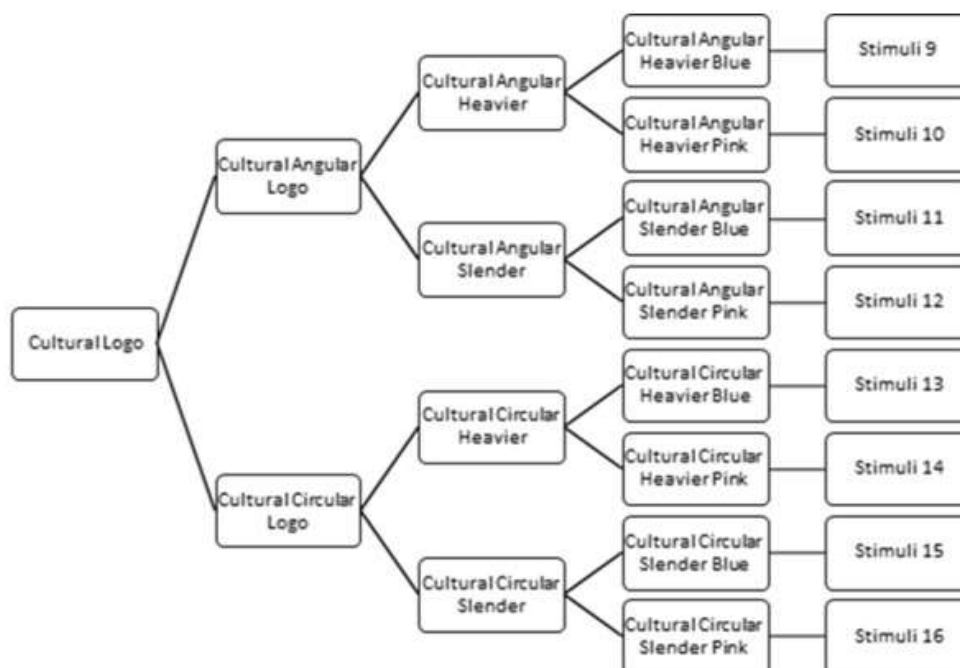
An experimental study was developed, on a sample of 649 respondents using an online survey with Qualtrics. This method was chosen as it improves response rate, having the ability to randomize survey items and protects confidentiality (Machado et al., 2015). We tried to recruit respondents from a wide range of age cohorts, sex, educational backgrounds and regions of Portugal, while using the researchers' contact list. We also gathered demographic information regarding respondents' sex, age, region of residence, educational level and profession.

It is important to state that from the sample of 649 respondents, only 357 (55,01%) of the surveys were entirely completed. The remaining 292 (44,99%) were somehow uncompleted, meaning that the respondents answered partially the survey, abandoning it before completed.

3.3 Stimulus Selection

This study will use a sample of 32 unknown and manipulated logos (please see Figure 3), as a stimuli for the analysis, and we will use a 2 (cultural) X 2 (organic) X 2 (heavy vs slender) X 2 (angular vs round) X 2 (light pink vs navy blues) between-participants design. Figure 2 represents the design of stimuli on a single organic logo and a single cultural logo. Nevertheless, we will be using two logos per the two naturalness categories (2 organic and 2 cultural), so the final number of stimuli is 32. The logos used were selected from a data base of cultural and organic logos developed by Machado et al., (2015). In this study, respondents classified a large set of logos according to their recognition and to the naturalness of logo design, following a semiotics classification of design and

logo strategy terminology (Machado et al., 2015). Only the logos that were correctly categorized in this research as unknown and as cultural or organic by at least 75% of the respondents were considered for the present study. By using these logos, we guarantee that the logos included in this research are unknown in the Portuguese market, and correctly classified as cultural and organic logos. After this selection, in order to test the research model of the present study, all the logos were manipulated along the heavy/slender and angular/round dimensions (Alexander, 2003; Elliot & Niesta, 2008; Lieven et al., 2015). Hence, the cultural and organic logos presented as stimuli ranged from heavy logos (with a heavier use or a concentrated usage of colour) with more angular shapes to slender logos (with a more diffuse usage of colour) and more rounded shapes, as presented in Table 6. Regarding the colours of the colour used, these were manipulated into light pink and dark navy blue (Labrecque & Milne, 2012; Lieven et al., 2015), to confirm if feminine and masculine brand gender perceptions were evoked by the usage of these colours.



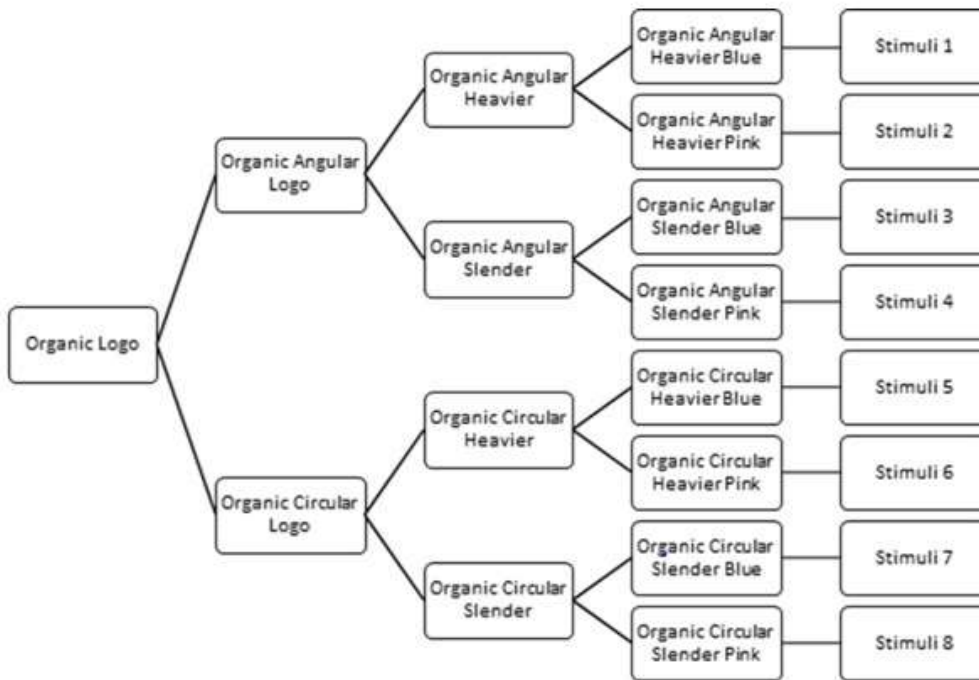


Figure 2: Stimuli Design
Source: Own Construction









Cultural Round Heavy	Cultural Round Slender
	
	
Cultural Angular Heavy	Cultural Angular Slender
	
	

Table 6: Example of the manipulations conducted on the logos used to this study
Source: Own Constructions

To avoid possible bias resulting from response fatigue (Egleston et al., 2011), each respondent was only presented with four logos from the total set of 32 different stimuli created. In order to prevent potential bias that might arise from the construction of pre-defined fixed blocks of logos, the four stimuli displayed to each respondent were randomly selected from the total set by Qualtrics software, assuming the following constraints: a) each logo design could only appear to the respondent in one colour (either blue or pink) and b) in one shape (round vs angular and heavier vs slender); c) each respondent was necessarily presented with two organic and two cultural logos.

3.3 Measures

All the constructs were measured using scales from prior studies. Scales were translated from English to Portuguese, as this experiment was conducted among the Portuguese population.

In order to evaluate perceptions regarding logo shape, and hence, to do a manipulation check, participants were asked how they qualify the logos, by using two semantic differential scales. These seven-point bipolar rating scale using adjectival opposites, one from poorly feminine to highly feminine and the other from poorly masculine to highly masculine, were not based on a universally applied semantic differential scale, as there is none. The choice to opt for a seven-point bipolar rating scale is directly linked with the scale used to classify affect towards the logo, explained below. In addition to this, and based on Al-hindawe (1996), this scale has the advantage that the subjects can indicate whether they judge the logo to be extremely feminine/masculine or poorly feminine/masculine by marking the extremities (1 or 7, respectively), or if, on the other hand, they have not formed an opinion of the logos by marking position 4, a neutral position half way between the two extremes. In order to further evaluate the perceptions regarding the logo shape, participants were also asked

to rate the logos on two semantic differential scales that reflect heaviness/slenderness and angularity/roundness in a design context, using 11-point scales (1= bold/solid, 11= airy/delicate; 1= angular/sharp, 11= round/smooth (Björntorp, 1987; Lieven et al., 2015). To assess the gender perceptions evoked by each logo, we used the scaled developed by Grohmann (2009), to measure Masculine Brand Personality (MBP) and Feminine Brand Personality (FBP) (see Table 7). Therefore, for each depicted stimulus, respondents were asked the question: “If this logo was a person, how would you describe it?”. A list of 12 personality traits (MBP: adventurous, aggressive, brave, daring, dominant, and sturdy; FBP: expresses tender feelings, fragile, graceful, sensitive, sweet, and tender) were presented along with a 7-point Likert-type scale, from “strongly disagree” (1) to “strongly agree” (7). The same scale was used to measure respondents’ perceived gender; that is, their self-appraisal regarding gender-related attributes. This allowed us to measure how the congruence between the perceived gender of the respondents and the perceived gender of the brand logo influences consumer affective response to the logo.

MBP	FBP
Adventurous	Expresses tender feelings
Aggressive	Fragile
Brave	Graceful
Daring	Sensitive
Dominant	Sweet
Sturdy	Tender

Table 7: Gender Dimensions of Brand Personality
Source: Grohmann (2009)

In respect to affect, as there is not one universally applied affect scale, we used in this research the items most often used to measure affect towards logos (Chaudhuri & Holbrook, 2001; Grohmann, 2009; Grossman & Till, 1998; Henderson & Cote, 1998; Kim et al., 1996; Samu et al., 1999; Walsh et al., 2010), namely: unpleasant/pleasant; uninteresting/interesting;

undistinctive/distinctive; dislike/like; bad/good; low quality/high quality. We used again a seven-point Likert type scale to measure how much responded agree with the items displayed, where 1 was representative of “strongly disagree” and 7 “strongly agree”. It is also important to state that all scales used were itemised rating scales.

In addition to this, we also gathered demographic information regarding respondents’ sex, age, region of residence, level of education and professional occupation. In order to remove the subjects who were colour-blinded, while avoiding data collection biases (Gorn et al., 1997), respondents were asked if they suffer from colour-blindness.

Chapter IV

Results

4.1 Structure of the questionnaire

In order to guarantee that all the questions on the questionnaire were well understood by the respondents, a pre-test was conducted.

As previously mentioned, respondents were presented randomly with only four out of the 32 stimuli, what, consequently, creates several combinations and versions of the questionnaire. In each version some restrictions, regarding the logos presented were created. Thus, each logo design could only appear to the respondent in one colour (either blue or pink) and in one shape (either round or angular and either heavier or slender). Each respondent was necessarily presented with two organic and two cultural logos, summing a total of four logos per version. Even though not all the respondents were presented with the same logos, the questions were the same in all versions.

In first place, in order to guarantee all respondents could perfectly identify the colours used, they were asked if they suffered from any colour-blindness symptom. The answers to this question were gathered using a nominal scale (yes/no).

The second question was conducted to guarantee that the brands were unknown to the respondents as they were asked if they knew to which brand the logo is associated with. Once again, the answers were gathered by using a nominal scale (yes/no).

Regarding the following questions, we aimed to understand the gender evoked by the logos displayed. In order to do so, respondents were asked to rank

each logo using a semantical bipolar scale, ranging from “less feminine” to “very feminine” and another one from “less masculine” to “very masculine”. Following this question, they were asked to indicate their level of agreement with the gender personality scale items, developed by Grohmann (2009), for each logo presented on the questionnaire. The same scale was used to ask participants their own gender perception. Afterwards, affect towards the logo was measured by asking participants to indicate their level of agreement with the items of the affect scale used.

The last part of the questionnaire was devoted to socio-demographic questions, regarding the participant’s sex, age, district of residence and professional occupation. Lastly, with the objective of determining if the congruence between the perceived gender of the respondents and the perceived gender of the logos influences affective responses to the logo, participants were asked to indicate their own level of agreement, with respect to the items of Grohmann's (2009) personality scale in relation to their own personality.

4.2 Sociodemographic characterization of the sample

In total, the questionnaire reached 649 respondents. From this total sample, 357 (55,01%) respondents completed entirely the questionnaire, while the remaining 292 (44,99%) submitted an uncompleted survey.

When analysing the sample on a biological sex criterion, 101 respondents were female, and 256 were male, corresponding to 28,3% and 71,7% respectively, of the sample (see Table 7).

When it comes to age, the spectrum of age of the sample ranged from 16 to 73 years old. Nevertheless, the majority of the respondents were between 20 and 30

years old, followed by 50 and 60 years old. The lowest percentage of respondents corresponded to a group characterized by being 70 to 80 years old (Table 7).

In terms of education, most respondents own a bachelor's degree (44,8%). Subsequently, 40,3% of respondents are characterized by having a Master or post-graduate degree of education. A total of 11,2% of the total sample of respondents affirms to have a high-school diploma, while 3,6% chose the option "other" for this question (Table 7).

Regarding professional occupation, 29,6% of our sample is connected to the financial and business sector, followed by students and the education system, 24,1% and 8,1% respectively. 6,4% reported to work in marketing and sales, while 4,8% work on the health system. In addition to this, a small part of the respondents works in law and engineering, 3,6% on both sectors (Table7).

In regard to the district of residence, the majority of the respondents lives in Porto (58%) and Lisbon (22,7%). The following most relevant regions are Coimbra (8,1%), Braga (3,4%), Aveiro (1,4%) and Viseu (1,1%). A minority reported to live in Ponta Delgada (0,3%), Funchal (0,3%), Castelo Branco (0,3%) and Bragança (0,3%). Interestingly, there are also a couple responses from abroad, namely from England (0,3%) and Belgium (0,3%) (see Table 8).

		Frequency (n=357)	Valid Percentage % (n=357)
Biological Sex	Male	256	71,7%
	Female	101	28,3%
Age	[16;20]	20	5,6%
	]20;30]	143	40,1%
	]30;40]	45	12,6%
	]40;50]	47	13,2%
	]50;60]	84	23,5%
	]60;70]	16	4,5%
	]70;80]	2	0,6%

(Continued)

		Frequency (n=357)	Valid Percentage % (n=357)
District of Residence	Aveiro	5	1,4%
	Belgium	1	0,3%
	Braga	12	3,4%
	Bragança	1	0,3%
	Castelo Branco	1	0,3%
	Coimbra	29	8,1%
	England	1	0,3%
	Funchal	1	0,3%
	Guarda	2	0,6%
	Leiria	3	0,8%
	Lisboa	81	22,7%
	Ponta Delgada	1	0,3%
	Porto	207	58,0%
	Santarém	2	0,6%
	Setúbal	2	0,6%
	Viana do Castelo	2	0,6%
	Vila Real	2	0,6%
Viseu	4	1,1%	
Education	High school	40	11,2%
	Bachelors	160	44,8%
	Post-Graduate/Master	144	40,3%
	Other	13	3,6%
Occupation	Arts & Design	14	3,9%
	Education	29	8,1%
	Engineering	13	3,6%
	Health	17	4,8%
	Law	13	3,6%
	Management & Financial	102	29,6%
	Marketing & Sales	23	6,4%
	Other	51	14,3%
	Student / Working Student	86	24,1%
	Tourism	9	2,5%
Suffering from colour-blindness	Yes	8	2,2%
	No	349	97,8%
Recognition of the brand's logos	Yes	154	9,7%
	No	1440	90,3%

Table 8: Sample characterization
Source: SPSS Output

4.3 Statistical Analysis

It is important to highlight the fact that the great majority of the respondents correctly classified the logos as unknown (90,3%), while a minority indicated they recognized the logos (9,7%) (See Table 8), and this should reflect false recognitions. Another relevant information is that only 2,2% of the respondents affirmed suffering from colour-blindness symptoms (See Table 7). Consequently, this allowed to control over the effects of brand recognition.

Firstly, we edited the data from the questionnaires, in order to conduct the statistical analysis, using SPSS. Then, we conducted a reliability test to all the variables included in the study. This allowed us to verify if the hypothesis presented previously can be confirmed.

4.3.1 Coding

In our statistical analysis, the first stage corresponds to the coding of the variables chosen to run the data in the SPSS program. We coded Logo Naturalness, Logo Shape and Logo Colour, which are our categorical variables, into dummy variables (see Table 9).

Cultural Logo Design	0
Organical Logo Design	1
Rounded Logo Design	0
Angular Logo Design	1
Slender Logo Design	0
Heavier Logo Design	1
Light Pink Colour	0
Dark Blue Colour	1

Table 9: Variables Coding
Source: Own Construction

It is also important to note that throughout this chapter, the variables will present the following names (see Table 10):

Logo Naturalness	Logo_N
Logo Shape	Logo_S
Logo Boldness	Logo_B
Logo Colour	Logo_C
Masculine Perceptions of personality in logos	MBP_Logo
Feminine Perceptions of personality in logos	FBP_Logo
Consumer Perceived Masculinity	Con_Mas
Consumer Perceived Femininity	Con_Fem
Masculine Congruence between perceived gender of respondents and logo gender	Mas_LogoCon
Feminine Congruence between perceived gender of respondents and logo gender	Fem_LogoCon
Affect Towards the Logo	A_Logo

Table 10: Definition of the variables in the study
Source: Own Construct

4.3.2 Reliability

In order to prove the reliability of the scales used in this research and to measure the internal consistency of our model, the Cronbach's Alpha (α) for our variables was estimated (see Table 10). Additionally, in relation to the internal consistency, as shown in Table 10, the Cronbach's Alpha (α) for MBP_Logo ($\alpha=0,873$), FBP_Logo ($\alpha=0,941$), Con_Mas ($\alpha=0,742$), Con_Fem ($\alpha=0,855$) and A_Logo ($\alpha=0,951$) are above the recommended value of 0,7 (Hair et al., 1998). Along with these results, Con_Mas has a moderate level of internal consistency. Regarding MBP_Logo and Con_Fem, the level of internal consistency is considered moderate. For FBP_Logo, A_Logo the level of internal consistency is considered excellent.

Logo Gender Perception ($n=1594$)

Mean	Motivations
(SD)	(1 = strongly disagree to 7 = strongly agree)

3,38	<i>Masculine Logo Gender Perception</i> (Grohmann, 2009)
(1,349)	

3,64	If this logo was a person, how would you describe it
(1,757)	as adventurous? (Continued)

Logo Gender Perception (n=1594)

	Mean (SD)	Motivations (1 = strongly disagree to 7 = strongly agree)
CR = 0,872 α = 0,873	2,49 (1,627)	If this logo was a person, how would you describe it as aggressive?
	3,57 (1,704)	If this logo was a person, how would you describe it as brave?
	3,36 (1,707)	If this logo was a person, how would you describe it as daring?
	3,58 (1,776)	If this logo was a person, how would you describe it as dominant?
	3,64 (1,781)	If this logo was a person, how would you describe it as sturdy?
CR = 0,940 α = 0,941	3,41 (1,663)	<i>Feminine Logo Gender Perception</i> (Grohmann, 2009)
	3,48 (1,925)	If this logo was a person, how would you describe as expressing tender feelings?
	3,12 (1,784)	If this logo was a person, how would you describe it as fragile?
	3,72 (1,849)	If this logo was a person, how would you describe it as graceful?
	3,42 (1,895)	If this logo was a person, how would you describe it as graceful?
	3,36 (1,942)	If this logo was a person, how would you describe it as sweet?
	3,37 (1,954)	If this logo was a person, how would you describe it as tender?

Consumer Gender Perception (n=11520)

	Mean (SD)	Motivations (1 = strongly disagree to 7 = strongly agree)
CR = 0,745 α = 0,742	4,08 (0,946)	<i>Masculine Consumer Gender Perception</i> (Grohmann, 2009)
	4,67 (1,278)	How would you describe yourself as adventurous?
	2,71 (1,449)	How would you describe yourself as aggressive?
	4,88 (1,241)	How would you describe yourself as brave?

(Continued)

Consumer Gender Perception (n=11520)

	Mean (SD)	Motivations (1 = strongly disagree to 7 = strongly agree)
	4,24 (1,444)	How would you describe yourself as daring?
	4,26 (1,539)	How would you describe yourself as dominant?
	3,73 (1,611)	How would you describe yourself as sturdy?
	4,64 (1,093)	<i>Feminine Consumer Gender Perception</i> (Grohmann, 2009)
CR = 0,857 $\alpha = 0,855$	5,07 (1,428)	How would you describe yourself as expressing tender feelings?
	3,63 (1,517)	How would you describe yourself as fragile?
	4,29 (1,401)	How would you describe yourself as graceful?
	5,16 (1,437)	How would you describe yourself as graceful?
	4,74 (1,405)	How would you describe yourself as sweet?
	4,94 (1,424)	How would you describe yourself as tender?

Affect Towards the Logo (n=1594)

	Mean (SD)	Motivations (1 = strongly disagree to 7 = strongly agree)
	4,17 (1,490)	<i>Affect Towards the Logo (n=1594)</i>
CR = 0,951 $\alpha = 0,951$	4,44 (1,62)	I consider this brand logo to be pleasant. (Grossman and Till, 1998; Kim et al, 1996; (Continued) Samu et al, 1999; Chaudury & Holbrook, 2001).
	4,3 (1,646)	I consider this brand logo to be interesting. (Grossman & Till, 1998; Henderson & Cote, 1998; Kim et al, 1996; Walsh et al, 2010).
	4,19 (1,667)	I consider this brand logo to be distinctive. (Henderson & Cote, 1998; Walsh et al, 2010).
	4,2 (1,754)	I like this brand logo. (Grossman & Till, 1998; Henderson & Cote, 1998 Grohmann, 2009; Kim et al, 1996; Walsh et al, 2010).

(Continued)

Affect Towards the Logo ($n=1594$)

Mean (SD)	Motivations (1 = strongly disagree to 7 = strongly agree)
4,15 (1,681)	I consider this brand logo to be good. (Grossman & Till, 1998; Henderson & Cote, 1998; Kim et al, 1996; Samu et al, 1999; Walsh et al, 2010).
3,74 (1,6)	I consider this brand logo to be of high quality. (Grossman & Till, 1998; Henderson & Cote, 1998; Kim et al, 1996; Walsh et al, 2010).

Table 11: Measurement Model: items means and standard deviations; construct reliability (CR) and Cronbach alpha (α)
Source: SPSS Output

In summary, thanks to the stated data, we can conclude that all the measurements used in the model are satisfactory and valid, which allows us to proceed with the test of the structural model.

4.3.3 Hypothesis testing

The structural model suggested previously in this research (i.e., research design), is a representation of the hypothesis on test, explicitly, and respectively, signed on the paths of Figure 2. Without exception, all the hypothesis were submitted to testing by evaluating the statistical significance of each hypothesis with the help of the p-value along with the standardized estimate. On Table 12, the path coefficient of each hypothesis is presented, demonstrating the impact of each correlation present in our study.

When analysing Table 12, it is important to pay close attention to the coding applied to the dummy variables in the categorical variables, such as cultural logo designs (0 = cultural designs; 1 = organic designs), shape (0 = round; 1 = angular), boldness (0 = slender; 1 = heavier) and colour (0 = pink; 1 = dark blue). By doing so, we can interpret the standardized estimation (i.e. path coefficient) of the Regression Linear Model conducted, to better understand the influence of the predicted relations. In addition to this, it is also relevant to note that only if the p-value is below 0,05 we can consider it as significant.

Hypothesis	Path	Sig	Path Coefficient (β)	Relevance Hypothesis
H1.1	ConLogo_Mas \longrightarrow A_Logo	0,03	0,047	Supported
H1.2	ConLogo_Fem \longrightarrow A_Logo	0,052	0,043	Not Supported
H2.1	MBP_Logo \longrightarrow A_Logo	0,00	0,382	Supported
H2.2	FBP_Logo \longrightarrow A_Logo	0,00	0,457	Supported
H3.1	Logo_N \longrightarrow MBP_Logo	0,02	-0,076	Supported
H3.2	Logo_N \longrightarrow FBP_Logo	0,00	0,448	Supported
H4.1	Logo_S \longrightarrow MBP_Logo	0,00	0,139	Supported
H4.2	Logo_S \longrightarrow FBP_Logo	0,00	-0,176	Supported
H5.1	Logo_B \longrightarrow MBP_Logo	0,898	0,003	Not Supported
H5.2	Logo_B \longrightarrow FBP_Logo	0,541	-0,013	Not Supported
H6.1	Logo_C \longrightarrow MBP_Logo	0,221	0,03	Not Supported
H6.2	Logo_C \longrightarrow FBP_Logo	0,00	-0,138	Supported

Table 12: Hypothesis Testing.
Source: SPSS Output.

Due to the complexity of our model and in order to better understand the final result, corresponding to H1.1 and H1.2, the following analyses will be done in a descending order, meaning from H6.1 and H6.2, with simpler constructs, to H1.1 and H1.2, with more complex constructs.

According to the results of our model, the impact of logo colour on masculine brand logo gender perceptions is statistically considered as not significant (Sig=0,221) (Table 12). Hence, it is not possible to conclude that dark blue colour enhances the perception of a brand's logo masculinity, consequently meaning that H6.1 is not confirmed.

On the other hand, we conclude that the relation between logo colour logo and feminine brand gender perceptions is statistically significant (Sig=0,00) (Table 12). Additionally, by analysing the path coefficient regarding the correlation ($\beta=-0,138$) (Table 12) it indicates that light pink coloured logos have a moderate impact on feminine brand gender perceptions. Therefore, H6.2. is confirmed.

In regard to the relations between boldness (heavier vs slender) and logo brand gender perceptions, they are in both cases (i.e. MBP_Logo and FBP_Logo), not statistically significant (Sig=0,898 and Sig=0,541, respectively) (Table 12). With that being stated, it is not possible to confirm that boldness in logo design has an effect on the brand gender perceptions of the logo, meaning H5.1. and H5.2. are not confirmed.

Moreover, we find that the influence of logo shape design on masculine brand gender perception is statistically significant (Sig=0,00) (Table 12). The path regarding this correlation ($\beta=0,139$) (Table 12) indicates that logos designed with more angular shapes have a moderate impact on masculine brand gender perceptions. Thus, hypothesis H4.1 is confirmed.

Also, the influence of logo shape design on feminine brand gender perception is statistically significant (Sig=0,00) (Table 12). Besides, through the analysis of the standardized estimate value ($\beta=-0,176$) (Table 12), we can conclude that logos designed with more rounded shapes have a significant, yet moderate, impact on feminine brand gender perceptions. Hence, we can confirm H4.2.

The results of our model show that the relation regarding the naturalness of logo design and masculine brand perceptions is statistically significant (Sig=0,02) (Table 12). In addition, by analysing the path coefficient ($\beta=-0,076$) (Table 12), we find that cultural logos have a low, yet significant, positive impact on masculine brand gender perceptions. Consequently, we can confirm H3.1.

Furthermore, results show that the relation between the naturalness of logo design and feminine brand perceptions is also statistically significant (Sig=0,00).

Furthermore, through conducting an analysis of the standardized estimate value ($\beta=0,448$), we find that organic logo designs have a moderate positive impact on feminine brand gender perceptions, thus confirming H3.2.

Regarding the relation between logo masculine brand gender perceptions and affect towards the logo, we find this relation is statistically significant (Sig=0,00). The path coefficient concerning this correlation ($\beta=0,382$) indicates that logos transmitting masculine brand perceptions have a moderate and positive impact on affect towards the logo. Accordingly, we can confirm H2.1.

Likewise, results show that the relation between logo feminine brand gender perceptions and affect towards the logo is statistically significant (Sig=0,00). When analysing the path coefficient ($\beta=0,457$), we can infer that logos transmitting feminine brand perceptions have a moderate positive impact on affect towards the logo. Consequently, H2.2. is confirmed.

Finally, the relation regarding the congruence between logo masculine brand gender perceptions and consumer masculine gender perceptions and affect towards the logo is statistically significant (Sig=0,030). The analysis of the standardized estimate value ($\beta=0,047$), indicates that this congruence has a moderate positive impact on affect towards the logo. Thus, H1.1 is confirmed.

The results regarding the congruence between logo feminine brand gender perceptions and consumer feminine gender perceptions and affect towards the logo is, by a small difference, statistically not significant (Sig=0,052). Consequently, there is no possibility to conclude that the congruence in femininity among logo and consumer perceptions enhance affect towards the logo, which indicates that H1.2 is not supported.

To better understand the interaction between the elements of H1.1, we produced a graphical representation of our model regarding the congruence between logo masculine brand gender perceptions and consumer masculine gender perception and affect towards the logo (See Figure 3).

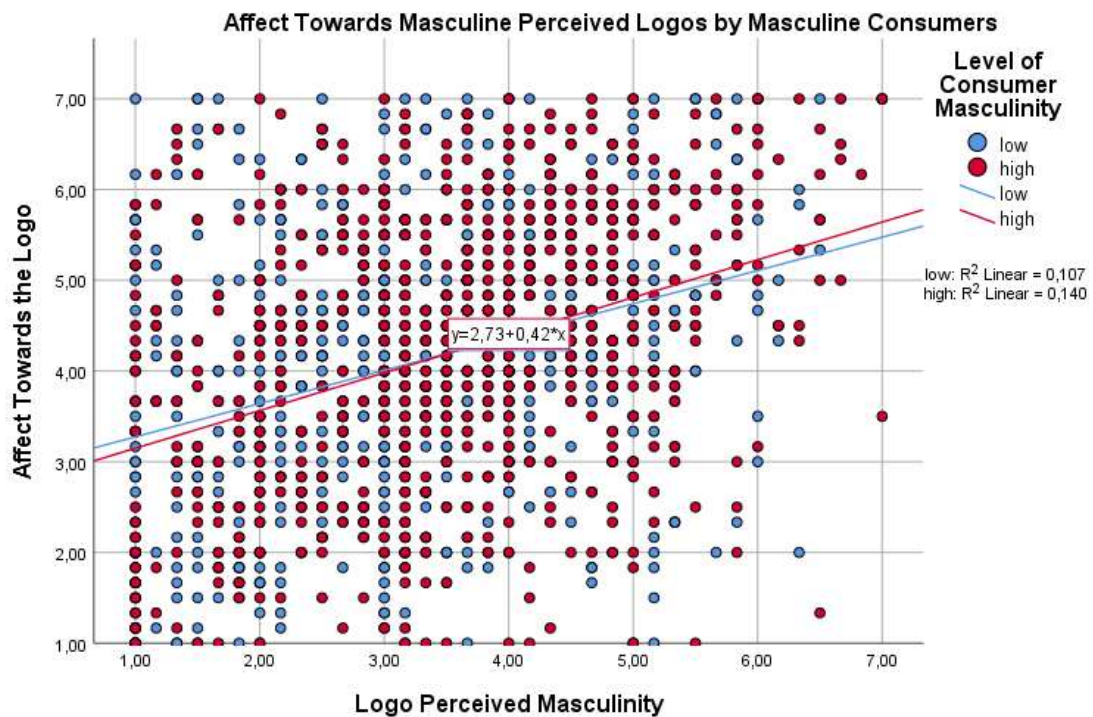


Figure 3: Interaction between Consumer Perceived Masculinity, Logo Perceived Masculinity on Affect Towards the Logo
 Source: SPSS Output

By examining Figure 4, we can verify that the graphical line representing the level of consumer perceived masculinity combined with the logo perceived masculinity, indicates that as this congruence increases so does affect towards the logo, which once again confirms that the hypothesis H1.1. is supported.

4.3.4 Model Fit

The last step of our statistical analysis is related to the measuring of the overall model fit. This is an important step as it “portrays the degree to which the specified indicators represent the hypothesized constructs” (Hair et al., 1998, p. 621)”, indicating if the model is acceptable to adequately test our hypothesis.

After analysing the results for the conducted Linear Regression, we can analyse that the variation in the dependent variable (Affect_Logo) is explained by 34% by the model’s independent variables (See Table 13).

Predictor Variables	Model β
Dependent variable: Affect_Logo	
MBP_Logo	0,382
FBP_Logo	0,457
Con_Mas	-0,071
Com_Fem	0,16
Mas_LogoCon	0,047
Fem_LogoCon	0,043
R ²	0,34
F for change in R ²	5, 010

Table 13: Results of the hierarchical linear regression model
Source: SPSS Output.

Chapter V

Discussion

This section is related to the main topics discussed along the literature review, the goals of this research and the results obtained throughout the investigation process.

As mentioned in the previous chapter, results show that brand gender perceptions are influenced by the design elements, namely logo naturalness, shape and colour, which goes in line with the main assumptions of this study. Nevertheless, as seen in our results, and contrary to our prior assumptions, logo boldness does not elicit brand gender perceptions in consumers' minds. Thus, we find support for our hypothesis, except for H5 (both H5.1. and H5.1.) and H6.1.

Our results indicate that cultural logos with angular shapes induce perceptions of masculine brand personality, while organic logos with rounded shapes stimulate feminine brand perceptions. Previous research has already demonstrated that logo shape is an influencer of brand gender perceptions (Lieven et al., 2015), as rounder and slender designs contribute to feminine perceptions, while angular and geometric designs to masculine perceptions. In addition to this, Moss et al. (2007) demonstrated that biological sex influences design preferences, as females tend to prefer less technical drawings and more natural details (i.e. people, flowers, butterflies), while males rather opt for more technical drawings, more related to manufactured objects, such as machinery, vehicles and technology. We must take into consideration that these findings focus on biological sex and not on the perceived gender. Nevertheless, as mentioned in previous research (Buss, 1994), according to EP, gender perceptions are result from the process of social and cognitive evolution that males and

females face throughout time, due to reproductive success. Thus, we can assume that the interaction between logo design and gender perceptions exists.

Regarding the shape of the different types of natural logos, this proved to be one of the most relevant contributions of this study, since, as far as we know, the association between cultural and organic logos, modified with angular and rounded shapes, with masculine and feminine perceptions of the logo design has not yet been studied. Thus, this study can provide relevant insights to companies, when they are planning their branding and positioning strategies. Therefore, brands should take into consideration that brand logos with cultural drawings and angular, more geometrical lines, might evoke masculine traits of brand personality in consumers' minds, in respect to brand personality.

Another interesting result of our study, which has not been thoroughly studied in previous research, is that boldness does not have a significant impact on brand gender perceptions. In previous literature, Lieven et al. (2015) demonstrates that if a logo is not only edged/sharp but also bold/solid, masculinity is significantly enhanced, and that a logo that is curved/smooth as well as airy/delicate signals a particularly strong sense of femininity for the brand. In the results of our study, we are not able to conclude that the boldness of logo design is relevant for the building of brand gender perceptions.

Previous research suggested that colour influences brand personality perceptions (Labrecque & Milne, 2012). Van Tilburg et al. (2015) deepened this idea by analysing the influence of light and dark colours on brand gender perceptions. Moreover, other researchers concluded that the colour pink is often preferred by females, while blue is preferred by males (Picariello et al., 1990). Associating these findings with EP literature, we can assume that female and male colour preference influences the ability of colour to evoke brand gender perceptions in consumers. In addition to this, we should highlight taking that once a colour is selected to be part of a logo, and consequently represent a brand,

it is extremely difficult to change the colour afterwards (Labrecque & Milne, 2012). Thus, the impact of colour on consumer brand perceptions should be acknowledged by marketing managers and taken into serious consideration when marketing decisions are being held. According to our results regarding logo colour, light pink does, indeed, evoke a feminine brand personality perceptions. Unexpectedly, dark blue logo colour does not evoke a masculine brand personality perceptions. Therefore, our results were inconclusive regarding this assumption. We acknowledge that brand gender is a very complex construct and that many factors may impact brand gender perceptions and, even though we controlled the effect of brand recognition, the logo formats, such as the species of animal used, as well as other aspects of the logos, may have affected brand gender perceptions.

An interesting finding was that the congruence between perceived logo masculinity and perceived consumer masculinity generates higher levels of positive affect towards the logo. Yet, we could not confirm the same relation in regard to the congruence between perceived logo masculinity and perceived consumer masculinity. However, we should point out that the congruence between feminine logo gender perceptions and feminine consumer gender perceptions almost has a significant positive effect on affect towards the logo, as the p-value is almost significant. The literature shows that this congruence between consumer's and brand's gender identity favourably affects consumer's responses, leading to a higher brand trust, loyalty and purchase intention (Lieven et al., 2014). Aesthetics is, as demonstrated in previous research, extremely important to stimulate affective responses, since consumers can form an initial judgment of a specific object just based on its appearance (Machado et al., 2015). Furthermore, it has also been studied that the greater the prominence of different physical features, the greater the perceived attractiveness for each gender (Grammer et al., 2003). Since logos are key physical representations of brands

(Henderson & Cote, 1998), the combination of design characteristics that, according to EP aesthetically work as drivers of gender perceptions, enhancing the desirableness and attractiveness (Buss & Schmitt, 1993), induce a higher level of affect. This assumption was, in fact and according to our results, confirmed in the male case, whereas the more masculine a consumer perceived himself, the greater affect the consumer felt towards a masculine logo.

Nevertheless, this assumption needs to be further tested as it can lead to critical insights for marketing decisions and was not verified in the female case. The combinations between gender cues (i.e. all the design elements, such as colour, shape, naturalness) should be in line with the companies' strategic objectives and consequent marketing strategies, as logos are the main visual element of a company's branding strategy (Henderson & Cote, 1998).

As mentioned on Chapter 2, gendered brands, whether masculine or feminine, induce stronger and more favourable responses from consumers, when compared to brands that opt for an absence of a clear gender position or for an androgynous positioning, which often evokes mixed gender traits which are harder to categorize (Lieven et al., 2014). Additionally, a clear brand logo gender positioning has a positive impact on consumer affective responses and also guarantees consistency between brand's desired and obtained positioning (Lieven et al., 2014). At this respect, (Henderson & Cote, 1998) highlight how critical it is for any brand to build and enhance affect towards the its logo, as affect can transfer from the logo to the brand, with little or no processing. Thus, marketing managers should be aware of the relevant outcomes strong gendered brand identity signs, particularly the logo, stimulate, both for well established brands or for new brands entering the market.

Chapter VI

Conclusion

This chapter will summarize the research conducted and describe the main theoretical and managerial implications of the results. Furthermore, we will present the limitations of this research, as well as the directions for further future research.

6.1 Summary and Implications

Brands are a big part of consumers daily lives, as they are representations of consumers' identity. As logos are a physical representation of the brand, with the ability to impact consumer perceptions and affect towards the brand, with little or no processing, it is of great importance to study this brand identity sign. The main goal of this research was to examine the impact of logo design elements on brand gender perceptions and, consequently, on affective responses towards the logo.

For this reason, we conducted an extensive analysis of the relevant literature covering brand personality, with special focus on the gender dimensions of brand personality, namely masculine brand and feminine brand personality. Additionally, we studied the importance of brand logo elements, as a logo is the main brand visual identity sign and the focus of this research. In particular, we examined how logo design elements can induce brand gender perceptions and influence brand-related consumer responses.

According to research on brand personality and logo strategy, many elements of the logo can enhance personality perceptions in consumers' mind, (i.e. type font, logo shape). Nevertheless, the study of logo design and logo colour is still in its infancy and has numerous mysteries for marketing professionals and

scholars. Another relevant motive to further study this subject is related to its effects, as logo literature suggests that this visual element has a critical role in achieving positive affect towards the logo (Henderson & Cote, 1998). In addition, (Machado et al., 2015) also enhances the fact that natural logo designs have a higher probability of generating positive affective reactions. Consequently, we thought that it would be relevant to more deeply analyse the naturalness of brand logo designs, examining the influence of the different types of natural designs, namely cultural and organic forms, on brand gender perceptions and, as a consequence of that, on affect towards the logo.

The hypotheses proposed in this research were based on the theory on aesthetics and colour, as well as on EP literature. The influence of the gendered cues on brand gender perceptions, and ultimately their outcomes in terms of consumer responses, were the basis of this research. Hence, we decided to analyse the ability of logo naturalness, shape, boldness and colour, to influence logo brand gender perception. Additionally, we wanted to analyse if logo gender perceptions influence affect towards the logo, and if affect towards the logo is influenced by the congruence between logo gender perceptions and consumers gender perceptions.

A quantitative analysis was conducted, counting with 357 completed questionnaires to a total amount of 32 manipulated logos. Results were analysed by using linear regression models. The majority of our hypotheses were confirmed, with exception to H5.1., H5.2. and H6.1.

Thanks to our results, we found that within naturalness designs, cultural logo designs evoke masculine brand gender perceptions (H3.1.), while organic logo designs evoke feminine brand gender perceptions (H3.2.). When it comes to logo shape, we found that angular forms evoke masculine perceptions of brand personality (H4.1.), and, more rounded forms evoke feminine perceptions of brand personality (H4.2.). Furthermore, we found that logo boldness had no

significant impact whether on masculine or feminine brand gender perceptions, on both cases (i.e. heavier (H5.1.) and slender (H5.2.)). Moreover, we concluded that the use of light pink does, in fact, enhance feminine brand gender perceptions (H6.1). However, when it comes to the use of dark blue, we could not reach the same conclusion, as we were not able to conclude that it has an impact on masculine brand gender perceptions (H6.2.). Although we attempted to control the effect of brand recognition and its possible consequences in biasing results, there might have been an effect of external factors on participants' perceptions, regarding logos gender, such as the species of the animal used (i.e. penguin).

When focusing on the theoretical implications of this research, it is important to mention that this study was based on a convenience sample. Still, we believe to have achieved results that can have a relevant contribution to the marketing literature on the topics related to this research, and also to marketing managers. One of the main contributions of this research is related with the confirmation and expansion of the knowledge regarding the application of EP's principles in branding, by confirming that brand logo elements should be designed having in mind EP theories. Additionally, to our knowledge, this is the first study analysing the impact of the naturalness of logo design (i.e. cultural vs organic) and logo shape (i.e. angular vs rounded shapes) and boldness (heavier vs slender) on brand personality perceptions. This leads to important insights regarding the formation of brand gender perceptions. Furthermore, even though colour has already been the subject of numerous researches, several of these studies reached inconclusive results. The present research contributes to the literature on this topic and indicates that the use of dark blue by brands in order to evoke masculine brand gender perceptions may not be effective. We believe that this might be a relevant result, suggesting that consumers are currently widening the colour spectrum often related to genders, in this case, to

masculinity. In conclusion, the results of this research contribute to the logo strategy and brand personality and brand gender literatures, focusing on the ability of distinct and relevant brand logo design elements to contribute to brand gender perceptions, and, thereby, to consumer affective responses towards the logo.

6.2 Managerial Implications

Companies spend a reasonable amount of time and money designing and redesigning their logos. As the primary design elements of a brand and a critical part of a branding strategy, logos are suggested by the literature, to be influencers of brand gender perceptions. Thus, by providing marketing managers with appropriate knowledge regarding the theories and principles of logo design, the task of, designing or sometimes redesigning a brand logo can be simpler and more effective, while helping brands to achieve competitive advantage or emphasize its desired positioning in the market.

Our results show that a clear gendered position evokes positive affects towards the logo. Particularly, this research points out the positive affect towards masculine logos, as the more masculine a logo is perceived by a consumer that perceives himself/herself as having a masculine gender identity, the more positive the affective response towards the logo. Therefore, brands should have a clear brand gender positioning in mind, embodying this strategy into the design of the elements of its logo. Additionally, brands wishing a demarked positioning in the masculine consumers segment, should consistently use gendered design elements, in order to conquer higher levels of affect towards the logo, which can be transferred to the brand with little or no processing.

This research provides relevant knowledge regarding the choice of the brand logo elements to convey a masculine and a feminine gender. The use of cultural

logos with angular shapes enhances masculinity. Femininity is enhanced by the use of organic logo designs, with more rounded shapes and by using light pink.

Results show that managers attempting a feminine brand gender perception should consistently use light pink, while managers aiming a masculine brand gender perception do not have to stick to dark blue. Colour theories demonstrate the impact of a good usage of colour on branding, as consumers tend to strongly attach colours to brands. Thus, this topic should be of great importance for marketing managers when designing branding strategies, whether on new or in well-established brands.

6.3 Limitations and suggestions for further research

As any other academic research this study is not without limitations.

One of the major limitations felt throughout the time devoted to this research is related to the established deadlines. Due to this reason we focused only on a single outcome of the possible positive outcomes of having a gendered brand logo and a well-defined brand gender (i.e. affect towards the logo). Despite of the crucial importance of affect towards the logo, there are other relevant outcomes in terms of consumer responses that could have been studied. Therefore, further research could consider other consumer outcomes, such as purchase intention or loyalty, as they are equally relevant to branding strategies.

Previous research has suggested that some product categories are linked with strong gender associations, as consumers perceive brands within the products category in which they are inserted (Grohmann, 2009). Azar (2015), identified cosmetics and cars as examples of product categories with femininity and masculinity associations, respectively. In this study, we analysed the influence of logo elements on logos brand gender in general, and did not focus in specific product categories. Further studies might focus on analysing the influence of logo elements on consumer brand gender perceptions regarding logos

representative of product categories perceived as typically masculine or feminine. It might be interesting to study how brands belonging to masculine product categories (e.g. as cars) (feminine product categories (e.g. cosmetics)) and which aim to target feminine perceived consumers (masculine perceived consumers) might use logo design to more effectively reach these consumers.

The fact that the data collection was conducted only in Portugal did not allow a cross-cultural analysis of the impact of logo design elements on consumer responses. This fact might have biased the interpretation of the colours used in this study, as different cultures tend to associate different meanings to the same colour. Therefore, it might be relevant to do a cross-cultural research, to understand if there are differences in the logo gender perceptions evoked by logo colours, due to the different meanings distinct cultures attach to colours.

Colour theories have already recognized the ability of colour hue and colour value (i.e. dark blue and light pink), to evoke brand gender perceptions. However, even though prior research indicates that colour is a crucial driver of consumers' perceptions of brand gender, our results were not totally satisfactory on this matter. Thus, further studies that analyse other colours properties, besides the ones used in this study (i.e. colour hue, value and saturation) could have a relevant contribution. Nevertheless, as in this study we could not confirm that dark blue influences masculine brand gender logo perception, other colours might be taken under study, such as green or grey.

Lastly, fatigue might have been a barrier in our study, occurring during the questionnaire completion. Even though we only showed four logos to each respondent, each adopting high degrees of experimental design complexity, taking into account the total amount of questions to be answered, a considerable number of respondents did not complete the questionnaires. Therefore, future investigations could adopt another strategy by showing a smaller number of logos, in order to decrease the total number of questions asked.

Concerning additional suggestions for eventual future research, according to our theoretical findings, cultural and organic logos play a significant role in eliciting brand gender perceptions. Yet, further research could try to find stronger support to this finding, by analysing more deeply natural logo designs, and including a wider variety of cultural and organic designs, besides the ones used on this study. Taking into account that boldness did not reach significant results, we could not prove the effects of this variable on logo gender perceptions. Therefore, in future research, this variable should be further analysed to better understand its effects on logo gender perceptions, by adding, also, partial usage of colour. Finally, further research should continue to study more in-depth the combination of different gender cues and their effects on consumer brand-related responses.

References

- Aaker, J., Fournier, S., & Brasel, S. A. (2004). When Good Brands Do Bad. *Journal of Consumer Research*. <https://doi.org/10.1086/383419>
- Aaker, J. L. (1997). Dimensions of brand personality. *Journal of Marketing Research*. <https://doi.org/10.2307/3151897>
- Abril, P. S., Olazábal, A. M., & Cava, A. (2009). Marketing and the Law. In *Journal of the Academy of Marketing Science*. <https://doi.org/10.1007/s11747-009-0159-8>
- Aggarwal, P. (2004). The Effects of Brand Relationship Norms on Consumer Attitudes and Behavior. *Journal of Consumer Research*. <https://doi.org/10.1086/383426>
- Al-hindawe, J. (1996). Considerations when constructing a semantic differential scale. *La Trobe Working Papers in Linguistics*.
- Alexander, G. . (2003). An Evolutionary Perspective of Sex-Typed Toy Preferences: Pink, Blue, and the Brain. *Archives of Sexual Behavior*.
- Allen, D. E., & Olson, J. (1995). Conceptualizing and creating brand personality: A narrative theory approach. In *Advances in Consumer Research*.
- Alreck, P. L., Settle, R. B., & Belch, M. A. (1982). Who responds to “gendered” ads, and how? Masculine brands versus feminine brands. *Journal of Advertising Research*.
- Alschuler, R. H. and Hattwick, W. . (1969). *Painting and Personality*. University of Chicago Press, Chicago.
- Aspara, J., & Van Den Bergh, B. (2014). Naturally designed for masculinity vs. femininity? Prenatal testosterone predicts male consumers’ choices of gender-imaged products. *International Journal of Research in Marketing*. <https://doi.org/10.1016/j.ijresmar.2013.09.001>
- Avery, J. (2012). Defending the markers of masculinity: Consumer resistance to

- brand gender-bending. *International Journal of Research in Marketing*.
<https://doi.org/10.1016/j.ijresmar.2012.04.005>
- Azar, S. L. (2015). Toward an understanding of brand sexual associations. *Journal of Product and Brand Management*. <https://doi.org/10.1108/JPBM-05-2014-0607>
- Azar, S. L., Aimé, I., & Ulrich, I. (2018). Brand gender-bending: The impact of an endorsed brand strategy on consumers' evaluation of gendered mixed-target brands. *European Journal of Marketing*. <https://doi.org/10.1108/EJM-04-2017-0278>
- Batra, R., Lehmann, D.R. and Singh, D. (1993). The brand personality component of brand goodwill: some antecedents and consequences. In *Aaker, D.A. and Biel, A.L.: Brand Equity and Advertising: Advertising Role in Building Strong Brands* (pp. 83–96).
- Belk, R. W. (1988). Possessions and the Extended Self. *Journal of Consumer Research*. <https://doi.org/10.1086/209154>
- Bellizzi, J. A., & Milner, L. (1991). Gender Positioning of a Traditionally Male-Dominant Product. *Journal of Advertising Research*.
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*. <https://doi.org/10.1037/h0036215>
- BJÖRNTORP, P. (1987). Fat Cell Distribution and Metabolism. *Annals of the New York Academy of Sciences*. <https://doi.org/10.1111/j.1749-6632.1987.tb36198.x>
- Blackston, M. (1993). Beyond brand personality: building brand relationships. In *Brand Equity & Advertising: Advertising's Role in Building Strong Brands*.
- Bloch, P. H. (1995). Seeking the Ideal Form: Product Design and Consumer Response. *Journal of Marketing*. <https://doi.org/10.2307/1252116>
- Bottomley, P. A., & Doyle, J. R. (2006). The interactive effects of colors and products on perceptions of brand logo appropriateness. *Marketing Theory*. <https://doi.org/10.1177/1470593106061263>
- Bourdieu, P. (1998). *La Domination Masculine*. Paris: Éditions du Seuil.

- Burke, P. J. (1991). Identity Processes and Social Stress. *American Sociological Review*. <https://doi.org/10.2307/2096259>
- Buss, D. (1994). *The Evolution of Desire: Strategies of Human Mating*. Basic Books.
- Buss, D. M. (1995). Evolutionary Psychology: A New Paradigm for Psychological Science. *Psychological Inquiry*. https://doi.org/10.1207/s15327965pli0601_1
- Buss, D. M., & Schmitt, D. P. (1993). Sexual Strategies Theory: An Evolutionary Perspective on Human Mating. *Psychological Review*. <https://doi.org/10.1037/0033-295X.100.2.204>
- Butler, J. (1990). *Gender Trouble: Feminism and the Subversion of Identity*. Routledge.
- Carrigan, T., Connell, B., & Lee, J. (1985). Toward a new sociology of masculinity. *Theory and Society*. <https://doi.org/10.1007/BF00160017>
- Carroll, B. A., & Ahuvia, A. C. (2006). Some antecedents and outcomes of brand love. In *Marketing Letters*. <https://doi.org/10.1007/s11002-006-4219-2>
- Chang, C. (2006). The influence of masculinity and femininity in different advertising processing contexts: An accessibility perspective. In *Sex Roles*. <https://doi.org/10.1007/s11199-006-9088-x>
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing*. <https://doi.org/10.1509/jmkg.65.2.81.18255>
- Colman, A. M., Wober, J. M., & Norris, C. E. (1995). Sight Bites: A Study of Viewers' Impressions of Corporate Logos in the Communication Industry. *Market Research Society. Journal*. <https://doi.org/10.1177/147078539503700405>
- Constantinople, A. (1973). Masculinity-femininity: An exception to a famous dictum? *Psychological Bulletin*. <https://doi.org/10.1037/h0035334>
- Cowan, R. L., Frederick, B. D. B., Rainey, M., Levin, J. M., Maas, L. C., Bang, J., Hennen, J., Lukas, S. E., & Renshaw, P. F. (2000). Sex differences in response to red and blue light in human primary visual cortex: a bold fMRI study. *Psychiatry Research - Neuroimaging*. <https://doi.org/10.1016/S0925->

- Cunningham, M. R. (1986). Measuring the Physical in Physical Attractiveness. Quasi-Experiments on the Sociobiology of Female Facial Beauty. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/0022-3514.50.5.925>
- Das, G. (2014). Impacts of retail brand personality and self-congruity on store loyalty: The moderating role of gender. *Journal of Retailing and Consumer Services*. <https://doi.org/10.1016/j.jretconser.2013.07.011>
- Deaux, K., & LaFrance, M. (1998). *Gender. The Handbook of Social Psychology, vol. II.* (McGraw-Hill (Ed.)).
- Debevec, K., & Iyer, E. (1986). The influence of spokespersons in altering a product's gender image: Implications for advertising effectiveness. *Journal of Advertising*. <https://doi.org/10.1080/00913367.1986.10673033>
- Dolich, I. J. (1969). Congruence Relationships between Self Images and Product Brands. *Journal of Marketing Research*. <https://doi.org/10.2307/3150001>
- Egleston, B. L., Miller, S. M., & Meropol, N. J. (2011). The impact of misclassification due to survey response fatigue on estimation and identifiability of treatment effects. *Statistics in Medicine*. <https://doi.org/10.1002/sim.4377>
- Elliot, A. J., & Niesta, D. (2008). Romantic Red: Red Enhances Men's Attraction to Women. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/0022-3514.95.5.1150>
- Epstein, S. (1977). Traits are alive and well. In Hillsdale (Ed.), *Personality at the crossroads: Current issues in interactional psychology* (pp. 83–98).
- Firat, A. F. (1994). Gender and Consumption: Transcending the Feminine? In *Gender Issues and Consumer Behavior*.
- Fischer, E., & Arnold, S. J. (1990). More Than a Labor of Love: Gender Roles and Christmas Gift Shopping. *Journal of Consumer Research*. <https://doi.org/10.1086/208561>

- Fonseca, B. (2018). *Brand Logo and Brand Gender* (Issue March). Universidade Católica Portuguesa.
- Fournier, S. (1994). A Consumer-Brand Relationship Framework for Strategic Brand Management. *ProQuest Dissertations & Theses*.
- Fournier, S. (1998). Consumers and Their Brands: Developing Relationship Theory in Consumer Research. *Journal of Consumer Research*. <https://doi.org/10.1086/209515>
- Franck, K., & Rosen, E. (1949). A projective test of masculinity-femininity. *Journal of Consulting Psychology*. <https://doi.org/10.1037/h0057315>
- Freimuth, M. J., & Hornstein, G. A. (1982). A critical examination of the concept of gender. *Sex Roles*. <https://doi.org/10.1007/BF00287716>
- Freling, T. H., & Forbes, L. P. (2005a). An empirical analysis of the brand personality effect. *Journal of Product & Brand Management*. <https://doi.org/10.1108/10610420510633350>
- Freling, T. H., & Forbes, L. P. (2005b). An examination of brand personality through methodological triangulation. *Journal of Brand Management*. <https://doi.org/10.1057/palgrave.bm.2540254>
- Fry, J. N. (1971). Personality Variables and Cigarette Brand Choice. *Journal of Marketing Research*. <https://doi.org/10.2307/3149566>
- Garber, L. L., Jr., Burke, R. R., & Jones, J. M. (2000). The role of package color in consumer purchase consideration and choice. *Marketing Science Working*, 104, 1–46.
- Gherardi, S. (1995). *Gender, symbolism and organizational cultures*. Sage.
- Goffman, E. (2016). The presentation of self in everyday life. In *Social Theory Re-Wired: New Connections to Classical and Contemporary Perspectives: Second Edition*. <https://doi.org/10.4324/9781315775357>
- Goldberg, L. R. (1993). The Structure of Phenotypic Personality Traits. *American Psychologist*. <https://doi.org/10.1037/0003-066X.48.1.26>

- Goldman, A. (2005). The aesthetic. In *The Routledge companion to aesthetics* (pp. 275–286). Routledge.
- Gorn, G. J., Chattopadhyay, A., Yi, T., & Dahl, D. W. (1997). Effects of color as an executional cue in advertising: They're in the shade. *Management Science*. <https://doi.org/10.1287/mnsc.43.10.1387>
- Gould, S. J., & Weil, C. E. (1991). Gift-giving roles and gender self-concepts. *Sex Roles*. <https://doi.org/10.1007/BF00288418>
- Grammer, K., Fink, B., Møller, A. P., & Thornhill, R. (2003). Darwinian aesthetics: Sexual selection and the biology of beauty. In *Biological Reviews of the Cambridge Philosophical Society*. <https://doi.org/10.1017/S1464793102006085>
- Grohmann, B. (2009). Gender dimensions of brand personality. *Journal of Marketing Research*. <https://doi.org/10.1509/jmkr.46.1.105>
- Grohmann, B. (2016). Communicating brand gender through type fonts. *Journal of Marketing Communications*. <https://doi.org/10.1080/13527266.2014.918050>
- Grohmann, B., Giese, J. L., & Parkman, I. D. (2013). Using type font characteristics to communicate brand personality of new brands. *Journal of Brand Management*. <https://doi.org/10.1057/bm.2012.23>
- Grossman, R. P., & Till, B. D. (1998). The persistence of classically conditioned brand attitudes. *Journal of Advertising*. <https://doi.org/10.1080/00913367.1998.10673540>
- Gummesson, E. (2002). Total Relationship Marketing: Marketing Management, Relationship Strategy, and CRM Approaches for the Network Economy. *Journal of Services Marketing*.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate data analysis with readings (5nd ed.). In *Prentice-Hall, Upper Saddle River*.
- Henderson, P. W., & Cote, J. A. (1998). Guidelines for selecting or modifying logos. *Journal of Marketing*. <https://doi.org/10.2307/1252158>
- Henderson, P. W., Giese, J. L., & Cote, J. A. (2004). Impression management using

- typeface design. In *Journal of Marketing*.
<https://doi.org/10.1509/jmkg.68.4.60.42736>
- Hoegg, J., & Alba, J. W. (2008). A role for aesthetics in consumer psychology. In *Curtis P. Haugtvedt, Paul Herr, and Frank R. Kardes (Eds.), Handbook of consumer psychology, Mahwah, NJ: Lawrence Erlbaum*. (pp. 733–754).
- Huang, H. H., Mitchell, V. W., & Rosenbaum-Elliott, R. (2012). Are Consumer and Brand Personalities the Same? *Psychology and Marketing*.
<https://doi.org/10.1002/mar.20525>
- Hurlbert, A. C., & Ling, Y. (2007). Biological components of sex differences in color preference. In *Current Biology*. <https://doi.org/10.1016/j.cub.2007.06.022>
- Iijima, M., Arisaka, O., Minamoto, F., & Arai, Y. (2001). Sex differences in children's free drawings: A study on girls with congenital adrenal hyperplasia. *Hormones and Behavior*. <https://doi.org/10.1006/hbeh.2001.1670>
- Jablonski, N. G., & Chaplin, G. (2000). The evolution of human skin coloration. *Journal of Human Evolution*. <https://doi.org/10.1006/jhev.2000.0403>
- Janiszewski, C., & Meyvis, T. (2001). Effects of Brand Logo Complexity, Repetition, and Spacing on Processing Fluency and Judgment. *Journal of Consumer Research*. <https://doi.org/10.1086/321945>
- Johar, G. V., Sengupta, J., & Aaker, J. L. (2005). Two roads to updating brand personality impressions: Trait versus evaluative inferencing. In *Journal of Marketing Research*. <https://doi.org/10.1509/jmkr.2005.42.4.458>
- Jun, J.W. and Lee, H.-S. (2007). Cultural differences in brand design and tagline appeals. *International Marketing Review*, 24(4), 474–491.
- Kaplan, M. D., Yurt, O., Guneri, B., & Kurtulus, K. (2010). Branding places: Applying brand personality concept to cities. *European Journal of Marketing*.
<https://doi.org/10.1108/03090561011062844>
- Keller, K. L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*. <https://doi.org/10.2307/1252054>

- Kim, C. K., Han, D., & Park, S. B. (2001). The effect of brand personality and brand identification on brand loyalty: Applying the theory of social identification. *Japanese Psychological Research*. <https://doi.org/10.1111/1468-5884.00177>
- Kim, J., Allen, C. T., & Kardes, F. R. (1996). An investigation of the mediational mechanisms underlying attitudinal conditioning. *Journal of Marketing Research*. <https://doi.org/10.2307/3152128>
- Kleine, R. E., Kleine, S. S., & Kernan, J. B. (1993). Mundane Consumption and the Self: A Social-Identity Perspective. *Journal of Consumer Psychology*. [https://doi.org/10.1016/S1057-7408\(08\)80015-0](https://doi.org/10.1016/S1057-7408(08)80015-0)
- Koen, F. (1969). Verbal and non-verbal mediators in recognition memory for complex visual stimuli. In *Report, Office of Education, Washington, DC*.
- Kolyesnikova, N., Dodd, T. H., & Wilcox, J. B. (2009). Gender as a moderator of reciprocal consumer behavior. *Journal of Consumer Marketing*. <https://doi.org/10.1108/07363760910954136>
- Kotler, P. (1973). Atmospheric effects as a marketing tool. Atmospheric Effects on Shopping Behavior: A Review of the Experimental Evidence. *Journal of Retailing*.
- Labrecque, L. I., & Milne, G. R. (2012). Exciting red and competent blue: The importance of color in marketing. *Journal of the Academy of Marketing Science*. <https://doi.org/10.1007/s11747-010-0245-y>
- Labrecque, L. I., Patrick, V. M., & Milne, G. R. (2013). The Marketers' Prismatic Palette: A Review of Color Research and Future Directions. *Psychology and Marketing*. <https://doi.org/10.1002/mar.20597>
- Lee, Y. K., Back, K. J., & Kim, J. Y. (2009). Family restaurant brand personality and its impact on customer's emotion, satisfaction, and brand loyalty. *Journal of Hospitality and Tourism Research*. <https://doi.org/10.1177/1096348009338511>
- Levy, S. J. (1959). Symbols for sale. *Harvard Business Review*, 35 (4), 117–124.

- Lieven, Theo, Andreas Herrmann, Jan R. Landwehr, & M. van T. (2011). Sex Matters: The Effect of Brand Gender on Brand Equity. In *Rohini Ahluwalia, Tanya L. Chartrand, & Rebecca K. Ratner (Eds.), Advances in Consumer Research, vol. 39* (p. 527).
- Lieven, T., Grohmann, B., Herrmann, A., Landwehr, J. R., & van Tilburg, M. (2014). The Effect of brand gender on brand equity. *Psychology and Marketing*. <https://doi.org/10.1002/mar.20701>
- Lieven, T., Grohmann, B., Herrmann, A., Landwehr, J. R., & van Tilburg, M. (2015). The effect of brand design on brand gender perceptions and brand preference. *European Journal of Marketing*. <https://doi.org/10.1108/EJM-08-2012-0456>
- Lieven, T., & Hildebrand, C. (2016). The impact of brand gender on brand equity: Findings from a large-scale cross-cultural study in ten countries. *International Marketing Review*. <https://doi.org/10.1108/IMR-08-2014-0276>
- Lippa, R. A. (2005). How do lay people weight information about instrumentality, expressiveness, and gender-typed hobbies when judging masculinity-femininity in themselves, best friends, and strangers? *Sex Roles*. <https://doi.org/10.1007/s11199-005-4277-6>
- Lohse, G. L., & Rosen, D. L. (2001). Signaling quality and credibility in yellow pages advertising: The influence of color and graphics on choice. *Journal of Advertising*. <https://doi.org/10.1080/00913367.2001.10673639>
- Lorber, J. (1994). *Paradoxes of gender*. New Haven, CT: Yale University Press.
- Machado, Joana Cesar, De Carvalho, L. V., Torres, A., & Costa, P. (2015). Brand logo design: Examining consumer response to naturalness. *Journal of Product and Brand Management*. <https://doi.org/10.1108/JPBM-05-2014-0609>
- Machado, Joana César, Vacas-de-Carvalho, L., Azar, S. L., André, A. R., & dos Santos, B. P. (2019). Brand gender and consumer-based brand equity on Facebook: The mediating role of consumer-brand engagement and brand

- love. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2018.07.016>
- Machado, Joana César, Vacas-de-Carvalho, L., Costa, P., & Lencastre, P. (2012). Brand mergers: Examining consumers' responses to name and logo design. In *Journal of Product and Brand Management*. <https://doi.org/10.1108/10610421211264900>
- Majewski, M. (1978). *The relationship between the drawing characteristics of children and their sex*. Illinois State University.
- Malhotra, N. K. (1988). Self concept and product choice: An integrated perspective. *Journal of Economic Psychology*. [https://doi.org/10.1016/0167-4870\(88\)90029-3](https://doi.org/10.1016/0167-4870(88)90029-3)
- McCracken, Grant. (1989). Who Is the Celebrity Endorser? Cultural Foundations of the Endorsement Process. *Journal of Consumer Research*,. <https://doi.org/10.1016/b978-0-12-558702-0.50017-0>
- Mead, G. H. (1934). Excerpt from *Mind Self and Society* (1). In *University of Chicago Press*.
- Meyers-Levy, J., & Peracchio, L. A. (1995). Understanding the Effects of Color: How the Correspondence between Available and Required Resources Affects Attitudes. *Journal of Consumer Research*. <https://doi.org/10.1086/209440>
- Minamoto, F. (1985). *Male – female Differences in Pictures*. Shoseki, Tokyo.
- Mohebbi, M. (2014). Investigating the Gender-based Colour Preference in Children. *Procedia - Social and Behavioral Sciences*. <https://doi.org/10.1016/j.sbspro.2014.01.1238>
- Moi, T. (2005). *Sex, gender and the body: The student edition of what is a woman*. Oxford University Press.
- Mollon, J. (1986). Understanding colour vision. *Nature*, 321, 12–13.
- Moreau, C. P., & Herd, K. B. (2010). To Each His Own? How Comparisons with Others Influence Consumers' Evaluations of Their Self-Designed Products.

- Journal of Consumer Research*. <https://doi.org/10.1086/644612>
- Moss, G. (1995). Differences in the design aesthetic of men and women. *Journal of Brand Management*, 3, 51–61.
- Moss, G. (1996). Do males and females make Judgements in a self-selecting fashion? *Journal of Art and Design Education*, 15(2), 161–170.
- Moss, G. (1999). Gender and consumer behaviour: further explorations. *Journal of Brand Management*, 7(2), 88–100.
- Moss, Gloria, Gunn, R., & Heller, J. (2006). Some men like it black, some women like it pink: consumer implications of differences in male and female website design. *Journal of Consumer Behaviour*. <https://doi.org/10.1002/cb.184>
- Moss, Gloria, Hamilton, C., & Neave, N. (2007). Evolutionary factors in design preferences. *Journal of Brand Management*. <https://doi.org/10.1057/palgrave.bm.2550073>
- Nelson, K. E. (1971). Memory development in children: evidence from non-verbal tasks. In *Psychonomic Science*, Vol. 25 No. 6, pp. 346–348. (pp. 346–348).
- Orth, U. R., Limon, Y., & Rose, G. (2010). Store-evoked affect, personalities, and consumer emotional attachments to brands. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2009.10.018>
- Orth, U. R., & Malkewitz, K. (2008). Holistic package design and consumer brand impressions. *Journal of Marketing*. <https://doi.org/10.1509/jmkg.72.3.64>
- Palan, K. (2001). Gender identity in consumer behavior research: A literature review and research agenda. *Academy of Marketing Science Review*.
- Park, B. (1986). A Method for Studying the Development of Impressions of Real People. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/0022-3514.51.5.907>
- Park, J. K., & John, D. R. (2010). Got to Get You into My Life: Do Brand Personalities Rub Off on Consumers? *Journal of Consumer Research*. <https://doi.org/10.1086/655807>

- Patterson, M., & Elliott, R. (2002). Negotiating Masculinities: Advertising and the Inversion of the Male Gaze. *Consumption Markets & Culture*. <https://doi.org/10.1080/10253860290031631>
- Peñaloza, L. (1994). Crossing boundaries/drawing lines: A look at the nature of gender boundaries and their impact on marketing research. *International Journal of Research in Marketing*, 11(4), 359–379.
- Perrett, D. I., Lee, K. J., Penton-Voak, I., Rowland, D., Yoshikawa, S., Burt, D. M., Henzi, S. P., Castles, D. L., & Akamatsu, S. (1998). Effects of sexual dimorphism on facial attractiveness. *Nature*. <https://doi.org/10.1038/29772>
- Phillips, B. J., Mcquarrie, E. F., & Griffin, W. G. (2014). How visual brand identity shapes consumer response. *Psychology and Marketing*. <https://doi.org/10.1002/mar.20689>
- Picariello, M. L., Greenberg, D. N., & Pillemer, D. B. (1990). Children's Sex-Related Stereotyping of Colors. *Child Development*. <https://doi.org/10.2307/1130755>
- Plummer, J. T. (1985). A strategic concept for multinational advertising. *In Proceedings of the AMA Marketing Educators Conference*. New York: Young & Rubicam., 1–31.
- Powlishta Maya G.; Serbin, Lisa A.; Poulin-Dubois, Diane; Eichstedt, Julie A., K. K. . Sen. (2001). From infancy through middle childhood: The role of cognitive and social factors in becoming gendered. *Unger, Rhoda K [Ed] (2001) Handbook of the Psychology of Women and Gender (Pp 116-132) Xvi, 556 Pp Hoboken, NJ, US: John Wiley & Sons Inc; US*.
- Rawsthorn, A. (2010). Daring to play with a rich palette. *The New York Times*.
- Reimann, M., Zaichkowsky, J., Neuhaus, C., Bender, T., & Weber, B. (2010). Aesthetic package design: A behavioral, neural, and psychological investigation. *Journal of Consumer Psychology*. <https://doi.org/10.1016/j.jcps.2010.06.009>

- Rogers, P. L. (1995). *Girls Like Colors, Boys Like Action? Imagery Preferences and Gender*. ERIC. EBSCO. Clemson University Library, Clemson, SC. 21 Mar. 2009.
- Rook, D. W. (1985). The Ritual Dimension of Consumer Behavior. *Journal of Consumer Research*. <https://doi.org/10.1086/208514>
- Roy, P., Khandeparkar, K., & Motiani, M. (2016). A lovable personality: The effect of brand personality on brand love. *Journal of Brand Management*. <https://doi.org/10.1057/s41262-016-0005-5>
- Sachdev, I., & Bourhis, R. Y. (1991). Power and status differentials in minority and majority group relations. *European Journal of Social Psychology*. <https://doi.org/10.1002/ejsp.2420210102>
- Samu, S., Krishnan, H. S., & Smith, R. E. (1999). Using advertising alliances for new product introduction: Interactions between product complementarity and promotional strategies. *Journal of Marketing*. <https://doi.org/10.2307/1252001>
- Schechter, A. H. (2010). Measuring the Value of Corporate and Brand Logos. *Design Management Journal (Former Series)*. <https://doi.org/10.1111/j.1948-7169.1993.tb00124.x>
- Schindler, P. S. (1986). Color and contrast in magazine advertising. *Psychology & Marketing*. <https://doi.org/10.1002/mar.4220030203>
- Schneider, D. J. (2004). *The psychology of stereotyping*. The Guilford Press.
- Seifert, L. S. (1992). Pictures as a means of conveying information. *Journal of General Psychology*. <https://doi.org/10.1080/00221309.1992.9917808>
- Shapiro, S. A., & Nielsen, J. H. (2013). What the Blind Eye Sees: Incidental Change Detection as a Source of Perceptual Fluency. *Journal of Consumer Research*. <https://doi.org/10.1086/667852>
- Sheldon, W. H., Stevens, S. S., & Tucker, W. B. (1940). The varieties of human physique. In *The varieties of human physique*.

- Sherry, J. F., Kozinets, R. V., Duhachek, A., DeBerry-Spence, B., Nuttavuthisit, K., & Storm, D. (2004). Gendered Behavior in a Male Preserve: Role Playing at ESPN Zone Chicago. *Journal of Consumer Psychology*. https://doi.org/10.1207/s15327663jcp1401&2_17
- Simonson, A., & Schmitt, B. H. (1997). *Marketing aesthetics: The strategic management of brands, identity, and image*. New York: The Free Press.
- Sirgy, M. J. (1982). Self-Concept in Consumer Behavior: A Critical Review. *Journal of Consumer Research*. <https://doi.org/10.1086/208924>
- Spaeth, T. (1999). Powerbrands. In *Across the Board*, Vol. 36 No. 2 (pp. 23–29).
- Spence, J. T., & Helmreich, R. L. (1979). *Masculinity and femininity: Their psychological dimensions, correlates, and antecedents*. University of Texas Press.
- Stern, B. B. (1988). Sex-role self-concept measures and marketing: A research note. *Psychology & Marketing*. <https://doi.org/10.1002/mar.4220050107>
- Sung, Y., & Kim, J. (2010). Effects of brand personality on brand trust and brand affect. *Psychology and Marketing*. <https://doi.org/10.1002/mar.20349>
- Swaminathan, V., Stilley, K. M., & Ahluwalia, R. (2009). When Brand Personality Matters: The Moderating Role of Attachment Styles. *Journal of Consumer Research*. <https://doi.org/10.1086/593948>
- Swann, W. B., & Ely, R. J. (1984). A battle of wills: Self-verification versus behavioral confirmation. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/0022-3514.46.6.1287>
- Testi, A., & Kimmel, M. (1997). Manhood in America: A Cultural History. *The Journal of American History*. <https://doi.org/10.2307/2952748>
- Tilburg, M. van, Herrmann, A., Grohmann, B., & Lieven*, T. (2015). The Effect of Brand Gender Similarity on Brand-Alliance Fit and Purchase Intention. *Marketing ZFP*. <https://doi.org/10.15358/0344-1369-2015-1-5>
- Ulrich, I. (2013). The effect of consumer multifactorial gender and biological sex on the evaluation of cross-gender brand extensions. *Psychology and*

- Marketing*. <https://doi.org/10.1002/mar.20646>
- Vitz, P. C., & Johnston, D. (1965). Masculinity of smokers and the masculinity of cigarette images. *Journal of Applied Psychology*. <https://doi.org/10.1037/h0022168>
- Wallendorf, M., & Arnould, E. J. (1988). "My Favorite Things": A Cross-Cultural Inquiry into Object Attachment, Possessiveness, and Social Linkage. *Journal of Consumer Research*. <https://doi.org/10.1086/209134>
- Walsh, M. F., Page Winterich, K., & Mittal, V. (2010). Do logo redesigns help or hurt your brand? The role of brand commitment. *Journal of Product & Brand Management*. <https://doi.org/10.1108/10610421011033421>
- West, C., & Zimmerman, D. H. (2013). Doing gender. In *Doing Gender, Doing Difference: Inequality, Power, and Institutional Change*. <https://doi.org/10.4324/9780203615683-8>
- Wetherell, M., & Edley, N. (1999). Negotiating hegemonic masculinity: Imaginary positions and psycho-discursive practices. *Feminism and Psychology*. <https://doi.org/10.1177/0959353599009003012>
- Wheeler, A. (2003). *A Complete Guide to Creating, Building, and Maintaining Strong Brands*. Wiley, Hoboken, NJ.
- Worth, L. T., Smith, J., & Mackie, D. M. (1992). Gender schematicity and preference for gender-typed products. *Psychology & Marketing*. <https://doi.org/10.1002/mar.4220090104>
- Yik, M. S. M., & Russell, J. A. (2001). Predicting the Big Two of Affect from the Big Five of Personality. *Journal of Research in Personality*. <https://doi.org/10.1006/jrpe.2001.2322>
- Yorkston, E., & De Mello, G. E. (2005). Linguistic Gender Marking and Categorization. *Journal of Consumer Research*. <https://doi.org/10.1086/432232>
- Zemach, I., Chang, S., & Teller, D. Y. (2007). Infant color vision: Prediction of infants' spontaneous color preferences. *Vision Research*.

<https://doi.org/10.1016/j.visres.2006.09.024>

Appendix

Appendix 1 – Questionnaire – Random Example

Este questionário faz parte de um trabalho de investigação de uma aluna do Mestrado de Marketing, da Católica Porto Business School, que tem como objetivo a análise da resposta dos consumidores, relativamente a um conjunto de logótipos.

Neste inquérito, não existem respostas certas ou erradas. Acima de tudo, temos interesse em conhecer a sua opinião. Todas as respostas e dados fornecidos são confidenciais e anónimos e serão usadas, apenas, com o propósito desta investigação. As suas respostas são cruciais para o desenvolvimento da nossa pesquisa. A duração deste questionário será de, aproximadamente, 10 minutos.

Agradecemos, desde já, a sua disponibilidade e participação neste estudo.

1. Sofre de sintomas de daltonismo?

Sim___ Não___



2. Sabe a que marca é que este logótipo pertence?

(Por favor, escolha apenas uma das opções seguintes)

Sim

Não

3. Como classificaria este logótipo, quanto ao género?

Nada feminino 1 2 3 4 5 6 7 Muito feminino

Nada masculino 1 2 3 4 5 6 7 Muito masculino

4. Indique, segundo a escala apresentada, o seu grau de concordância com as afirmações que se seguem, relativamente ao logótipo apresentado anteriormente (1 significa “discordo totalmente” e 7 “concordo totalmente”):

“Se este logótipo fosse uma pessoa, como o descreveria?”

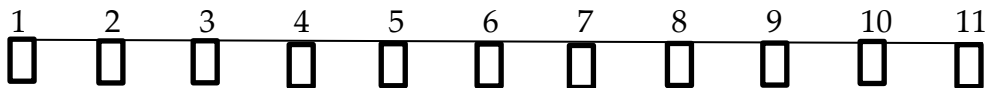
	1	2	3	4	5	6	7
Aventureiro (a)							
Agressivo (a)							
Corajoso (a)							
Ousado (a)							
Dominante							
Robusto (a)							
Exprime sentimentos de ternura							
Frágil							
Gracioso (a)							
Sensível							
Doce							
Meigo (a)							

5. Indique o seu grau de concordância perante as seguintes afirmações, tendo em conta os sentimentos ou emoções que este logótipo lhe provoca (1 significa “discordo totalmente” e 7 “concordo totalmente”):

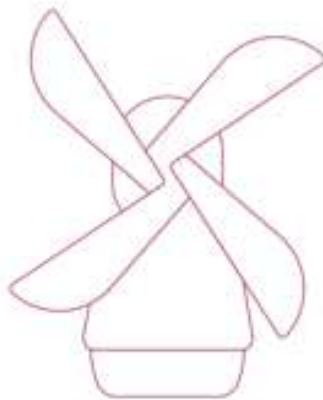
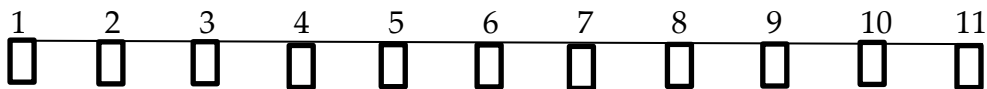
	1	2	3	4	5	6	7
“Eu considero que este logótipo é agradável.”							
“Eu considero que este logótipo é interessante.”							
“Eu considero que este logótipo é distintivo.”							
“Eu gosto deste logótipo.”							
“Eu considero que este logótipo é bom.”							

<p>“Eu considero que este logótipo é de elevada qualidade.”</p>							
---	--	--	--	--	--	--	--

6. Indique, segundo a escala apresentada, como classificaria este logótipo, tendo em conta a sua forma (1= preenchimento fino ; 11 = preenchimento carregado):



7. Indique, segundo a escala apresentada, como classificaria este logótipo, tendo em conta a sua forma (1= arredondado/suave ; 11 = angular/pontiagudo):



8. Sabe a que marca é que este logótipo pertence?

(Por favor, escolha apenas uma das opções seguintes)

__ Sim

__ Não

9. Como classificaria este logótipo, quanto ao género?

Nada feminino 1 2 3 4 5 6 7 Muito feminino

Nada masculino 1 2 3 4 5 6 7 Muito masculino

10. Indique, segundo a escala apresentada, o seu grau de concordância com as afirmações que se seguem, relativamente ao logótipo apresentado anteriormente (1 significa “discordo totalmente” e 7 “concordo totalmente”):

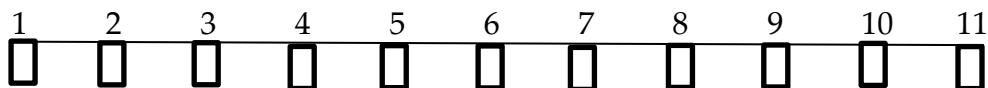
“Se este logótipo fosse uma pessoa, como o descreveria?”

	1	2	3	4	5	6	7
Aventureiro (a)							
Agressivo (a)							
Corajoso (a)							
Ousado (a)							
Dominante							
Robusto (a)							
Exprime sentimentos de ternura							
Frágil							
Gracioso (a)							
Sensível							
Doce							
Meigo (a)							

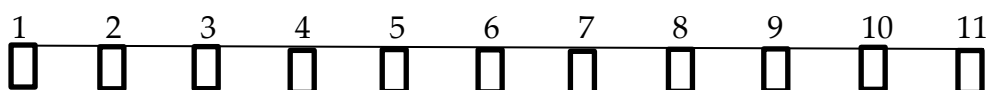
11. Indique o seu grau de concordância perante as seguintes afirmações, tendo em conta os sentimentos ou emoções que este logótipo lhe provoca (1 significa “discordo totalmente” e 7 “concordo totalmente”):

	1	2	3	4	5	6	7
“Eu considero que este logótipo é agradável.”							
“Eu considero que este logótipo é interessante.”							
“Eu considero que este logótipo é distintivo.”							
“Eu gosto deste logótipo.”							
“Eu considero que este logótipo é bom.”							
“Eu considero que este logótipo é de elevada qualidade.”							

12. Indique, segundo a escala apresentada, como classificaria este logótipo, tendo em conta a sua forma (1= preenchimento fino ; 11 = preenchimento carregado):



13. Indique, segundo a escala apresentada, como classificaria este logótipo, tendo em conta a sua forma (1= arredondado/suave ; 11 = angular/pontiagudo):





14. Sabe a que marca é que este logótipo pertence?

(Por favor, escolha apenas uma das opções seguintes)

Sim

Não

15. Como classificaria este logótipo, quanto ao género?

Nada feminino 1 2 3 4 5 6 7 Muito feminino

Nada masculino 1 2 3 4 5 6 7 Muito masculino

16. Indique, segundo a escala apresentada, o seu grau de concordância com as afirmações que se seguem, relativamente ao logótipo apresentado anteriormente (1 significa “discordo totalmente” e 7 “concordo totalmente”):

“Se este logótipo fosse uma pessoa, como o descreveria?”

	1	2	3	4	5	6	7
Aventureiro (a)							
Agressivo (a)							
Corajoso (a)							
Ousado (a)							
Dominante							
Robusto (a)							
Exprime sentimentos de ternura							
Frágil							
Gracioso (a)							
Sensível							
Doce							
Meigo (a)							

17. Indique o seu grau de concordância perante as seguintes afirmações, tendo em conta os sentimentos ou emoções que este logótipo lhe provoca (1 significa “discordo totalmente” e 7 “concordo totalmente”):

	1	2	3	4	5	6	7
“Eu considero que este logótipo é agradável.”							
“Eu considero que este logótipo é interessante.”							
“Eu considero que este logótipo é distintivo.”							
“Eu gosto deste logótipo.”							
“Eu considero que este logótipo é bom.”							

<p>“Eu considero que este logótipo é de elevada qualidade.”</p>									
---	--	--	--	--	--	--	--	--	--

18. Indique, segundo a escala apresentada, como classificaria este logótipo, tendo em conta a sua forma (1= preenchimento fino ; 11 = preenchimento carregado):

1	2	3	4	5	6	7	8	9	10	11
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. Indique, segundo a escala apresentada, como classificaria este logótipo, tendo em conta a sua forma (1= arredondado/suave ; 11 = angular/pontiagudo):

1	2	3	4	5	6	7	8	9	10	11
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



20. Sabe a que marca é que este logótipo pertence?
(Por favor, escolha apenas uma das opções seguintes)

__ Sim

__ Não

21. Como classificaria este logótipo, quanto ao género?

Nada feminino 1 2 3 4 5 6 7 Muito feminino

Nada masculino 1 2 3 4 5 6 7 Muito masculino

22. Indique, segundo a escala apresentada, o seu grau de concordância com as afirmações que se seguem, relativamente ao logótipo apresentado anteriormente (1 significa “discordo totalmente” e 7 “concordo totalmente”):

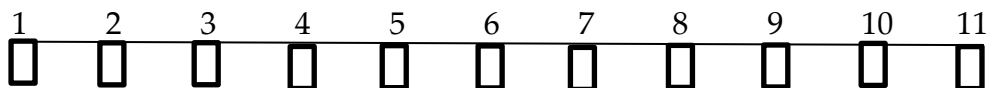
“Se este logótipo fosse uma pessoa, como o descreveria?”

	1	2	3	4	5	6	7
Aventureiro (a)							
Agressivo (a)							
Corajoso (a)							
Ousado (a)							
Dominante							
Robusto (a)							
Exprime sentimentos de ternura							
Frágil							
Gracioso (a)							
Sensível							
Doce							
Meigo (a)							

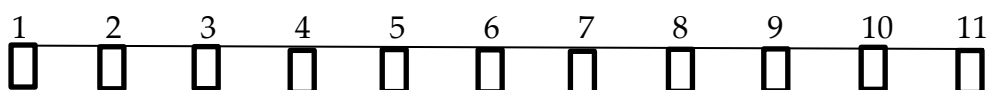
23. Indique o seu grau de concordância perante as seguintes afirmações, tendo em conta os sentimentos ou emoções que este logótipo lhe provoca (1 significa “discordo totalmente” e 7 “concordo totalmente”):

	1	2	3	4	5	6	7
“Eu considero que este logótipo é agradável.”							
“Eu considero que este logótipo é interessante.”							
“Eu considero que este logótipo é distintivo.”							
“Eu gosto deste logótipo.”							
“Eu considero que este logótipo é bom.”							
“Eu considero que este logótipo é de elevada qualidade.”							

24. Indique, segundo a escala apresentada, como classificaria este logótipo, tendo em conta a sua forma (1= preenchimento fino ; 11 = preenchimento carregado):



25. Indique, segundo a escala apresentada, como classificaria este logótipo, tendo em conta a sua forma (1= arredondado/suave ; 11 = angular/pontiagudo):



26. Para terminar, responda por favor a algumas questões sobre si:

Sexo: F___ M___

27. Como é que se descreveria a si próprio?

	1	2	3	4	5	6	7
Aventureiro (a)							
Agressivo (a)							
Corajoso (a)							
Ousado (a)							
Dominante							
Robusto (a)							
Exprime sentimentos de ternura							
Frágil							
Gracioso (a)							
Sensível							
Doce							
Meigo (a)							

28. Idade: ___

29. Escolaridade (especifique por favor o último grau obtido):

- Ensino Básico _____
- Ensino Secundário _____
- Licenciatura _____
- Pós-Graduação / Mestrado _____
- Outro (Se sim, qual) _____

30. Profissão: _____

31. Distrito de residência: _____

Appendix 2 – Logos used







