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CONSUMER ENGAGEMENT WITH A BRAND ON FACEBOOK:
LINGUISTIC CATEGORY MODEL ANALYSIS

Dissertation presented to the Portuguese Catholic University to
obtain a degree of Master in Psychology in Business and Economics

By

Rita Maria Soares de Sousa Santos

Faculty of Human Sciences

September, 2020



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Abstract

Over the past years, social media has changed the way organizations promote business online and the use of digital technologies, such as Facebook, Instagram or Twitter by brands to share product-related information, as well as to engage with consumer has grown significantly. Nowadays, the vast majority of brands have incorporated the several social media channels into their marketing strategies with the purpose to spread their business faster as well as to engage with customers more efficiently. Facebook has been identified as one of the most used social networking platform presenting valuable opportunities and benefits for both consumers and marketers (Kallas, 2020; Smith, 2020). Although several are the brands that have been using Facebook to interact with consumers, there are still doubts regarding what is the best strategy and/or how the language type used by brands on the digital environment shapes the relationship between brands and costumers. Therefore, the purpose of this dissertation is to analyze the relationship between the type of language posted by brands on consumer engagement in Facebook users. Due to the heterogeneity of the several brands presented in this dissertation, brands were segmented according to their different number of followers. Language was categorized and analyzed based on the continuum pole of abstraction and concreteness provided by the Linguistic Category Model (LCM) proposed by Semin & Fiedler (1991) and consumer engagement was measured through several Facebook metrics, namely the number of comments and likes on posts and the number of likes for brands. Results showed that for companies between 50 and 579 followers a more abstract language increases the number of likes of the brand, while for companies between 580 and 3.138 followers, a more concrete language increases the number of likes on posts as well as of brand pages. In future studies, it would be useful to understand the nature of companies with different numbers of followers to understand what type of factors can influence the type of language used by them.

Keywords: Consumer Engagement; Social Media; Linguistic Category Model; Language Abstraction; Facebook

Resumo

Ao longo dos últimos anos, as redes sociais têm modificado a forma como as organizações promovem os seus negócios online e o uso de diversas tecnologias digitais, como o *Facebook*, *Instagram* ou *Twitter* pelas marcas para a partilha de informações relacionadas com os produtos, bem como para interagir com os consumidores tem crescido significativamente. Atualmente, a grande maioria das marcas incorporou as diversas plataformas de redes sociais nas suas estratégias de marketing com o objetivo de divulgar os seus negócios mais rapidamente bem como de interagir mais eficazmente com os consumidores. O *Facebook* tem sido apontado como uma das plataformas de rede social mais utilizadas, apresentando oportunidades e benefícios valiosos tanto para os consumidores como para os profissionais de marketing (Kallas, 2020; Smith, 2020). Embora existam várias marcas que utilizam *Facebook* para interagir com os consumidores, existem ainda dúvidas acerca da melhor estratégia e/ou como o tipo de linguagem utilizada pelas marcas no ambiente digital molda a relação entre estas duas entidades. Neste sentido, o objetivo desta dissertação é analisar a relação entre o tipo de linguagem utilizada nas publicações das marcas e a interação dos consumidores em usuários do *Facebook*. Devido à heterogeneidade das diferentes marcas estudadas nesta dissertação, as mesmas foram segmentadas de acordo com os seus diferentes números de seguidores. A linguagem foi categorizada e analisada com base no contínuo polo de abstração e concretização fornecido pelo Modelo de Categorização Linguística (MCL) proposto por Semin & Fiedler (1991) e o envolvimento dos consumidores foi medido através de diversas métricas do *Facebook*, nomeadamente o número de comentários e gostos nas publicações e o número de gostos das marcas. Os resultados mostram que para empresas entre os 50 e os 579 seguidores uma linguagem mais abstrata aumenta o número de gostos da marca, enquanto que para empresas entre os 580 e os 3.138 seguidores uma linguagem mais concreta aumenta o número de gostos das publicações assim como da marca. Em estudos futuros, seria útil entender a natureza das empresas com diferentes números de seguidores de forma a entender que tipo de fatores podem influenciar o tipo de linguagem usada pelas mesmas.

Palavras-chave: Envolvimento dos Consumidores; Redes Sociais; Modelo de Categorização Linguística; Abstração da Linguagem; *Facebook*

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List of Abbreviations

LCM: Linguistic Category Model

DAV: Descriptive Action Verbs

IAV: Interpretative Action Verbs

SV: State Verbs

ADJ: Adjectives

Chapter 1: Introduction

1.1. Background and Problem Statement

Nowadays technology have a global impact in everything we do as well as in the way we interact with others. The emergence of several social media platforms such as Facebook, Instagram and Twitter enabled not only the development of a variety of online groups and voluntary associations, but also opened up new opportunities for market communities to interact with their customers. In this sense, social media are starting to transform brand management as well as the way how online branding is perceived and designed. Now, more than ever, brands need to embrace this phenomenon and express themselves through social media in order to start being digital and to accompany the consumers' digital speed. In fact, over the last years brands have been increasingly investing in social media in order to foster greater levels of interactivity with their clients to promote higher customer engagement (Hudson, Huang, Roth & Madden, 2016).

We can think of social media as a massive data repository or as a digitalized focus group with a shared purpose or interest, in which millions of people share their opinions about a specific or several topics (Ren, Kraut & Kiesler, 2007). With the appearance of social media, social networking sites such as Facebook, Instagram, LinkedIn and/or Twitter have become popular among online users to search a variety of content on the Web. Since most technological devices have access to internet, social media is easily accessed anywhere and at any time by a large number of people spread all over the world. Marketers should see this new way of communication as an opportunity to share content/information and products/services with existing as well as potential customers and receive customers' insights faster and cheaper than before (Hudson et. al., 2015).

With the growing tendency to incorporate social networking sites in the business world as well as to gradually accept the participation of consumers in the brand construction process companies have less control about the information available on the internet about them, which sometimes do not give them the chance or the right to alter publicly publications/reviews provided by their customers (Kaplan & Haenlein, 2010). The active role of consumers in the value-creation process of brands originated a few important changes in brand identity as well as brand management, which consequently has over the past years, led to its reconceptualization.

Brands have the power to influence a variety of spheres of human's life (e.g. social, cultural, religion and/or sporting) and now, more than ever, with so many heterogeneous brands available in the market they need to understand how they can attract consumers' attention (Kapferer, 2008). According with Kapferer (2008) brands are more than simple names, since they have the ability to create assumptions and beliefs in consumers' minds as well as to develop emotional bonds with them through the marketing of the brand. Indeed, there are several factors (e.g. saliency, intensity and/or trust) that are able to influence buyers however, and most importantly, each brand needs to ensure that develop a unique group of characteristics/attributes that will differentiate them from each other: brand identity. For example well-known brands, such as BMW, Levi's or "Absolut" become extremely famous due to the values and emotions that they evoke in consumers: BMW promises high levels of reliability and power and the launch of the car "Mini" is associated with memories related with the historical period of the "Swinging Sixties" in the United Kingdom; Levi's jeans are associated with feelings of rebellion and freedom while the brand "Absolut" resembles to a fashionable vodka (Kapferer, 2008).

Traditionally, branding literature described brand identity as a static, fixed and unchanged concept regardless of the environmental constraints (e.g. Aaker, 1996; Kapferer, 2008). During the 1990s and approximately until its end the Goods-Centered Model of Exchange, based on classical and neoclassical economics approaches, was the dominant marketing perspective at the time (Vargo & Lusch, 2004). The Goods-Centered Model of Exchange assumed that marketing as well as brands behaved unidirectionally and vertically (from brands to consumers) and that they were mainly identifiers of goods/services (Oliveira, 2019; Sjöberg, 2017). In other words, the focus was on the exchange of tangible and manufactured goods (operand resources – considered resources on which an action is performed) in which the value/utility was embedded in the product itself and in the transaction(s) made between the firm and the customer (Vargo & Lusch, 2004).

In the late 90's several scholars (e.g. Rust, 1998; Sheth & Parvatiyar, 2000) felt the need to shift into a new marketing paradigm that was able to encompass the continuous relationship among marketing actors and where the relationships as well as the exchange of intangible goods were fundamental characteristics (Vargo & Lusch, 2004). Marketing moved from a goods-dominant view to a service-dominant view, in which specialized skills, knowledge and processes are the exchange offer and the customer, as opposed to the

producer, is the central figure (Vargo & Lusch, 2004). The Service-Centered Model of Exchange emphasizes the exchange of invisible and uncountable goods (e.g. competences and/or organizational processes), commonly referred as operant resources – resources that produce effect(s), since they are assumed to be the distribution tools/vehicles for service provision and value creation. Goods are perceived as transmitters of knowledge by consumers whom determine its value according to the usefulness and benefit of the service/product and the knowledge originated is the source of competitive advantage that adds value and differentiates a company from its competitors (Vargo & Lusch, 2004). According with this perspective the customer becomes an active and coproducer agent during this learning process, since they collaborate with brands to determine and cocreate firm's output/product value as well as firm's financial performance through constant and improved feedback. In this sense, firms learn with customers and are adaptive as well as flexible to their individual and dynamic needs in order to meet people's end-states/desires (Vargo & Lusch, 2004). For example, people purchase a variety of goods/products to satisfy and achieve several important human needs/higher-order benefits, such as personal satisfaction, self-esteem, self-approval and /or recognition, which goes beyond the single function(s) of the product. Brand(s) concern in developing services that are meaningful and add utility to consumers' life should be more important than ever and words like interactivity, integration, customization and ongoing relationships are central to this new marketing approach.

In this environment where individuals are socially connected, and bilateral and multilateral friendships are established, brands are constantly being monitored by their clients. Because of their control over brands' identity surveillance and positioning, it is essential that they maintain their consistency and values as well as offer personalized proposals (Oliveira, 2017). Collins and Porras (1996) state that in order for companies to have success as well as durability they should keep their core values and purpose well defined while their business strategies and practices remain flexible to environmental changes. In fact, well known brands such as Sony and Motorola achieved long-term performance and are perceived as stable in the market due to their ability to maintain brands' identity/ideology fixed and stimulating progress as well innovation in response to technological breakthroughs and/or market life cycles (Collins & Porras, 1996). Aligned with these authors' vision, Interbrand (2007) believes that brands should be “constant yet

flexible” since 70% of the brand must remain coherent while 30% should remain agile and open to new transformations. In sum, brand identity should have a dynamic meaning since it should encompass the flexibility to adapt to the evolution of the market as well as to possible environmental variations, while maintaining their ideals and core values for the development of customer’ self-identity (Silveira, Lages & Simões, 2013).

Brand’s value goes beyond their utilitarian character, since consumers use them to construct their self-image (Aaker, 1997). Nowadays there are a large variety of products available in the market and consumers’ purchase decisions are motivated by a wide range of incentives, such as family pressures and reference groups, economic reasonings or advertising/media and celebrities. This makes that the pleasure gain from buying an object fulfill people’s personal as well as social wishes, which consequently, leads them to buy products not only for their purpose but also for what they mean and how they can positively influence their life (Fournier, 1998; Levy, 1959). According with Fournier (1998) the objects designed carry a symbolic meaning and are recognized as psychological products, when going shopping consumers evaluate their symbolism to decide whether or not it fits the goal they had in mind. For example, if consumers desire to purchase an exciting and provocative product, they should look for objects in shades of red, but instead if the intention is to buy “respectable” or “mainly” products they should search for objects with darker colors or in shades of browns and yellows respectively.

The more a product and the symbology behind it reflects, adds value, reinforces or is congruent with a certain aspect of the consumer’ self-concept or possible/desired self, more the object will be used and enjoyed (Levy, 1959). The work of Merrilees and Kristiansen (2010) emphasized how people build their self through the use of brands in different ways. Accordingly, consumers can form three different types of relationship with brands: a symbolic relationship, an iconic type of interrelationship or an indexical one. In the first one customers use a certain object due to its association with a specific symbology, more specifically the participant of this study explained that Ford was an affordable family car and was a symbol of his family orientation while the BMW, driven during business hours and recognized as a luxurious and prestigious brand, made customers feel wealthy and successful and they were seen by others as a confident and respectable businessmen. In this type of relationship, the experience of a brand gives meaning to the brand itself. An iconic interrelationship means that the symbol resembles an object to the consumers, that is, people

are fan of Sporting and support the team because it is perceived as an icon to look up as well as to feel proud about. What differentiates an iconic from an indexical relationship is that the last one is based on a factual relationship, on which a consumer is loyal to a brand because he/she is able to recall memories from the past associated with that brand. As studied by Bettman and Escalas (2003; 2005) consumers are not only more likely to form associations with brands that share similar attributes with/of their self-identity, but also with brands that matches the image and associations of the groups they belong to. Conversely, brand associations that are not in line with the mental representations of the group to which the consumer belongs to tend to be avoided.

Consumer behavior literature also highlights that consumers commonly attribute to brands personality characteristics and they are more likely to use brand personalities that are in line with their own (Aaker, 1997). Aaker (1997) defined brand personality as “the set of human characteristics associated with a brand” and advertisers might be the responsible for this phenomenon. Using animism techniques advertisers leads people to transfer human characteristics to brands, which is often called as personification. For example, Coca-Cola is mentioned by consumers as being “cool”, “fresh” and “real”; Pepsi is described as being “young”, “exciting” and “hip”; personality features like “contemporary” and “cool” are addressed to describe the brand Absolut Vodka; Dr. Pepper is recalled as being “unique” and “fun” (Aaker, 1997). Aaker’s research (1997) showed that consumers perceived brands as having five different personality dimensions, namely Sincerity (subdimensions/categories: honest and cheerful), Excitement (subdimensions/categories: imaginative and up-to-date), Competence (subdimensions/categories: reliable and intelligent), Sophistication (charming and upper class) and Ruggedness (subdimensions/categories: tough and outdoorsy). Moreover, the author proposes that the above brand personality dimensions described might have different influences on consumer preference. Indeed, while Sincerity, Excitement and Competence seem to be related with an innate part of human personality, Sophistication and Ruggedness possibly tap a personality dimension that the human being desires to have/obtain. For example, brands associated with Sophistication (e.g. Mercedes, Monet) often focus on aspirational associations such as upper class, glamorous and sexy while Ruggedness brands (e.g. Marlboro, Levi’s) tend to be associated with American ideals of Western, strength and masculinity.

By describing the evolution of brands and their relationship with customers throughout these pages, it is possible to understand that currently brand identity frameworks include consumers' inputs as well as the vision that managers have to their brands to establish more trustworthy and effective customer-brand relationships (Silveira et al., 2013). A bidirectional relationship between brands and consumers is proposed, since brands help customers to develop their self-identities and consumers use brands to build their self-concept, which will allow the creation of a bonding between the two parts. Furthermore, consumer culture theory states that the participation of the consumer on the development of the brand identity will promote a culture of (value) co-creation, in which consumers will become both brand identity seekers and makers (Arnould & Thompson, 2005).

Since the development of World Wide Web 2.0 and with the growing tendency of marketers to spread their businesses in the online environment taking into account consumers' buying preferences/opinions, social media enables brands to engage with consumers faster and in ways that were not possible before. Social media, more precisely social networking sites, allows not only individuals to foster their relationships with their family and friends but it is also a space where buyers can obtain information about their dearest brands as well as their available products or/and the latest news (Paquette, 2013). For example, virtual brand communities are online spaces, whose members share a common interest in a particular brand/product, which allow consumers to discuss between them their personal experiences associated with that specific brand/product and, consequently, influence others' purchase decisions. It is important to highlight that consumer opinions can be good or bad depending on their experience, which can turn out to be either a positive or negative influence for the reputation and survival of brands as well as for the degree of loyalty to the brand (Casaló, Favián & Guinalú, 2008).

One of the social networking websites that has been pointed out as a valuable marketing tool to gather market trends as well as to understand consumer tastes or/and likes is Facebook. Facebook, established in 2004, is the most visited and used social networking platform containing a high number of monthly active users and brand pages (Ertugan, 2017; Kallas, 2020; Smith, 2020). This social networking website presents interesting benefits for both customers and brands. Through Facebook, consumers can create their own profile and obtain insights about other's preferences or lifestyles, look for job opportunities as well as share information about their own products and sell them at lower prices or sponsor several

brands, including their products and services. Regarding brands, it can also be a useful communication tool to proliferate/spread new business opportunities and a way to promote products or services.

Facebook presents several interactive functionalities and tools from which brands can take advantage and use them to attract new customers into their business (Roshnee Ramsaran-Fowdar & Fowdar, 2013). For instance, Facebook profile enables brands to develop a clear vision and mission through accurate statements while elements of Facebook groups such as, the name, group subject matter and the image must be strategically analyzed to be aligned with marketing goals. Business/Fan pages also allow brands to share information about upcoming events, blogs, articles, podcasts, videos and/or links. In addition, social ads can be advertised on this social website according with user's characteristics (e.g. age, location and/or education level) and Facebook messages can be personalized (Roshnee Ramsaran-Fowdar & Fowdar, 2013).

On Facebook the information shared on brand's pages is in the form of posts, which can refer to products and/or campaigns as well as be presented in the form of photographs and/or text. Consumers involvement with brands in the online environment, regardless of whether it is Facebook, Instagram or Twitter, is usually demonstrated through the actions of liking, sharing and/or commenting on the content displayed by them. Although exists brands like Coca-Cola who are very successful online and have millions of fans, research suggests that one of the major difficulties to online community success is related with consumer engagement (Ren, Harper, Drenner, Terveen, Kiesler, Riedl & Kraut, 2012; Luarn, Lin & Chiu, 2015).

Contrary to physical environments in stores where people can see what others are doing, online contexts do not allow that possibility meaning that engaging with customers is extremely demanding. Several are the authors that have been trying to understand what type of content drives and persuades consumer engagement on Facebook brand pages (Cvijikj & Michahelles, 2013; Fu, Wu & Cho, 2017; Luarn, Lin & Chiu, 2015; Parsons, 2013; Yuki, 2015). Although it is a theme studied in recent years, few are the studies that provide insights into the best linguistic approach to reach consumers.

Language is essential for human communication since allow us to understand others' intentions, to detect human linguistic patterns, to understand which linguistic as well as motivational mechanisms are underlying some important social phenomena (e.g.,

stereotypes) and/or to analyze which type/aspects of language contributes to a higher level of member attachment in online communities (Semin & Fiedler, 1991). The study of language allows the comprehension of a variety of phenomena since people create and exchange meaning through language. One particular theoretical framework that has been extensively used to study the relationship between language and cognition, more specifically how people use language to describe interpersonal as well as behavioral events is the Linguistic Category Model (LCM) proposed by Semin and Fiedler (1988; 1991; 2008).

The Linguistic Category Model (LCM) developed by Semin and Fiedler (1988; 1991) highlights one essential aspect of language – language abstraction. According with this linguistic model, the same situation can be described in more concrete or abstract terms (Semin and Fiedler, 1991). In particular, the LCM makes the distinction between verbs and predicates which represents different levels of language abstraction. At the most concrete pole of the classification are Descriptive Action Verbs – DAV (e.g. Kiss), via Interpretive Action Verbs – IAV (e.g. Help), State Action Verbs – SAV (e.g. Surprise), State Verbs – SV (e.g. Like) and the most abstract dimension consists of Adjectives – ADJ (e.g. Honest) (Semin and Fiedler, 1991). Descriptive Action Verbs refer to observable and concrete descriptions of a given situation, without the possibility of an interpretative analysis (e.g. “Martha kissed Hugo”) whereas Interpretive Action Verbs refer to a more general class of actions and the context where the action takes place is not necessary for sentence comprehension (e.g. “Marta helped Hugo”). Similar to Interpretive Action Verbs, State Action Verbs do not refer to concrete actions or behaviors, however this specific linguistic category conveys the emotional state evoked in the object of the sentence as a consequence of that action (e.g. “Marta surprised Hugo”) (Semin and Fiedler, 1991). State Verbs mention mental or emotional states of the subject of the sentence, in other words, SV refer to durable unobservable states of the social object and not to a specific event (e.g. “Marta likes Hugo”). Adjectives refer only to the actor of the sentence, which generally corresponds to the actor’s trait levels (e.g. “Marta is honest”) (Semin and Fiedler, 1991).

Through the description of the different levels of abstraction proposed by the Linguistic Category Model, it is possible to perceive that a social event can be described according to a greater or lesser level of abstraction depending on the type of language used by people. Concrete wording, such as DAV or IAV, describes the behavior of the subject in a specific situation and the statement is highly informative regarding what has happened in

that particular situation, since it is a statement very easy to verify (Semin and Fiedler, 1991; Schellekens, 2010). On contrary, abstract wording is more informative about the actor's personality since it generalize the behavior to the trait level of the subject. In other words, statements described in more abstract words – ADJ – suggest that the individual will have a greater tendency to repeat the behavior or action performed in the future because we are assuming that psychological traits have a higher perceived stability and durability (Semin and Fiedler, 1991). When people choose to use abstract language to describe an experience, they are emphasizing that the reason for that individual's behavior is related to a behavioral tendency or behavioral pattern of that individual. In other words, people are assuming that this behavior is due to factors inside the actor. Instead, when people choose to use concrete language to describe an experience, they are emphasizing that the behavior observed is related to factors external to the subject who performed the action. As stated by Semin & Fiedler (1991) abstract description are more informative about the subject while concrete description are more informative about the situational conditions.

The Linguistic Category Model has been applied in several domains in order to explain a variety of psychological phenomena, from the individual level to the group level. More precisely, the model has been widely used in investigations to study causal attribution phenomena (Brown & Fish, 1983; Fiedler & Semin, 1988); explore intergroup relations and dynamics (Maass, 1999) and analyze different cognitive processes, such as context sensitivity or/and constructive memory effects (Fiedler & Semin, 1988). Additionally, studies have been conducted to understand the effects of language abstraction in the mass media (Geschke et al., 2010) as well as in the marketing field (Mackenzie, 1986; Kim & Meyers-Levy, 2008). As illustrated by Keller and Block (1997) the vividness of information seems to be related with persuasion. According with the authors, participants rated vivid (concrete) information as more easy to image/picture when compared to the ones who only had access to nonvivid (abstract) information.

The application of the Linguistic Category Model to the social media environment has been quite limited, and it is only recently that several authors have started to use this model to analyze the effects of language abstraction in electronic word of mouth. Due to the growing importance of social media platforms for the promotion of online brands, it is essential to understand not only how language is being used in the social environment, but also what type of language is being used in order to effectively manage the company's social

media marketing communication strategy. For instance, Schellekens, Verlegh & Smidts (2010) analyzed the influence of the use of a more abstract or concrete language by consumers in electronic word of mouth and its effects on receivers. The results showed that product experiences were described in more abstract or concrete terms depending on consumers' a-priori attitude regarding the product in the experience. In other words, for positive product experiences consumers used more abstract language if they hold a favorable attitude toward the brand however, if consumers hold a negative attitude toward the brand the product experience would be described in more concrete terms (Schellekens, Verlegh & Smidts, 2010). Negative product experiences were described more abstractly by consumers with an unfavorable (vs. favorable) attitude toward the brand. The results presented highlight that consumers use more concrete or abstract language to describe product experiences depending on their a priori expectations about the product (Schellekens, Verlegh & Smidts, 2010). For product experiences that are compatible with consumer's a priori product attitude, they are more likely to attribute the cause of the experience to the product or the brand meaning that it is more likely that the brand will behave in the same way in future occasions. Conversely, for product experiences that are incongruent with the consumer's a priori product attitude, people are more likely to attribute the cause of the experience to the situation or the user, in order to justify the event as an isolated act of the product/brand (Schellekens, Verlegh & Smidts, 2010). In addition, Schellekens, Verlegh & Smidts (2010) suggest that language abstraction can be used strategically to adapt communication to a target audience. Based on the same theoretical rationale described above, people use more abstract terms to describe an experience that is compatible (rather than incompatible) with the receiver's product attitude.

The findings of the authors Schellekens, Verlegh & Smidts (2010) also contribute to a better understanding of the effects of language abstraction on receivers purchase intention. A positive recommendation described more abstractly led to higher buying intentions when compared to the same message described more concretely. A negative recommendation described more concretely led to higher buying intentions when compared to the same message described in more abstract terms.

Other important contributions of this study are related to the way consumers use language abstraction according to the different communication goals, as well as how receivers mindset (process vs. outcome) moderates the persuasiveness of language

abstraction. For example, concrete product messages are more persuasive when a receiver is considering using a certain product, however abstract product messages have shown to have a stronger influence on purchase intention when a receiver is thinking about the benefits and advantages of use a certain product (Schellekens, Verlegh & Smidts, 2010).

In line with the previous study, Alessandrini (2013) explored the effects of language persuasion and purchase intentions in the social media environment, more precisely on Facebook, taking into account the product category and brand attachment, which are mentioned as two factors that influence consumer behavior. Overall, the results showed that a more concrete type of language results in a greater perceived truth of the message – *believability* – due to the familiarity properties and vivid(ness) effects characteristic of concrete language when compared to abstract language. More specifically, the findings of this study suggest that online messages framed more concretely are considered more persuasive when referring to homogeneous consumer preferences. Contrariwise, online messages framed more abstractly are considered more persuasive when considering product categories for which consumers show heterogeneous preferences (Alessandrini, 2013). Consumer homogeneity preferences refer to a market segment or a class of products where the characteristics or attributes of the brands are quite similar as well as the standard among them. In this type of market, consumer preferences are expressed equally (Alessandrini, 2013). Conversely, in a heterogeneous market, consumer preferences are expressed in different ways. A concrete language proved to be more persuasive for homogeneous consumer preferences, as the concrete terms are more informative about the product itself and its functionalities, which provides consumers with detailed information about the type of service being shared, while an abstract language had a greater impact on purchase intention of consumers with heterogeneous product preferences, since abstract words convey emotions more easily and reveal information related to the subject of the sentence and states/sensations associated with the product experience (Alessandrini, 2013).

Alessandrini (2013) also found that the consumer's degree of brand attachment strongly influences their perception of the message transmitted online. Online consumers who have a lower (vs. higher) level of brand attachment are more likely to be persuaded by a more concrete language rather than a more abstract one. In this specific case, consumers may not know the brand and its products, may have ambiguous feelings about the brand, may not agree with some of its corporate policies or dislike/do not trust the brand

(Alessandrini, 2013). For these reasons, a more concrete language presents more benefits, as it will highlight the reason(s) why that specific brand is better than its direct competitors. The results of the study differ for online consumers whose level of attachment to the brand was high. This type of online consumers are already familiar with the product or service presented and it is likely that they have already tried the brand or service for several times. Due to consumers' strong commitment to the brand, as well as the high degree of knowledge about it, the type of language used online does not seem to affect recipients perception of the message.

The studies mentioned above provide important and useful insights regarding how the Linguistic Category Model (LCM) can be extended to the social media environment. As stated by Semin & Fiedler (1991) and Schellekens, Verlegh & Smidts (2010) research related with language abstraction was mainly concerned with providing explanations for a variety of social psychological phenomena in the interpersonal domain, such as causal attribution (Brown & Fish, 1983) and/or in the personality domain (Allport & Odbert, 1936). Thus, the purpose of this dissertation is to continue developing this topic and understand how consumer engagement is affected by brand's language abstraction or concreteness on Facebook. Additionally, the present investigation will consider brands of different nature in order to understand the impact of language abstraction on consumer engagement.

1.2. Aim and Scope

This dissertation aims to study the relation between language abstraction and consumer engagement on Facebook. I propose to investigate the role of psycholinguistic cues companies/brands use in online social networked media through the linguistic category model (Fiedler, Semin, & Bolten 1989). Based on this model, I will categorize the language that several companies/brand use online to dialogue with their public through the analysis of the number of verbs or adjectives used (which would correspond to a more concrete vs. abstract type of language) and correlate it with the level of engagement consumers show with a certain product or campaign. Consumer engagement will be analyzed through specific metrics which, for this dissertation, will be the number of likes of the post, the number of comments of the post and the number of likes of the brand page. This way we can understand if the index of abstraction can lead to a higher or low level of consumer engagement, namely

the frequency that brand fans tend to visit their favorite brand page or the level of attachment to the brand.

Using evidence from theoretical background on Linguistic Category Model (Semin & Fiedler, 1991) the following hypotheses were developed:

Hypothesis 1: The higher the index of abstraction of comments, higher is online consumers engagement

Hypothesis 2: The index of abstraction is a positive predictor of the number of likes

1.3. Research Methods

The data were collected through Facebook, more precisely the data were obtained through the Facebook page of the respective brands. The first step to build the database was to select the brands that were going to be analyzed. Initially, I focused only on startups, given that these are still in their earlier stages of development. However, a large number of startups did not have a Facebook page, and some of them did not have any linguist content to be analyzed. For these reasons, I included not only startups but also well-known brands. To have sufficient observations to analyse, I collected data from 50 different brands. For each brand, I collected and categorized 10 posts/linguistic interactions. In total I collected 467 observations.

Startups were selected based on the “Startup Voucher 2018: Portugal”, which is one of the measures of StartUP Portugal - National Strategy for Entrepreneurship aiming to support the development of business projects at an early stage. Established brands on the market were also selected based on the “Brandz Top 100 Most Valuable Global Brands 2019”. Subsequently, 150 companies were selected and placed on an excel sheet. The next step was to randomize the 50 companies that would constitute the database. Once the database was re-ordered, I used the first 50 companies (either a Startup or a known-brand). The total number of startups was 27 and the total number of global brands was 23. Each post was analyzed according to the Linguistic Category Model (LCM) developed by Semin & Fiedler (1991).

1.4. Relevance

Digital is the new era and with the increasing participation of consumers in the processes of brand transformation, a new and more interactive relationship began to be developed between brands and consumers. With a greater number of people using social media, it is essential for brands to understand not only what type of content is most appealing and persuasive to consumers but also, how language can affect consumers engagement with brands. As pointed out by Luarn, Lin and Chiu (2015) there are still organizations that believe that consumers can become more virtually involved with brands. Additionally, few are the studies focusing on the impact of language abstraction on consumer engagement, especially on social networking sites.

In general terms, the results of this dissertation will offer the possibility to explore and understand more deeply the relationship between language and consumer engagement. It will also allow marketers to understand what type of content has been developed to increase consumer involvement with brands, as well as what type of language is more useful and efficient for developing a stronger relationship with the desired target audience. Hence, this dissertation can provide valuable insights/information for brands to design better posts and/or advertising messages at reduced costs and with faster results.

1.5. Dissertation Structure

The present dissertation is divided into six different chapters. This first chapter starts with a presentation of the problem background and problem statement which includes the aim of the dissertation. The scope, relevance and the hypotheses are also described.

In the second part of this dissertation, which corresponds to Chapter 2, the literature will be reviewed. Firstly, prior research regarding the importance of language will be described, followed by a detailed explanation of the Linguistic Category Model (LCM) which will be the conceptual framework used for the purpose of this dissertation. Research related with the importance of language in the formation of groups and online communities, with a particular focus on social identity theory is also going to be explored. Finally, literature related to social brand management will be presented, mainly on Facebook.

Chapter 3 concerns the methodology of the study, which contemplates the research objectives of the study and the approaches taken, data collection, measurements and the analyses performed.

Chapter 4 will describe the results of this dissertation according to the hypotheses designed and, in Chapter 5, the results will be discussed in light of a pertinent literature review. Additionally, the limitations and suggestions for future studies to improve the understanding of brand-consumer relationships will be presented.

Chapter 6 will contain a brief conclusion about the present study providing useful insights about how brands can interact with customers in the social media environment based on a linguistic approach.

Chapter 2: Literature Review

In this chapter the most relevant topics to the purpose of this dissertation are going to be presented. The main important literature related with the problem presented on the introduction will be in-depth reviewed and analyzed.

This theoretical section will contain four principal sections, namely the importance of language as a communication tool, the description of the Linguistic Category Model (LCM), the importance of language in the formation of groups and communities and brand awareness on social media with particular focus on Facebook.

2.1. Importance of language

Language, considered by many as one of the major achievements of human species, is an important aspect of human life and plays a crucial role when we intend to communicate with others our thoughts and beliefs about the surrounding environment. Indeed, it is through this communication tool that we represent and attribute meaning to the world we live in.

Over the last years, the field of language evolution has been receiving inputs from a variety of researchers from different disciplines and work areas. For instance, during the last twentieth century researchers from cognitive science, robotics, behavioral genetics, primatology, neuroscience, speech sciences and/or neuropsychology have been largely contributing to a deeper interpretation of language evolution (Bickerton, 2003; Christiansen & Kirby, 2003). The simultaneously study of these different approaches provide a better understanding regarding several important features and characteristics of language, such as the interactions that happen in our brain that enable speech, the structure of language and what it is used for, how we determine to use one type of speech or words over another, how the different communication systems influence language and/or how language is acquired during the first years of life as well as how it develops. Among several authors, Christiansen and Kirby (2003) highlight that in order to fully understand language evolution it is necessary to consider a multidisciplinary approach and take into consideration a diversity of data, since language is influenced by a variety of factors that interact between each other.

Another area of consensus among the linguistic community is that to understand language evolution, it is necessary to first analyze the different components that are part of it, in other words, the different components of the language itself (Christiansen & Kirby, 2003; Pinker, 2003). Words represent one of the components through which we assign

meaning to language and it is, through an organized flow of sound, that they are employed in our daily discourse to express ideas and/or share concepts with others. In this sense, words can be thought of as being at the base of people's mental lexicon, which refers to an individual speaker's word representations, and which encompass the meaning and syntax properties of the word itself (Pinker, 2003). A word can be considered as a random sign that people use to connect a specific signal with the corresponding concept, in other words, symbols and/or words have the capacity to connect sounds or gestures to specific images and principles. During childhood we learned to associate the sound of the different words that we have knowledge to the corresponding meaning, which facilitates the interaction with others since it is not necessary to shape the word to elicit the thought between its form and its content (it is an automatic process). It seems that this ability to associate existing words/symbols to each other is an essential prerequisite/condition for language adaptation.

Grammar, another relevant component of language, allows individuals to join words into phrases and/or sentences. As stated by Wilhelm von Humboldt, inside individual's head exists a finite linguistic algorithm that can generate an unlimited number of potential sentences, meaning that an infinite number of different thoughts can be transmitted (Pinker, 2003). In English's grammar a couple of rules allow speakers to formulate a phrase elucidating a sequence of phrases ("daughter phrases"), on which one or more of those phrases can be similar to the mother/original phrase. In this way, a variety of sentences from any size can be created – e.g. "I wonder whether she knows that I know that she knows that he thinks she is interested in him".

Grammar can convey a wide range of thoughts due to the fact that people's grammatical knowledge is framed/expressed in abstract categories, such as "noun" and "verb" instead of concrete categories such as "cat" and "woman". In this way, it is possible to create a variety of sentences, ranging from the simplest to the most complex, without any restriction related to their content (Pinker, 2003). For example, we can create the following sentence "A dog is biting a man" or the other way around "A man is biting a dog". The abstract properties of grammar as well as the recursive rules mentioned above, allow not only the formulation of a variety of sentences, but also infinite possibilities regarding its content, complexity and/or number. In addition to these two mentioned tricks, grammar covers a variety of rules that can be aggregated across several/multiple subsystems namely syntax, morphology and phonology (Pinker, 2003). Syntax links words in phrases and

sentences through some principles that provide structure to the sentences we create. In this sense, there are several processes that must be taken into account when a sentence is being created, including the order of words, phrase' constituency, the predicate-argument of the structure and binding traces/sentence' movement. For instance, the predicate-argument structure allows the reader to understand the relationship between the several subjects of a sentence, in other words, it allows the reader to understand to what the predicate (normally the verb) is associated with (Pinker, 2003).

Morphology, other important subsystem of grammar, analyzes how words (e.g. prefixes and/or suffixes) are formed and structured to create more complex words or parts of words (Pinker, 2003). Additionally, morphology study parts of speech, intonation and/or ways context can modify a word's pronunciation and meaning. The final system that I am going to mention is phonology, which study how words are related with specific sounds and, consequently, how sounds or signs are organized to convey linguistic meaning (Pinker, 2003).

The study of all the different components of language mentioned above allows a better understanding of how all these subsystems interact with each other to produce the language as we know it today. It is also worth mentioning that grammar interacts with other relevant systems of our mind such as perception, conceptual as well as social knowledge, to provide the necessary tools for speakers to use in their daily speech (Pinker, 2003).

Individuals use language to communicate to one another for a variety of purposes and reasons, including being a communication tool for sharing information about social impressions, judgments, beliefs, perceptions, attribution and/or stereotypes (Holtgraves & Kashima, 2008). In this sense, the study of language and language use can be extremely useful to comprehend a variety of relevant psychological phenomena central to social cognition, not only at the speaker level and the recipient of the message but also at group level. Language and social cognition are interdependent concepts, as many of the social-cognitive processes involve the use of language which, consequently, allows people to create internal as well as collective representations of objects/beliefs. In social cognition language is perceived as being a semiotic tool, that is, a social tool from which its users create meaning but also exchange meaning between each other (Holtgraves & Kashima, 2008; Semin, 2000). In light of this perspective, this semiotic tool or shared social tool enables its users to create a symbolic system shared between them, which presupposes an active participation of

speakers and receivers in the creation of meaningful and understandable language for both. Assuming that individuals have an active participation in the creation and exchange of meaning in a given linguistic system, we are saying that several social cognitive processes are affected by certain linguistic characteristics of speakers and listeners. More precisely, speakers and listeners during social interaction collaborate to create a specific use of language which will, consequently, condition their cognitions and it could be perceived by both as belonging to the totality of the language system (language as an abstract system) (Holtgraves & Kashima, 2008). Usually during a social interaction people initially explore each other's perspectives and opinions regarding a certain matter and interpret expressions/phrases/words according with these viewpoints. As the conversation between the subject and the listener continues, feedback tips are manifested, such as body language cues or/and short words/sentences, as a signal of mutual understanding. When both interlocutors admit that they have reached a mutual consensus or understanding, it is said that they have established a common belief or have reached a shared reality for the current purpose/subject. At this phase/stage, the speech of each speaker is conceptualized as "we" share the same representation which allow the creation of a collective representation rather than an internal one. Through the mutual influence of the type of language used by both parties throughout this process, it is inevitable that modifications/changes will not occur in speaker's, receiver's and group domains in relation to language use as well as the content of the sentence (Holtgraves & Kashima, 2008).

Several are the effects that have been reported in the literature concerning the influence of language use in speakers. Three main areas that have been explored by a variety of researchers that highlight some of the unintended consequences of language use are decision making (Wilson & Schooler, 1991), emotions (Lyubomirsky, Sousa & Dickerhoof, 2006) and/or storytelling (McGregor & Holmes, 1999). For instance, Lyubomirsky et al. (2006) analyzed how writing, talking and/or thinking about the several significant events that people go through, whether these situations are positive or unpleasant/traumatic, influence their well-being and life satisfaction. The authors found that participants who wrote and talked about their painful memories or negative life situations reported higher levels of satisfaction with life compared to subjects who just thought about those events. These results can be explained in the light of the inherent benefits of writing and speaking, since these two actions generally involve the organization and analysis of a given problem

with the goal to find a solution for it, whereas thinking does not involve an organized structure or a coherent rationalization of the situation and is usually accompanied by mental images, intense emotions as well as memories. In this sense, the expression of emotions through language can be perceived as a therapeutic way to regulate one's own emotions, although it may change the meaning of the emotional experience to the speaker.

While speakers use language to create meaning with others, the recipients of the message struggle to discover speakers' intentions or purposes, that is, the intentional meaning behind the conversation. By doing this, many undeliberated effects occur and recipients must analyze the information beyond what is explicitly being said. In this sense, a variety of different meanings can be perceived by listeners and some unintended effects can occur at different levels (Holtgraves & Kashima, 2008). Several are the researchers that have conducted a variety of studies at the semantic (e.g. Brown & Fish, 1983), syntax (Semin & Fiedler, 1988, 1991) and pragmatics (Grice, 1975) levels to understand how language use influence listeners. For instance, Brown and Fish (1983) studied the causal attribution implicit in interpersonal verbs and their results showed that different verb categories in sentences evoke two distinctive modes of thought that consequently affect language use, namely the Agent-Patient Schema and the Stimulus- Experiencer Schema. According with the authors, interpretive action verbs (e.g. "help", "compete", "cheat", "answer", "find") elicit an "agent-patient schema" where greater causal weight is attributed to the agent/subject of the phrase whereas mental/state verbs (e.g. "love", "charm", "attract", "see", "admire") elicit an "stimulus-experiencer schema" where greater causal weight is attributed to the stimulus/object of the phrase. In the following statement "Ted cheats Paul" we are more likely to think that "Ted is the kind of person who cheats people" instead of "Paul is the kind of person that people cheat", which means that we perceive "Ted" (the agent/sentence subject) as the causal origin of the behavior. In other words, the act of helping performed by the agent - "Ted" – seems to arise out of a tendency to be helpful to other people (patients) in general rather than a predisposition to help only certain people. On contrary, we are more likely to assign the causal origin of the behavior to "Paul" (the stimulus/object sentence) when comparing to "Ted" (the experiencer) if we consider the following sentence "Ted likes Paul". In this case, we are more likely to think that the stimulus of the sentence – Paul – has certain inherent characteristics and/or dispositional traits that Ted likes which, consequently,

leads to Ted liking Paul and not the opposite (for further information see Brown & Fish, 1983; Fiedler & Semin, 1988).

Besides the effects of language use mentioned above, the collective representations constructed during social interaction between speakers and listeners may influence how people collectively speak about a given subject. One of the areas where the consequences of this effect is most visible is in intergroup stereotypes. The linguistic features/devices chosen to represent or talk about ingroup and outgroup behavior can play a crucial role in the preservation as well as disparity of intergroup stereotypes (Mass, 1999). This well-known social cognitive phenomena – Linguistic Intergroup Bias (LIB) – refers to the propensity to use different degrees of abstraction when people are describing positive or negative behaviors of the ingroup versus the outgroup (Mass, 1999). I will return to this topic in more detail when talking about the importance of language in the formation of groups and communities.

2.2. The Linguistic Category Model (LCM)

Different linguistic categories, such as interpersonal verbs and adjectives, present different cognitive implications when they are used to describe persons and their behaviors. Research in social psychology regarding how language mediates the relationship between social cognition and the social reality in our everyday life have been showing that sentences with interpersonal verbs and sentences with trait terms (adjectives) are used to study different psycholinguistic phenomenon (e.g. Brown & Fish, 1983; Semin & Fiedler, 1991). For example, adjectives are used in social psychology to explain diverse psychological and cognitive processes such as impression formation, information processing, storage and retrieval as well as on the organization of these linguistic indices as trait terms (Semin & Fiedler, 1991; Wyer & Srull, 1980; Allport & Odbert, 1936).

Besides the adjectives that we normally use to create impressions about others, it is also very common to use interpersonal verbs in our speech with the goal to describe/express events or situations, emotional states, relationships between people as well as properties of persons. Indeed, several are the authors that have been studying the semantic meaning underlying interpersonal verbs, that is, the contextual information mediated by these specific verbs (Brown & Fish, 1983; Fiedler & Semin, 1988; Kit-Fong Au, 1986). Despite the extensively amount of literature that exists in social psychology to study the causal attribution of interpersonal verbs as well as their underlying meanings, the analysis of the causes as well as consequences of such verbs implicit in language remains incomplete (Fiedler & Semin, 1988; Semin & Fiedler, 1991). As claimed by the authors Semin and Fiedler (1991), the distinction made by Brown and Fish (1983) between the two types of state verbs (stimulus-experiencer verbs and experiencer-stimulus verbs) is not supported by a clear semantic criterion. Furthermore, the high level of ambiguity involved in using several interpersonal verbs, such as "respect" or "reward", which makes them objectively difficult to verify and the fact that there is a possibility that the behavior observed in the same event can be attributed to the actor or the subject, makes the linguistic devices used to express relationships between individuals not sufficient. In order to overcome these informational limitations found in interpersonal terms, a theoretical framework called the linguistic category model (LCM) was proposed by Semin and Fiedler (1988, 1991).

The linguistic category model provides a solid foundation to study the language used by people to describe social events. This model distinguishes between two different

properties of language: verbs presenting four different categories and adjectives. The first ones are commonly used to describe actions as well as psychological states, while the second ones are employed to describe characteristics of persons, such as traits or dispositions (Semin & Fiedler, 1991).

According to the LCM, there are four categories of verbs and one of adjectives, ranging in a continuum of concreteness to abstractedness. The first type of verbs are **descriptive action verbs** (DAV) referring to a specific behavioral event and its comprehension depends highly on the context where the action happened (for example if we consider that “John pushed David” we need to understand why John behaved in that way and it could be either “to save him from an oncoming car” or “under an oncoming car”). Some examples of these verbs are “call”, “kick” and “kiss”. According with the classification criteria, these verbs refer to actions that have a clear beginning as well as end and corresponds to objective descriptions of observable events (Semin & Fiedler, 1991).

The second ones are **interpretative action verbs** (IAV) which refer to a general class of observable behaviors and not to a specific one, since they act as a frame for a variety of actions. For example, the verb “help” can describe a variety of behaviors associated to an action. For instance, one can help a person through a variety of actions and with several purposes, such as by giving instructions to find a street, by proving support for the preparation of an exam or/and by giving money to get out financial constraints. Similar to the previous verb category (DAV), these type of verbs are related with actions that present a clear beginning as well as end but, on contrary, the context involved around the sentence is not essential for its comprehension. In other words, the interpretation of the sentence goes beyond its description and the perceptual features of an action are not conserved. One other feature that distinguishes this verb category with the previous one is related with the fact that these behaviors present/have a positive and negative semantic value. Some examples of verbs that belong to this category are “cheat”, “imitate” and/or “help” (Semin & Fiedler, 1991; Schellekens, 2010).

The third verb category that is proposed by the LCM are the **state verbs** (SV), which correspond to verbs that describe stable actions, such as feelings or mental/emotional states. Contrary to DAV and IAV, state verbs do not correspond to a concrete action/behavior neither to the situation itself but, instead, they refer to states that are elicited by the social object of the sentence. For example, if we have the following sentence “Paul likes Mary” we

can understand that the verb “like” is referring to an enduring mental (unobservable) state of Paul and not to a specific action – e.g. “Paul kick Mary”. Furthermore, the understanding of the sentence is not depending on the context and its interpretation goes beyond the description itself. One particular characteristic that differentiates the SV from DAV or IAV is that these do not have a clear definition of a beginning and an end as well as do not take progressive forms (Semin & Fiedler, 1991; Schellekens, 2010). Verbs like “admire”, “hate”, “love”, “ear”, “collaborate” and “to be” are some examples.

This model also points out for other verb category called the **state action verbs** (SAV), which are similar to action verbs but with one particularity. According with the classification criteria a crucial feature of these type of verbs is that the emotion is induced by an action performed by the subject whereas, SV do not have any action reference at all because the emotion or psychological state already exists (Semin & Fiedler, 1991; Schellekens, 2010). Some of the verbs that belong to this category are “surprise”, “amaze”, “anger” or “excite” (for further information see Semin & Fiedler, 1991).

The last category that is identified by the linguistic category model are the **adjectives** (ADJ), which refer to abstract traits or dispositions of the target/person and are understood regardless of the context (Semin & Fiedler, 1991). According to the authors, adjectives can be differentiated into two different types: those whose morphology derives from a verbal stem (e.g. talk-talkative) and those who are considered authentic adjectives (e.g. friendly). It is important to mention that for the purpose of my dissertation I only consider the second type of adjectives.

As mentioned previously, the different categories of interpersonal verbs and adjectives above can be perceived in a continuum spectrum ranging from a more abstract type of language to a more concrete one (Semin & Fiedler, 1988). The most concrete terms are descriptive action verbs (DAV) since they usually refer to an objective description of a certain event. In this example – “Paul kiss Johanna” – the language employed to describe this specific situation is very concrete and is specifically describing how the subject behaved. This description is providing an accurate as well as observational representation of what exactly happened in that specific situation/context. On contrary, the same event can be described with a higher level of abstraction – “Paul is affectionate” by another person that is also observing this situation. This second description of the same event is more informative about the subject’s personality and generalizes Paul’s behavior to other situations and

towards other people. As it can be understood, the more abstract type of language are adjectives which refer to people's psychological traits and which are considered stable traits of people's personality.

The more abstract the language employed to describe an event, less verifiable is the statement since is focusing more on psychological characteristics about the subject who is performing the behavior and less on the situational circumstances. The more amount of information about the actor of that action is available, it gets more difficult to verify the validity of the statement because psychological traits cannot be seen and do not refer to specific situations. Furthermore, it gets more difficult to imagine or propose situations where the protagonist behaved differently since adjectives often demonstrate enduring people's qualities/traits (Semin & Fiedler, 1988). Simultaneously, interpersonal behaviors abstractly reported generate higher levels of disagreement and are often more controversy when compared to interpersonal behaviors reported more concretely. For example, the following statement "Paul kick Johanna" is very easy to verify and do not lead to any type of misunderstanding since is referring to a specific situation and exactly describing what happened there. On contrary, the following statement "Paul is aggressive" is more informative about Paul's personality which is more open for dispute since it is not mentioning an observable event and this particular opinion may be different according with different people, which is highly subjective.

The differences produced by a more concrete or abstract language are also well documented in other fields unrelated to the interpersonal domain. In this sense, the concreteness-abstractness dimension has been widely studied in a variety of areas, such as Linguistics, Neuropsychology and Marketing (Paivio, 1971; Borgida & Nisbett, 1977; Keller & Block, 1997; Lee & Ariely, 2006; Loomis, 2010; Hansen & Wanke, 2010; Lee, Keller & Sternthal, 2009; Schellekens, 2010). For example, Hansen and Wanke (2010) analyzed how linguistic properties, more precisely how the concreteness of language, affect people's judgments of truth and the results showed that concrete statements were judged more likely to be true compared to abstract statements. In line with this finding, Loomis (2010) argues that concrete words are read more quickly and are easier to comprehend compared to abstract words.

2.3. Importance of language in the formation of groups and communities

Social groups form an important part of human social life and in many situations they can be seen as a source of protection or/and self-confidence for individuals. Language, used as a way of communication between the members of the group itself or to inform others about group's social identity as well as boundaries, can be an important as well as influential communication tool to discriminate groups. Additionally, understanding the type of language used by groups can help us to answer questions about how groups are psychologically formed. In fact, it is very common for groups to create their own linguistic speech and adopt unique speech styles with the purpose to distinguish between each other and to develop group's social identity (Giles & Giles, 2012).

Turner and Onorato (1999) postulate that one's personal identity is developed in part through the relationships developed within the group of individuals s/he belongs to. In other words, our self-concept is influenced by the social group membership we belong to. In this sense, when people act as group members they act collectively and not individually meaning that they internalize group norms, rules and values. Although group dynamics are affected by individual's self-concept - which refers to individual's personality traits, personal experiences and appraisals of others - and by group internal processes, group relationships also modify people's behavior which means that we should not estimate equivalent conclusions from personality factors, individual processes or interpersonal relationships to intergroup relationships since individual and group attitudes are not psychologically comparable (Turner & Onorato, 1999). In this sense, Turner (1996) pointed out for the fact that in order to understand intergroup relations it is fundamental to center the attention on the psychological processes that happen inside the group as well as on the perception that group members share of their intergroup relationships.

With the purpose to understand how the self-concept is connected to social identity and how groups are psychologically formed, several authors started to study group processes, intergroup relationships as well as intergroup conflicts (Sherif & Sherif, 1953; Turner & Hogg, 1985; Turner & Tajfel, 1986; Turner & Onorato, 1999). One particular social psychological theory that become very promising to explain intergroup interactions was the Social Identity Theory developed by Tajfel and Turner (Tajfel & Turner, 1979; Tajfel & Turner, 1986). Based on "minimal group studies", social identity theory found that the randomly social categorization and, consequently, aggrupation of people into different

groups lead to intergroup discrimination. One of the most interesting findings was related with the fact that even in the absence of interpersonal attraction, face-to-face social interaction, previous hostility or conflict between the groups and under conditions of anonymity, subjects discriminate in favor of the people who belong to the same group (ingroup – members of the same social category) over the outgroup. Additionally, the participants also showed mutual connection through a higher level of positive attitudes towards the ingroup when compared to the outgroup (Turner & Hogg, 1985; Turner & Tajfel, 1986; Turner & Onorato, 1999).

The results mentioned above can be interpreted according with the assumption of social identity. According with Tajfel and Turner (1986) it is possible to distinguish between two extremes of social behavior: interpersonal behavior and intergroup behavior. The former refers to the interaction developed between, at least two individuals, that is only affected by their individual characteristics (e.g. psychological traits) while the latter includes interactions established between two or more individuals and/or groups of people that are determined by individual's belongingness/attachment in several social categories (e.g. group affiliations and/or loyalties). Examples of interpersonal behavior are the relationships formed between a couple or old friends and examples representative of the intergroup pole are the behavior of dancers from opposing teams or the behavior performed at a negotiation table from different parties (Tajfel & Turner, 1986). The creation and development of bonds between a collection of individuals who belong to the same social category and have a common interest leads them to define themselves in terms of their group membership, accepting this way the value and emotional components shared by the group (Turner & Onorato, 1999). In light of this perspective, people's perception and acceptance as members of the same social class are essential conditions for the formation of social identity which, consequently, provides the group with a cognitive structure.

As mentioned by Turner and Onorato (1999) when people are assigned to different groups based on random criteria group formation occurs immediately based on a process of self-categorization, thus leading to the construction of group's social identity. The identification with one's own group allows self-identity to be preserved as well as strengthened. Moreover, the categorization of different groups and consequent distinct characteristics between them accentuates intergroup divergences as well as differences. Given that groups strive to obtain and maintain a positive social identity, comparisons are

made between ingroups and outgroups with the purpose to achieve favorable evaluations for the ingroup as well as to ensure a meaningful distinction between them (Tajfel & Turner, 1986; Turner & Onorato, 1999; Islam, 2014). This motivation to seek a positive collective self-esteem and ingroup supremacy is related with an intrinsically competitive intergroup favoritism/discrimination. Some of the strategies adopted by groups to pursue a positive social identity are the status position (high vs. low), the strength of ingroup identification, group's collective beliefs as well as shared ideals about the nature of the social system and/or intergroup differences of power and wealth.

Intergroup comparison or discrimination can lead to several biases in social perception, since groups compare themselves to find similarities as well as differences. For instance, the perpetuation of stereotyping can be motivated due to the necessity to protect or magnify one's social identity (Tajfel & Turner, 1986; Maass, 1999). Other important aspect that can contribute to the development of this social bias is the way language is used to describe in-group and out-group behaviors (Maass, 1999). Based on the linguistic properties, more precisely interpersonal verbs and adjectives, of the Linguistic Category Model (LCM), Maass (1999) developed the Linguistic Intergroup Bias Model (LIB). The Linguistic Intergroup Bias Model (LIB) suggests that a positive behavior performed by an in-group fellow will be described in more abstract words in comparison to the same behavior performed by an out-group member, which will be framed more concretely. On contrary, a negative action performed by an in-group fellow will be described in more concrete words in comparison to the same behavior performed by an out-group member, which will be framed more abstractly (Maass, 1999). In other words, to describe positive in-group behavior and negative out-group actions more abstract terms are employed while to describe negative in-group behavior and positive out-group actions more concrete terms are employed.

As mentioned in the previous chapter, the concrete terms refer to specific behavioral events or situations while abstract terms refer to psychological states or dispositions at the trait-level personality, which are assumed to be stable across situations (Semin & Fiedler, 1991; Maass, 1999). Abstract terms employed to describe undesirable out-group behaviors and desirable in-group behaviors highlights the fact that the behavior performed corresponds to a behavioral pattern of the group, confirming the prior expectation (Maass, 1999). However, in order to explain unexpected positive actions performed by the out-group and

unexpected negative actions performed by the in-group people have a greater tendency to use more concrete terms since they classify the behavior as an isolated act (Maass, 1999).

2.4. Brand awareness in social media, mainly Facebook

The emergency of web-based consumer opinion platforms/online public forums enabled customers to engage in electronic word-of-mouth (eWOM) communications with other consumers to gather a variety of information regarding product data (Henning-Thurau, Gwinner, Walsh & Gremler, 2004). In this sense these type of websites allows the socialization in virtual communities, between known people as well as strangers, enabling the access to online product information reviews as well as consumers to share product information with others in order to make better and more informed purchase decisions (Lueg, Ponder, Beatty & Capella, 2006).

Indeed, several are the authors that are providing some insights regarding the impact of social media peer communication on consumer making decisions and marketing strategies. For example, Wang, Yu and Wei (2012) demonstrated how consumer socialization through peer communications using social media tools can positively impact consumer product attitudes as well as consumer purchase intentions. More specifically, the authors began by discovering who were the most frequent users of social media websites among the Chinese consumers through one of the largest Internet portal in China (ww.sina.com). With the permission from the Website the authors built a link which directed the participants to an instructions page, in which the consumers who had not used any of the listed websites (e.g. Renren.com, QQpengyou and/or 51.com) were not able to continue to the online survey containing questions specific to the consumers' tie strength with peers, consumers' identification with the peer group, peer communication, product attitude, purchase intention, product involvement and need for uniqueness. The results of this study shows that consumption-related peer communication is positively associated with product attitude, product involvement as well as with purchase intentions in two different ways: a normative influence leads consumers to act in conformity with the dominant norms and rules within a specific group in order to meet their expectations to avoid punishment and achieve reward- based on social norms- while an informational influence drives us to seek information about a certain product/service from peers- based on perceived referent expertise. Both of these two sources of peer pressure will influence how the customer is going to evaluate the several products available in the market as well as will determine the level of product involvement, including for newcomers who do not have a formed opinion yet (Lord, Lee & Choong, 2001; Wang, Yu & Wei, 2012). Additionally, this study adds that

the strength of the bonds established between peers and the identification with the peer group have a positive impact on peer communication. Finally, the authors highlighted how the role of consumers' need for uniqueness- person's self-esteem-driven need to be different from others- moderates the impact of peer communication on product attitude, especially for low-uniqueness consumers since they seem to be more likely to be affected/influenced by others' judgements/perspectives. In line with these results, Lueg, Ponder, Beatty and Capella (2006) studied how teenagers' propensity to shop as well as purchase products was influenced by two different shopping channels, more precisely the internet and the mall. The authors found that the teenagers' involvement with each channel had a positive influence on communication with peer and family regarding the time spent shopping in the channel and future intentions to shop and purchase through the channel used. Also, it was found that communication with peers on the Internet influenced the level of money spent as well as peers were the most influential agents, when compared with family, on the two channels analyzed in the current study. The studies mentioned above demonstrate how technology has shaped consumers' buying decision as well as how it has modifying the interaction between brands and customers. In the past consumers were easily influenced by marketing campaigns to evaluate a brand or to choose a certain product/service however, and undoubtedly due to the high level of connectivity present in our society, it is becoming notorious that consumers are privileging their friends, peers, family and social media' influencers/followers to get advice regarding a brand over brand' publicity and/or experts' opinion (Kotler, 2017). In fact, when making purchase decisions customers are governed by their own personal/individual preference(s) as well as by a desire for social compliance. According with Kotler (2017) this trend will continue and very soon the majority of personal buying decisions will be mostly social decisions.

Over the past years there are increasingly more companies to include social media on their marketing strategy/plan in order to engage as well as to collaborate with consumers, since the appearance of Internet has dramatically changed the way that customers and marketers communicate. The use of Facebook, for example, for the dissemination of small businesses is becoming increasingly evident. In 2015, 40 million of Facebook' pages corresponded to small business and the majority of the advertisements were performed by small business owners (Snyder, 2015). According to this social networking site, in March there were 1.56 billion daily active users on average and 2.38 billion monthly active users

(Facebook statistics). As proven by Dholakia and Durham (2010) Facebook can be a powerful tool to increase consumers' engagement with the several brands available in the market. These authors conducted an investigation to understand the impact of businesses when they decide to pepper their followers with messages and offers to attract more "fans". To answer this question, the researchers set up Dessert Gallery' (DG- a popular bakery and café chain in Houston) Facebook page and measured its effect on consumer behavior. Firstly, they sent a survey to a large number of customers from DG's mailing list with the goal to collect information regarding store evaluations and shopping behavior. Three months after the launch of the page, a new survey was sent to consumers and responses from DG's Facebook fans, Facebook users who did not become fans and customers not on Facebook were received. It is important to mention that a comparison was made to assess the number of DG's fans between the realization of the first survey and the second one. The results showed that people who had replied to both surveys and had become fans increased their store visits per month and produced more positive word of mouth when compared to nonfans. In addition, DG's fans were more likely to recommend the brand to (their) friends and reported higher levels of emotional attachment to the brand.

Nowadays companies in many industries desire not only to integrate social media platforms and channels into their communication strategies, but also to encourage consumers to have an active role/part in this process. Although social media is a fundamental tool for branding and customer marketing, there are still doubts about the best way to approach consumers on the online environment to promote high levels of consumer engagement as well as how brands should promote themselves in this new conversational environment. In recent years, several researchers have been studying which type of brand content typology increases customer' awareness in the social media environment and what are the benefits or/and advantages associated with. For example, in a study developed by Hudson, Huang, Roth and Madden (2015) exploring the relationship between social media use and consumer-brand relationships, it was suggested that consumers who engaged with their favorite brands through internet/social media developed more intense relationships with those brands when compared to the ones that did not engage in these type of behaviors. Aligned with this, results from Kim, Choi, Qualls and Han (2008) refer that online community members develop stronger commitment to the brand, are more likely to buy products of that specific brand,

spread more positive word-of-mouth information and customers are more willing to share important information with the company.

Other scholars have been trying to understand how different online designs affect the commitment as well as the voluntary participation of their members (Ren, Kraut & Kiesler, 2007; Ren, Kiesler, Riedl & Kraut, 2012). Based on insights from social psychology, these authors explored which characteristics should online communities develop to have a higher rate of member attachment. According with social psychology, member attachment to a certain group can be fostered/promoted in two ways: identity-based attachment and bond-based attachment. In the first hypothesis, people feel connected with a specific group by its purpose or group's character while on the second manner people's sense of community is developed through the creation of interpersonal bonds and relations. This means, by the level of attachment (socially or emotionally) that group members feel with each other. To find which theory promotes a higher level of member attachment in online communities, the authors conducted a six-month field experiment in which to increase identity-based attachment they shared information related with group activities whereas to increase bond-based attachment they gave information related with members similarity. The results of this study suggest that features related with identity-based attachment have better as well as stronger effects to promote member attachment to online communities when compared to features related with bonding.

De Vries, Gensler and Leeflang (2012) explored factors that induce brand post popularity on Facebook. Their findings showed that enhancing the number of likes or the number of comments requires different measures. In order to increase the number of likes, managers should adopt strategies like placing a highly vivid or a medium interactive brand post (e.g., video or contest) on the brand page and, on the contrary, if managers desire to enhance the number of comments they should generate a question for consumers to reply. Similarly, Cvijikj and Michahelles (2014) analyzed how the content shared by several brands in terms of media type, content type, posting day and time influenced consumer engagement, measured by the number of likes, comments and shares, on Facebook. According with the results the entertainment, when compared to Information and Remuneration content type, was the one that had the largest and the most significant effect over all engagement measures. The authors also suggest that photos seem to be the most appealing post media type in Facebook brand pages, since vividness increases the level of engagement between

consumers and brands. Additionally, posts created on workdays seem to have a significant effect on the number of comments while posts shared during the low hours (4AM-4PM) seem to increase the number of likes and sharing ratios.

Smith, Fischer and Yongjian (2012) tried to understand the differences regarding brand-related-user-generated content (UGC) on three well known social media channels, namely between Twitter (a microblogging site), Facebook (a social network) and YouTube (a content community). Based on the analysis of 600 brand posts from two different companies - Lululemon and American Apparel, the authors concluded that on YouTube the brand-related UGC is related with consumer' self-promotional aspects when compared to the other two sites, while on Twitter the content generated is focused on conversations to share information or news and to initiate discussions/debates about brands or other subjects. As expected, YouTube was the one that hosted less brand-central content as well as the channel less used by consumers to engage with marketers due to its higher self-focus when compared to Twitter and Facebook. As mentioned in this study, marketers should proactively collaborate and communicate with consumers mostly on Twitter and Facebook to increase the visibility of brands as well as to foster positive feelings towards them. Also, marketers should take into account that sharing relevant and useful content as well as being aware of consumers' questions and doubts/concerns are highly valued requirements. Other researchers, Klassen et al. (2018) studied how social media strategies used by a variety of brands from different industries – food, industry and lifestyle - could foster consumer engagement on two social media channels: Facebook and Instagram. The results show that each industry uses different social media strategies to interact with customers as well as different strategies should be used to engage with Facebook and Instagram' users if the brands desire to be successful. More specifically, social media strategies like the use of an optimistic tone, videos, messages displaying body image when compared to food content as well as content inducing positive emotions were positively associated with Facebook interactions. On contrary marketers should invest on posts containing “relatable” content (posts that promote feelings of friendship between the poster and the user or posts with which the fan relates with the shared content – e.g. “What to eat for breakfast?”) and on the use of personal stories on Instagram. This well-known online platform allows the fast engagement with users through the possibility of sharing photos as well as through the realization of Instagram Stories and Live. Both Facebook and Instagram interactions were positively

associated with the use of links to purchasable items by food and lifestyle brands, which may be related to the fact that consumers often look for new products to use and are actively searching for available offers.

Other study analyzed how the tone of voice used by brands, that is a human vs. corporate one, influenced purchase intentions on Facebook (Barcelos, Dantas & Sénécal, 2018). During initial encounters between companies and consumers it can be useful to understand what type of language and tone, communication style, should be adopted to foster a good relationship between both, since it is in this period that customers form opinions and expectations about new and unfamiliar brands (Keeling, McGoldrick & Beatty, 2010 cited in Barcelos et. al., 2018). The adoption of a “human voice” in social media can be defined as a more close, natural and human (e.g., use of emoticons) style of online communication while a “corporate voice” is a more distant and formal way of communication. It is important to mention that the customer goal (utilitarian vs. hedonic) as well as the degree of situational involvement (perceived risk – uncertainty vs. certainty) influences consumer responses towards the brand and, consequently, purchase intentions. The authors found that it is useful for a brand to adopt a human voice if the products/services showed are mainly hedonic and if the context associated corresponds to a low situational involvement and consumers’ low risk perception. On the contrary, on contexts of high situational involvement and when consumers have a high risk perception, a corporate tone of voice should be used. These results can be explained by the concept of perceived risk, which is related with the consumer decision process. When facing a risky decision, the consumer evaluates the severity of the possible negative consequences of his/her choice and the probability of those outcomes to happen, which are going to contribute to the individual’s perception of risk. In the presence of a risky decision, customers may stick to familiar options instead of unfamiliar ones avoiding the option that do not correspond to the norm/standard. In these cases, the use of a human voice can be harmful because it can be perceived as unusual or atypical if most companies of a specific industry or in general do not communicate in this way/style.

In line with the previous study, Gretry, Horváth, Belei and Riel (2017) shared some content about how to communicate with consumers on social media contexts. The results suggest that when consumers are already familiar with a brand, an informal tone of voice increases their trust in the brand. However, if consumers are not familiar with the brand the adoption of an informal tone of voice it is not a good option.

As we can see throughout the description of these studies, several are the authors that have been trying to understand the best way to communicate as well as the type of content that should be posted on social media with particular incidence on Facebook.

2.5. Research Hypothesis

According to the Linguistic Category Model (LCM) (Semin & Fiedler, 1991), through the use of a more abstract language, a greater amount of information about the psychological traits of the subject who is performing that action can be obtained since adjectives describe people's stable and lasting personality qualities. Following this theoretical rationale, I can suggest that the adoption of a more abstract language by brands will promote greater consumer involvement as it emphasizes stable and long-lasting traits of brands. Based on this theoretical approach, the following hypotheses were designed to study the association between language abstraction and consumer engagement in the social networking website Facebook:

Hypothesis 1: The higher the index of abstraction of comments, higher is online consumers engagement

Hypothesis 2: The index of abstraction is a positive predictor of the number of likes

Chapter 3: Methodology

In this chapter, the methodology applied for this dissertation will be presented. In first place, the purpose of the study as well as its research objectives and approaches used are going to be explained, followed by data collection, measurement and analysis.

3.1. Research Objectives and Approaches

The main purpose of this dissertation is to explore the relationship between type of language posted by brands, based on the continuum pole of abstraction and concreteness provided by the Linguistic Category Model (LCM), on consumer engagement in Facebook users. Additionally, I will analyze if language abstraction can be a positive predictor of the number of likes.

Based on the LCM theoretical model proposed by Semin and Fiedler (1991) language abstraction was characterized according with the different properties of language: verbs and adjectives. Also, it was necessary to calculate the index of abstraction. After the calculation of the index of abstraction for each post of the fifty companies, posts were analyzed with the goal to understand the effect of language abstraction on the number of likes and comments of the posts as well as on the number of likes of brand pages.

3.2. Data Collection

A total of 467 posts from Facebook brand pages, more precisely 27 from startups and 23 from globally known brands, were manually collected. More precisely, Startups were taken from the document “Startup Voucher 2018: Portugal – 2018 -1ª fase – NUTS II – Norte, Centro e Alentejo” and globally known brands were selected based on the “Brandz Top 100 Most Valuable Global Brands 2019” (see Attachment 1). In order to select the brands that would constitute the final database 50 companies out of 150 were randomized. Once the database was re-ordered, I used the first 50 companies - either a Startup or a known-brand – to analyze the several posts and take the corresponding engagement measures from Facebook. Each post was analyzed according to the Linguistic Category Model (LCM), more precisely the index of abstraction, developed by Semin & Fiedler (1991).

3.3. Measurements

The measurements used in this dissertation to study the relation between language abstraction and consumer engagement are the following:

Index of Abstraction: In order to measure language abstraction, it was necessary to calculate the index of abstraction according to the instructions provided by Coenen, Hedeboew and Semin (2006). For each comment, I counted the number of DAV, IAV, SV and ADJ. Next, each linguistic criterion – DAV, IAV, SV and ADJ, was weighted by a numerical value to reach an abstraction score. The scores attributed to each category were the following: DAV were assigned with the value of 1, IAV were assigned with the value of 2, SV were assigned with the value of 3 and ADJ were assigned with the value of 4. Through the scores attributed to each linguistic category, it is possible to calculate an average language abstraction value for each post.

Equation 1. Computing the index of abstraction.

$$\text{Index of abstraction} = \frac{((n_{DAV} \times 1) + (n_{IAV} \times 2) + (n_{SV} \times 3) + (n_{ADJ} \times 4))}{N_{total}}$$

The first step was the sum of the total number of DAV, IAV, SV and ADJ per post, afterwards it was necessary to multiply the number of each linguistic category with the corresponding score and sum them for each post– (number of DAV*1) + (number of IAV*2) + (number of SV*3) + (number of ADJ*4) and, lastly, it was necessary to divide the scores obtained from each category in the first calculation with the total number of coded items obtained from the second calculation. The degree of language abstraction varies between 1 and 4, on which 1 corresponds to very concretely – DAV and 4 to very abstract – ADJ. In order to facilitate the comprehension of the calculations mentioned above, I will add an example and illustrate the procedure taken to achieve the final value of the average degree of language abstraction.

For example: “On this vacation, we **want (SV)** to **know (SV)**: Who **was (SV)** that friend who **explored (IAV)** **new (ADJ)** locations? Who **took (DAV)** you to **discover**

(SV) the hidden treasures of the world ? Who do you get **lost (IAV)** on the road to adventure? **Select/Choose (DAV)** your **explorer (ADJ)** friend !”

Equation 2. Example illustrating the calculation of index of abstraction.

$$Index\ of\ Abstraction = \frac{((2_{DAV} \times 1) + (2_{IAV} \times 2) + (4_{SV} \times 3) + (2_{ADJ} \times 4))}{10}$$

$$Index\ of\ abstraction = \frac{2 + 4 + 12 + 8}{10} = \frac{26}{10} = 2.6$$

Number of Followers (Quartiles): The several brands analyzed in this dissertation were quite heterogeneous in several aspects, namely in the number of followers. If we compare the number of followers between Startups, which are small and newly companies, and well-known brands, which are companies already established in the market for years and with a high number of followers, we can see a considerable difference between them. Therefore, a quartile segmentation of the variable number of followers was performed on SPSS. More precisely, this variable was divided into four different quartiles on which Quartile 1 (Q1) corresponds to the brands that have 50 followers until the ones that have less or equal number of 579 followers; Quartile 2 (Q2) corresponds to the brands that have between 580 and 3,138 followers; Quartile 3 (Q3) corresponds to the brands that have between 3,139 and 1,045,356 followers and, finally, Quartile 4 (Q4) belongs to the brands that have more than 1,045,357 followers. I categorized the groups as follows: Q1: Very low number of followers, Q2: Low number of followers; Q3: Moderate number of followers; Q4: High number of followers.

Consumer Engagement

Number of comments: The number of comments was removed on Facebook through the number of comments from users of each post analyzed, with a total of 10 posts per company, of the 50 brands present in this thesis.

Number of Likes: The number of likes of posts were removed on Facebook through the number of likes of each publication/post analyzed, with a total of 10 posts per company, of the 50 brands present in this thesis.

Number of likes for brands: The number of likes on the brand page were removed on Facebook through the number of likes that the different brands analyzed in this dissertation presented.

3.4. Data Analysis

Firstly, it is important to mention that all the statistical analyses were conducted on SPSS (version 26).

I first tested my initial hypotheses that a general index of abstraction predicted consumer engagement (number of comments and likes, both proxy measures for consumer engagement). To test whether there was a relation between the index of abstraction and consumer's engagement, two simple linear regressions were performed. In each of these statistical analyses, the independent variable was the index of abstraction and the dependent variables were either the number of likes as well as comments of the several posts and the number of likes of brand pages.

However, on a more exploratory ground, I decided to look separately to different brands, as their position in the market may be perceived differently. Therefore, after the recodification of the number of followers into quartiles, simple linear regressions analyses were conducted to test if the index of abstraction is a positive predictor of the consumer engagement (using number of comments and likes as proxy measures).

Chapter 4: Results

In the present chapter the analysis performed will be described with the purpose to provide answers to the hypothesis proposed.

4.1. Initial Hypotheses Testing

Simple Regressions between the index of abstraction and online consumers engagement

A simple linear regression between the index of abstraction and the number of comments was conducted to test whether the index of abstraction is a positive predictor of the number of comments. The model was not statistically significant, $F(1, 462) = 0.23$ $p = .63$ (Table 1), and the index of abstraction did not significantly predict the number of comments.

Table 1

Simple linear regression between the index of abstraction and the number of comments

Variable	B	Beta	t	p
(constant)	155.49		1.16	.25
Index of Abstraction	2.40	.02	.48	.63

Note. R2 adjusted = -.002.

A simple regression was repeated to analyze the relation between the index of abstraction and the number of likes. Similarly, the model was not statistically significant, $F(1, 440) = 0.02$, $p = .89$ (Table 2), and the index of abstraction did not significantly predict the number of likes.

Table 2. *Simple linear regression between the index of abstraction and the number of likes*

Variable	B	Beta	t	p
(constant)	57.12		2.91	.00
Index of Abstraction	.98	.01	.13	.89

Note. R2 adjusted = -.002

A simple regression was repeated to analyze the relation between the index of abstraction and the number of likes of brand pages. The model was not statistically significant, $F(1,456) = 0.18$, $p=.67$ (Table 3), and the index of abstraction did not significantly predict the number of likes of brand pages.

Table 3

Simple linear regression between the index of abstraction and the number of likes of brand pages

Variable	B	Beta	t	p
(constant)	12640354.7		2.09	.04
Index of Abstraction	950429.96	.02	.42	.67

Note. R2 adjusted = -.002.

4.2. Exploratory Analyses

Simple Regressions between the index of abstraction and online consumers engagement, considering the number of followers of brands

Similarly to the results where I tested my initial hypotheses, I conducted again simple linear regressions to explore the current data in a different way. Database was split into four groups: Q1: Very low number of followers, Q2: Low number of followers; Q3: Moderate number of followers; Q4: High number of followers. For all of the statistical analysis conducted the independent variable, index of abstraction, remained the same but the dependent variables were different on each analysis. More specifically, the dependent variables used were the number of comments of each post, the number of likes of each post and the number of likes of brand pages.

A simple linear regression between the index of abstraction and the number of comments was conducted to test whether the index of abstraction predicted the number of comments. The results showed that the model was not statistically significant for none of the four quartiles. More specifically, the result corresponding to the 1st quartile showed that the model is not statistically significant $F(1,119) = .01, p=.95$. The result corresponding to the 2nd quartile show that although the model was not statistically significant, it was marginal $F(1,119) = 3.01, p=.09$. The model of 3rd quartile was not statistically significant $F(1,114) = 1.34, p=.25$, neither was the the model of the 4th quartile, $F(1,104) = 0.15, p=.70$. For the index of abstraction as individual predictor, the relation was not significant for any of the quartiles (all $ps > .05$), meaning that the index of abstraction does not predict the number of comments based on the different number of followers of brands (Table 4).

Table 4

Simple linear regression between the index of abstraction and the number of comments

Number of followers	Model	B	Beta	t	p
Q1	1 (constant)	.31		1.07	.29
	Index of Abstraction	.01	.01	.07	.95
Q2	1 (constant)	1.24		3.09	.00
	Index of Abstraction	-.25	-.16	-1.74	.09
Q3	1 (constant)	1.91		.18	.86
	Index of Abstraction	4.32	.11	1.16	.25
Q4	1 (constant)	53.47		.81	.42
	Index of Abstraction	9.92	.04	.39	.70

Note. Q1 R2 adjusted = -.008; Q2 R2 adjusted = .016; Q3 R2 adjusted = .003; Q4 R2 adjusted = -.008.

A simple regression between the index of abstraction and the number of likes was conducted to test whether the index of abstraction could predict the number of likes. Although the regression model was not statistically significant for the Q1 ($F(1, 120) = 1.57, p = .21$), Q3 ($F(1, 108) = 1.39, p=.24$) and Q4 ($F(1, 87) = 1.02, p = .32$), the results differ

for the regression model in Q2, $F(1, 119) = 4.68, p=.03$. In proportion, the index of abstraction explains 3.8% ($R^2 = .038$) of the variance in the number of likes (Table 5). Interestingly, we can see a statistically significant effect for brands whose number of followers corresponds to the a low level (Q2; between 580 and 3,138 followers). In this case, for companies with a low level of followers, the more abstract are the linguistic interactions with consumers, the more consumers like the posted interaction.

Table 5

Simple linear regression between the index of abstraction and the number of likes

Number of followers	Model	B	Beta	t	p
Q1	2 (constant)	5.56		1.73	.09
	Index of Abstraction	1.60	.11	1.25	.21
Q2	2 (constant)	29.16		4.33	.00
	Index of Abstraction	-5.25	-.20	-2.16	.03*
Q3	2 (constant)	30.31		.68	.50
	Index of Abstraction	18.10	.11	1.18	.24
Q4	2 (constant)	250.59		2.73	.01
	Index of Abstraction	250.59	-.11	-1.01	.32

Note. Q1 R^2 adjusted = .005; Q2 R^2 adjusted = .030; Q3 R^2 adjusted = .004; Q4 R^2 adjusted = .000.

* $p < .05$

A simple regression between the index of abstraction and the number of likes of brand pages was conducted to test whether the index of abstraction predicted the number of likes of brand pages. Although the results showed that the regression models were not statistically significant for both Q3 ($F(1, 114) = .54, p=.46$) or Q4 ($F(1, 108) = 1.20, p=.28$) however, it was possible to observe statistically significant results for Q1 and Q2 (Table 6): Q1 showed that the regression model is statistically significant $F(1, 116) = 4.05, p = .05$. In proportion, the index of abstraction explains 3.4% ($R^2 = .034$) of the variance in the number

of likes of brand pages; Q2 showed also a statistically significant regression model, $F(1, 112) = 5.72, p = .02$. In proportion, the index of abstraction explains 4.9% ($R^2 = .049$) of the variance in the number of likes. In brands with a very low number of followers, abstraction positively predict liking for the brand ($\beta = .18, p = .05$). Contrarily, in brands with low number of followers, abstraction negatively predicts the liking for the brand ($\beta = -.22, p = .02$).

Table 6

Simple linear regression between the index of abstraction and the number of likes of brand pages

Number of followers	Model	B	Beta	t	p
Q1	3 (constant)	197.39		5.07	.00
	Index of Abstraction	31.18	.18	2.01	.05*
Q2	3 (constant)	2246.69		8.65	.00
	Index of Abstraction	-221.55	-.22	-2.39	.02*
Q3	3 (constant)	343114.30		2.61	.01
	Index of Abstraction	-34588.16	-.07	-.73	.46
Q4	3 (constant)	37594773.4		1.60	.11
	Index of Abstraction	9886836.36	.11	1.01	.27

Note. Q1 R^2 adjusted = .025; Q2 R^2 adjusted = .040; Q3 R^2 adjusted = -.004; Q4 R^2 adjusted = .002.

* $p < .05$

Chapter 5: Discussion

The goal of the present work was to study the relation between language abstraction and consumer engagement on Facebook, more precisely to understand if there was a relationship between language abstraction and consumer engagement. The findings show that the index of abstraction per se was not a significant predictor of general consumer engagement however, when segregating companies according to different number of followers, it was found a statistically significant relationship between language abstraction and the number of likes for posts for companies whose number of followers are low (Q2). Regarding the number of likes of brand pages, two statistically significant results were found. More precisely, in brands with a very low number of followers, abstraction positively predicted liking for the brand (Q1) and in brands with low number of followers, abstraction negatively predicted the liking for the brand (Q2).

Based on the insights provided by the Linguistic Category Model (LCM) (Semin & Fiedler, 1991), hypothesis one was tested in a more generalized mode. According with LCM, using a more abstract language should lead to a greater amount of information about the psychological traits of the subject who is performing a certain action. This inference is solely derived from adjectives, which are used to describe people's stable and lasting personality qualities. The same theoretical rationale was applied to brands and hypothesis one was developed (H1: the index of abstraction positively predicts online consumers' engagement). Looking at data in a more generalized mode, it was possible to conclude that per se, the index of abstraction was not a statistically significant predictor of consumer engagement, expressed in the number of comments, the number of likes for the post and the number of likes of brand pages and therefore the hypothesis was rejected.

The results concerning the first hypothesis showed that abstract words do not seem to be related to consumer engagement. A possible explanation may be related to the persuasiveness of concrete words. As demonstrated by several authors in the Marketing field, concrete words take less time to read compared to abstract words (Loomis, 2010). Additionally, concrete descriptions are associated with higher levels of familiarity and vividness which facilitates the creation or/and imagination of mental images/pictures (Loomis, 2010; Keller & Block, 1997; Kim, Kardes & Herr, 1991). All of these studies highlight several important properties as well as features conveyed by the use of a concrete

language that can influence consumers' engagement and, consequently, diminish the persuasiveness of messages or information that is presented in abstract language.

Secondly, I decided to explore the data with the aim of understanding if there was any relationship between the index of abstraction and consumer engagement, taking into consideration the fact that brands may not be comparable among themselves. Therefore, I coded the number of followers into four distinct quartiles: very low, low, moderate and high number of followers. The same theoretical rationale was applied to brands and hypothesis two was developed (H2: the index of abstraction is a positive predictor of the number of likes). Similarly to the results found on H1, for the index of abstraction as individual predictor of the number of comments, the relation was not significant for any of the quartiles. However, the results from the simple linear regression showed a statistically significant relationship between language abstraction and the number of likes for posts whose number of followers are low (between 580 and 3,138 followers). Also, the results from the simple linear regression concerning the second hypothesis show a statistically significant relationship between language abstraction and the number of likes of brand pages whose number of followers are very low (between 50 and 579 followers) and low (between 580 and 3,138 followers). However, the index of abstraction is a positive predictor of liking for brands with very low number of followers, and interestingly, it is a negative predictor for brands with low number of followers, a result that is contradictory with the result presented above, for the likes for the post.

To facilitate the discussion concerning the results of the several brands according with the different number of followers, I would like to mention that the different quartiles will relate to different types of companies. In this sense, I understand brands with a very low number of followers (Q1) as Micro Companies; brands with a low number of followers (Q2) as Startups and Small Companies; brands with a moderate number of followers (Q3) as Medium Size Companies and brands with a high number of followers (Q4) as Large Size Companies/Multinational companies.

The results concerning the second hypothesis pointed out for an interesting fact, which is the lack of significant statistically results between language abstraction and the number of comments, the number of likes and the number of likes of brand pages of for brands with a minimum of 3139 followers and more than 1,045,357 followers (Medium Size Companies and/or Multinational companies). One possible explanation maybe related with

the level of brand attachment of consumers to brands that have a big dimension and are already established in the market for a long period of time, which makes them really well known brands. Examples of these companies present in this dissertation are Netflix, BMW, Starbucks, Facebook, Coca-Cola. As showed by Alessandrini (2013) online consumers who report a high level of brand attachment are not affected by the type of language used in Social Media. In this sense, consumers may already have experienced the benefits of the brand for several times and they may have a deep knowledge about its products and/or services, meaning that these type of consumers may have already a strong commitment and/or loyalty to the brands that they are familiar with. The high level of brand attachment can provide some insights to explain the relationship between language abstraction and consumer engagement for brands with a high number of followers (>3139). However, the case may be different for Micro Companies and Startups since and, contrary to the brands mentioned above, they are characterized as small and relatively new organizations trying to enter in a specific market (Chesbrough & Weiblen, 2015).

For Micro Companies, the results showed that the index of abstraction is a positive predictor of the number of likes of brand pages, in other words, the more abstract language is in the posts companies make, the more likely users are to like their Facebook brand page. The results found by the author Alessandrini (2013) go in the opposite direction to the findings present in this study. Alessandrini (2013) suggests that online consumers who have a low level of brand attachment are more influenced and, consequently, driven to buy a product more easily through a more concrete language, since they want a clear and straight forward language capable of explaining why that product is better compared to others available on the same market. Although the present dissertation did not consider consumers' level of brand attachment, a possible explanation for the different results may be related to the communication strategy with users adopted by the companies, depending on the stage the company is in and/or the type of company. Because in Micro Companies, language only relates to the number of likes of brand pages, we can assume that this companies are still at the stage of establishing their identity to start engaging with consumers and make themselves known, which will have a more abstract component than a product or a service. This type of companies - Micro Companies - have really low number of followers, more precisely between 50 and 579 followers and, since they are at an early stage of their development, maybe their priority and/or marketing strategy is to begin to develop an identity with the

purpose to create a bond or establish a relationship with their target audience. In this scenario, consumers may not have any type of relationship with the brands due to lack of knowledge or skepticism since it is a brand they have never heard before and do not know the product features or services they are able to offer, which can potentially lead to feelings of indifference or lack of attraction towards the brand. As stated by Semin & Fiedler (1991), State Verbs and Adjectives are the linguistic dimensions that score higher in abstraction comparing to DAV and IAV, given that they contain more information about the subject and his/her enduring qualities. Therefore, the use of linguistic categories like SVs and ADJs may be a strategic option of Micro Companies to promote the engagement between them and consumers. For this purpose, an abstract language may be more useful to highlight the stability and enduring characteristics of the brand since the use of SVs and ADJs contributes to a more emotional and appealing message, thus providing a sense of temporal stability to consumers (Kousta et al., 2011; Semin & Fiedler, 1991).

Controversially, the results show that Startups have a negative relationship with all the indicators studied regarding consumer engagement: the number of likes of posts, the number of likes of the brand and the number of user comments. That is, the index of abstraction turned out to be a negative predictor for the number of likes on posts and for the number of likes on Startup(s) brand pages. In the case of Startups and small companies, the publication of company's posts in a more concrete language brings more benefits to the interaction between customers and brands, which translates into an increase in the number of likes on the brand pages of Startups and Small Companies - between 580 and 3,138 followers. Once companies (e.g. Micro Companies) start to develop and grow in terms of size/dimension and visibility in the market they want to reach, as well as in their number of followers, perhaps the type of language used has to be different, since these type of companies probably depend much more on the communication of the service or product being promoted (online). According to Semin & Fiedler (1991), a concrete language promoted by Descriptive Action Verbs (DAVs) and Interpretative Action Verbs (IAVs) refer to concrete behavioral events, through which it is possible to obtain a large amount of information about the situation, which makes it easier for others to verify what happened without leaving room for disputes. In line with this theoretical reasoning and translating into the relationship with brands, Startups' posts written in a concrete type of language will make reference to detailed information about the product/service being disclosed as well as its

functionalities and specificities, making it the statements contained in the posts objectively and easy to verify by the recipients of the message.

The results obtained by analyzing the different brands based on the different number of followers provide relevant and extremely useful insights for marketers to effectively engage with consumers on Facebook. More precisely, the results highlight relevant insights that can help to design or delineate more efficient digital marketing strategies according to the type of target company. Taking the results obtained from Micro Companies and Startups regarding the relationship between language abstraction and the number of likes of brand pages, it is possible to understand that both companies use different strategies to influence the number of likes of their Facebook pages. If we think of Micro companies as companies that are starting and their goal is to become familiar with consumers in order to make the brand known in a generic way then an abstract language will be more useful however, the goal maybe different for small companies (e.g. Startups) already established in the market they want to achieve. In the second case, which requires closer contact with customers, the purpose may be to promote the products and services that the brand has to offer in detail. To achieve this goal, a concrete type of language is more beneficial since will provide to customers specific information about the product. These findings suggest that companies use different dynamic strategies, depending on the stage/phase they are in.

A first limitation of this dissertation is related with the brands chosen to participate in this study. The heterogeneity of the companies and the qualitative differences between startups and well-known brands may be important factors to explain the obtained results. As pointed out by Weiblen & Chesbrough (2015) startups and large corporations are often seen as different organizations. Large companies are well established companies in the market with a variety of available resources, scale and power while startups are often characterized as small companies with innovative and disruptive ideas taking the first steps in the industry (Chesbrough & Weiblen, 2015; Grilo, Palos-Sanchez & Saura, 2019). Startups and large corporations differ in their nature, in their dimension and possibly in the methodologies as well as resources used to produce products or services. Due to these differences and as suggested by the present study, the type of language used to engage with startups and with large corporations may be different, in other words, the type of language chosen to share on social media by startups and large corporations may have a different impact on consumer engagement.

A second limitation that can be pointed out pertains to the levels of the linguistic category model used in this dissertation. In this particular study four different levels of verb categories and adjectives were used – Descriptive Action Verbs (DAV), Interpretative Action Verbs (IAV), State Verbs (SV) and Adjectives (ADJ) – however, and since the introduction of this model, the authors Semin & Fiedler (1991) and Semin (1994) suggested a fifth possible level, namely State Action Verbs (SAV). According with Semin & Fiedler (1991), “State Action Verbs” (SAV) are represented between the Interpretative Action Verbs (IAV) and State Verbs (SV) and what differentiates them between the SV is the fact that the sentence subject is the one that originates a certain state in the sentence object (e.g. “you surprise me”). Although there does not seem to be a significant abstraction difference level between Interpretative Action Verbs (IAV) and State Action Verbs (SAV) (Semin & Fiedler, 1991), it would be interesting to understand if the addition of this linguistic category level would change the results in any kind or/and in any direction. Additionally, several authors (e.g. Carnaghi et al., 2008) have been studying the distinct role of adjectives and nouns in person perception. Carnaghi et al. (2008) suggest that through nouns, in comparison with adjectives, people may assume several assumptions about the person in question that go beyond the information provided since nouns categorize people according to a certain group, type or kind of person whereas adjectives indicate one or more qualities/psychological trait(s) that a person may have. The results of this study propose nouns as the most abstract level of the Linguistic Category Model, which indicates that nouns are even more abstract than adjectives. Although the Linguistic Category Model does not include nouns as another level of abstraction, according with Carnaghi et al. (2008) there are a variety of reasons to include nouns as the highest level of language abstraction into the model developed by Semin & Fiedler (1991). Since the majority of studies conducted in the social media environment with the goal to understand the relationship between language abstraction and electronic word of mouth has focused on the four levels of the traditional Linguistic Category Model (e.g. Schellekens et al., 2010; Alessandrini, 2013) - (DAV), (IAV), (SV) and (ADJ) – it seems a good opportunity to explore whether with the addition of this level of language abstraction the effects found suffer any change.

In addition to the limitations mentioned above, there is also another limitation that can be pointed out to this dissertation. In the present study, language abstraction was only analyzed according with the four category levels proposed by Semin & Fiedler (1991)

however, it was not taking into consideration the valence of language (positive versus. negative) (Schellekens et al., 2010).

Based on the findings from this study, further investigation should be carried out to understand the nature of Micro Companies, Startups and companies with a small number of followers comparing to companies with a high number of followers. Although the present study provides important insights into the relationship between language abstraction and consumer engagement in Micro Companies and Startups, through a more careful analysis of the differences between the different levels of these companies, it may be easier to understand what type of factors can influence the type of language used. It could be also interesting to understand if there is any difference between campaign versus product type of posts and their relationship with language abstraction. Additionally, one of the factors that can significantly affect language use are human emotions so, for this reason, it could be a huge advantage for companies to understand how emotions can positively affect language use in order to establish better communications with consumers. Moreover, if used properly, language can convey certain emotions that can be useful in developing the relationship between a brand and a specific target audience.

The findings of the present study also suggest that consumers perceive differently the likes of posts and the likes of brand pages/brands, which may be related to the fact that people do not identify themselves with the brand or dislike the brand but agree with the content shared on a publication of the brand. Future research should explore potential differences, as well as similarities in these indicators, to understand what and how their properties or characteristics can help to justify the differences found.

Regarding the metrics of Facebook to study consumer engagement, there are still some measures that can be further explored in order to understand in more detail how brands relate consumers in the digital environment including the number of shares of posts and/or hashtags. It could also be interesting to carry out the same study, adding the metrics just mentioned, in other social media platforms such as Instagram or Twitter. Additionally, companies could be categorized according to their industry, in order to understand whether language use is or can be affected by the industry in which they operate.

Several authors (e.g. Alessandrini, 2013) have been highlighting the similarities between the Linguistic Category Model developed by Semin & Fiedler (1991) and the Construal Level Theory developed by Liberman & Trope (1998). According with Construal

Level Theory (Liberman & Trope, 1998) distant future events are represented on a higher level, that is, they are more likely to be described in more general, abstract and subordinate feature comparing to near events. On the other hand, near future events are more likely to be represented on a low level, meaning that more concrete terms are more likely to be used. It would be interesting to understand the relationship between these two theoretical rationales and if the construct of psychological temporal distance can be related with language abstraction.

Chapter 6: Conclusion

The present study provides important and useful insights into how the type of language influences the relationship between brands and consumers on Facebook. More specifically how Micro Companies who are just starting to run a business on social media and Small Companies, which can be the case of Startups, can use different strategies to promote consumer engagement. The results of this dissertation suggests that at an early stage Micro companies should use an abstract language to make the brand known to consumers while, at a second/middle stage Small Companies (e.g. Startups) should opt for the use of a concrete language with the goal to promote the products and services that the brand has to offer.

This study paves the way for future research in the field of language abstraction and Social Media Platforms. Although language abstraction was explored by previous researchers (e.g. Schellekens et al., 2010; Alessandrini, 2013) mainly focusing on the relationship between electronic Word of Mouth (eWOM) and Purchase Intention, this dissertation applies the concept of language abstraction to a variety of companies that differ in their nature and size, including Startups. The present study alerts to the growing importance of Startups and how this type of company has been neglected when it comes to research studies. In the past few years, Startups are gaining relevance and are forming partnerships with the big corporations with the goal to collaborate together due to their disruptive and innovative character (Chesbrough & Weiblen, 2015; Grilo, Palos-Sanchez & Saura, 2019). As such, it is imperative to understand how language can contribute to the online growth of these companies as well as which type of language (and at which stage) is more useful to develop their relationship with consumers.

In developing this theme and becoming aware of the huge amount of factors that can influence the relationship between brands and consumers in the online environment, specially taking into consideration the important role of language, it is possible to realize the importance of continuing to explore how language shapes and affects communication between companies and customers.

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Attachments

Attachment 1: Brands analyzed in the present dissertation and corresponding number of followers

Brand	Number of followers
Vantta	161
Unconventional Things	147
Moodshake	3108
Placesum	632
SquadLinker	163
COA	855
MindFit - Exercite a sua Mente	775
Oh, Pets!	269
O Atelier	822
GreenFin Aquaponics - Consultadoria e Projetos	121
MYNUTRISCAN	512
UniPlanet	57 282
1UP Gaming Lounge	25 159
sUPport: Elevamos a tua imagem!	484
PixelTejo	94

RecomPENSE+	50
JSdesignbrand	148
Trendout Enjoy Life ®	3138
Projeto Hermes	69
Moot - The Movement Lab	1 935
Talego Design	579
Funactive	935
Wardrobe	1445
Horta Gourmet	2104
SurfingRoute	1757
FlyMovieDrone	519
Milustra D'ouro	1340
Apple Portugal	27 373
Microsoft Portugal	13 459 217
Facebook Portugal	214 622 895
McDonald's Portugal	79 536 094
Mastercard Portugal	16 205 345
IBM Portugal	6411
Coca-Cola Portugal	551 878

Disney Portugal	52 391 197
Starbucks Portugal	462 382
Accenture Portugal	18 096
American Express Portugal	19 348
Netflix Portugal	60 328 705
Samsung Portugal	159 869 616
Toyota Portugal	143 365
Cisco Portugal	1 662 113
L'oréal Portugal	2 702 336
Huawei Portugal	57 449 329
Vodafone Portugal	1 045 356
Oracle Portugal	2124
Uber Portugal	5562
Mercedes-Benz Portugal	496 618
BMW Portugal	45 518
Ikea Portugal	28 281 159