

#### UNIVERSIDADE CATÓLICA PORTUGUESA

# Consumer engagement with a brand on Facebook

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by

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"Alone we can do so little, together we can do so much." - Helen Keller

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### **Abstract**

Social media and in particular social Networking Sites have grown in importance and have each day more users. This fact has increased the number of brands on these social networking sites (SNS) trying to engage with their consumers.

The purpose of this research is to determine the main motivations for consumers to engage with a brand through Facebook and to study if brand love influences consumer engagement and how these factors (brand love, and consumer engagement) impact brand equity. For this we performed an online survey with 233 valid responses. Correlations analyses were performed in other to study these relations.

The results indicate that the principal motivations to engage with a brand through the consumption of content are entertainment, social influence, search for information and trust. The main motivations to interact and participate in a SNS brand page are social influence and personal identity

Brand love also influences consumer engagement and these two factors influence brand equity.

Theoretical and managerial findings are discussed and directions for further research are given.

Keywords: Consumer engagement, Social Networking Sites, Facebook, Brand love, Brand equity

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## Chapter 1. Introduction

The Internet has brought many new ways to connect and interconnect not only people, but also people and organizations, especially with the emergence of Web 2.0 (Boyd & Ellison, 2007; Hajli, 2014; Lorenzo-Romero, Constantinides, & Alarcón-del-Amo, 2011; Page, Pitt, Web, Berners-lee, & Deighton, 2011). In recent years, one of the most popular trends in online marketing and brand management has been centred on the growth of social media and their popularity among consumers (Schivinski & Dabrowski, 2014). This evolution has changed brands' communication strategies and brand's relationships with consumers (Hutter, Hautz, Dennhardt, & Füller, 2013; Jahn & Kunz, 2012; Mangold & Faulds, 2009).

In 2013, 89% of Europe's population aged between 16 and 24 used social networks compared with 58% between the ages of 25 and 54 and 27% between 55 and 74 (Seybert & Issn, 2013). In the same year, the values for Portugal values were 92%, 70% and 36% respectively (Eurostat, 2014).

Social media have introduced new forms of communication between brands and consumers and this can be confirmed by the increasing number of brands in social networking sites (SNS) (Schivinski & Dabrowski, 2014). In 2013, almost three quarters of European companies with 10 or more employees had a website and 30% used at least one type of social media (Eurostat, 2013)

These data confirm that social media, and in particular SNS, are of extreme importance for the future of brands and for the development of relationships between brands and their consumers, and therefore they should be managed carefully.

With all of this in mind, the objective of this dissertation is to study the factors that contribute to consumer's engagement with brands through social media and, in particular, to determine the main motivations for consumer engagement. We also intend to understand if brand love has any impact on consumer engagement and in brand equity, and if consumer engagement influences brand equity Therefore, the following research questions have been defined:

- 1. What are the motivations to engage with a brand on Facebook?
- 2. Has brand love any influence on consumer engagement and/or in brand equity?
- 3. Has consumer engagement any influence in brand equity?

The methodology used to assert these questions was a quantitative survey. We studied the influence of the different motivations, identified in the literature review, on consumer engagement. We also studied the relations between consumer engagement and brand love and brand equity and brand love and brand equity. The survey was performed online through email and instant messaging in Facebook.

This dissertation has 7 chapters, being the first one the introduction, where the object of study is presented. The second chapter is the literature review about social media, its influence on consumer behaviour, consumer engagement, brand gender, brand love and brand equity. In the third one we present the research model and formulate the hypotheses. In chapter 4, the research methodology is described. In chapter 5, the results are presented and in chapter 6 they are discussed in detail. In this chapter the research limitations and the directions for further research are also noted. Finally, there is a small conclusion in chapter 7.

## Chapter 2. Literature Review

#### 2.1 Social Media

The concept of social media was clarified by Kaplan & Haenlein (2010). For these authors, social media "is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content (UGC)" (Kaplan & Haenlein, 2010, p.61). UGC is the sum of all ways in which people use social media, meaning "all the various forms of media content that are publicly available and created by the end-user" and not by professionals (Kaplan & Haenlein, 2010, p.61).

Social media includes a diverse range of online word-of-mouth (WOM) forums such as social networking sites (SNS), creativity works sharing sites (like YouTube), blogs, chat rooms, consumer product or service ratings websites, Internet discussing forums, among others (Mangold & Faulds, 2009).

Social media, especially SNS, provide a virtual space for people to communicate (Vinerean, Cetina, Dumitrescu, & Tichindelean, 2013). SNS are applications that enable users to connect by creating personal information profiles, inviting whoever they want, being that friends, colleagues or strangers to have access to those profiles, and sending e-mails and instant messages between each other (Kaplan & Haenlein, 2010; Trusov, Bucklin, & Pauwels, 2009). These personal profiles can include any type of information, including photos, videos, audio files and blogs (Kaplan & Haenlein, 2010; Trusov et al., 2009).

Therefore, SNS offer people new ways to grow their social networks, by building and maintaining social interaction, creating relationships, sharing information, generating and editing content and participating in social movements through the Internet (Hajli, 2014; Kirtiş & Karahan, 2011; Lorenzo-Romero et al., 2011; Mangold & Faulds, 2009). SNS allows the convergence of people with the same interests based on similar characteristics published on their profiles (Lorenzo-Romero et al., 2011).

Social media facilitates communication (Mangold & Faulds, 2009). It allows one individual to communicate effortlessly with hundreds or thousands of other consumers in a quick manner (Mangold & Faulds, 2009), and on the other hand it allows brands the opportunity to share and exchange information with their consumers (Sashi, 2012). The passive position of the consumer has declined and nowadays they are also content generators, adding value to the interaction consumer–brand by collaborating and supporting business through co-creation (Hajli, 2014; Sashi, 2012). Consumers are also able to influence purchase decisions of others in peer-to-peer interactions (Hajli, 2014; Sashi, 2012).

Social media have grown in importance, influencing consumer behaviour, more specifically their awareness, their search for information, attitudes, purchase behaviour and post-purchase evaluation (Mangold & Faulds, 2009). Social media favours relationship and community building and also promotes active engagement (Hutter et al., 2013) which has stimulated brands to use them as an effective way to interact with consumers.

#### 2.2 Brands in Social Networking Sites

The increasing use of SNS for peer and friend recommendations, user-generated content, and product reviews and feedback, is becoming a central role on consumer-brand interactions and engagement (Rohm, Kaltcheva, Milne, D. Kaltcheva, & R. Milne, 2013; Sashi, 2012). Their interactive nature allows both interested parties, been that, sellers and customers, to share and exchange information while granting at the same time opportunity for customers to exchange information between themselves (Tsimonis & Dimitriadis, 2014).

Several factors may lead a firm to have a page on a SNS. Among them are their fast growth and popularity, their viral nature and the competitors' presence on SNS (Tsimonis & Dimitriadis, 2014). SNS have also cost advantages to companies (Tsimonis & Dimitriadis, 2014) because there is no need for promotion in the mass media and they allow interaction with consumers through channels which are free of charge (Kirtiş & Karahan, 2011). Also many purchase decisions are being increasingly influenced by SNS interactions (Hutter et al., 2013).

Firms can accomplish many actions through SNS such as: create prize competitions, announce new products/services, interact with fans, provide advice and useful information and handle customer service issues (Tsimonis & Dimitriadis, 2014). Numerous brands have been using SNS in an attempt to stay ahead of the competition and to stimulate creativity and to foster customer co-creation of new product or ideas (Rohm et al., 2013). In addition, it is a way to build awareness for brands and eventually generate sales (Gironda & Korgaonkar, 2014).

By using SNS companies aim mostly to interact with consumers, create and enhance relationships with customers by increasing consumer engagement (Gironda & Korgaonkar, 2014), target acquisition of new customers (Gironda & Korgaonkar, 2014) and promote products and increase sales (Tsimonis & Dimitriadis, 2014). Other expected outcomes are the creation of brand awareness, the increase of brand loyalty and brand equity (Erdoğmuş & Çiçek, 2012; Schivinski & Dabrowski, 2014). According to Lorenzo-Romero et al.(2011), regarding the potential of SNS as marketing tools, they can play different roles as part of the marketing strategy.

Concerning the interaction with consumers, SNS have several benefits as they help businesses to connect with consumers, develop and improve relationships and cultivate relationships in a timely manner and at a low cost (Kaplan & Haenlein, 2010). SNS allow a regular and direct communication with consumers. This way managers can keep users and potential customers close to the brand, augment its visibility and the positive feelings associated with it, while having the opportunity to turn a simple user into an enthusiast and a loyal customer (Smith, Fischer, & Yongjian, 2012; Tsimonis & Dimitriadis, 2014). Besides approximating consumers to the brand, SNS can increase sales by allowing other activities such as special discounts, offers, marketing messages or even by using the brand page as a direct selling channel (Tsimonis & Dimitriadis, 2014).

Customer engagement is one of the most important benefits that social media and, in particular SNS, can have for companies (Tsimonis & Dimitriadis, 2014). Examples of consumer engagement are UGC (Smith et al., 2012) and WOM (Libai et al., 2010). According to Hutter et al. (2013), engagement with a Facebook fan page has a positive influence on consumers' brand awareness, WOM activities and purchase intention (Hutter et al., 2013). Creating a page on a SNS and encouraging consumers to become frequent users leads to engagement and furthermore increases consumers trust and loyalty (Lorenzo-Romero et al., 2011).

Consumer information available on SNS, voluntarily uploaded by the users, allows companies to better target and segment potential customers (Lorenzo-Romero et al., 2011; Tsimonis & Dimitriadis, 2014). With the gathered personal information, many characteristics are susceptible for analysis, such as personality and lifestyle (Vinerean et al., 2013), their trust in the Internet (Wang, Yu, & Wei, 2012), perceived ease of use, perceived risk and the attitudes toward SNS (Lorenzo-Romero et al., 2011). Based on consumer analysis and segmentation, many attitudes may be adopted by companies, such as selectively informing customers (what can even be made on an individual basis), about their products, promotions or services, offering them valuable and interesting news or using the SNS as a customer service channel (Gironda & Korgaonkar, 2014; Lorenzo-Romero et al., 2011; Vinerean et al., 2013).

A major concern for companies is to grow product awareness and increase sales, by acquiring new costumers, increasing consumption or by cross-selling (Coulter & Roggeveen, 2012; Tsimonis & Dimitriadis, 2014). SNS activities affect the purchase decision making process and thereby brands can use it as a viable and relevant marketing communication channel (Hutter et al., 2013).

Increasing brand loyalty is also very important for companies. Consumers' loyalty is reinforced by the adoption of several attitudes, namely advantageous campaigns and relevant and popular content on SNS (Erdoğmuş & Çiçek, 2012).

Furthermore, companies can also gain through the interactions with fans, since they can use SNS as a source of consumer voice for the development or testing of new projects, products or services, and for the creation of new advertising campaigns (Hajli, 2014; Lorenzo-Romero et al., 2011; Wang et al., 2012; Wolny & Mueller, 2013).

SNS are considered, in general, to be less invasive than other marketing communication campaigns since consumers can choose to until what extent they will expose themselves to marketing content (Hutter et al., 2013). Nevertheless, there is a potential risk of brand pages being overly active, bothering their fans by posting too much (Hutter et al., 2013). This over solicitation with SNS content has deleterious effects on the evaluation of brands, on the purchase decision making process and diminishes WOM (Hutter et al., 2013)

It should be noted that besides the benefits that SNS offer to companies, risks do exist regarding their use (Tsimonis & Dimitriadis, 2014).

One of the main motives for some companies to be apprehensive in pursuing long-term, collaborative consumer generated content is because it requires renouncing a considerable control of brand messages and brand meanings (Muñiz & Schau, 2011).

The Internet is also an open community and brand pages on SNS are mainly unregulated which is an important factor to take into account when deciding whether to be present on SNS or not (Schivinski & Dabrowski, 2014). Inevitably, discussions between consumers will occur, and they tend to be sincere and open when they are advising other consumers about a certain product and giving their brand experience (Dekay, 2012; Schivinski & Dabrowski, 2014). All brands are susceptible and may be targets of damaging WOM and degenerative content from Internet users (Schivinski & Dabrowski, 2014). When not led appropriately, these occurrences may lead to damaging WOM among SNS users (Tsimonis & Dimitriadis, 2014).

## 2.3 Effect of Social Networking Sites on Consumer Behaviour

SNS can influence consumer behaviour regarding the search for information, acquisition and post-purchase behaviour such as dissatisfaction statements (Mangold & Faulds, 2009) and also behaviours and patterns of Internet usage (Laroche, Habibi, Richard, & Sankaranarayanan, 2012). Since the Internet is expanding at an incredible rate worldwide and the users of SNS are growing in similar proportion, it is crucial for communication managers to understand online consumer behaviour (Schivinski & Dabrowski, 2014). Laroche et al.(2012) pointed out that, in an online environment, people enjoy contributing, creating, and joining communities to fulfil needs of belongingness, being socially connected and accepted, feeling simple pleasure by interacting with their peers and members of the same groups.

In terms of information search, Bronner & de Hoog (2014) defended that the information provided by suppliers of consumer goods is losing relevance, and that the major factors influencing buyers choice are widely accessible opinions, reviews and experiences from other consumers. Recommendations are also important elements for consumer's decision making process (Hajli, 2014). According to Heinonen (2011), by sharing experiences and knowledge, consumers are generating novel forms of services, which have an important role in influencing the purchase decision.

Consumers are no longer inactive recipients of the communications and offerings of marketers (Page et al., 2011). SNS allows prospects and customers to dialog directly with brand representatives or to communicate with friends about a specific brand (Vinerean et al., 2013). They not only create content, but

they add comments and contents to social network discussions, and may even contribute with reviews and evaluations of products (Page et al., 2011).

Regarding attitudes and purchase behaviour, there are several aspects which influence the perception of a brand or the purchase intention. Schivinski & Dabrowski (2014) stated that, brand equity is not directly affected by the company-created social media communication, but since it influences brand attitude, it may indirectly influence the consumer value perceptions. On the other hand, UGC, on Facebook, has positive repercussions on both brand equity and brand attitude (Schivinski & Dabrowski, 2014), which in turn has a positive effect on brand purchase intention. Therefore, user-generated social media communications have a bigger impact on consumers overall brand perception than company-created communication (Schivinski & Dabrowski, 2014). The most important being peer communication, which is able to influence the decision making process of consumers and thus must be addressed with adequate marketing strategies (Vinerean et al., 2013).

Concerning the purchase intention, peer communication affects product attitudes and product involvement, which can in turn increase purchase intentions (Wang et al., 2012). Peer communication is positively influenced by tie strength between peers and identification with the peer group (Wang et al., 2012).

Considering these effects it is extremely important for brands to engage with consumers through social media and in particular through SNS.

#### 2.4 Consumer Engagement

There is a lack of consensus regarding the appropriate definition, forms and dimensionality of engagement (Hollebeek, 2011). Various authors tried to define it and there are slight variances on the terms used (Brodie, Hollebeek, Juric, & Ilic, 2011; Heinonen, 2011; Hollebeek, 2011; Sashi, 2012; van Doorn et al., 2010; Verhoef, Reinartz, & Krafft, 2010).

Considering the numerous definitions of consumer engagement proposed, the elements in common are the trend to a two-way communication and the value and importance of co-creation within marketing relationships (Brodie et al., 2011; Hollebeek, 2011). Hollebeek (2011, p.790) used the term "customer brand engagement" and defined it as "the level of an individual customer's motivational, brand-related and context-dependent state of mind characterized by specific levels of cognitive, emotional and behavioural activity in direct brand interactions". According to Sashi (2012, p.267), customer engagement focuses on "customers and their needs (...), aims to provide superior value relative to competitors by generating, disseminating, and responding to intelligence regarding customer needs and seeks to build trust and commitment in relationships with customers". Consumer engagement is a broader concept than customer engagement.

To Parent, Plangger, & Bal (2011), consumer engagement is considered a dynamic involvement of a consumer with a brand, product, service, or company which is expressed, for example, by the creation of content on social media(Parent et al., 2011). It includes all consumer-to-firm interactions and consumer-to-consumer communications (such as electronic WOM) about the brand (Gummerus, Liljander, Weman, & Pihlström, 2012). Even the smallest of

gestures, like putting a comment or "like" on a SNS page can also be interpreted as a form of engagement (Wallace, Buil, & Chernatony, 2014).

Engagement is particularly relevant in SNS communication. Since SNSs are centred on relationships and intrinsically on sharing between users, the use of SNS pages – including those of a brand – will ultimately lead to the building of significant relationships (Tsai & Men, 2013).

For example, brands using SNS to communicate with consumers are allowing them to engage with the brand by reading and commenting brand posts, expressing their feelings of pleasure or repent, likes and dislikes, while at the same time being able to share that content within their social group (Tsai & Men, 2013).

#### Levels of Consumer Engagement

Based on the types of consumers' online brand-related activities (COBRA) identified by (Muntinga, Moorman, & Smit (2011), consumer engagement with brand SNS pages can be examined using three continuous degrees that correspond to a gradual involvement with a brand on social media, namely consuming, contributing and creating (Heinonen, 2011; Muntinga et al., 2011; Shao, 2009).

The first level corresponds to consuming activities (Muntinga et al., 2011). It refers to users who only watch, read, or view content but never participate or create content (Muntinga et al., 2011; Shao, 2009). Most consumers are only consuming content, while only a few are contributors and creators of content (Heinonen, 2011).

The contributing type is the middle level of online brand-related activity (Muntinga et al., 2011). It includes both user-to-content and user-to-user interactions about brands (Muntinga et al., 2011; Shao, 2009). Contributors of content enjoy writing on brand forums, on brand's fan pages on SNS and are always eager to comment on pictures, videos and other brand-related content and are permanently interested in discussing content that others have created (Muntinga et al., 2011).

The creators are the most active of the three levels of COBRA (Muntinga et al., 2011). Creating implies being a frequent producer and publisher of brand-related content that other users will probably consume and will be able to discuss and contribute to (Muntinga et al., 2011; Shao, 2009). Producing is mainly an attitude in which people aim to construct their personal identity by self-expression and self-actualization (Shao, 2009).

To provide content that engages consumers online, marketers must understand consumers' motivations for interacting with brands on SNSs (Tsai & Men, 2013). One of the objectives of this study is to understand the motivations of consumers that lead them to engage with a brand through Facebook – Consumer Engagement.

## 2.5 Consumers' motivations to engage with a brand

Several authors have been studying what motivates consumers to interact with brands through social media. According to the literature there are six main motivations: social influence, search for information, entertainment, trust, reward and personal identity.

#### Social Influence

SNS have enabled people to build and sustain a community of individuals and offered them an active mean to communicate with their preferred brands and with customers of these brands (Gironda & Korgaonkar, 2014; Heinonen, 2011; Jahn & Kunz, 2012; Whiting & Williams, 2013). Consumers benefit from social connections with other users and the possible formation of ties with other people that share a common passion – the brand (Muntinga et al., 2011; Tsimonis & Dimitriadis, 2014). Consumers are able to share experiences and information with each other and contribute to debates concerning the brand (Heinonen, 2011). Related with social influence is consumers' ability to share knowledge, and by doing so, to help other consumers (Heinonen, 2011; Muntinga et al., 2011).

Social pressure frequently influences consumer's decision to join and collaborate on a brand page and generate brand related content (Muntinga et al., 2011). In SNS, consumers can check which and how many of their friends are members of a recommended product/brand page before becoming part of that community (Coulter & Roggeveen, 2012). The user will more easily feel familiar with a product/brand page to which their friends belong to and will more likely be curious and not only investigate the product, but also approve and support it (Coulter & Roggeveen, 2012). Individuals may join a brand page or/and upload brand-related content because they feel the urge to comply with friends and because other people do so (Gironda & Korgaonkar, 2014; Martins & Patrício, 2013; Muntinga et al., 2011).

The users that are trying to achieve acceptance and recognition of others and attempting to cause a good impression are more willing to participate and share information on SNS, namely through the activity of recommendation (Akrimi & Khemakhem, 2014). They use recommendations in order to become

more accepted and integrated in their social group (Akrimi & Khemakhem, 2014).

#### Search for information

Nowadays, consumers rely and use more often SNS to conduct their search for information and to decide what to purchase (Gironda & Korgaonkar, 2014; Mangold & Faulds, 2009; Martins & Patrício, 2013; Rohm et al., 2013). The main objectives in terms of information search are: gathering of product information and pre-purchase information, such as looking up product reviews in order to make a well informed and pondered buying decision, accessing experiences and knowledge of others online (Whiting & Williams, 2013), using know-how and information from user-generated media for practical purposes (Heinonen, 2011) and to be inspired with fresh ideas (Muntinga et al., 2011).

Buyers or opinion seekers use SNS to obtain information and opinions for their purchase since they may consider that recommendations made by friends are more trustworthy and dependable (Chu & Kim, 2011; Coulter & Roggeveen, 2012; Harris & Dennis, 2011; Heinonen, 2011). Opinion leaders may use the social environment to their advantage, since they have great opportunities to share product-related ideas and opinions with the community and consumers (Chu & Kim, 2011).

The most common reasons for interacting with brands via SNS, is the interest and usefulness of page content, be that hedonic or functional, and at the right time (Coulter & Roggeveen, 2012; Gironda & Korgaonkar, 2014; Jahn & Kunz, 2012; Rohm et al., 2013).

#### **Entertainment**

Entertainment is one of the main motivations concerning consumers' use of SNS (de Vries, Gensler, & Leeflang, 2012; Rohm et al., 2013). People are more prone to like a product/brand page if the information is both fascinating and appealing (Coulter & Roggeveen, 2012).

Entertainment has four main activities associated: relaxation or escape (Muntinga et al., 2011; Whiting & Williams, 2013); inspiration and mood management motives (Heinonen, 2011); enjoyment and having fun (Curran & Lennon, 2011; Martins & Patrício, 2013; Muntinga et al., 2011) and to pass the time (Muntinga et al., 2011; Whiting & Williams, 2013).

The most common entertainment activities stated are playing games, listening to music, and viewing videos (Martins & Patrício, 2013; Whiting & Williams, 2013). Some users also name as motives the enthusiasm of being able to contribute in discussions about the brand or to share experiences and to be able to upload brand related pictures (Muntinga et al., 2011).

#### Trust

Trust is an important concept regarding SNS and its use. Consumers resort more often to SNS to perform their search for information and to make buying choices (Mangold & Faulds, 2009). People assume SNS as a more trustworthy source of information concerning products and services than the communications made by the companies (Mangold & Faulds, 2009). Acquaintances on SNS are seemingly more reliable and credible than opinions from complete strangers, which makes, SNSs a crucial basis for product information for consumers and greatly helps and accelerates WOM and sharing behaviour on SNSs (Chu & Kim, 2011).

Trust is considered an antecedent of consumer engagement (Hollebeek, 2011; Sashi, 2012) and is also an important aspect regarding the intention of purchase. When a potential buyer is encouraged by their SNS friends to believe in a brand, he or she will be more prone to acquire products from that specific brand (Hajli, 2014).

#### Reward

Another motivation to engage with a brand SNS, is because it is an easy and comfortable way to receive brand related campaigns and/or special offers (Gironda & Korgaonkar, 2014; Rohm et al., 2013). Any reward provided by the brand being that monetary, job-related benefits or of other nature is welcome by the consumer (Muntinga et al., 2011).

#### **Personal Identity**

Consumers desire a link and identification with the brand (Rohm et al., 2013). Members of a particular fan page resort to memberships to build an image of themselves (Chu & Kim, 2011; Martins & Patrício, 2013). Users may participate on a brand page to demonstrate opinions and at the same time be able to express themselves in order to affirm a personal identity, in the form of self-presentation (give others a reflection of their personality), self-expression (express one's identity and/or personality), and/or self-assurance (receive recognition form other members and increase confidence) (Heinonen, 2011; Muntinga et al., 2011).

Additionally to the motivations identified above there are other factors that might influence consumer engagement, one of these factors is brand love.

#### 2.6 Brand Love

Brand love is a recent marketing concept, which has been shown to influence key marketing variables such as brand loyalty and WOM (Bergkvist & Bech-Larsen, 2010). Research on brand love states that this feeling can appear when the item loved is an object or a brand (Albert, Merunka, & Valette-Florence, 2008).

Carroll & Ahuvia (2006; p.81) defined brand love as "the degree of passionate emotional attachment a satisfied consumer has for a particular trade name." (Carroll & Ahuvia, 2006) According to the same authors, the love a consumer has for a particular brand includes these characteristics: passion for a brand, brand attachment, positive evaluation of the brand, positive emotions in response to the brand, and declarations of love toward the brand (Carroll & Ahuvia, 2006). More recently, Albert et al., (2009) proposed two main dimensions of brand love: seven first-order dimensions (duration, dream, memories, intimacy, unicity, idealization and pleasure) and two second-order dimensions (passion and affection) (Albert, Merunka, & Valette-Florence, 2009).

Brand love is able to fortify the existent bonds between consumers and brands, strengthens the belief in the brand, nurtures the relationship, increases trust and will ultimately increase consumer's retention (Loureiro, Ruediger, & Demetris, 2012). Consumers in love with a brand are more willing to repeat a purchase and to recommend the brand to others (Loureiro et al., 2012). They will invariably pick the brand over any other and even forgive and minimize a problem if it has occurred (Loureiro et al., 2012)

Carroll & Ahuvia (2006) proposed both antecedents and consequences of brand love. As antecedents they identified hedonic products and self-expressive brands (brands who reflect one's social or inner self) and as

outcomes brand loyalty and positive WOM (Carroll & Ahuvia, 2006). These authors emphasize that brand love includes a need to proclaim love (as if the brand were a person) and leads to the assimilation of the brand into the consumer's identity (Carroll & Ahuvia, 2006). Bergkvist & Bech-Larsen (2010), Batra, Ahuvia, & Bagozzi (2012) and Loureiro et al. (2012) support the results of Carroll & Ahuvia (2006), by identifying brand loyalty as an outcome of brand love. Batra et al. (2012) equally identified WOM as outcome.

Bergkvist & Bech-Larsen (2010) also included active engagement as a consequence of brand love. They used the definition of Keller (2001, p.19) of active engagement where "customers are willing to invest time, energy, money, or other resources in the brand beyond those expended during purchase or consumption of the brand". Active engagement includes WOM, visiting brand websites, and purchasing brand products (Bergkvist & Bech-Larsen, 2010).

Brand love has a positive effect on active engagement which suggests that brand love leads not only to WOM, as found by Carroll & Ahuvia (2006), but also to other brand related activities (Bergkvist & Bech-Larsen, 2010). According to this perspective we also assume that brand love will positively influence consumer engagement with a brand through Facebook.

As active engagement and positive WOM (a component of consumer engagement) are outcomes of brand love, we can thus infer that brand love will also influence consumer engagement. Since brand loyalty is one of the outcomes of brand love and one of the components of brand equity we sustain that brand love will also influence brand equity.

#### 2.7 Brand Equity

Aaker (1991) stated that creating brand equity, or building a strong brand, is an effective strategy for discerning a brand from other of competing brands (Aaker (1991) cited by Yoo, Donthu, & Lee, 2000). According to Aaker (1991,p.15), brand equity can be defined as "a set of brand assets and liabilities linked to a brand, its name and symbol that add to or subtract from the value provided by a product or service to a firm and/or to that firm's customers" (Aaker (1991) cited by Schivinski & Dabrowski, 2014).

Brand equity is a multidimensional concept (Aaker, 1996). It is composed of brand loyalty, brand awareness, perceived quality and brand associations (Aaker, 1996). Brand equity may not be heavily positively or negatively affected in the short term, but should be achieved in the long term, through well thought and designed marketing efforts (Yoo et al., 2000). Thus, brand equity is long-lasting and sustainable, and a brand with a solid brand equity is an indispensable asset to a firm (Yoo et al., 2000).

An alternative concept is consumer-based brand equity (CBBE) developed by Keller (1993; p. 2), who defined it as "the differential effect of brand knowledge on consumer response to the marketing of the brand" (Keller, 1993). This is, CBBE is the difference on consumers reaction to a brand (more concretely to one of the elements of its marketing mix) when that brand is compared with the same marketing mix element of a non-branded product or a product with a fictional brand name (Keller, 1993). Keller (1993) emphasized that brand equity should be perceived in terms of brand awareness and brand associations that consumers recall.

Yoo et al. (2000, p.196) defined brand equity more simply as "the difference in consumer choice between the focal branded product and an unbranded

product given the same level of product features". This definition emphasises the comparison of two items that are in fact similar or almost equal in every way except for the brand name (Yoo et al., 2000). It is possible to ascertain a difference in consumer choice between two products through the measurement of intention to buy or an inclination to prefer a focal brand instead of the noname product (Yoo et al., 2000).

Brand equity can, therefore, be perceived as a notion that predicts that consumers will have a tendency to choose in a determined category a branded product instead of an unbranded one (Keller, 1993; Yoo et al., 2000). This allows the branded product to have an important competitive advantage over the non-branded product, since it creates significant competitive barriers (Yoo et al., 2000).

According to Keller (2001), brand equity can be created though six building blocks of which consumer-brand resonance is the most valuable (Keller, 2001). One of the components of brand resonance is consumer active engagement (a concept previously described in chapter 2.6). Therefore we propose that consumer engagement will influence brand equity.

#### 2.8 Brand Gender

Brand personality is a multidimensional concept defined by (Aaker, 1997, p. 347) as "the set of human characteristics associated with a brand". As personality traits are included in human characteristics, it is very probable that consumers will unconsciously associate personality traits with brands, including masculine or feminine personality characteristics (Grohmann, 2009). Grohmann (2009, p.106) defined the gender dimensions of brand personality as

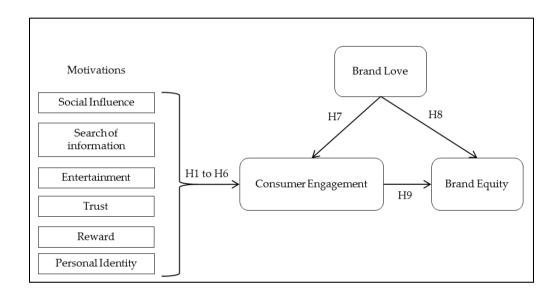
the "set of human personality traits associated with masculinity and femininity applicable and relevant to brands".

The gender dimensions of brand personality are particularly important to brands with symbolic value for consumers (Grohmann, 2009). The gender dimensions will result in a positive outcome and influence consumer's response positively as long as they are congruent with consumers' sex role identity (Grohmann, 2009). These positive responses include a favourable brand attitude, stronger brand predilection over rival brands, greater brand affect and trust, higher degree of brand loyalty, stronger purchase intentions, and increased likelihood of WOM communication (Grohmann, 2009).

Brand gender also influences positively brand equity. Brands associated with high levels of masculinity and femininity are associated with a higher brand equity (Lieven, Grohmann, Herrmann, Landwehr, & van Tilburg, 2014). Since brand gender is associated with greater brand affect, positive WOM and brand equity we suggest that brand gender, might also have a positive effect on consumer engagement with a brand through Facebook, brand love and brand equity, when it is congruent with consumers' sex role identity.

# Chapter 3. Research Model and hypotheses formulation

Based on the constructs identified above on the literature review we propose the following framework.



**Figure 1** – Research model demonstrating the relation between the motivations to engage with a brand and consumer engagement with a brand through Facebook and between consumer engagement and brand love, brand equity; source: authors.

In this framework (Figure 1) we suggest the possible relations between the motivations previously described (independent variables) in chapter 2.5 and consumer engagement with a brand through Facebook (dependent variable) described in chapter 2.4. The concept of brand love is also present and we expect it will influence consumer engagement. We also propose brand equity as an outcome of consumer engagement and brand love.

Based on these relations we then formulated the following hypothesis that we intend on studying.

#### Relationship between consumers' motivations and consumer engagement

A desire to be part of a community, to share experiences and to connect with others with the same passion for the brand (Muntinga et al., 2011), are frequently referred as motivations to engage with a brand. Social pressure from friends and the need to fit in a group are also often mentioned (Gironda & Korgaonkar, 2014). Therefore we propose that social influence will influence consumer engagement.

H1: There is a positive relation between the motivation "social influence" and consumer engagement with a brand through Facebook.

Consumers use SNS to conveniently obtain information about products (Gironda & Korgaonkar, 2014), read reviews in order to make well informed buying decisions and access experiences and knowledge of others users (Whiting & Williams, 2013). Recommendations made by friends or by other consumers, on SNS, are considered more trustworthy and dependable (Chu & Kim, 2011; Coulter & Roggeveen, 2012). Consequently, we predict that the motivation "search for information" will influence consumer engagement.

H2: There is a positive relation between the motivation "search for information" and consumer engagement with a brand through Facebook.

Entertainment is one of the main motivations concerning consumers' use of SNS (de Vries et al., 2012; Rohm et al., 2013). Consumers seek relaxation and enjoyment and thus use SNS brand pages to read interesting content, play games, listen to music and watch videos about the brand (Martins & Patrício, 2013; Whiting & Williams, 2013). Accordingly, we anticipate that "entertainment" will influence consumer engagement.

H3: There is a positive relation between the motivation "entertainment" and consumer engagement with a brand through Facebook.

Consumers assume SNS as a more trustworthy source of information concerning products and services than the communications made by the companies (Mangold & Faulds, 2009). Opinions of friends on SNS are considered reliable and credible (Chu & Kim, 2011). Therefore, we expect that "trust" will influence consumer engagement.

H4: There is a positive relation between the motivation "trust" and consumer engagement with a brand through Facebook.

Consumers consider interacting with a brand SNS, an easy and comfortable way to learn about brand related campaigns (Gironda & Korgaonkar, 2014; Rohm et al., 2013) and received special offers or other benefits (Muntinga et al., 2011). Accordingly, we propose that "reward" will influence consumer engagement.

H5: There is a positive relation between the motivation "reward" and consumer engagement with a brand through Facebook.

Consumers desire a link and identification with the brand (Rohm et al., 2013) and participate on a brand page to demonstrate opinions and express themselves, in order to affirm their personality (Chu & Kim, 2011; Martins & Patrício, 2013). Consequently, we predict that the motivation "personal identity" will influence consumer engagement.

H6: There is a positive relation between the motivation "personal identity" and consumer engagement with a brand through Facebook.

# Relationship between brand love and consumer engagement and brand equity

Brand love has a positive effect on active engagement (Bergkvist & Bech-Larsen, 2010) and in positive WOM (a component of consumer engagement) (e.g. Batra et al., 2012; Carroll & Ahuvia, 2006). Consequently, we can infer that brand love will influence consumer engagement

H7: There is a positive relation between brand love and consumer engagement with a brand through Facebook.

Brand loyalty is one of the outcomes of brand love (e.g. Bergkvist & Bech-Larsen, 2010; Loureiro et al., 2012) and one of the components of brand equity therefore, we sustain that brand love will also influence brand equity.

H8: There is a positive relation between brand love and brand equity.

#### Relationship between consumer engagement and brand equity

Keller (2001) identified active engagement as a component of brand resonance, one of the essential stages to build brand equity. Since active engagement is required to build brand equity, we propose that it will influence consumer engagement online.

H9: There is a positive relation between consumer engagement with a brand through Facebook and brand equity.

To test these hypotheses, we developed a questionnaire which was applied through an online survey.

# Relationship brand gender and consumer engagement, brand love and brand equity

Although brand gender was not included in the research questions or on the research model, we regard it as an important concept to study. Therefore we intended to study the possible influence of brand gender on consumer engagement, brand love and brand equity, but opted not to formulate any specific hypothesis regarding this influence. To ascertain this influence it is necessary to determine if brand gender is congruent with consumer's sex role identity.

### Chapter 4. Methods

Considering the purpose of this study and the research question identified above, this work is addressed in a quantitative perspective. A quantitative method is used to infer evidence for a theory through measurement of variables that produce numeric outcomes (Field, 2009)

One of the objectives of this study is to test the hypothesized relationship between the independent variables (motivations to engage with a brand) and the dependent variables (consumer engagement (with a brand through Facebook)). We also aim to understand the relationship between consumer engagement and brand love, brand equity and brand gender. Furthermore, we propose to study the possible relations between brand love and brand equity.

In order to do so, a self-administered online survey was conducted about consumer-brand relationship on Facebook. Facebook has been used in multiple studies as an appropriate platform to perform surveys (e.g. Hutter et al., 2013; Jahn & Kunz, 2012; Schivinski & Dabrowski, 2014). There are several advantages for using surveys, especially online surveys: they are non-expensive and quick to administer; do not have the interference of the interviewer; there is no interviewer variability because questions are written and therefore are always enquired in the same way; and are more convenient to the respondent (Bryman, 2008).

The first step was to perform a pre-test of the survey, with 5 people, in order to determine if the questions were clear. Next, a link to the online survey was sent through instant messaging on Facebook and emails to the participants. The invitation to the survey consisted of a small text informing about the topic of the study and asking to the respondents to send the link onwards to their

friends and family. After clicking on the survey's link, the respondents were redirected to the questionnaire and had access to an introductory text. The explanatory text described the general objectives of the study.

The survey consisted of sixteen questions, five of which were demographic. There were two questions related to the use of Internet and Facebook, three associated with the types of pages that the respondent like, three were focused on the respondent's favourite brand and the way that brand is perceived (brand gender and brand love), two were centred on the study of consumer's motivations to engage with its favourite brand, on Facebook, and the frequency of the different types of engagement. The last question was related with brand equity. The survey was administered over an 11 day period and it is shown in Appendix I.

#### 4.1 Independent and Dependent variables

The six independent constructs (search for information, entertainment, social influence, personal identity, trust and reward) were all measured by multiple item scales using a seven-point Likert structure with the endpoints being "strongly disagree" to "strongly agree." The variables brand gender and brand love and brand equity were measured in the same way.

The dependent variable consumer engagement was measured using a multiple item scale, with each item being measured on a seven-point Likert scale, with "never" and "very frequently" as endpoints. The exact items used can be seen on tables 6, 7, 8 and 9. The scales used were adapted from the literature. Respondents were asked to complete the survey always considering their favourite brand page on Facebook when answering the questions.

#### Scales used to formulate the questions on the survey

We based our questions about the motivations on scales described in the literature. To study the motivations "search for information", "trust" and "reward" we adapted the scales used by Machado, Azar, Vacas de Carvalho, & Mender (2015) in their study. To investigate the motivation "entertainment" and "personal identity" we based our questions on the scale used by Jahn & Kunz (2012). For the motivation "social influence" we used the scale used by Curran & Lennon (2011) and by Machado et al. (2015) in their study (see Table 1).

The scale used to study brand gender was the one developed by Grohmann (2009) (see Table 2). To investigate brand love we used the scale adapted by Loureiro et al. (2012) (see Table 2). To study consumer engagement with the brand on Facebook, we used the scale used by Tsai & Men (2013) (see Table 3). Finally, to study the variable brand equity we employed the scale used by Yoo & Donthu (2001) to measure perceived quality, brand loyalty, brand associations, brand awareness and overall brand equity (see Table 4)

The scale for consumer engagement was adapted to reflect the objectives of this study. One item of the original scale was eliminated because it was not relevant to our study. The scale for brand equity was adapted in order to measure the equity of service brands, since the respondents favourite brand could be a service brand. Some items were slightly modified to fit the Portuguese language. The items in the questionnaire were first written in English, translated into Portuguese, and then back translated to English. Back translation was used to ensure that the items in Portuguese communicated similar information as those in the English language as described by Loureiro

et al. (2012). The exact scales used by the authors mentioned above can be consulted in Appendix II.

#### **Motivations**

#### Social influence (4 items)

- SocI1. By interacting with the brand on Facebook, I feel I am part of a community.
- SocI2. I interact with the brand on Facebook to state my interests and preferences to my friends.
- SocI3. My interaction with the brand on Facebook allows me to increase my social involvement.
- SocI4. I participate in the brand page on Facebook because someone I know wants me to.
  - SocI5. I joined the brand page on Facebook to fit in with a group of people.
- SocI6. I am part of the brand page on Facebook because friends would think less of me if I was not.

#### Search for Information (3 items)

- SInf1. My interaction with the brand on Facebook allows me to better understand the brand.
- SInf2. I like to interact with the brand on Facebook because it allows me to find out the opinions of other consumers about the brand.
- SInf3. My interaction with the brand on Facebook gives me convenient access to information about brands, as the brand's posts appear directly on my news feed.

#### Entertainment (4 items)

- Ent1. The content of the brand Facebook page is fun.
- Ent2. The content of the brand Facebook page is exciting.
- Ent3. The content of the brand Facebook page is pleasant.
- Ent4. The content of the brand Facebook page is entertaining.

#### Trust (4 items)

- Tru1. I believe it is safe to interact with the brand on Facebook.
- Tru2. I believe that the brand respects my privacy when I interact with it on Facebook.
- Tru3. I believe that the brand will not provide the information that they have obtained about me, through Facebook, to other people or entities.
- Tru4.I trust the information published by other consumers on Facebook on the brand page.

#### Reward (2 items)

- Rw1. I interact with the brand on Facebook in order to access discounts and promotions.
- Rw2. I like to interact with the brand on Facebook as it offers contests and games from which I can access free products or other special offers.

#### Personal identity (4items)

PInd1. By interacting with the brand on Facebook I can make a good impression on others.

PInd2. By interacting with the brand on Facebook I can improve the way I am perceived.

PInd3. By interacting with the brand on Facebook I can present others who I am.

PInd4. By interacting with the brand on Facebook I can present others who I want to be.

Table 1 – Scales used to study the motivations

Brand Gender (6 items + 6items)				
GM1. Adventurous				
GM2. Aggressive				
GM3. Brave	Masculine			
GM4. Daring	Mascumie			
GM5. Dominant				
GM6. Sturdy				
GF1. Expresses tender feelings				
GF2. Fragile				
GF3. Graceful	Feminine			
GF4. Sensitive	renume			
GF5. Sweet				
GF6. Tender				
Brand Love (5 items)				
BL1. This is a wonderful brand.				
BL2. This brand makes me feel good.				
BL3. This brand makes me feel happy.				
BL4. This brand is a delight.				
BL5. I am passionate about this branc	1.			

Table 2 – Scales used to study brand gender and brand love

#### **Engagement -** Consumer-brand interaction on Facebook

Eng1. Viewing pictures on the brand's Facebook page.

Eng2.Reading companies' posts, user comments, or product reviews.

Eng3. Watching videos on the brand's Facebook page.

Eng4. Engaging in conversations on the brand's Facebook page (e.g., commenting, asking, and answering questions).

Eng5. Sharing the brand's Facebook posts on my own Facebook page (e.g., videos, audios, pictures, texts).

Eng6. Recommending the brand's Facebook page to my Facebook contacts.

Eng7.Uploading product-related videos, audios, pictures, or images.

Table 3 - Scale used to study consumer engagement.

#### **Brand equity**

#### Brand loyalty (3 items)

- BL1. I consider myself to be loyal to X.
- BL2. Brand X would be my first choice.

BL3. I will not buy the products or use the services of other brands if brand X is available.

#### Perceived quality (2 items)

PQ1. The likely quality of brand X is extremely high.

PQ2. The likelihood that brand X would be functional is very high.

#### Brand awareness/associations (5 items)

BAA1. I can recognize brand X among other competing brands.

BAA2. I am aware of brand X.

BAA3. Some characteristics of brand X come to my mind quickly.

BAA4. I have difficulty in imagining brand X in my mind.

BAA5. I can quickly recall the symbol or logo of brand X.

#### Overall Brand Equity (4 items)

OBE1. It makes sense to buy the products or use the services of brand X instead of any other brand, even if they are the same.

OBE2. Even if another brand has the same features as brand X, I would prefer to buy the products or use the services of brand X.

OBE3. If there is another brand as good as X, I prefer to buy the products or use the services of brand X.

OBE4. If another brand is not different from X in any way, it seems smarter to purchase to the products or use the services of brand X.

Table 4 - Scales used to study brand loyalty, perceived quality, brand awareness/brand associations and overall brand equity.

#### 4.2 Statistic procedures

Prior to testing the hypothesised relationship between the variables, analyses of the measure scales were performed to ensure their quality. To evaluate the initial reliability of the measures, we employed Cronbach's  $\alpha$ . If the Cronbach's  $\alpha$  increases the reliability also increases and values above 0.70 are considered acceptable (Field, 2009)<sup>1</sup>.

Some items of the scales were excluded from further analysis due to incoherencies in Cronbach's  $\alpha$  and in inter-item correlation (items were excluded from the scale if the Cronbach's  $\alpha$  was higher without the items). All the statistical analysis can be observed in Appendix III. Two items of brand gender were excluded (GM2 - Aggressive and GF2 - Fragile), as were three items of social influence (SocI4, SocI5, SocI6), one item of search for information (SInf3), two items of Trust (Tru1 and Tru4) and two items of brand awareness/associations (BAA4 and BAA5).

The Cronbach's  $\alpha$  coefficient ranged from 0.795 to 0.925, which elucidates the internal consistency of each scale (all the Cronbach's  $\alpha$  are displayed in the Appendix III).

Subsequently, an exploratory factor analysis (EFA) with principal component analysis and a Varimax rotation was performed (using SPSS) to explore the dimensionality of the constructs. The EFA is often used to determine the metric qualities of a scale and it is frequently used to construct a questionnaire to measure an underlying variable (Field, 2009; Hill & Hill, 2012). This technique allows the reduction of data to a more manageable size while

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 $<sup>^{1}</sup>$  A Cronbach's  $\alpha$  higher than 0.9 is excellent; between 0.8 and 0.9 is good; between 0.7 and 0.8 is reasonable; between 0.6 and 0.7 is weak and lower than 0.6 is unacceptable ((Hill & Hill, 2012)

retaining as much of the original information as possible (Field, 2009; Hill & Hill, 2012).

The items loaded on a single factor, suggesting that the different motivations (search for information, entertainment, social influence, personal identity, trust and rewards), masculine brand gender, feminine brand gender, brand love, brand loyalty, perceived quality, brand awareness/association and overall brand equity are unidimensional. Consumer engagement created two factors which was already expected, according to Tsai & Men (2013). As identified by these authors, one factor corresponds to the consuming type of engagement (items Eng1, Eng2 and Eng3) and the other to the contributing type (items Eng4, Eng5, Eng6 and Eng7).

To further assess the correlation between variables and test the hypotheses formulated, Spearman's correlation coefficient and Kendall's tau were calculated. These non-parametric tests are used when the data violated parametric assumptions such as non-normal distribution which is the case (Field, 2009; Hill & Hill, 2012). Only when the assumption of normal distribution is achieved is it possible to use Pearson correlation, which is a more robust test (Field, 2009). Correlation values of  $\pm 0.1$  represent a small effect,  $\pm 0.3$  a medium effect and  $\pm 0.5$  a large effect (Field, 2009). In all the analysis performed the two coefficients showed similar results.

In order to determine if the respondents' sex role identity was congruent with brand gender, independent-samples *t*-student tests were performed between the sex of the respondents (male and female respondents) and the feminine brand gender and the masculine brand gender. The *t*-student analysis is used to test if the means of two groups are equal or if there are differences between them. Only if the groups are different it is possible to assume that

there might be congruence between the respondents sex role identity and brand gender.

## Chapter 5. Results

#### 5.1 Sample

A convenience sample of 299 useable questionnaires was collected. The population of the study comprised Facebook users in Portugal. 141 of the respondents were male (47.2%) and 158 were female (52.8%). Respondents ranged in age from 16 to 76 with a mean age of 34.2 years. The majority had a university degree (40.1%) and 35.8% had a postgraduate or master degree (Table 5).

		%
Gender	Female	52.8
Gender	Male	47.2
	15-24	22.7
	25-34	35.2
A 70	35-44	26.4
Age	45-54	10.3
	55-65	3.1
	More than 65	2.3
	Elementary School	1.7
	Secondary School	18.7
	Professional Degree	0.3
Education	Bachelor Degree	0.3
	University Degree	40.1
	Postgraduate/Masters	35.8
	PhD	3.0

Table 5 – Social demographics characteristics. Source: Output from SPSS

Regarding the professions of the sample, there is a predominance of healthcare professionals (14.0%) and professionals of marketing, communication and sales (12.4%). 20.1% of all the respondents were students (Table 6).

Profession	%	Profession	%
Architect/Designer	1.3	Marketing, Communication	12.4
	1.0	and Sales	
Administrative Assistant	2.0	Managers/Businessman	6.4
Consultant/Certified		Psychologist Human	
Accountant	3.3	Resources/	2.0
Accountant		Social Worker	
Economists	1.3	Students	20.1
Engineers	9.4	Retired	3.0
Education Professionals /	5.7	Without any professional	2.0
Researchers	3.7	activity/ Unemployed	2.0
IT Professionals	5.0	Others	7.4
Healthcare Professionals	14.0	Did not answer	1.7
Lawyer/Jurist/Judges	3.0		

Table 6 – Occupations of the respondents. Source: Output from SPSS

The district with more respondents was the district of Porto with 54.8% followed by Lisbon with 29.1% (Table 7).

Residence	%	Residence	%
Aveiro	3.3	Viseu	1.3
Coimbra	1.3	Vila Real	0.7
Braga	3.7	Lisboa	29.1
Leiria	0.3	Porto	54.8
Funchal	0.3	Évora	0.7
Faro	1.7	Santarém	1.0
Setúbal	1.0	Portalegre	0.7

Table 7 – District of residence. Source: Output from SPSS

Concerning the time spent on the Internet, the results varied from 3% of the respondents that spend less than 30 minutes each day using Internet to 55.5% who use the Internet more than two hours/day. Regarding Facebook, the majority of respondents (37.8%) use on average less than 30 minutes a day and only 10.7% use it more than 2 hours per day (Table 8).

	Time spent	on Internet	Time spent on Facebook		
	Frequency	Percent	Frequency	Percent	
Less than 30 min	9	3.0	113	37.8	
Between 30 min and 1 hour	58	19.4	98	32.8	
Between 1 hour and 2 hours	66	22.1	56	18.7	
More than 2 hours	166	55.5	32	10.7	
Total	299	100.0	299	100.0	

Table 8 – Time spent on the Internet and on Facebook per day. Source: Output from SPSS

From the total respondents (299), 233 (77.9%) followed a company's or a brand's Facebook page and 66 did not (22.1%). Regarding the "followers", we asked them how many brand pages they follow. The majority of answers were in the two extremes: 32.2% of the respondents liked between 1 and 10 pages and 33.9% liked more than 30 pages (Table 9). This last group can be considered a group of more exhaustive Facebook users.

Number of "liked" pages	Frequency	%
Between 1 and 10 pages	75	32.2
Between 11 and 20 pages	50	21.5
Between 21 and 30 pages	29	12.4
More than 30 pages	79	33.9
Total	233	100.0

Table 9 – Number of pages that the respondents follow on Facebook. Source: Output from SPSS

#### 5.2 Time spent on Internet and time spent on Facebook

To understand if there was any relation between the age of respondents and the time spent on Internet and Facebook, Spearman's and a Kendall's correlations were performed (Table 11 and Table 10).

Correlations			Age	
-œ		Correl.	-,141**	
 !_b	Kendall's  tau_b  Time on Internet	Coeff.	-,141	
enc tau		Sig.	,002	
×		N	298	
an		Correl.	170**	
rme	Spearman s rho Time on Internet	Coeff.	-,179**	
eal		Sig.	,002	
Sp		N	298	
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 10 - Output from SPSS regarding the Spearman's correlation coefficient and Kendall's tau between time spent on Internet and age

There is a negative and small correlation between age and time spent on Internet.

Correlations			Age
tall'		Correl. Coeff.	-,135**
Kendall s tau_b	Time on Facebook	Sig.	,002
X s		N	299
Spearman' s rho		Correl. Coeff.	-,178**
s rh	Time on Facebook	Sig.	,002
St		N	299
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 11 - Output from SPSS regarding the Spearman's correlation coefficient and Kendall's tau between time spent on Facebook and age

Indeed, there is a negative and small correlation between age and time spent on Facebook.

Therefore, as age increases the time spent on Facebook and on the Internet decreases. When analysing the time spent on Facebook by age group, in every group the majority of respondents spent less than 30min on Facebook, except the group between 15-24 years where the majority of respondents spent between 30 min to 1 hour/day on Facebook (Appendix III).

Relationship between time spent on Facebook and consumer engagement

To comprehend if there was any correlation between the time spent on Facebook and consumer engagement, Spearman's correlation coefficients and Kendall's tau were calculated (Table 12).

	Correlations	Consuming	Contributing		
Kendall's tau_b	Time spent on	Correl. Coeff.	,094	,102*	
Kenc	Facebook	Sig.	,059	,040	
man' ho	Time spent on	Correl. Coeff.	,126	,135*	
Spearman s rho	Facebook	Sig.	,056	,041	
*. Correlation is significant at the 0.05 level (2-tailed).					

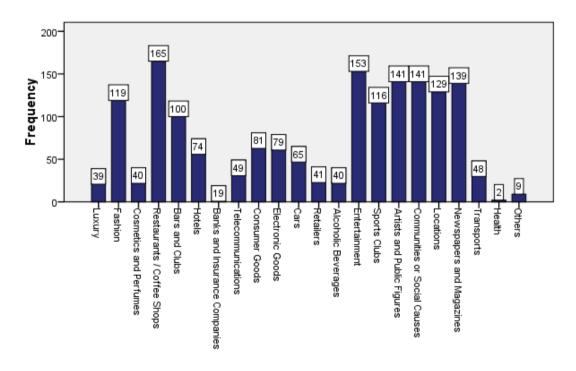
Table 12 - Output from SPSS regarding the Spearman's correlation coefficient and Kendall's tau between time spent on Facebook and consumer engagement (consuming and contributing types)

There is a positive and small correlation between time spent on the Internet and the contributing type of engagement although there is no correlation with the consuming type. Therefore, when the time spent on Facebook increases, the activities related with the contributing type of engagement also increases. Activities related with consuming to Facebook brand pages appears to be independent of time spent on Facebook.

#### 5.3 Liked and favourite brand pages categories

The respondents were asked to identify to which categories the Facebook brand pages they like belong to. The answers were then computed and the results can be seen in the graphic bellow (Graphic 1).

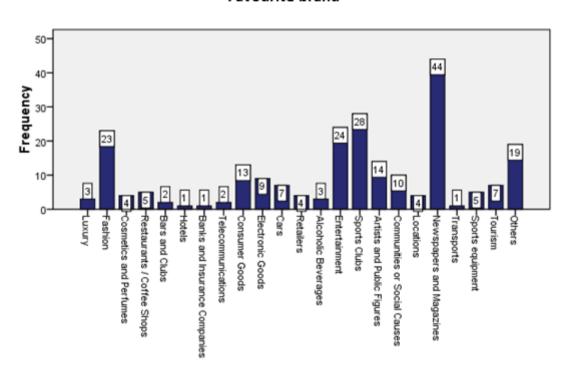
#### Category of liked pages



Graphic 1 - Categories to which the respondents' liked pages belong to. Source: Output from SPSS.

The categories with the most number of answers were "restaurants / coffee shops" (165) and "entertainment" (141). Respondents were also asked what their favourite brand was. They identified 149 different brands. The most answered brand was FC Porto® (18 respondents) which is a sports club, followed by CocaCola® (10 respondents). When favourite brands were grouped in their categories, newspapers and magazines had the highest frequency with 18.9% of the brands (44 answers.)

#### Favourite brand



Graphic 2 – Favourite brands grouped in categories. Source: Output from SPSS.

#### 5.4 Hypothesis testing

Relationship between the motivations and consumer engagement

To test hypothesis H1 to H12 Spearman's correlation coefficients and Kendall's tau were calculated.

As explained above the variable consumer engagement was composed of two factors, one corresponding to the consuming type of engagement and the other to the contributing type. Therefore all the independent variables (social influence, search for information, entertainment, trust, reward and personal identity) were tested regarding the two types (hypothesis H1 to H6). The calculated coefficients are shown in Table 13.

			Social	Searc	Enter	Trus	Rewar	Pers.
			Influe	h	t	t	d	Identi
			n.	Info.				t
þ	Consuming	Correl.	,289**	,268**	,343**	,232**	,053	,121**
tau		Coeff.	,209	,200	,343	,232	,033	,121
		Sig.	,000	,000	,000	,000	,252	,009
Kendall's	Contributing	Correl.	,278**	,098*	,104*	,109*	,101*	2.47**
enc		Coeff.	,270	,096	,104	,109	,101	,247**
X		Sig.	,000	,029	,019	,018	,029	,000
O	Consuming	Correl.	,416**	,377**	,483**	,324**	,071	,173**
srh		Coeff.	,410	,377	,403	,324	,071	,1/3
an's rho		Sig.	,000	,000	,000	,000	,282	,008
rm	Contributing	Correl.	,397**	,134*	150*	152*	125*	246**
Spearm		Coeff.	,397	,134	,150*	,153*	,135*	,346**
Sı		Sig.	,000	,041	,022	,020	,039	,000
	*. Correlation is significant at the 0.05 level (2-tailed)							

Table 13 – Output from SPSS regarding the Spearman's correlation coefficient and Kendall's tau between motivations and types of engagement.

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

The motivations "entertainment", "social influence", "search for information" and "trust" showed a positive and moderate relation with the consuming type. This can indicate that users who use Facebook as a source of enjoyment and fun, who try to achieve acceptance and recognition of others or who want to know more about the brand and trust the information provided by this way, are more prone to consume content on the brand page. The motivation "reward" was not statistically significant so it cannot be stated that the two variables are related. The remaining motivation (personal identity) showed a positive but weak relation.

Regarding the contributing type, the motivations "social influence" and "personal identity" have a positive and moderate relation with the contributing type of consumer engagement. This indicates that these motivations are probably the most important regarding the contributing type. Users tend to participate in the Facebook brands page in order to achieve acceptance and recognition from others and to show who they are or who they want to be. All the other motivations have a positive relation although weak.

Therefore, hypothesis H1, H2, H3, H4 and H6 were supported for the two types of engagement (consuming and contributing) and H5 was only supported for the contributing type.

Relationship between brand love and consumer engagement and overall brand equity

To test hypothesis H7 and H8 correlations were calculated between brand love and the two types of engagement (H7) and between brand love and brand equity (H8). The calculated coefficients are shown in Table 14 and Table 15.

		Consuming	Contributing		
all's		Correl. Coeff.	,222**	,135**	
Kendall's tau_b	Brand Love	Sig.	,000	,002	
man'	D 1 I	Correl. Coeff.	,313**	,196**	
Spearman' s rho	Brand Love	Sig.	,000	,003	
**. Correla	**. Correlation is significant at the 0.01 level (2-tailed).				

Table 14 - Output from SPSS regarding the Spearman's correlation coefficient and Kendall's tau between brand love and the types of engagement.

There is a positive and moderate correlation between brand love and the consuming type. Regarding the contributing type of engagement, there is a positive correlation, even though, weak correlation. Accordingly it seems probable that a consumer with a higher brand love has a greater predisposition to consume content and even participate in the brand's Facebook page.

Several authors identified brand loyalty as an outcome of brand love (Batra et al., 2012; Bergkvist & Bech-Larsen, 2010; Carroll & Ahuvia, 2006; Loureiro et al., 2012). Since brand loyalty is one of the components of brand equity (Aaker, 1996), we expect a positive relation between brand love and brand equity (H8).

			Overall Brand Equity	
Ken dall's tau_b	Prond I ove	Correl. Coeff.	,418**	
H daj tau	Brand Love	Sig.	,000	
Spea rman's rho	Duan d L arra	Correl. Coeff.	,573**	
S rma	Brand Love	Sig.	,000	
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 15 - Output from SPSS regarding the Spearman's correlation coefficient and Kendall's tau between brand love and overall brand equity.

Observing the coefficients shown in table 15, there is indeed a positive and strong correlation between brand love and overall brand equity. As expected when a consumer loves a brand, he or she has a tendency to prefer that brand over the competition and this instigates stronger a brand equity.

To further investigate this relation, correlations were calculated between brand love and the different components of brand equity (brand loyalty, perceived quality and brand awareness/associations). The results are shown in Table 16.

Correlations			Brand Loyalty	Perceived Quality	Brand Awa/Asso.	Overall Brand Equity	
Kenda II's	Brand Love	Correl. Coeff.	,470**	,432**	,480**	,422**	
Ke <sub>1</sub>		Sig.	,000	,000	,000	,000	
Spear man's	Brand Love	Correl. Coeff.	,631**	,562**	,632**	,578**	
		Sig.	,000	,000	,000	,000	
**. Correlation is significant at the 0.01 level (2-tailed).							

Table 16 - Output from SPSS regarding the Spearman's correlation coefficient and Kendall's tau between brand love and brand loyalty, perceived quality and brand awareness/association.

There is a positive and relatively strong correlation between brand love and all the components of brand equity. Consequently, it is possible to predict that brand love not only influences positively brand loyalty, as described, but also influences perceived quality, brand awareness/association and overall brand equity.

Therefore, both hypothesis H7 and H8 were supported. H7 was supported for the two types of engagement (consuming and contributing).

Relationship between consumer engagement and overall brand equity

To test hypothesis H9 correlations were calculated between the two types of engagement and brand equity. The calculated coefficients are shown in Table 17.

			Overall Brand			
			Equity			
<u>-</u>	Consuming	Correl. Coeff.	,234**			
Kendall' s tau_b		Sig.	,000			
Ke s ta	Contributing	Correl. Coeff.	,181**			
		Sig.	,000			
m c	Consuming	Correl. Coeff.	,333**			
ear		Sig.	,000			
Spearm an's rho	Contributing	Correl. Coeff.	,261**			
a a		Sig.	,000			
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 17 - Output from SPSS regarding the Spearman's correlation coefficient and Kendall's tau between consumer engagement and overall brand equity.

There is a positive and moderate correlation between the consuming type of engagement and brand equity. Regarding the contributing type, there is a positive and weak correlation between the two variables. It is possible to infer that those consumers, who tend to consume content on Facebook brand page and consequently have more knowledge about the brand, are also willing to prefer that brand over its competitors, which enhances brand equity.

Therefore, hypothesis H9 was supported for the two types of engagement (consuming and contributing).

The syntheses of the results obtained regarding the tested hypothesis can be seen in Figure 2.

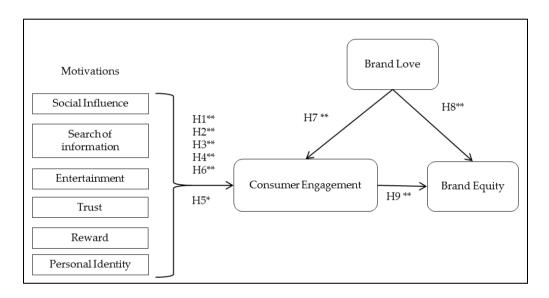


Figure 2 - Model of analysis demonstrating the relations between the different variables;\* hypothesis partially supported; \*\* hypothesis totally supported. Source: authors.

From all of the hypotheses proposed, only hypothesis H5 (positive relation between reward and consumer engagement) was partially supported. Reward is positively related with the contributing type but not with the consuming type.

# 5.5 Brand gender and congruence with respondents' sex role identity

Brand gender is an interesting and new research field that has been growing in importance in recent years. The gender dimensions of the brand influence consumer's response positively, such as WOM, brand affect and brand equity, as long as they are congruent with consumers' sex role identity (Grohmann, 2009). Therefore, we consider it an important concept to include in this study.

In order to access if there is congruence between respondents' sex role identity and the brand gender of their favourite brands, we analysed the means of the scores attributed by female and male respondents, regarding the masculine brand gender and feminine brand gender dimensions. We also performed a *t*-student test to determine if there is any difference in the way male and female respondents regard their favourite brand, in terms of masculine and feminine brand attributes.

#### Masculine Brand Gender

## Mean of masculine brand gender variable for male and female respondents

		Statisti	cs		
Masculine	Gender of respondents	N	Mean	Std. Deviation	Std. Error
brand gender	Female	127	4,7055	1,46316	,12983
	Male	106	4,9358	1,29572	,12585

Table 18 - Mean of masculine brand gender variable for male and female respondents. Source: output SPSS

The mean of the responses (Table 18), regarding the masculine brand gender dimensions of the respondents' favourite brand, is higher for male respondents than for female respondents. Although, in order to draw further conclusions, it is necessary to verify if there is a significant difference, between the two groups (female and male respondents), in the way they perceived their favourite brand, in terms of the masculine dimensions of brand gender.

# Difference between the means of female and male respondents regarding masculine brand gender

With the purpose of testing if the means of the two groups (female and male respondents) are different regarding masculine brand gender, we performed a *t*-student test for independent samples (Table 19)

		Inde	ependent	Samples	Test		
	Levene's	s Test					
Masculine	for Equ	ality		t-test fo	or Equa	ality of Mear	ns
brand	of Varia	ances					
gender	F	Sig.	t	df	Sig.	Mean Differenc e	Std. Error Difference
Equal variances assumed	3,025	,083	-1,260	231	,209	-,2303	,18281
Equal variances not assumed			-1,274	230,17	,204	-,2303	,18082

Table 19 - *t*-student test for masculine brand gender. Source: output SPSS.

The Levene's test is used to assess the equality of variances across groups or samples (Martinez & Ferreira, 2010). In this case, the Levene's test is not statistically significant then it is possible to assume that the variances are equal. Sig value is 0.209 so it is possible to conclude that there is no significant difference between the means of these two groups.

Although the male respondents regard their favourite brand, in average, as more masculine (mean =4.94, SD = 1.30) than the female respondents (mean =4.71, SD = 1.46), there is no significant difference between the means of these two groups. Therefore, it is possible to infer there is no difference between male and female respondents in the way they regard their favourite brand in terms of masculinity and it is not possible to assume that there is congruence between male respondents' sex role identity and masculine brand gender.

### Feminine Brand Gender

### Mean of feminine brand gender for female and male respondents

		Statisti	ics		
	Gender of	N	Mean	Std.	Std. Error
Feminine	Respondents	11	Mean	Deviation	Std. Effor
brand gender	Female	127	3,9228	1,73992	,15439
	Male	106	3,4698	1,46996	,14278

Table 20 - Mean of feminine brand gender variable for male and female respondents. Source: output SPSS

The mean of the responses (Table 20), regarding the feminine brand gender dimensions of the respondents' favourite brand, is higher for female respondents than for male respondents. Although, in order to draw further conclusions, it is necessary to verify if there is a significant difference, between the two groups (female and male respondents), in the way they perceived their favourite brand, in terms of feminine dimensions of brand gender.

# Difference between the means of female and male respondents regarding feminine brand gender

With the purpose of testing if the means of the two groups (female and male respondents) are different regarding the feminine brand gender, we performed a *t*-student test for independent samples (Table 21).

		Inde	ependen	t Sampl	les Test		
Feminine		e's Test quality		t-tes	t for Ea	uality of Mear	าร
brand		riances					
gender	F	Sig.	t	df	Sig.	Mean Difference	Std. Error Difference
Equal variances assumed	6,548	,011	2,122	231	,035	,45302	,21349
Equal variances not assumed			2,154	230,9	,032*	,45302	,21029
*. Correlation	is signif	icant at t	he 0.05.1	evel (2-t	ailed).		

Table 21 - t-student test for feminine brand gender. Source: output SPSS.

In this case, the Levene test is statistically significant then it is not possible to assume that the variances are equal. Sig value is 0.032, so it is possible to assume that there is a significant difference between the means of these two groups.

Therefore, it is possible to conclude there is a difference between male and female respondents in the way they regard their favourite brand in terms of femininity. On average, feminine respondents regard their favourite brands as more feminine (mean =3.92, SD = 1.74) than masculine respondents (mean=3.47, SD=1.45).

Apparently, there is congruence between the female respondents and the brand gender of their favourite brand (feminine). Although, when the scores given by female respondents to masculine and feminine brand attributes are compared, it is possible to verify that female respondents scored masculine brand attributes (mean= 4,71; SD=1,46) higher than feminine brand attributes (mean =3.92, SD = 1.74). Consequently, it is not possible to assume that female respondents prefer feminine rather than masculine brands. It is also not possible to conclude that there is congruence between the female respondents 'sex role identity and the brand gender of their favourite brand.

Based on these results and since the gender dimensions of the brand only influence consumer's response positively when they are congruent with consumers' sex role identity (Grohmann, 2009), we cannot study the possible relationship between brand gender and consumer engagement, brand love and brand equity.

# 5.6 Differences between male and female respondents in terms of consumer engagement, brand love and brand equity

To verify if there are significant differences between female and male respondents regarding their consumer engagement, brand love and brand equity, we performed *t*-student tests for independent samples. All the tests are display in Appendix III.

Regarding consumer engagement, there was no difference between male and female respondents regarding the consuming type of engagement. Concerning the contributing type, there was a significant difference between the means of these two groups. On average, male respondents experienced greater engagement by contributing to brand's Facebook page (mean =3.56, SD= 1.71) than female respondents (mean=2.94, SD=1.60). In terms of brand love and brand engagement, there was no difference between male and female respondents.

### Chapter 6. Discussion

Social media and in particular SNS have been growing in importance and have changed the way people communicate. The number of people who use SNS in Europe and in Portugal reflect this reality (Eurostat, 2014; Seybert & Issn, 2013). While these statistics are encouraging for brands, our results do not exactly reflect this reality. Although the majority of our respondents reported to use Internet for more than 2 hours each day, only 10.7% state that they pass more than 2 hours on Facebook, with 37.8% and 32.8% spending less than 30 minutes and between 30 min and 1 hour on Facebook, respectively. This data may not be very reassuring especially to brands that hope to capture consumer's attention by these means. Nevertheless, our results also show that, although respondents do not spend much time on Facebook, the great majority (77.9%) follows at least one brand, and a significant part (33.9%) follows more than 30 brands. These results indicate that, although users tend to follow a brand, they do not spend much time interacting with it on Facebook.

There is also a negative correlation between age and time spent on Facebook, meaning that with the increase in age the time spent on Facebook decreases. In our study, the age group which spends more time on Facebook is the one between 15 and 24, which can be regarded as a good segment for brands to target. Regarding consumer engagement, there is a positive correlation between the time spent on Facebook and the contributing type and not with the consuming type of engagement. Consequently, the higher the amount of time spent on Facebook, the higher the contributing activities performed by consumers, such as sharing content and participating in discussions on brand page.

In respect to the brand categories that consumers like, the ones with a higher relevance were related to recreation (restaurants and coffee shops and entertainment, which includes radio stations, TV channels, etc.). Regarding the favourite brand, the most frequently identified was a football club – FC Porto®, followed by CocaCola®. These categories are indicators of the types of brands consumer usually prefer to follow, which are brands related with leisure.

Recalling our first research questions, "what are the motivations to engage with a brand in Facebook?", we discovered that all the motivations to engage with a brand's Facebook page, identified in the literature, are present in our sample (social influence, search for information, entertainment, trust, reward and personal identity).

When analysing the two types of engagement, we can conclude that the principal motivations for engagement are different. In terms of the consuming type, entertainment is the most important motivation for engagement, followed by social influence, search for information and trust. In this case, users read, watch and consume content on a Facebook brand page because it is fun and they enjoy themselves by doing so. The importance of social influence can be related with the need of being recognized by others and to fit in a group. The presence of the motivation "search for information" is related with the fact that Facebook brand pages represent an easy way to search for product reviews or to ask for opinions. Trust in the brand page and its users are also valued by consumers.

For the contributing type, the most important motivations are social influence and personal identity. Consumers want a link and identification with the brand and at the same time they wish to be part of a group and receive recognition form other members of their social network group. Therefore they

primarily participate on a Facebook brand page to share their opinions and points of view to show other who they are and who they want to be.

Reward was only identified as related with the contributing type of engagement (it had no statistically significant correlation with the consuming type). This can be explained, as users are willing to participate in activities proposed by the brand on its Facebook page in order to receive offers or discounts. This is an important outcome for brands that seek to attract and persuade users to participate in their brand pages. It is a good strategy to offer some prize to reward the contribution. The other motivations, although present, had a weaker correlation with the two types of engagement.

Regarding the differences between male and female respondents, in terms of consumer engagement, our results show that there are only statistically significant differences between the two groups for the contributing type, with male respondents more prone to contribute to the brand's Facebook page than female respondents. In terms of brand love and brand equity, there was no difference between male and female respondents.

Our second research question was related with brand love and its influence on consumer engagement and/or on brand equity. According to Bergkvist & Bech-Larsen (2010), brand love has a positive effect on active engagement, being active engagement, in a rough manner, all the activities that can be performed by consumers about a brand, beyond its purchase or consumption. In our study, brand love showed to be correlated with both forms of engagement, although the correlation with the consuming form was stronger. It can be assumed that users who express love for a brand want to be in contact with the brand. Then they are more willing to consume brand content, on that brand's Facebook page, reading brand posts and content published by other

users about the brand and their experiences. Brands that inspire love are thus more capable of encouraging engagement from theirs followers on Facebook.

One of the identified outcomes of brand love is brand loyalty (e.g. Batra et al., 2012), a component of brand equity (Aaker, 1996). Accordingly, we anticipated that brand love would not only influence brand loyalty but would also influence overall brand equity. Our results show that brand love has indeed a positive and strong correlation not only with brand loyalty but also with all the components of brand equity and with overall brand equity. Consumers who love a brand have therefore not only a predisposition to choose that brand over its competitor, but also to perceive a superior quality in the brand's products, have more brand awareness and express positive brand associations.

The third question that we aimed to answer was related with consumer engagement and its possible influence on brand equity. Our results suggest that consumer engagement influences brand equity. Both types of engagement revealed a positive correlation with brand equity, though the correlation with the consuming type was moderate and with the contributing type weak. Consumers, who like to consume content to the Facebook brand page, by reading about the brand and the content published by other users, are certainly more willing to choose that brand over others, which enhances brand equity.

Finally, we also intended to study the possible influence of brand gender on consumer engagement, brand love and brand equity. According to Grohmann (2009), brand gender positively influences consumer's response and increases the likelihood of WOM communication, brand affect and brand preference over rival brands as long as gender dimensions are congruent with consumers' sex role identity (Grohmann, 2009). Since WOM can be seen as a form of engagement (Gummerus et al., 2012; Libai et al., 2010) we predicted that brand

gender might influence engagement, in addition to brand love and brand equity. In order to correctly study these interactions, we would have to define the respondents' personality, and in particular their sex role identity, and determine if it was or not congruent with brand gender. The survey did not contemplate this aspect, since this was not the aim of this study. We tried to investigate, in our sample, if female respondents showed a preference to feminine brands and/or if male respondents revealed a preference for masculine brands, demonstrating this congruence. It was not possible to establish this preference, so we could not study the possible relationship between brand gender and consumer engagement, brand love and brand equity.

### 6.1 Managerial implications

Understanding consumers' motivations to follow or interact with a brand on Facebook is important to brands that want to engage with their consumers and provide them valuable content. Simply following or liking a brand page is not necessarily the same as contributing to that brand page or sharing brand content. Indeed, the motivations behind these activities are not the same.

Brands which seek to attract their consumers to its Facebook page should invest on entertainment (main motivation identified in our study related to consuming type of engagement). This can be achieved by creating games, videos and interesting applications and content that might draw their consumers' interest.

The motivation of "search for information" was also important to the consuming type of engagement. Consumers resort to the brand's Facebook

page to get information about the products, not only provided by the brand but also provided by other users. The sharing of experiences and giving or receiving product reviews are valued activities by the consumers. Brands should therefore allow and encourage consumers to like, comment and give their opinions. Additionally, brands should have an active role, not only stimulating the participation, but also answering promptly any questions or issues that might emerge.

Providing a safe environment and ensuring that the information provided is not going to be used in other ways outside SNS, is also important to encourage consumers' engagement.

Another important motivation identified in our study is social influence. This means that consumers seek to be part of a community and fit within a group. Encouraging online communities and discussion forums within the brand's Facebook page will help consumers to develop relationships with others who share similar interests and promote the exchange of information about brand products and experiences. This strategy will not only incentive the participation, but also the consuming of content. Consumers may feel part of the group by only being associated with the brand through a "like".

The motivation "personal identity" is also very important to the contributing type of engagement. Encouraging users to be more active, giving opinions and expressing themselves through association with the brand might be an important strategy to stimulate consumer engagement. Offering special offers or discounts as a reward for participation can also increase users' participation.

The love for the brand and the identification with the brand in terms of brand gender are also important to engagement. Brands who reflect one's social or inner self are more prone to be loved. Creating a strong brand identity in terms of brand gender, either feminine or masculine, will facilitate

consumers identification with the brand and encourage consumer engagement and brand love.

Ultimately, a higher brand engagement will be converted in higher brand equity, which is a valuable competitive advantage to the brand over its competitors.

### 6.2 Limitations and future research

While this study has interesting implications, we are aware of its limitations. An important limitation was the sampling procedure. In this study we used a non-probabilistic snowball sampling technique and therefore the sample is not representative of the population (Bryman, 2008).

We also used the Facebook and emailing as a way to distribute the survey. Although using SNSs to conduct surveys has been a common practice used by several authors (e.g. (Baltar & Brunet, 2012; Hutter et al., 2013; Jahn & Kunz, 2012), there are some limitations. The main limitation is that Facebook is not designed for mailing and if the same message is sent many times, the account can be blocked. Additionally, sending private messages improves the response rate but they are more time consuming. The message can also be seen as a "spam" and therefore reduce the level of participation. The solution used was to post a link to the survey on the authors' personal pages, and also to complement data collection by sending a personal email to the researchers' contact list.

In this research we did not try to study one brand or product category in particular. The aim was to study the motivations for engagement with brands in general, and to understand how engagement influences brand equity. Therefore it would be interesting to understand the particular motivations for engagement with SNS pages in a specific industry or for a particular brand and then analyse how it influences brand equity. It would also be interesting to study if the motivations are the same ones for different product categories, from more utilitarian to more hedonic products. Studying brand love in this context would probably lead us to extend the knowledge in this area.

We could also study if there is any relation between the respondents' age and consumer engagement and if the motivations are the same in different age groups. This study could be expanded to include age influence on brand love and on brand equity.

Furthermore, it would be relevant to study the particular motivations of fans of brands with a higher engagement rate (higher number of likes, user comments, shares), and to understand how this engagement relates to brand love and how it influences the distinct dimensions of brand equity.

Another interesting research direction would be to study the particular motivations of users who follow a higher number of brands and understand how these motivations influence the level of engagement they have with those brands, on Facebook.

Finally, it would be pertinent to extend the knowledge of brand gender, by studying its influence on consumer engagement. It would be necessary to identify respondents' personality (how they perceived themselves in terms of masculinity and femininity) and correlate it with the brand gender. It would be interesting to use previously identified highly masculine and highly feminine brands and verify how this influences consumer engagement, for both males and females respondents, and if there are any differences between the two groups. In this context, it would also be interesting to determine if the motivations for consumer engagement are different (or not) between males and

females respondents. The results could also be compared with the ones obtained for androgynous or undifferentiated brand. This study could also be extended to include the influence of brand gender on brand love and brand equity.

### Chapter 7. Conclusion

This research has explored different factors that influence the consumer engagement with a brand though one of the most relevant SNS –Facebook.

To achieve this we analysed the influence of the most motivations identified in the literature, as inducers of engagement in social media, in a particular context of a Facebook. Other variables were also studied, such as brand gender, brand love and brand equity, and its relation with engagement. According to the state of the art, these variables could be related with engagement, but, to our knowledge, this relation was not appropriately explored until this date.

The results showed that, although all the motivations identified have some relation with engagement, the main ones, and the ones in which brands should invest to motivate the consuming of brand related content on Facebook, are entertainment, social influence, search for information and trust. Social influence and personal identity are the most important to stimulate the participation of consumers. Consumer's relation with a brand, through the love for that brand or through the identification with the brand's personality, also enhances engagement and ultimately brand equity.

To conclude, should provide their followers on Facebook the content that they value more, and this will provide not only a better consumer-brand engagement, but also a better performance and a higher brand equity.

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### Appendices

### Appendix I – Survey

Original Survey (in Portuguese)

O Consumidor e a	a Marca no Facebook	
faz parte da dissertação do Mest	no preenchimento do questionário a seguir apresentado, que trado em Marketing de uma aluna da Universidade Católica gação tem como objetivo compreender a relação dos no Facebook.	
Todas as respostas são confider	u erradas, estamos interessados acima tudo na sua opinião. nciais e anónimas. O questionário terá a duração a colaboração é essencial para a realização deste trabalho! nente a sua ajuda.	
Ana Raquel André - raquelqandre	e@gmail.com	
*Obrigatório		
1. 1. Em média quanto tempo	o passa, por dia, na Internet? *	
Marcar apenas uma oval.		
1.1. Menos de 30 mi	inutos	
1.2. Entre 30 minutos		
1.3. Entre 1 e 2 hora:		
1.4. Mais de 2 horas		
	oo passa, por dia, no Facebook? *	
Marcar apenas uma oval.		
2.1. Menos de 30 mi		
2.2. Entre 30 minutos		
2.3. Entre 1 e 2 hora:	5	
2.4. Mais de 2 horas		
3. 3. Gosta ou já alguma vez	gostou de alguma página de marca no Facebook? *	
(para gostar da página de un dessa marca)	ma marca no Facebook tem de colocar "gosto" na página	
Marcar apenas uma oval.		
3.1. Sim		
3.2. Não Passe	para a pergunta 12.	
	uantas páginas de marcas gosta no Facebook? *	
Marcar apenas uma oval.		
4.1. Entre 1 e 10 pág	ginas	
4.2. Entre 11 e 20 pá		
4.3. Entre 21 a 30 pá	aginas	

Marcar tudo o que for aplicável.  5.1. Luxo  5.2. Moda	
J.Z. MOGA	
5.3. Cosmética e Perfumes	
5.4. Restaurantes / Cafetarias	
5.5. Bares e discotecas	
5.6. Hotéis	
5.0. Hotels 5.7. Bancos e Seguradoras	
5.8. Telecomunicações	refrigerantes, chocolates, cereais, biscoitos)
ogos)	emplo: smartphones, computadores, tablets,
5.11. Automóveis	
5.12. Retalhistas (por exemplo: super	mercados)
5.13. Bebidas Alcoólicas	•
5.14. Entretenimento (por exemplo: e	stações de rádio, canais de televisão, cinema)
5.15. Clubes Desportivos	
5.16. Artistas e Figuras Públicas	
	s (por exemplo: operação nariz vermelho,
Iniversidade Católica Portuguesa)	
5.18. Locais (por exemplo: a cidade o	o Porto)
5.19. Jomais e Revistas	
5.20. Transportes (por exemplo: CP,	Ryanair)
Outra:	
. Qual é a sua página de marca favorita o Facebook? *	
or favor identifique o nome de uma marca	-
	_

		narca favorita no f		ze uma		amigos.			
escala de 1 a 7 sendo 1 "disc Marcar apenas uma oval por		2 7 "concordo tota	Imente".		n p	9.3. Interagir com a narca X no Facebook permite-me aumentar o neu envolvimento social.	$\circ$	00000	
7.1. Aventureira	1 - Discordo totalmente	2 3 4	5 6 Co	7 - oncordo salmente	9 P F	neu envolvimento social.  0.4. Eu interajo com a  vágina da marca X no  Facebook porque alguém  que eu conheço me  sediu.	0	00000	0
7.2. Agressiva 7.3. Corajosa 7.4. Ousada 7.5. Dominante 7.6. Robusta					9 P F e	oeulu. ).5. Eu juntei-me à )ágina da marca X no Facebook para me enquadrar num grupo de Dessoas.	0	00000	0
7.7. Expressa sentimentos de ternura 7.8. Frágil 7.9. Graciosa	0000				p F m p	0.6. Eu juntei-me à página da marca X no Facebook para que os neus amigos não pensem menos de mim.	0	00000	0
7.10. Sensível 7.11. Doce 7.12. Meiga	8				n p	9.7. Interagir com a narca X no Facebook permite-me compreender nelhor a marca.	0	00000	
B. Indique qual o seu grau o diz respeito à marca X, a su Jtilize uma escala de 1 a 7 s Marcar apenas uma oval por	ua marca favorita, endo 1 "discordo t	no Facebook. *	_		c F	S.8. Gosto de interagir     com a marca X no     Facebook pois permite- ne conhecer a opini	0	00000	
					d s	dos outros consumidores sobre a marca.			
8.1. Esta maroa é maravilhosa. 8.2. Esta maroa faz-me sentir bem. 8.3. Esta maroa faz-me	1 - Discordo totalmente	2 3 4	5 6 Co	7 - oncordo almente	d 	sobre a marca.  9.9. Interagir com a narca X no Facebook permite-me um acesso cómodo a informação cobre a mesma, uma vez que as publicações da narca aparecem diretamente no meu feed le noticias.	0	00000	С
maravilhosa. 8.2. Esta marca faz-me sentir bem. 8.3. Esta marca faz-me muito feliz. 8.4. Esta marca é uma delícia.			5 6 Co	oncordo	d 	sobre a marca.  9.9. Interagir com a marca X no Facebook permite-me um acesso cómodo a informação sobre a mesma, uma vez que as publicações da marca aparecem diretamente no meu feed de notícias.  9.10. O conteúdo da póagina da marca X no acebook é divertido.	0	00000	0
maravilhosa.  8.2. Esta marca faz-me sentir bem.  8.3. Esta marca faz-me muito feliz.  8.4. Esta marca é uma delícia.  8.5. Eu estou apaixonado por esta marca.	totalmente	000	5 6 Contact	oncordo almente	d s n p c s q d d d p F P	sobre a marca.  9.0. Interagir com a marca X no Facebook permite-me um acesso pómodo a informação porto a mesma, uma vez que as publicações da marca aparecem diretamente no meu feed le notícias.  9.10. O conteúdo da página da marca X no racebook é divertido.  9.11. O conteúdo da página da marca X no racebook é routeúdo da página da marca X no racebook é entusiasmante.	0	00000	0 0 0
maravilhosa.  8.2. Esta marca faz-me sentir bem.  8.3. Esta marca faz-me muito feliz.  8.4. Esta marca é uma delícia.  8.5. Eu estou apaixonado por esta marca.  3. Indíque qual o seu grau diz respeito às suas motiva página de marca favorita, n	de concordância soces para interaço o Facebook. *	Com as seguinte pir com a página	5 6 Co tota	oncordo almente	d 9 n p 0 s d d d p F P P P P P	sobre a marca.  9.0. Interagir com a marca X no Facebook permite-me um acesso processor a mesma, uma vez que as publicações da marca aparecem diretamente no meu feed le notícias.  9.10. O conteúdo da página da marca X no racebook é divertido.  9.11. O conteúdo da página da marca X no racebook é agradável.	0 0 0	00000	0 0 0 0
maravilhosa. 8.2. Esta marca faz-me sentir bem. 8.3. Esta marca faz-me muito feliz. 8.4. Esta marca é uma delícia. 8.5. Eu estou apaixonado por esta marca. 9. Indique qual o seu grau diz respeito às suas motiva aógina de marca favorita, n dilize uma escala de 1 a 7 s	totalmente	com as seguinte pir com a página otalmente" e 7 "or	5 6 Co tota  (Control of the control	oncordo almente	9 m p p q d d d d p F P P P P P P P P P P P P P P P P P P	obre a marca.  9.0. Interagir com a marca X no Facebook nemite-me um acesso cómodo a informação cobre a mesma, uma vez que as publicações da marca aparecem diretamente no meu feed de notícias.  9.10. O conteúdo da vágina da marca X no racebook é divertido.  9.11. O conteúdo da vágina da marca X no racebook é entusiasmante.  9.12. O conteúdo da vágina da marca X no racebook é entusiasmante.  9.12. O conteúdo da vágina da marca X no racebook é entusiasmante.	0 0 0 0 0	00000	0 0 0 0
maravilhosa. 8.2. Esta marca faz-me sentir bem. 8.3. Esta marca faz-me muito feliz. 8.4. Esta marca é uma delícia. 8.5. Eu estou apaixonado por esta marca.  1. Indíque qual o seu grau diz respeito às suas motiva bágina de marca favorita, n dilize uma escala de 1 a 7 s Marcar apenas uma oval por marcar apenas uma oval por sentir de la companya de la	de concordância ações para interaço Facebook. * Jendo 1 "discordo t	Com as seguinte pir com a página	5 6 Contotal Section 1 Contotal	oncordo almente	d s s s s s s s s s s s s s s s s s s s	sobre a marca.  9.0. Interagir com a marca X no Facebook permite-me um acesso promodo a informação promodo a infor	0 0 0 0 0 0		0 0 0 0 0
maravilhosa.  8.2. Esta marca faz-me sentir bem.  8.3. Esta marca faz-me muito feliz.  8.4. Esta marca é uma delícia.  8.5. Eu estou apaixonado	de concordância spões para interaça o Facebook. *1 endo 1 "discordo t linha.	com as seguinte pir com a página otalmente" e 7 "or	5 6 Contotal Section 1 Contotal	no que sua ente".	9 m p p p p p p p p p p p p p p p p p p	obre a marca.  9.0. Interagir com a marca X no Facebook bermite-me um acesso bómodo a informação borbe a mesma, uma vez que as publicações da marca aparecem diretamente no meu feed le noticias.  1.10. O conteúdo da bágina da marca X no Facebook é divertido.  1.11. O conteúdo da bágina da marca X no Facebook é entusiasmante.  1.12. O conteúdo da bágina da marca X no Facebook é entusiasmante.  1.13. O conteúdo da bágina da marca X no Facebook é agradável.  1.13. O conteúdo da bágina da marca X no Facebook é agradável.  1.14. Acredito que é	0 0 0 0 0 0		0 0 0 0 0 0

uformação que tem a u respeito, através do debook, a outras desoas ou entidades.	0	00000		_	10.	. 10. Com que frequência partici no Facebook? * Por favor considere sempre a m. escala de 1 a 7 sendo 1 "nunca"	arca X, a e 7 "mu	sua ma	ca favori	ta no Face	_
7. Confio na ormação publicada por ros consumidores na gina da marca X no cebook.	0	00000	0			Marcar apenas uma oval por linh	1 - Nunca	2	3 4	5 6	7 - Muito frequentemer
18. Interajo com a arca X no Facebook ara ter acesso a escontos e promoções.	0	00000				10.1. Ver fotografias ou imagens na página da marca no Facebook. 10.2. Ler publicações da	$\bigcirc$			00	0
19. Gosto de interagir om a marca X no acebook, porque realiza oncursos e						marca, dos outros utilizadores ou opiniões sobre produtos.  10.3. Assistir a vídeos na	0			00	0
assatempos onde posso anhar produtos ou fertas especiais.			, )			página da marca no Facebook. 10.4. Participar em	0				0
.20. Ao interagir com a arca X no Facebook onsigo causar uma boa npressão nos outros.	0	00000				conversas na página da marca no Facebook (comentar, perguntar e/ou responder a questões).	0			00	
.21. Ao interagir com a narca X no Facebook osso melhorar a forma omo os outros me vêm.	0	00000	0			10.5. Partilhar as publicações da marca na sua página pessoal do Facebook (como vídeos, músicas, imagens).	0	00		00	0
.22. Ao interagir com a narca X no Facebook osso mostrar aos outros omo sou.	0	00000				<ol> <li>Recomendar a página da marca do Facebook a outros amigos.</li> </ol>	0			00	0
.23. Ao interagir com a narca X no Facebook osso mostrar aos outros uem eu quero ser.	0	00000	0			<ol> <li>Publicar vídeos, música, imagens ou fotografias sobre a marca ou os seus produtos.</li> </ol>	0			00	0
					11.	. 11. Indique qual o seu grau de considerando a marca X, sua i Utilize uma escala de 1 a 7 seno Marcar apenas uma oval por linh	marca fa do 1 "disc	vorita, n	o Facebo	ook. *	-
							1 - Disco totalmer		2 3	4 5	
						11.1. Eu considero-me leal à marca X. 11.2. A marca X seria a minha primeira escolha.			2 3 )()	4 5 OC	
						11.1. Eu considero-me leal à marca X. 11.2. A marca X seria a minha primeira escolha. 11.3. Eu não comprarei os produtos ou utilizarei os serviços de outras marcas, se a marca X			2 3 00 00	4 5 OC OC	6 Concor
						11.1. Eu considero-me leal à marca X. 11.2. A marca X seria a minha primeira escolha. 11.3. Eu não comprarei os produtos ou utilizarei os serviços de outras marcas, se a marca X estiver disponível. 11.4. A probabilidade da marca X ter qualidade é muito elevada.			2 3 00 00 00	4 5 OC OC	6 Concor
						11.1. Eu considero-me leal à marca X.  11.2. A marca X seria a minha primeira escolha.  11.3. Eu não comprarei os produtos ou utilizarei os serviços de outras marcas, se a marca X estiver disponível.  11.4. A probabilidade da marca X ter qualidade é			2 3	4 5 OC OC OC	6 Conco

marca X.  11.8. Eu lembro-me facilmente de algumas características da marca X.  11.9. Eu tenho dificuldade em imaginar a marca X.  11.10. Eu consigo recordar-me rapidamente do símbolo ou logotipo da marca X.  11.11. Faz sentido comprar os produtos ou utilizar os serviços da marca X, em vez dos de qualquer outra marca, mesmo que sejam iguais.  11.12. Mesmo que outra marca tivesse as mesmas características da marca X, en vez fos de qualquer outra marca, mesmo que outra marca tivesse as mesmas características da marca X, en vez fos de utilizar os serviços da marca X.  11.13. Se existir outra marca tão boa como X,	11.8. Eu lembro-me facilmente de algumas características da marca X.  11.9. Eu tenho dificuldade em imaginar a marca X.  11.10. Eu consigo recordar-me rapidamente do símbolo ou logotipo da marca X.  11.11. Faz sentido comprar os produtos ou utilizar os serviços da marca X, em vez dos de qualquer outra marca, mesmo que sejam iguais.  11.12. Mesmo que outra marca tivesse as mesmas características da marca X, eu preferiria comprar os produtos ou utilizar os serviços da marca X.  11.13. Se existir outra	concorrentes. 11.7. Eu conheço a		00000	
11.9. Eu tenho dificuldade em imaginar a marca X.  11.10. Eu consigo recordar-me rapidamente do simbolo ou logotipo da marca X.  11.11. Faz sentido comprar os produtos ou utilizar os serviços da marca X, em vez dos de qualquer outra marca, mesmo que sejam iguais.  11.12. Mesmo que outra marca tivesse as mesmas características da marca X, eu preferiria comprar os produtos ou utilizar os serviços da marca X.  11.13. Se existir outra	11.9. Eu tenho dificuldade em imaginar a maroa X.  11.10. Eu consigo recordar-me rapidamente do símbolo ou logotipo da maroa X.  11.11. Faz sentido comparar os produtos ou utilizar os serviços da maroa X, em vez dos de qualquer outra marca, mesmo que sejam iguais.  11.12. Mesmo que outra maroa tivesse as mesmas características da maroa X, eu preferiria comprar os produtos ou utilizar os serviços da maroa X.  11.13. Se existir outra marea tão boa como X, eu prefiro comprar os produtos ou utilizar os serviços da maroa X.  11.14. Mesmo que outra maroa não seja diferente de X de nenhuma forma, parece-me mais inteligente comprar os produtos ou utilizar os serviços da maroa X.  11.14. Mesmo que outra maroa não seja diferente de X de nenhuma forma, parece-me mais inteligente comprar os produtos ou utilizar os serviços da maroa.	facilmente de algumas características da marca	0	00000	0
recordar-me rapidamente do símbolo ou logotipo da marca X.  11.11. Faz sentido comprar os produtos ou utilizar os serviços da marca X, em vez dos de qualquer outra marca, mesmo que sejam iguais.  11.12. Mesmo que outra marca tivesse as mesmas características da marca X, eu preferiria comprar os produtos ou utilizar os serviços da marca X.  11.13. Se existir outra	recordar-me rapidamente do símbolo ou logotipo da maroa X.  11.11. Faz sentido comprar os produtos ou utilizar os serviços da maroa X, em vez dos de qualquer outra maroa, mesmo que sejam iguais.  11.12. Mesmo que outra maroa x eu preferiria comprar os produtos ou utilizar os serviços da maroa X, eu preferiria comprar os produtos ou utilizar os serviços da maroa X.  11.13. Se existir outra maroa tão boa como X, eu prefiro comprar os produtos ou utilizar os serviços da maroa X.  11.14. Mesmo que outra maroa não seja diferente de X de nenhuma forma, parece-me mais inteligente comprar os produtos ou utilizar os serviços da maroa X.  11.14. Mesmo que outra maroa não seja diferente de X de nenhuma forma, parece-me mais inteligente comprar os produtos ou utilizar os serviços da maroa.	11.9. Eu tenho dificuldade em imaginar a marca X.	0	00000	0
comprar os produtos ou utilizar os serviços da marca X, em vez dos de qualquer outra marca, mesmo que sejam iguais.  11.12. Mesmo que outra marca tivesse as mesmas características da marca X, eu preferiría comprar os produtos ou utilizar os serviços da marca X.  11.13. Se existir outra	comprar os produtos ou utilizar os serviços da marca X, em vez dos de qualquer outra marca, mesmo que sejam iguais.  11.12. Mesmo que outra marca tivesse as mesmas características da marca X, eu preferiria comprar os produtos ou utilizar os serviços da marca X.  11.13. Se existir outra marca tão boa como X, eu prefiro comprar os produtos ou utilizar os serviços da marca X.  11.14. Mesmo que outra marca não seja diferente de X de nenhuma forma, parece-me mais inteligente comprar os produtos ou utilizar os serviços da marca X.  11.19. Mesmo que outra marca não seja diferente de X de nenhuma forma, parece-me mais inteligente comprar os produtos ou utilizar os serviços da marca.	recordar-me rapidamente do símbolo ou logotipo da	0	00000	0
marca tivesse as mesmas características da marca X, eu preferiria comprar os produtos ou utilizar os serviços da marca X.  11.13. Se existir outra	marca tivesse as mesmas características da marca X, eu preferiria comprar os produtos ou utilizar os serviços da marca X.  11.13. Se existir outra marca tão boa como X, eu prefiro comprar os produtos ou utilizar os serviços da marca X.  11.14. Mesmo que outra marca não seja diferente de X de nenhuma forma, parece-me mais inteligente comprar os produtos ou utilizar os serviços da marca.  seze para a pergunta 12.  or último indique por favor a suas características	comprar os produtos ou utilizar os serviços da marca X, em vez dos de qualquer outra marca,	0	00000	0
	marca tão boa como X, eu prefiro comprar os produtos ou utilizar os serviços da marca X.  11.14. Mesmo que outra marca não seja diferente de X de nenhuma forma, parece-me mais inteligente comprar os produtos ou utilizar os serviços da marca.  sese para a pergunta 12.  or último indique por favor a suas características	marca tivesse as mesmas características da marca X, eu preferiria comprar os produtos ou utilizar os serviços da	0	00000	0
produtos ou utilizar os	marca não seja diferente de X de nenhuma forma, parece-me mais inteligente comprar os produtos ou utilizar os serviços da marca.  sese para a pergunta 12.  or último indique por favor a suas características	marca tão boa como X, eu prefiro comprar os produtos ou utilizar os	0	00000	0
marca não seja diferente de X de nenhuma forma, parece-me mais inteligente comprar os produtos ou utilizar os	or último indique por favor a suas características	marca não seja diferente de X de nenhuma forma, parece-me mais inteligente comprar os produtos ou utilizar os	0	00000	0
2. Género *		Feminino Masculino			
2. Género * Marcar apenas uma oval.  Feminino	Feminino	3. Idade *			
2. Género * Marcar apenas uma oval.  Feminino  Masculino	Feminino Masculino				

14. Escolaridade * Por favor indique o grau de ensino que concluiu.    Marcar apernas uma oval.     Ensino Básico     Ensino Secundário     Licenciatura     Pós Graduação/Mestrado     Outra:     15. Profissão *  16. Residência *   Por favor indique por favor o concelho onde reside.    Com tecnologia     Google Forms	14.	
Marcar apenas uma oval.  Ensino Básico Ensino Secundário Licenciatura Pós Graduação/Mestrado Outra:  15. Profissão *  16. Residência * Por favor indique por favor o concelho onde reside.  Com tecnologia		
Ensino Secundário  Licenciatura  Pós Graduação/Mestrado  Outra:  15. Profissão *  16. Residência *  Por favor indique por favor o concelho onde reside.  Com tecnologia		
Licenciatura Pós Graduação/Mestrado Outra:  15. Profissão *  16. Residência * Por favor indique por favor o concelho onde reside.  Com tecnologia		Ensino Básico
Pós Graduação/Mestrado Outra:  15. Profissão *  16. Residência * Por favor indique por favor o concelho onde reside.  Com tecnologia		Ensino Secundário
Outra:  15. Profissão *  16. Residência *  Por favor indique por favor o concelho onde reside.  Com tecnologia		Licenciatura
16. Residência * Por favor indique por favor o concelho onde reside.  Com tecnologia		Pós Graduação/Mestrado
16. Residência * Por favor indique por favor o concelho onde reside.  Com tecnologia		Outra:
16. Residência * Por favor indique por favor o concelho onde reside.  Com tecnologia	15.	Profissão *
Por favor indique por favor o concelho onde reside.  Com tecnologia		
Por favor indique por favor o concelho onde reside.  Com tecnologia		
reside Com tecnologia	16.	
		Por favor indique por favor o concelho onde reside.
		Google Farms

### Survey in English

The consumer and the brand on Facebook

We would like to have your collaboration on the completion of the survey bellow which is incorporated in the dissertation for a Master of Science in Marketing of a student of the Universidade Católica Portuguesa - Porto. The main objective of this research is to understand the relationship between consumers and brands on Facebook.

There are no right or wrong answers; we are above all interested in your opinion. All answers are confidential and anonymous. The survey should only take approximately 10 minutes. Your cooperation is essential to the completion of this work! We would like to thank you for your help.

Ana Raquel André - raquelqandre@gmail.com

1	How much time, in average, do you spend on Internet each day?
1.1	Less than 30 min
1.2	Between 30 min and 1 hour
1.3	Between 1 hour and 2 hours
1.4	More than 2 hours
2	How much time, on average, do you spend on Facebook each day??
2.1	Less than 30 min
2.2	Between 30 min and 1 hour
2.3	Between 1 hour and 2 hours
2.4	Between 1 hour and 2 hours  More than 2 hours  Do you like or have ever liked a brand page on Facebook?
2.4	More than 2 hours
2.4	More than 2 hours
2.4	More than 2 hours  Do you like or have ever liked a brand page on Facebook?
3 3.1	More than 2 hours  Do you like or have ever liked a brand page on Facebook?  (to like a brand page you have to click "Like" on that page)
2.3 2.4 3 3.1 3.2	More than 2 hours  Do you like or have ever liked a brand page on Facebook?  (to like a brand page you have to click "Like" on that page)  Yes
3 3.1	More than 2 hours  Do you like or have ever liked a brand page on Facebook?  (to like a brand page you have to click "Like" on that page)  Yes
2.4 3 3.1 3.2	More than 2 hours  Do you like or have ever liked a brand page on Facebook?  (to like a brand page you have to click "Like" on that page)  Yes  No - pass directly to question 12
2.4 3 3.1 3.2 4 4.1	More than 2 hours  Do you like or have ever liked a brand page on Facebook?  (to like a brand page you have to click "Like" on that page)  Yes  No - pass directly to question 12  Approximately, how many brand Facebook pages do you like?
2.4 3 3.1 3.2	More than 2 hours  Do you like or have ever liked a brand page on Facebook?  (to like a brand page you have to click "Like" on that page)  Yes  No - pass directly to question 12  Approximately, how many brand Facebook pages do you like?  Between 1 and 10 pages

5	Please select the categories to which the brand Facebook pages that you like
	belong to.
(You ca	in select more than one category.)
5.1	Luxury
5.2	Fashion
5.3	Cosmetics and Perfumes
5.4	Restaurants / Coffee Shops
5.5	Bars and Clubs
5.6	Hotels
5.7	Banks and Insurance Companies
5.8	Telecommunications
5.9	Consumer Goods (e.g. soft drinks, chocolates, cereals, biscuits)
5.10	Electronic Goods (e.g. smartphones, computers, tablets, games)
5.11	Cars
5.12	Retailers (e.g. supermarkets)
5.13	Alcoholic Beverages
5.14	Entertainment (e.g. radio stations, TV channels, cinema)
5.15	Sports Clubs
5.16	Artists and Public Figures
5.17	Communities or Social Causes (e.g. UNICEFF, Cergy-Pontoise University)
5.18	Places (e.g. the city of Paris)
5.19	Newspapers and Magazines
5.20	Transports (e.g. SNCF, Ryanair)
5.21	Other
	-
6	What is your favourite brand page on Facebook?

When answering the following questions please always consider your favourite brand page on Facebook. (Identified as brand X.)

7	If brand X were a person how would you describe it?		
(Please	e, when answering, always consider brand X, your favourite brand page on Facebook.)		
Use a s	cale from 1 to 7 being 1 "I fully disagree" and 7 "I fully agree"		
7.1	Adventurous		
7.2	Aggressive		
7.3	Brave		
7.4	Daring		
7.5	Dominant		
7.6	Sturdy		
7.7	Expresses tender feelings		
7.8	Fragile		
7.9	Graceful		
7.1	Sensitive		
7.11	Sweet		
7.12	Tender		

Please rate your level of agreement with the following statements regarding brand X, your favourite brand page on Facebook.

(Use a scale from 1 to 7 being 1 "I fully disagree" and 7 "I fully agree")			
8.1	This is a wonderful brand.		
8.2	This brand makes me feel good.		
8.3	This brand makes me feel happy.		
8.4	This brand is a delight.		
8.5	I am passionate about this brand.		

9	Please rate your level of agreement with the following statements regarding		
	your motivations to interarct with brand X, your favourite brand page		
	Facebook.		
(Use a	scale from 1 to 7 being 1 "I fully disagree" and 7 "I fully agree".)		
9.1	By interacting with the brand on Facebook, I feel I am part of a community		
9.2	I interact with the brand on Facebook to state my interests and preferences to		
	friends		
9.3	My interaction with the brand on Facebook allows me to increase my so		
	involvement		
9.4	I participate in the brand page on Facebook because someone I know wants me		
9.5	I joined brand page on Facebook to fit in with a group of people		
9.6	I am part of brand page on Facebook because friends would think less of me		
	was not		
9.7	My interaction with the brand on Facebook allows me to better understand		
	brand		
9.8	I like to interact with the brand on Facebook because it allows me to find out		
	opinions of other consumers about the brand		
9.9	My interaction with the brand on Facebook gives me convenient access		
	information about brands, as the brand's posts appear directly on my news feed		
9.1	The content of the brand Facebook page is fun		
9.11	The content of the brand Facebook page is exciting		
9.12	The content of the brand Facebook page is pleasant		
9.13	The content of the brand Facebook page is entertaining		
9.14	I believe it is safe to interact with the brand on Facebook		
9.15	I believe that the brand respects my privacy when I interact with it on Faceboo		
9.16	I believe that the brand will not provide the information that they have obtain		
	about me, through Facebook, to other people or entities		
9.17	I trust the information published by other consumers on Facebook on the bra		
	page		
9.18	I interact with the brand on Facebook in order to access discounts and promotio		

9.19	I like to interact with the brand on Facebook as it offers contests and games		
	from which I can access free products or other special offers		
9.20	By interacting with the brand on Facebook I can make a good impression on		
	others		
9.21	By interacting with the brand on Facebook I can improve the way I am perceived		
9.22	By interacting with the brand on Facebook I can present others who I am		
9.23	By interacting with the brand on Facebook I can present others who I want to be		
10	How frequently do you engage in the following activities regarding brand X or		
10	Facebook?		
(please	, when answering, always consider brand X, your favourite brand page on Facebook)		
	Use a scale from 1 to 7 being 1 "Never" and 7 "Very Frequently".		
10.1	Viewing pictures on the brand's Facebook page		
10.2	Reading companies' posts, user comments, or product reviews		
10.3	Watching videos on the brand's Facebook page		
10.4	Engaging in conversations on the brand's Facebook page (e.g., commenting, askin		
	and answering questions)		
10.5	Sharing the brand's Facebook posts on my own Facebook page (e.g., videos, audio		
	pictures, texts)		
10.6	Recommending the brand's Facebook page to my Facebook contacts		
10.7	Uploading product-related videos, audios, pictures, or images		
11	Please rate your level of agreement with the following statements regarding brand		
	your favourite brand page on Facebook.		
(Please	, when answering, always consider the brand X, your favourite brand's Facebook page		
11.1	I consider myself to be loyal to X.		
11.2	Brand X would be my first choice.		
11.3	I will not buy the products or use the services of other brands if brand X is available.		
11.4	The likely quality of brand X is extremely high.		

11.6	I can recognize brand X among other competing brands.
11.7	I am aware of brand X.
11.8	Some characteristics of brand X come to my mind quickly.
11.9	I have difficulty in imagining brand X in my mind.
11.10	I can quickly recall the symbol or logo of brand X.
11.11	It makes sense to buy the products or use the services of brand X instead of any other
	brand, even if they are the same.
11.12	Even if another brand has the same features as brand X, I would prefer to buy the
	products or use the services of brand X .
11.13	If there is another brand as good as X, I prefer to buy the products or use the services of
	brand X.
11.14	If another brand is not different from X in any way, it seems smarter to purchase to the
	products or use the services of brand X.

To conclude, please indicate your social demographic characteristics.

12	Gender
12.1	Female
12.2	Male
13	Age
14	Education
	Education specify the last degree obtained)
	specify the last degree obtained)
	specify the last degree obtained)  Elementary School
14 (Please	specify the last degree obtained)  Elementary School  Secondary School

16 Residence (Please specify your residence zone)		
16 Residence		
16 Residence		
	15	Profession
(Please specify your residence zone)	16	Residence
	(Please	specify your residence zone)

# Appendix II – Published scales used to formulate the survey

### **Motivations**

Socia	l Influence	(6 items)
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By interacting with the brand on Facebook, I feel I am part of a community I interact with the brand on Facebook to state

my interests and preferences to my friends
My interaction with the brand on Facebook
allows me to increase my social involvement

Machado et al., 2015

(Motivations to interact with brands on Facebook – Towards a typology of consumer–brand interactions)

Type of scale: seven-point Likert scale with the endpoints being "strongly disagree" to "strongly agree".

Cronbach's  $\alpha$ : .81

I participate in the brand page on Facebook because someone I know wants me to

I joined brand page on Facebook to fit in with a

I joined brand page on Facebook to fit in with a group of people

I am part of brand page on Facebook because friends would think less of me if I was not

Curran, J. M., & Lennon, R. 2011 (Participating in the conversation: Exploring usage of social media networking sites.)

Conceptualization: Social influence relates to the approval or disapproval of others when the consumer decides to adopt and use products and services (Curran & Lennon, 2011).

Type of scale: seven-point Likert scale with the endpoints being "strongly disagree" to "strongly agree".

Cronbach's α: .734

#### Search for Information (3 items)

My interaction with the brand on Facebook allows me to better understand the brand I like to interact with the brand on Facebook because it allows me to find out the opinions of other consumers about the brand

My interaction with the brand on Facebook gives me convenient access to information about brands, as the brand's posts appear directly on my news feed Machado et al., 2015

(Motivations to interact with brands on Facebook – Towards a typology of consumer–brand interactions)

Type of scale: seven-point Likert scale with the endpoints being "strongly disagree" to "strongly agree".

Cronbach's α: .81

#### Entertainment (4 items)

The content of the brand Facebook page is fun The content of the brand Facebook page is exciting

The content of the brand Facebook page is pleasant

The content of the brand Facebook page is entertaining

Jahn & Kunz (2012)

(How to transform consumers into fans of your brand)

Conceptualization: hedonic value (or entertainment) plays important roles for social media users.

Type of scale: seven-point Likert scales anchored by "I fully disagree" vs "I fully agree"

Hedonic value ( $\alpha$ = 0.88)

#### Trust (4 items)

I believe it is safe to interact with the brand on Facebook

I believe that the brand respects my privacy when I interact with it on Facebook

I believe that the brand will not provide the information that they have obtained about me, through Facebook, to other people or entities

I trust the information published by other consumers on Facebook on the brand page

Machado et al., 2015

(Motivations to interact with brands on Facebook – Towards a typology of consumer–brand interactions)

Type of scale: seven-point Likert scale with the endpoints being "strongly disagree" to "strongly agree".

Cronbach's  $\alpha$ : .8

#### Reward (2 items)

I interact with the brand on Facebook in order to access discounts and promotions

I like to interact with the brand on Facebook as it offers contests and games from which I can access free products or other special offers Machado et al., 2015

(Motivations to interact with brands on Facebook – Towards a typology of consumer–brand interactions)

Type of scale: seven-point Likert scale with the endpoints being "strongly disagree" to "strongly agree".

Cronbach's α: .84

#### Personal Identity (4 items)

By interacting with the brand on Facebook I can make a good impression on others

By interacting with the brand on Facebook I can improve the way I am perceived

By interacting with the brand on Facebook I can present others who I am

By interacting with the brand on Facebook I can present others who I want to be

Jahn & Kunz (2012) ( How to transform consumers into fans of your brand)

Conceptualization: Consumers decide to participate in a fan page because they expect an impact on their image or status or to. show the own self-concept (Jahn & Kunz, 2012).

Type of scale: seven-point Likert scales anchored by "I fully disagree" vs "I fully agree"

Cronbach's  $\alpha$ : .91

### Brand Gender

Brand Gender			
Masculine brand personality char			
Adventurous		Grohmann, B, 2009 (Gender	
Aggressive		dimensions of brand	
Brave	$(Crophoch's \alpha = 80)$	personality)	
Daring	(Cronbach's $\alpha$ = .89)	77	
Dominant		Conceptualization: In an online	
Sturdy		survey, respondents were	
Feminine brand personality chara	cteristics (6 items)	randomly assigned to a set of	
Expresses tender feelings		brands presented in random order. Participants rated each brand's MBP and FBP.	
Fragile			
Graceful	(6 1 1/ 00)		
Sensitive	(Cronbach's $\alpha$ = .90)		
Sweet		Type of scale: rating scale	
Tender			

### Brand Love

Brand	Love (5 items)
This is a wonderful brand	Loureiro, Ruediger, & Demetris, 2012 (Brand
This brand makes me feel good	emotional connection and loyalty)
This brand makes me feel happy	
This brand is a delight	Conceptualization: The authors conceptualize the
I am passionate about this brand	brand love feelings as "the passion, positive evaluation of the brand, positive emotions in response to the brand and declaration of love for the brand" (Loureiro et al., 2012) (p. 16)
	Type of scale: 5-point Likert scale ranging from 1 (Completely Disagree) to 5 (Completely Agree).
	Composite reliability: .929

### Consumer Engagement

Consumer-brand interact	ion on Facebook (8 items)
Viewing pictures on the brand's Facebook page	
Reading companies' posts, user comments, or	Tsai & Men, 2013 ( Motivations and
product reviews	Antecedents of Consumer Engagement With
Watching videos on the brand's Facebook page	Brand Pages on Social Networking Sites)
Liking/joining the brand's Facebook page (e.g.,	
becoming a fan of or following)	Conceptualization: Engagegment refers to the
Engaging in conversations on the brand's	activities performed by consumers on a brand
Facebook page (e.g., commenting, asking, and	Facebook page.
answering questions)	
Sharing the brand's Facebook posts on my own	Type of scale: 7-point Likert scale
Facebook page (e.g., videos, audios, pictures,	
texts)	Question used: "How often do you participate
Recommending the brand's Facebook page to	in the following activities?"
my Facebook contacts	
Uploading product-related videos, audios,	Cronbach's α:: .88
pictures, or images	

### Brand Equity

Perceived quality			
The likely quality of X is extremely high.  The likelihood that X would be functional is very high.	Yoo & Donthu, 2001 (Developing and validating a multidimensional consumer-based brand equity scale)		
	Conceptualization: Perceived quality is "the consumer's judgment about a product's overall excellence or superiority" (Zeithaml, 1988, p. 3 cited by (Yoo & Donthu, 2001). It is based on consumers' evaluations of product quality.  Type of scale: five-point Likert scales anchored at 1 = "strongly disagree" and 5 = "strongly agree."		
	Composite reliability: 0.92		
Brand loyalty			
I consider myself to be loyal to X.	Yoo & Donthu, 2001 (Developing and validating		
X would be my first choice.	a multidimensional consumer-based brand		
I will not buy other brands if X is available at the	equity scale)		
store.			
	Conceptualization: brand loyalty reflects the		
	predisposition to be loyal to a brand and the		
	intention to buy the brand as a primary choice		

(Oliver, 1997 cited by (Yoo & Donthu, 2001)).

Type of scale: five-point Likert scales anchored at 1 = "strongly disagree" and 5 = "strongly agree."

Composite reliability: 0.88

#### Brand associations with brand awareness

I can recognize X among other competing brands I am aware of X.

Some characteristics of X come to my mind quick y equity scale)

I can quickly recall the symbol or logo of X.

I have difficulty in imagining X in my mind.

Yoo & Donthu, 2001 (Developing and validating a multidimensional consumer-based brand equity scale)

Conceptualization: the authors use the Aaker's (1991) conceptualization of brand awareness and brand associations. Brand awareness is "the ability for a buyer to recognize or recall that a brand is a member of a certain product category" (Aaker, 1991, p. 61 cited by (Yoo & Donthu, 2001). Brand association

Is "anything linked in memory to a brand" and brand image as "a set of [brand] associations, usually in some meaningful way." (Aaker (1991, p. 109) cited by (Yoo & Donthu, 2001).

Type of scale: Type of scale: five-point Likert scales anchored at 1 = ``strongly disagree'' and 5 = ``strongly agree."

Composite reliability: 0.92

### Overall brand equity (OBE)

It makes sense to buy X instead of any other brand, even if they are the same.

Even if another brand has the same features as X, I would prefer to buy X.

If there is another brand as good as X, I prefer to buy X.

If another brand is not different from X in any way, it seems smarter to purchase X.

Yoo & Donthu, 2001 (Developing and validating a multidimensional consumer-based brand equity scale)

Conceptualization: brand equity consists of four dimensions: brand loyalty, brand awareness, perceived quality of brand, and brand associations.

Type of scale: five-point Likert scales anchored at 1 = "strongly disagree" and 5 = "strongly agree."

Composite reliability: 0.90

# Appendix III – Statistical procedures

Relation between age group and time spent on Facebook

Age group \* Time on Facebook Crosstabulation

			Time on Facel	oook			
			Less than 30	Between 30 min and 1 hour	Between 1 hour and 2 hours	More than 2 hours	Total
	15-24	Count	15	29	15	9	68
		% of Total	5,0%	9,7%	5,0%	3,0%	22,7%
	25-34	Count	41	29	16	19	105
		% of Total	13,7%	9,7%	5,4%	6,4%	35,1%
	35-44	Count	36	24	16	3	79
A 20 200112		% of Total	12,0%	8,0%	5,4%	1,0%	26,4%
Age group	45-54	Count	15	9	6	1	31
		% of Total	5,0%	3,0%	2,0%	,3%	10,4%
	55-64	Count	4	2	3	0	9
		% of Total	1,3%	,7%	1,0%	,0%	3,0%
	≥65	Count	2	5	0	0	7
		% of Total	,7%	1,7%	,0%	,0%	2,3%
Total		Count	113	98	56	32	299
		% of Total	37,8%	32,8%	18,7%	10,7%	100,0%

Table 22 – Crosstable between age group and time spent on Facebook. Source: Output SPSS

# Means scale items and variables

	Mean - items	SD - items	Mean of variable	SD of variable
Social Influence 1	4.59	1.91		
Social Influence 2	3.57	1.99	3.90	1.65
Social Influence 3	3.56	1.89		
Search for information 1	4.78	1.87	4.50	1.74
Search for information 2	4.36	1.94	4.56	1.74
Entertainment 1	4.59	1.80		
Entertainment 2	4.94	1.64	4.06	1.46
Entertainment 3	5.35	1.49	4.96	1.40
Entertainment 4	4.96	1.73		
Trust 2	5.20	1.78	E 10	1.72
Trust 3	5.00	1.90	5.10	1.73
Reward 1	2.73	2.00	2.72	1.05
Reward 2	2.72	1.97	2.73	1.85
Personal identity 1	2.15	1.58		
Personal identity 2	2.18	1.59	2 24	1.54
Personal identity 3	2.67	1.89	2.34	1.54
Personal identity 4	2.36	1.78		

Table 23 – Means of scale items and motivations variables. Source: Output SPSS

	Mean - items	SD - items	Mean of variable	SD of variable
Brand Loyalty 1	5.00	1.79		
Brand Loyalty 2	5.12	1.79	4.74	1.73
BrandLoyalty3	4.09	2.16		
Perceived quality 1	5.62	1.44	5.46	1.40
Perceived quality 2	5.30	1.56	3.46	1.40
Brand Awareness/Associations 1	5.79	1.43		
Brand Awareness/Associations 2	5.87	1.37	5.83	1.25
Brand Awareness/Associations 3	5.82	1.34	5.65	
Overall Brand Equity 1	4.74	1.95		
Overall Brand Equity 2	4.76	2.01	4.63	1.76
Overall Brand Equity 3	4.72	1.94	4.03	1./6
Overall Brand Equity 4	4.33	1.95		

Table 24 - Means of scale items and brand equity variables. Source: Output SPSS

	Mean - items	SD - items	Mean of variable	SD of variable
Brand gender Adventurous	4.73	1.74		
Brand gender Brave	4.82	1.67		
Brand gender Daring	4.85	1.66	4.81	1.39
Brand gender Dominant	4.87	1.77		
Brand gender Sturdy	4.77	1.80		
Brand gender Expresses tender feelings	4.04	1.91		
Brand gender Graceful	3.86	1.75	2.72	1.74
Brand gender Sensitive	3.58	1.82	3.72	1.64
Brand gender Sweet	3.56	1.92		
Brand gender Tender	3.56	1.91		

Table 25 - Means of scale items and brand gender variables. Source: Output SPSS

	Mean – items	SD - items	Mean of variable	SD of variable
Brand Love1	5.29	1.60		
Brand Love 2	5.41	1.50		
Brand Love 3	5.00	1.75	4.84	1.55
Brand Love 4	4.41	1.91		
Brand Love 5	4.11	2.10		

Table 26 - Means of scale items and brand love variables. Source: Output SPSS

	Mean - items	SD - items	Mean of variable	SD of variable
Engagement 1 – Consuming	5.21	1.66		
Engagement 2 – Consuming	4.94	1.79	4.96	1.49
Engagement 3 – Consuming	4.81	1.89		
Engagement 4 – Contributing	2.90	1.82		
Engagement 5 – Contributing	3.63	2.06	3.23	1 (0
Engagement 6 – Contributing	3.36	2.12	3.23	1.68
Engagement 7 – Contributing	3.02	2.03		

Table 27 - Means of scale items and engagement variables. Source: Output SPSS

# Scale Items excluded

Some items of the scales were excluded from further analysis due to incoherencies in Cronbach's  $\alpha$  (items were excluded from the scale if the Cronbach's  $\alpha$  was higher without the items) and in inter-item correlation. We excluded two items of brand gender (GM2 - Aggressive and GF2 - Fragile), three items of social influence (SocI4, SocI5, SocI6); one item of search for information (SInf3); two items of Trust (Tru1 and Tru4) and two items of brand awareness/associations (BAA4 and BAA5). According to Field (2009), items that when removed increase the Cronbach's  $\alpha$  should be eliminated from the scale to improve its reliability (Field, 2009).

# Masculine brand gender - Aggressive

### **Reliability Statistics**

Cronbach's $lpha$	Cronbach's $lpha$ Based on Standardized Items	N of Items	
,856	,859	6	

Table 28 – Cronbach's  $\alpha$  of masculine brand gender (6items). Source: Output SPSS:

#### **Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Brand gender Adventurous	22,3133	47,182	,586	,420	,843
Brand gender Aggressive	24,0515	48,394	,483	,262	,863
Brand gender Brave	22,2275	44,737	,746	,582	,814
Brand gender Daring	22,1931	45,544	,712	,567	,821
Brand gender Dominant	22,1760	44,490	,703	,542	,821
Brand gender Sturdy	22,2747	45,054	,662	,475	,829

Table 29 – Item-total correlations. Source: Output SPSS:

The item "brand gender aggressive" was eliminated since the Cronbach's  $\alpha$  increases without it.

# Feminine Brand Gender – fragile

# **Reliability Statistics**

Cronbach's $lpha$	Cronbach's $lpha$ Based on Standardized Items	N of Items	
,913	,911	6	

Table 30 - Cronbach's  $\alpha$  of feminine brand gender (6items). Source: Output SPSS:

### **Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Brand gender Expresses tender feelings		55,459	,747	,563	,900
Brand gender Fragile	18,5837	66,830	,528	,302	,925
Brand gender Graceful	16,9099	57,108	,764	,619	,897
Brand gender Sensitive	17,1931	55,682	,790	,629	,893
Brand gender Sweet	17,2189	52,792	,859	,850	,882
Brand gender Tender	17,2103	53,020	,855	,843	,883,

Table 31– Item-total correlations. Source: Output SPSS:

The item "brand gender fragile" was eliminated since the Cronbach's  $\alpha$  increases without it.

# Social Influence

# **Reliability Statistics**

Cronbach's α	Cronbach's $\alpha$ Based on Standardized Items	N of Items	
,786	,786	6	

Table 32 - Cronbach's  $\alpha$  of social influence (6items). Source: Output SPSS:

### **Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's $\alpha$ if Item Deleted
Social Influence 1	12,5794	35,710	,515	,432	,760
Social Influence 2	13,5966	32,224	,662	,540	,719
Social Influence 3	13,6094	33,161	,661	,511	,719
Social Influence 4	15,3262	41,617	,361	,346	,791
Social Influence 5	14,9914	35,078	,619	,448	,732
Social Influence 6	15,7339	44,196	,429	,433	,781

Table 33 – Item-total correlations. Source: Output SPSS:

The item "social influence 4" was eliminated since the Cronbach's  $\alpha$  increases without it.

# **Reliability Statistics**

Cronbach's $\alpha$	Cronbach's $\alpha$ Based on Standardized Items	N of Items
,791	,782	5

Table 34 - Cronbach's  $\alpha$  of social influence (5items). Source: Output SPSS:

### **Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's $\alpha$ if Item Deleted
Social Influence 1	10,7382	26,694	,572	,430	,751
Social Influence 2	11,7554	24,065	,698	,540	,705
Social Influence 3	11,7682	25,006	,692	,510	,708
Social Influence 5	13,1502	27,878	,572	,436	,750
Social Influence 6	13,8927	36,501	,329	,301	,813

Table 35 – Item-total correlations. Source: Output SPSS:

The item "social influence 6" was eliminated since the Cronbach's  $\alpha$  increases without it.

# **Reliability Statistics**

Cronbach's $lpha$	Cronbach's $\alpha$ Based on Standardized Items	N of Items
,813	,811	4

Table 36 - Cronbach's  $\alpha$  of social influence (4items). Source: Output SPSS:

### **Item-Total Statistics**

		Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's $\alpha$ if Item Deleted
Social Influence 1	9,3047	21,851	,617	,408	,772
Social Influence 2	10,3219	19,909	,714	,536	,724
Social Influence 3	10,3348	20,836	,703	,510	,731
Social Influence 5	11,7167	24,652	,500	,261	,822

Table 37– Item-total correlations. Source: Output SPSS:

The item "social influence 5" was eliminated since the Cronbach's  $\alpha$  increases without it.

# Search for information

# **Reliability Statistics**

Cronbach's $\alpha$	Cronbach's $\alpha$ Based on Standardized Items	N of Items
,736	,733	3

Table 38 - Cronbach's  $\alpha$  of search for information (3items). Source: Output SPSS:

### **Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Search for information 1	9,8541	8,720	,709	,519	,460
Search for information 2	10,2704	9,465	,570	,436	,640
Search for information 3	9,1288	12,095	,423	,223	,795

Table 39 — Item-total correlations. Source: Output SPSS:

The case of the item "search for information 3" was eliminated since the Cronbach's  $\alpha$  increases without it.

# <u>Trust</u>

# **Reliability Statistics**

Cronbach's $\alpha$	Cronbach's $\alpha$ Based on Standardized Items	N of Items
,836	,836	4

Table 40- Cronbach's  $\alpha$  of trust (4items). Source: Output SPSS:

### **Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Trust 1	14,5150	20,380	,647	,470	,804
Trust 2	15,0215	16,392	,808,	,692	,725
Trust 3	15,2146	16,626	,705	,584	,777
Trust 4	15,9056	20,638	,532	,285	,848

Table 41 – Item-total correlations. Source: Output SPSS:

The item "trust 4" was eliminated since the Cronbach's  $\alpha$  increases without it.

# **Reliability Statistics**

Cronbach's $\alpha$	Cronbach's $\alpha$ Based on Standardized Items	N of Items
,848	,850	3

Table 42- Cronbach's  $\alpha$  of trust (3items). Source: Output SPSS:

### **Item-Total Statistics**

	Scale Mean if Item Deleted		Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Trust 1	10,2017	11,938	,638	,458	,862
Trust 2	10,7082	8,768	,826	,682	,675
Trust 3	10,9013	8,908	,713	,577	,799

Table 43– Item-total correlations. Source: Output SPSS:

The item "trust 1" was eliminated since the Cronbach's  $\alpha$  increases without it.

# Brand awareness/associations

## **Reliability Statistics**

Cronbach's α	Cronbach's $\alpha$ Based on Standardized Items	N of Items
,788	,803	5

Table 44- Cronbach's  $\alpha$  of brand awareness/associations (5items). Source: Output SPSS:

### **Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Brand awareness/associations 1	23,5923	17,630	,729	,648	,693
Brand awareness/associations 2	23,5107	18,294	,707	,617	,703
Brand awareness/associations 3	23,5536	18,024	,754	,677	,689
Brand awareness/associations 5	23,4335	18,324	,625	,422	,728
BAwAss11.9RC <sup>1</sup>	23,4206	23,486	,147	,028	,885

Table 45 – Item-total correlations. Source: Output SPSS. ¹This item was reserved coded

According to Field (2009), if the item-total correlation is inferior 0.3 it means that that item does not correlate well with the scale so it has to be eliminated (Field, 2009). Also according to Field (2009), items that when removed increase the Cronbach's  $\alpha$  should be eliminated from the scale to improve its reliability (Field, 2009). This is the case of the item brand awareness/association (RC – Reversed coded) 4 so it was eliminated.

### **Reliability Statistics**

Cronbach's α	Cronbach's $\alpha$ Based on Standardized Items	N of Items	
,885	,887	4	

Table 46 - Cronbach's  $\alpha$  of brand awareness/associations (4items). Source: Output SPSS.

### **Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's $\alpha$ if Item Deleted
Brand awareness/associations 1	17,6352	13,259	,787	,648	,838
Brand awareness/associations 2	17,5536	13,809	,769	,617	,846
Brand awareness/associations 3	17,5966	13,621	,814	,677	,830
Brand awareness/associations 5	17,4764	14,173	,641	,415	,896

Table 47 – Item-total correlations. Source: Output SPSS.

The item "Brand awareness/associations 5" was eliminated since the Cronbach's  $\alpha$  increases without it.

# Cronbach's $\alpha$ of all variables

Variables	Cronbach α	Variables	Cronbach α
Masculine brand gender	,863	Engagement	,863
Feminine brand gender	,925	Engagement Consuming	,836
Brand Love	,920	Engagement Contributing	,856
Motivations	,892	Brand equity	,922
Social Influence	,822	Brand Loyalty	,880
Search for information	,795	Perceived quality	,859
Entertainment	,896	Brand awareness/associations	,896
Trust	,862	Overall Brand Equity	,918
Reward	,847		
Personal identity	,918		

Table 48 - Cronbach's  $\alpha s$  of the different variables. Source: Output SPSS.

The Cronbach's  $\alpha$  of 0.800 to 0.900 are considered good and above 0.900 are considered excellent (Hill & Hill, 2012).

# Exploratory Factorial Analysis (EFA)

# EFA of Masculine brand gender

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sai	,842	
Bartlett's Test of Sphericity	532,962	
	df	10
	Sig.	,000

Table 49 - KMO and Bartlett's Test of EFA of masculine brand gender. Source: Output SPSS.

The KMO is 0.842 which is considered "good" (Hill & Hill, 2012) and the Bartlett's Test of Sphericity is inferior to 0.5. Therefore the sample is adequate for factorial analysis.

#### Communalities

	Initial	Extraction
Brand gender Adventurous	1,000	,545
Brand gender Brave	1,000	,721
Brand gender Daring	1,000	,723
Brand gender Dominant	1,000	,660
Brand gender Sturdy	1,000	,603

Extraction Method: Principal Component

Analysis.

Table 50 - Communalities of EFA of masculine brand gender. Source: Output SPSS.

All communalities are above 0.5 which signify that all factors have an high contribute to factor formation (Martinez & Ferreira, 2010).

### **Total Variance Explained**

		Initial Eigenvalues		Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,251	65,025	65,025	3,251	65,025	65,025
2	,680	13,607	78,631			
3	,411	8,210	86,842			
4	,344	6,882	93,724			
5	,314	6,276	100,000			

Extraction Method: Principal Component Analysis.

Table 51 - Total Variance Explained of EFA of masculine brand gender. Source: Output SPSS.

The factorial analysis only found one factor to explain the correlations between the components of masculine brand gender. This factor explains 65.0% of variance.

# EFA of Feminine Brand Gender

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of S	,852	
Bartlett's Test of Sphericity	973,551	
	10	
	Sig.	,000

Table 52 - KMO and Bartlett's Test of EFA of feminine brand gender. Source: Output SPSS.

The KMO is 0.852 which is considered "good" (Hill & Hill, 2012) and the Bartlett's Test of Sphericity is inferior to 0.5. Therefore the sample is adequate for factorial analysis.

### **Communalities**

	Initial	Extraction
Brand gender Expresses tender feelings	1,000	,691
Brand gender Graceful	1,000	,738
Brand gender Sensitive	1,000	,738
Brand gender Sweet	1,000	,849
Brand gender Tender	1,000	,839

Extraction Method: Principal Component Analysis.

Table 53 - - Communalities of EFA of feminine brand gender. Source: Output SPSS.

All communalities are above 0.5 which signify that all factors have an high contribute to factor formation (Martinez & Ferreira, 2010).

**Total Variance Explained** 

Cammanant		Initial Eigenvalues		Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,855	77,105	77,105	3,855	77,105	77,105
2	,407	8,142	85,247			
3	,343	6,863	92,110			
4	,308	6,155	98,265			
5	,087	1,735	100,000			

Extraction Method: Principal Component Analysis.

Table 54 - Total Variance Explained of EFA of feminine brand gender. Source: Output SPSS

The factorial analysis only found one factor to explain the correlations between the components of feminine brand gender. This factor explains 77.1% of variance.

# EFA of Brand Love

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of	,866	
	939,928	
Bartlett's Test of Sphericity	df	10
	Sig.	,000

Table 55 - KMO and Bartlett's Test of EFA of brand love. Source: Output SPSS.

The KMO is 0.866 which is considered "good" (Hill & Hill, 2012) and the Bartlett's Test of Sphericity is inferior to 0.5. Therefore the sample is adequate for factorial analysis.

#### **Communalities**

	Initial	Extraction
Brand Love 1	1,000	,824
Brand Love 2	1,000	,774
Brand Love 3	1,000	,837
Brand Love 4	1,000	,727
Brand Love 5	1,000	,699

Extraction Method: Principal Component Analysis.

Table 56 - - Communalities of EFA of brand love. Source: Output SPSS.

All communalities are above 0.5 which signify that all factors have an high contribute to factor formation (Martinez & Ferreira, 2010).

**Total Variance Explained** 

Compo	Initial Eigenvalues			Extractio	n Sums of Squar	ed Loadings
nent	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,861	77,227	77,227	3,861	77,227	77,227
2	,521	10,414	87,640			
3	,254	5,083	92,723			
4	,205	4,093	96,816			
5	,159	3,184	100,000			

Extraction Method: Principal Component Analysis.

Table 57 - Total Variance Explained of EFA of brand love. Source: Output SPSS

The factorial analysis only found one factor to explain the correlations between the components of brand love. This factor explains 77.2% of variance.

# **EFA** of Motivations

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of S	,836	
Bartlett's Test of Sphericity	Approx. Chi-Square	2585,652
	df	136
	Sig.	,000

Table 58 - KMO and Bartlett's Test of EFA of motivations. Source: Output SPSS.

The KMO is 0.83 which is considered "good" (Hill & Hill, 2012) and the Bartlett's Test of Sphericity is inferior to 0.5. Therefore the sample is adequate for factorial analysis.

#### **Communalities**

	Initial	Extraction
Social Influence 1	1,000	,702
Social Influence 2	1,000	,838
Social Influence 3	1,000	,774
Search for information 1	1,000	,843
Search for information 2	1,000	,824
Entertainment 1	1,000	,807
Entertainment 2	1,000	,840
Entertainment 3	1,000	,737
Entertainment 4	1,000	,718
Trust 2	1,000	,868
Trust 3	1,000	,893
Reward 1	1,000	,881
Reward 2	1,000	,863
Personal Identity 1	1,000	,806
Personal Identity 2	1,000	,847
Personal Identity 3	1,000	,780
Personal Identity 4	1,000	,823

Extraction Method: Principal Component

Analysis.

Table 59 - - Communalities of EFA of motivations. Source: Output SPSS.

All communalities are above 0.5 which signify that all factors have an high contribute to factor formation (Martinez & Ferreira, 2010).

**Total Variance Explained** 

Commonst	Initial Eigenvalues		Initial Eigenvalues Extraction Sums of Squared Loadings		Rotation Sums of Squared Loadings				
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6,473	38,077	38,077	6,473	38,077	38,077	3,379	19,878	19,878
2	2,644	15,551	53,628	2,644	15,551	53,628	3,223	18,956	38,834
3	1,709	10,050	63,678	1,709	10,050	63,678	2,047	12,043	50,877
4	1,223	7,193	70,871	1,223	7,193	70,871	1,808	10,634	61,511
5	1,041	6,126	76,996	1,041	6,126	76,996	1,781	10,476	71,988
6	,754	4,438	81,434	,754	4,438	81,434	1,606	9,446	81,434
7	,518	3,050	84,484						
8	,468	2,750	87,234						
9	,390	2,292	89,526						
10	,316	1,859	91,385						
11	,310	1,824	93,209						
12	,287	1,690	94,899						
13	,214	1,260	96,158						
14	,209	1,227	97,385						
15	,168	,986	98,371						
16	,159	,937	99,307						
17	,118	,693	100,000						

Extraction Method: Principal Component Analysis.

Table 60 - Total Variance Explained of EFA of motivations. Source: Output SPSS

The factorial analysis found six factors to explain the correlations between the components of motivations. This factor explains 81.4% of variance.

Rotated Component Matrix<sup>a</sup>

		Component					
	1	2	3	4	5	6	
Personal Identity 2	,886						
Personal Identity 4	,870						
Personal Identity 1	,847						
Personal Identity 3	,846						
Entertainment 2		,861					
Entertainment 1		,858					
Entertainment 4		,820					
Entertainment 3		,800					
Social Influence 2			,850				
Social Influence 3			,774				
Social Influence 1			,648				
Trust 3				,906			
Trust 2				,855			
Reward 1					,927		
Reward 2					,879		
Search for information 2						,797	
Search for information 1						,793	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Table 61 – Rotated Component Matrix of EFA of motivations. Source: Output SPSS.

Factor 1 corresponds to personal identity, factor 2 to entertainment, factor 3 to social influence, factor 4 to trust, factor 5 to reward and factor to search for information.

# **EFA** of Engagement

### **KMO** and Bartlett's Test

Kaiser-Meyer-Olkin Measure of S	,840	
Bartlett's Test of Sphericity	Approx. Chi-Square	768,646
	df	21
	Sig.	,000

Table 62 - KMO and Bartlett's Test of EFA of engagement. Source: Output SPSS.

The KMO is 0.840 which is considered "good" (Hill & Hill, 2012) and the Bartlett's Test of Sphericity is inferior to 0.5. Therefore the sample is adequate for factorial analysis.

a. Rotation converged in 6 iterations.

### **Communalities**

	Initial	Extraction
Engagement 1	1,000	,815
Engagement 2	1,000	,718
Engagement 3	1,000	,731
Engagement 4	1,000	,660
Engagement 5	1,000	,706
Engagement 6	1,000	,712
Engagement 7	1,000	,742

Extraction Method: Principal

Component Analysis.

Table 63 - - Communalities of EFA of engagement. Source: Output SPSS.

All communalities are above 0.5 which signify that all factors have an high contribute to factor formation (Martinez & Ferreira, 2010).

**Total Variance Explained** 

		•							
C	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,853	55,049	55,049	3,853	55,049	55,049	2,747	39,245	39,245
2	1,232	17,596	72,646	1,232	17,596	72,646	2,338	33,400	72,646
3	,498	7,120	79,765						
4	,435	6,216	85,982						
5	,371	5,293	91,275						
6	,351	5,016	96,291						
7	,260	3,709	100,000						

Extraction Method: Principal Component Analysis.

Table 64 - Total Variance Explained of EFA of engagement. Source: Output SPSS

The factorial analysis found to 2 factors which correspond to two the factors identified by (Tsai & Men, 2013) as consuming (which correspond to the items 1, 2 and 3) and contributing (items 4 to 7). The two factors explain 72.6% of variance.

# Rotated Component Matrix<sup>a</sup>

	Component		
	1	2	
Engagement 7	,848		
Engagement 6	,823		
Engagement 5	,801		
Engagement 4	,745	,325	
Engagement 1		,880	
Engagement 3		,819	
Engagement 2		,815	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Table 65 - Rotated Component Matrix of EFA of engagement. Source: Output SPSS.

Factor 1 corresponds with the contributing type (items 4 to 7) and factor 2 corresponds with the consuming type (items 1 to 3).

# **EFA** of Brand Equity

### **KMO** and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,885
Bartlett's Test of Sphericity Approx. Chi-Square	1473,042
df	28
Sig.	,000

Table 66 - KMO and Bartlett's Test of EFA of brand equity. Source: Output SPSS.

The KMO is 0.885 which is considered "good" (Hill & Hill, 2012) and the Bartlett's Test of Sphericity is inferior to 0.5. Therefore the sample is adequate for factorial analysis.

**Communalities** 

	Initial	Extraction
Brand Loyalty 1	1,000	,699
Brand Loyalty 2	1,000	,724
Brand Loyalty 3	1,000	,513
Perceived quality 1	1,000	,730
Perceived quality 2	1,000	,648
Brand awareness/associations 1	1,000	,721
Brand awareness/associations 2	1,000	,650
Brand awareness/associations 3	1,000	,668

Extraction Method: Principal Component

Analysis.

Table 67 - - Communalities of EFA of brand equity. Source: Output SPSS.

All communalities are above 0.5 which signify that all factors have an high contribute to factor formation (Martinez & Ferreira, 2010).

**Total Variance Explained** 

Compo		Initial Eigenval	ues	Extractio	n Sums of Squar	ed Loadings
nent	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5,353	66,906	66,906	5,353	66,906	66,906
2	,870	10,877	77,784			
3	,548	6,851	84,635			
4	,395	4,942	89,576			
5	,294	3,669	93,245			
6	,232	2,903	96,148			
7	,180	2,253	98,401			
8	,128	1,599	100,000			

Extraction Method: Principal Component Analysis.

Table 68 - Total Variance Explained of EFA of brand equity. Source: Output SPSS

The factorial analysis only found one factor to explain the correlations between the components of brand equity. This factor explains 66.9% of variance.

# EFA of Overall Brand equity

#### **KMO** and Bartlett's Test

Kaiser-Meyer-Olkin Measure of San	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		
Bartlett's Test of Sphericity	Approx. Chi-Square	683,650	
	df	6	
	Sig.	,000	

Table 69 - KMO and Bartlett's Test of EFA of overall brand equity. Source: Output SPSS.

The KMO is 0.815 which is considered "good" (Hill & Hill, 2012). The Bartlett's Test of Sphericity indicates that the sample is adequate for factorial analysis since sig. value is inferior to 0.5 (Martinez & Ferreira, 2010).

### **Communalities**

	Initial	Extraction
Overall Brand Equity 1	1,000	,779
Overall Brand Equity 2	1,000	,847
Overall Brand Equity 3	1,000	,782
Overall Brand Equity 4	1,000	,802

Extraction Method: Principal Component

Analysis.

Table 70 – Communalities of EFA of overall brand equity. Source: Output SPSS.

All communalities are above 0.5 which signify that all factors have an high contribute to factor formation (Martinez & Ferreira, 2010).

**Total Variance Explained** 

Compo		Initial Eigenval	ues	Extraction Sums of Squared Loadings			
nent	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	3,211	80,268	80,268	3,211	80,268	80,268	
2	,357	8,919	89,187				
3	,263	6,574	95,761				
4	,170	4,239	100,000				

Extraction Method: Principal Component Analysis.

Table 71 – Total Variance Explained of EFA of overall brand equity. Source: Output SPSS

The factorial analysis only found one factor to explain the correlations between the components of masculine brand gender. This factor explains 80.3% of variance.

# Differences between male and female respondents in terms of consumer engagement, brand love and brand equity

To verify if there are significant differences between female and male respondents regarding their consumer engagement, brand love and brand equity, we performed t-student tests for independent samples.

# t-student for consumer engagement

The *t*-student test was performed for the two types of engagement (consuming and contributing type).

Independent Samples Test								
Consuming	for Eq	ne's Test uality of iances	t-test for Equality of Means					
	F	Sig.	t	df	Sig.	Mean Difference	Std. Error Difference	
Equal variances assumed	,661	,417	-,214	231	,830	-,04202	,19605	
Equal variances not assumed			-,215	224,73 1	,830	-,04202	,19579	

Table 72 - t-student test for consuming type of engagement. Source: output SPSS

The Levene's test is not statistically significant then we can assume that the variances are equal. Sig value is 0.830, so it is possible to conclude that there is no significant difference between the means of the two groups. Therefore, there no difference between male and female respondents regarding the consuming type of engagement.

Independent Samples Test								
Contributing	for Equ	e's Test ality of ances	t-test for Equality of Means					
Continuumig	F	Sig.	t	df	Sig.	Mean Difference	Std. Error Difference	
Equal variances assumed	,538	,464	-2,843	231	,005*	-,61880	,21767	
Equal variances not assumed			-2,826 217,86 ,005 -,61880 ,21895 2 ,21895					
*. Correlation is significant at the 0.05 level (2-tailed).								

Table 73 - t-student test for contributing type of engagement. Source: output SPSS.

The Levene's test is not statistically significant then it can be assumed that the variances are equal. Sig value is 0.005 so it is possible to conclude that there is a significant difference between the means of these two samples. On average, male respondents experienced greater engagement regarding the contributing type (mean =3.56, SD = 1.71) than female respondents (mean=2.94, SD=1.60) and this difference is statistically significant.

Statistics								
	Gender of Respondents	N	Mean	Std. Deviation	Std. Error			
Contributing	Female	127	2,9449	1,60509	,14243			
	Male	106	3,5637	1,71202	,16629			

Table 74 - Mean of contributing type of engagement for male and female respondents. Source: output SPSS  $\,$ 

# *t*-student for brand love

Independent Samples Test								
Brand love	for Equ	e's Test ality of ances	t-test for Equality of Means					
Brana love	F	Sig.	t	df	Sig.	Mean Difference	Std. Error Difference	
Equal variances assumed	,110	,740	-1,636	231	,103	-,33319	,20364	
Equal variances not assumed			-1,636	223,61	,103	-,33319	,20364	

Table 75 - *t*-student test for brand love. Source: output SPSS.

The Levene's test is not statistically significant then it can be assumed that the variances are equal. Sig value is .103 so it is possible to conclude that there is no significant difference

between the means of these two samples. Therefore, there is no difference between male and female respondents regarding the love for their favourite brand.

# t-student for brand equity

Independent Samples Test								
Brand equity	for Equ	e's Test ality of ances	t-test for Equality of M			ality of Means		
Brand equity	F	Sig.	t	df	Sig.	Mean Difference	Std. Error Difference	
Equal variances assumed	1,813	,179	-1,694	231	,092	-,39079	,23065	
Equal variances not assumed			-1,709	229,215	,089	-,39079	,22871	

Table 76 - t-student test for brand equity. Source: output SPSS

The Levene's test is not statistically significant then it can be assumed that the variances are equal. Sig value is .092 so it is possible to conclude that there is no significant difference between the means of these two samples. Therefore there is no difference between male and female respondents regarding brand equity.