



Universidade de Aveiro
Ano 2021

**ADÉLIA ARAÚJO
MARQUES DA COSTA**

**EM NOME DO AMOR À MARCA: UM ESTUDO
TRANSVERSAL SOBRE OS ANTECEDENTES DE
AMOR À MARCA NAS MARCAS DE SMARTPHONES**

**IN THE NAME OF BRAND LOVE: A CROSS-
SECTIONAL STUDY ON BRAND LOVE
ANTECEDENTS IN SMARTPHONE BRANDS**



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Dissertação apresentada à Universidade de Aveiro para cumprimento dos requisitos necessários à obtenção do grau de Mestre em Gestão, realizada sob a orientação científica da Doutora Vera Cristina Fontes Teixeira Vale, Professora Auxiliar do Departamento de Economia, Gestão, Engenharia Industrial e Turismo da Universidade de Aveiro.

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agradecimentos

O primeiro agradecimento é, sem dúvida, dirigido à Professora Vera Vale, minha orientadora. Por toda a sua disponibilidade, carinho, simpatia, e paciência em guiar-me ao longo de todo este processo. O conhecimento que me transmitiu e as suas palavras de motivação e calma fizeram toda a diferença para que eu conseguisse manter o rumo e ser bem-sucedida nos desafios a que me propus.

Um agradecimento especial aos meus pais, Maria da Conceição e Paulo, que sempre me apoiaram e encorajaram a estudar, a alcançar os meus objetivos, e a ser uma pessoa genuína. Com eles aprendo todos os dias o que é o amor e a perseverança.

Aos meus familiares e amigos que, mesmo longe, sempre acreditaram em mim e nas minhas capacidades, um grande obrigada. Sem vocês para me ouvir e aconselhar, nem o esforço nem a conquista teriam o mesmo significado.

Um último agradecimento a todos aqueles que cruzaram o meu percurso académico e o enriqueceram, assim como todos aqueles que contribuíram para a concretização deste estudo e para mais uma importante conquista na minha vida pessoal e académica.

palavras-chave

Amor à marca; Comportamento do consumidor; Envolvimento da marca com o consumidor online; Marca; Smartphones; Marketing; Modelo de Equações Estruturais

resumo

No mundo atual, de ritmo acelerado e orientado pela tecnologia, as marcas batalham para criar relações duradouras, lucrativas e significativas com os consumidores.

Amor à Marca é um conceito de marketing recente que pode ser alavancado e promovido para trazer vários benefícios, tanto para os consumidores como para os profissionais da área.

Acrescentando tecnologia a esta perspetiva, torna-se claro que existe um caminho interessante para investigação relativa ao Amor à Marca e às marcas de *smartphones*.

Como tal, esta investigação visa estudar os antecedentes de Amor à Marca - nomeadamente o Envolvimento da Marca com o Consumidor *Online* e a Satisfação com a Marca - no contexto particular das relações *online* entre os consumidores e as marcas de *smartphones*.

Como forma de atingir este objetivo, foi desenvolvido um modelo de investigação baseado na literatura existente, que deu origem a um estudo construído em volta de uma metodologia quantitativa, completada com um Modelo de Equações Estruturais. Os dados foram recolhidos através de um inquérito por questionário divulgado e promovido *online*. Um total de 327 respostas válidas foram recolhidas e analisadas utilizando o *software IBM® SPSS® Statistics 27* e *IBM® SPSS® Amos 27*.

Os resultados mostram que as hipóteses propostas, para além de serem fundamentadas na literatura existente, são suportadas, à exceção de uma, o que significa que não foi encontrada neste estudo nenhuma influência significativa de Satisfação com a Marca sobre o Amor à Marca.

As hipóteses suportadas confirmam que o Envolvimento da Marca com o Consumidor *Online* é um forte antecedente do Amor à Marca, que tem consequentes importantes tais como o Passa-a-Palavra Eletrónico Positivo, a Lealdade à Marca, e a Predisposição de Pagar um Aumento de Preço. As conclusões descobertas representam contribuições teóricas e de gestão significativas.

keywords

Brand Love; Consumer Behaviour; Online Consumer Brand Engagement; Brand; Smartphones; Marketing; Structural Equation Modelling

abstract

In today's fast-paced and technologically driven world, brands struggle to create long-lasting, profitable, and meaningful relationships with consumers. Brand Love is a recent marketing construct that can be leveraged and promoted to bring about several benefits for both consumers and practitioners. Adding technology to this prospect, it becomes clear that there is an interesting avenue for research regarding Brand Love and smartphone brands. As such, this research aims at studying Brand Love antecedents – namely Online Consumer Brand Engagement and Brand Satisfaction - in the particular context of consumers' online relationships with smartphone brands. As a way of attaining this goal, a research model based on extant literature was developed, which originated a study built around a quantitative methodology, completed with Structural Equation Modelling. Data were collected through a survey by questionnaire disseminated and promoted online. A total of 327 valid answers were collected and analysed using the IBM® SPSS® Statistics 27 and IBM® SPSS® Amos 27 software. Results show that the proposed hypotheses, besides being supported by extant literature, are supported, with the exception of one, meaning that no significant influence of Brand Satisfaction on Brand Love was found in this study. The hypotheses supported confirm that Online Consumer Brand Engagement is a strong antecedent to Brand Love, which has key outcomes such as Positive e-WOM, Brand Loyalty, and Willingness to Pay a Price Premium. The findings uncovered represent significant theoretical and managerial contributions.

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ACRONYMS AND ABBREVIATIONS

BL – Brand Love

BI – Brand Involvement

OBE – Online Brand Experience

SBIC – Self-Brand Image Congruency

OCBE – Online Consumer Brand Engagement

BS – Brand Satisfaction

WOM – Word-Of-Mouth

E-WOM – Electronic Word-Of-Mouth

PWOM – Positive Electronic Word-of-mouth

BLT – Brand Loyalty

WTPPP – Willingness to Pay a Price Premium

EFA - Exploratory Factor Analysis

KMO - Kaiser-Meyer-Olkin

AVE – Average Variance Extracted

CR – Composite Reliability

GFI – Goodness of Fit Index

CFI – Comparative Fit Index

PGFI – Parsimony Goodness of Fit Index

PCFI – Parsimony Comparative Fit Index

RMSEA – Root Mean Squared Error of Approximation

SEM – Structural Equation Model

CHAPTER 1. INTRODUCTION

Chapter 1, regarding the introduction to this dissertation, provides a straightforward outline of the issue to which this study concerns, as well as the driving force behind its selection and a characterisation of the problem and objectives set, while also clarifying the guiding research questions and design. The general structure for this dissertation is also presented.

1.1 FRAMING THE ISSUE AND MOTIVATION

In an ever-changing global market landscape as the one witnessed today, brands evoking positive feelings and fostering ever enduring and profitable relationships with consumers find themselves on a very beneficial position in terms of growth, sales, enhanced brand image, and competitive advantage. This, along with the knowledge that brands are all over and make a strong presence in consumers' everyday lives, has led investigators to gain a substantial interest in the different kinds of relationships between consumers and brands – namely, brand attachment, commitment, trust, satisfaction, advocacy and others in the like-dislike spectrum – among which is included the intense feelings that make up Brand Love (Noël Albert et al., 2008; Bıçakcıoğlu et al., 2018; Roy et al., 2013).

Brand Love is, as Roy et al. (2013, p. 3) put it, a rising concept in consumer behaviour research that can vary in intensity but is ultimately defined as “emotional and passionate feelings for a brand that might lead to commitment or loyalty in due course”. It is thus clear that the study of its formation and factors for its existence is vital for practitioners and managers, since it can enable valuable outcomes for brands: either through direct experience with the brand or through the even more complex and essential manner of word-of mouth (Roy et al., 2013).

Adding technological advances, and rising social media usage and website importance to the mix, it becomes clear that the online world is an unmissable vehicle of communication with consumers and for brand (and relationship) development, allowing for the creation and maintenance of consumers' feelings of love toward brands in a highly interactive co-creation environment apt for the construction of meaningful experiences and strong emotions for consumers (Loureiro et al., 2017).

As such, it is no secret that technology has snuck its way into just about every object we encounter and situation we experience in the course of our fast-paced lives, in an initial instance in a slow, almost shy way, and later in an exponential manner. From the most basic tasks to the more complex and traditional ones, technology has become a necessity and has paved its way into our hearts.

Smartphones are some of the most popular devices and are responsible for enhanced communication, incessant connectivity, and exciting new experiences that have users addicted and desiring to always have the latest, most exciting, and most advanced equipment. Their massive invasion to the global market exponentially leveraged social media and the online world and calls

for a deep understanding of their usage patterns, user experience, and ultimately, of their particular relationship dynamics with users.

As a result, the clarification of some of the antecedents of Brand Love in smartphone brands and of the consequents that can be derived from it is seen as an exciting avenue for research which will hopefully add value to extant literature and provide clear-cut directions for brand managers to achieve their marketing goals. Understanding how users come to love their smartphone (and associated brand), how that love is translated or operationalized, and the consequences of such strong feelings is of utter importance and relevance in today's interconnected and mobile-technology dependent world.

1.2 PROBLEM CHARACTERISATION AND STUDY OBJECTIVES

With hundreds of smartphone brands raiding the global markets each year to serve its billions of avid users, each attempting to compete with unique features and value offerings, it becomes pertinent to understand why these brands are loved by their users, how they are loved, and what that feeling of love means to both companies and customers.

This study's reasoning is set on a recognized market and literature need. Ergo, the problem identified and that this study will aim to solve is related to a need for the identification of strong Brand Love antecedents, especially in an online context and in the smartphone domain, – without overlooking its outcomes - thus enabling the development of new insights into consumer-Brand Love relationships in this particular environment of interaction.

Following this reasoning, it is possible to unravel the study's main and specific objectives. In this sense, the main objective concerns the study of Brand Love antecedents in the particular context of consumers' online relationships with smartphone brands, with the intention of assessing which factors allow or influence the formation (and maintenance) of consumers' feelings of love toward brands while addressing gaps in extant literature. In particular, the specific objectives are: to study the appropriateness, strength and type of influence each antecedent has on Brand Love; to draw conclusions on some of the most common Brand Love outcomes, according to their contribution to relationship type and strength; to possibly draw conclusions on individual-specific characteristics in consumer-Brand Love relationships; and to contribute to literature on the evolving online consumer market and Brand Love, providing practitioners with a valuable understanding of the potential of this environment on the promotion of Brand Love and the benefits they could derive from it.

In the impossibility of studying the behaviour, influence, and interaction of every possible Brand Love antecedent and outcome, it was opted to select some of the considered to be most important, relevant and interesting ones, that could fittingly lead to significant and valuable conclusions.

It is then expected that the fulfilment of the mentioned main and specific objectives will lead to the validation of the proposed conceptual model, and to the confirmation or disconfirmation of the proposed hypotheses through the identification of the constructs that positively affect Brand Love.

1.3 RESEARCH QUESTIONS AND DESIGN

The conduction of this study will be guided by a set of research questions, which directly influence the research design and all steps regarding its operationalization. Similarly to the conceptual model and research hypotheses, the research questions are expected to be supported and verified by the results and are as follows:

- Q1.** Can Online Consumer Brand Engagement and Brand Satisfaction predict Brand Love?
- Q2.** What impact does Online Consumer Brand Engagement have on Brand Love?
- Q3.** What are the most influential outcomes of Brand Love?

In this fashion, the study focused on the antecedents of Brand Love in smartphone brands through online consumer-brand relationships ought to be precise, thorough, and conscientious so that the maximum validity and accuracy of results is achieved, in line with the proposed research objectives, questions, and reasoning.

As a result of the mentioned research aspects, it is determined that the methodological approach to be undertaken is a quantitative one, with a defined set of variables under investigation and linked in a conceptual model that will serve as the foundation for the survey by questionnaire to be employed in order to gather a cohesive, valid, and adequate dataset to the study in question, all while being scientifically supported by an in-depth literature review.

1.4 GENERAL STRUCTURE OF THE DISSERTATION

The present study is settled on a funnel basis, meaning that its guiding thread – overall and in each chapter - flows from a general discussion of a topic to an in-depth, more complex and detailed analysis of a specific subject. This conveys a rational, coherent, and intuitive line of thought and knowledge that allows for a rich integration of the topic of the dissertation and the proposed research model, thus promoting the drawing of important, clear-cut conclusions.

As such, the dissertation will follow the structure presented in Figure 1 below.



Figure 1 - Dissertation Structure

In Chapter 1, the Introduction involves framing the issue and motivation, problem characterisation and study objectives, research questions and design, and the general structure of the dissertation, as a way of unveiling the theme and the intended direction of this study.

In Chapter 2 the Literature Review offers a comprehensive analysis of the constructs in analysis in this study – Brand Love, Online Consumer Brand Engagement, Brand Satisfaction, Positive Electronic Word-of-mouth, Brand Loyalty, and Willingness to Pay a Price Premium – all explained and contextualized within the current technological environment and consumer-brand relationship and consumer behaviour landscape. By opening with a foundational reasoning for Brand Love in the modern-day global interconnected smartphone marketplace, a complete understanding of its antecedents and consequents is possible through a natural flow of each of these concepts.

Chapter 3 encompasses the Research Model elaborated and implemented in this research. Through the detailed definition of the problem, the development of the conceptual model with exhaustive representation of all variables to be included and expected effects on each other, and the development of the related hypotheses to be tested, it is anticipated that the answers to the research questions will be rightfully uncovered.

In turn, Chapter 4 comprises the Research Methodology, quantitative in nature and consisting of a discussion defining the design, scales, measures, population, sample, and pre-test of the data collection method of survey by questionnaire, and also defining the data analysis methods to be utilised in the following chapter and stage of the study.

Next, Chapter 5 makes use of sample characterisation, a filter question, descriptive statistics, factor analysis, conceptual model reliability and validation, and of structural equation modelling in order to provide an extensive analysis of the data collected by means of the survey by questionnaire implemented.

Last, but certainly not least, Chapter 6 brings about the Conclusions of the research undertaken, specifying a set of final considerations from the author and limitations encountered in the course of the study, as well as a compilation of several suggestions for future investigations.

CHAPTER 2. LITERATURE REVIEW

Chapter 2 presents an exhaustive and comprehensive literature review on the constructs under examination: Brand Love, Online Consumer Brand Engagement, Brand Satisfaction, Positive e-WOM, Brand Loyalty, and Willingness to Pay a Price Premium.

2.1 BRAND LOVE

In a world full of environmental stimuli and where consumers find themselves to have less and less available time to engage in pleasurable activities from which they can elicit joy and fulfilment, it has become increasingly clear that building valuable, profitable, strong, and long-lasting relationships with consumers is no mean feat for brands, as well as a growing necessity to ensure survival in the marketplace. In fact, customer behaviours that generate revenue and profit, two of the most sought-after business objectives for companies, are greatly facilitated and supported by such strong emotional attachments to brands (Grisaffe & Nguyen, 2011). Grisaffe and Nguyen (2011) further argue that in order to arouse these profitable attachment-based repurchase behaviours, marketers and practitioners should clearly define the essence of the desired emotional attachments towards the brand, identify their antecedents and assess which of the antecedents are controllable and should thus receive marketers' full attention and efforts to maximize gains.

Drawing on Psychology research, there are pieces of evidence in consumer psychology hinting that consumers' strong attachment to brands might be an interesting and powerful predictor of their loyalty/commitment toward brands and willingness to pay a price premium in order to benefit from its products, services, or offered experiences (Thomson et al., 2005). Additionally, these attachment bonds can benefit from relationship quality and familiarity (repeated exposure and positive interaction), which along with satisfying responsiveness can act as a foundation for fulfilling peoples' vital need for security in their relationships and life (Hazan & Shaver, 1994).

Interestingly enough, satisfaction – which has been regarded as businesses' main strategic goal with customer relationships for over half a century – is no longer considered a sufficient predictor of consumer Brand Loyalty and of continued devotion and commitment towards brands, thus giving consumers the power to switch brands and destabilise marketers' efforts (Carroll & Ahuvia, 2006; Huber et al., 2015).

This power switch, along with the advent of modern services and industrial marketing and the growing importance of networks and technology in business settings has led to an important transformation in marketing, with an emphasis now being placed on a continuous relationship-oriented strategy rather than on the simplistic marketing mix approach (Gronroos, 1994). This means that an integrated relationship marketing strategy, involving the entire corporation, and betting on high-quality direct interactions, responsiveness, and on a broader customer interface on a long-term basis can open doors for an innovative environment of bilateral value co-creation where customers become more engaged, perceive higher quality, and become overall more

satisfied with the product/service, the firm and with the delivered personalized experience (Gronroos, 1994; Prahalad & Ramaswamy, 2004).

This paradigm shift in marketing has led to the emergence of a central construct in consumer-brand relationship research: Brand Love (Delgado-Ballester et al., 2017).

Research on the promising construct of Brand Love has only recently attained greater interest, and a consequence of this novelty may well be the lack of a universally accepted, clear-cut definition (Batra et al., 2012) on this “new marketing construct that helps explain and predict variation in desirable post-consumption behaviours among satisfied consumers” (Carroll & Ahuvia, 2006, p. 79).

Evidently, there are a few definitions present in the extant literature, that are accepted and employed by many scholars in their investigations. Namely, Carroll and Ahuvia (2006, p. 81) define Brand Love as “the degree of passionate emotional attachment a satisfied consumer has for a particular trade name”, highlighting the elements of passion, attachment, positive evaluation, positive emotions, and declarations of love for the brand; while Aro et al. (2018, p. 73) put forward a definition comprising “the emotional attachment of a satisfied consumer toward a brand, which can be formed and become apparent in different ways for different persons but which typically includes identification with a brand to some degree”.

Conversely, Batra et al. (2012) focus on consumers’ experiences on this phenomenon and distinguish between the frugal aspect of love as an emotion and love as a relationship, ultimately adopting the novel prototype approach on Brand Love. The authors pose that consumers’ love for all sorts of brands is only enhanced and enriched when the prototypical conceptualization is employed, along with its seven “multiple interrelated cognitive, affective, and behavioural” elements: passion-driven behaviours indicating strong desires and history of using and investing into it; self-brand integration; positive emotional connection, including a sense of positive attachment and “rightness”; anticipated separation distress; long-term relationship and future commitment intentions; positive attitude valence; and high certainty and confidence displayed in attitudes (Batra et al., 2012, pp. 6; 13).

But why exactly is there a need to distinguish between emotional and relational love? A look into the most common approaches to love throughout the years and in different contexts may be helpful in this understanding. The most useful conceptualization of love in consumer behaviour studies is that of Psychology, given that the application of a relationship paradigm is much more adequate than Sociology’s observable expressions of love (traditionally translated in marriages or reproduction, for example) and Psychoanalysis’ focus on sexuality (Noël Albert et al., 2008).

In this regard, Long-Tolbert and Gammoh (2012) assert that Brand Love’s conceptualization and measurement in marketing research matches and is deeply rooted in Sternberg’s widely acclaimed and supported Triangular Theory of Love. This theory presents a social psychology standpoint on interpersonal love, claiming that love is composed of three components: intimacy, passion, and decision/commitment, whose absolute and relative strengths, interactions, and products

determine both the amount and the kind of love that is experienced by means of the components' presence or absence in the mix (Sternberg, 1986). Hence Sternberg (1986) presents a taxonomy of eight different kinds of love:

- Nonlove – characterised by the absence of all three components and thus representing the absence of love observed in most trivial interpersonal relationships;
- Liking – characterized by the sole presence of the intimacy component of love, representing the set of feelings experienced in true, close, and warm friendships, where the absence of the other person does not evoke much thought nor preoccupation;
- Infatuated love – characterized by the sole presence of the passion component, resulting in instantaneous infatuations where an individual experiences a strong level of psychophysiological arousal for a certain period of time, with its duration depending on the right circumstances;
- Empty love – characterized by the sole presence of the decision/commitment component, usually found in dormant long-term relationships where the couple is close to the absence of love and have lost intimacy and passion, or in the case of arranged marriages where couples are committed from the start but have to learn to love each other;
- Romantic love – derives from the intimacy and passion components, consisting of an emotional bond with the added value of physical attraction, thus stronger than simple liking;
- Companionate love – consists of a combination of the intimacy and decision/commitment components, representing long-lasting, solid friendships where passion does not exist or has dissipated;
- Fatuous love – derives from the passion and decision/commitment components and represents those relationships that move swiftly, making decisions on the basis of passion and not on the crucial intimacy that promotes stability;
- Consummate love – represents the ultimate kind of love where all components are present and towards which most romantic relationships aim to reach but may fail in maintaining.

Given this theory's robustness, universality, and empirical backing, two main viewpoints on interpersonal relationship development have emerged in marketing literature: one transferring theories of interpersonal love to consumer-object relations, and another linking customer emotions to the relational paradigm in building, developing, and maintaining customer-brand relationships (Fournier, 1998; Long-Tolbert & Gammoh, 2012; Shimp & Madden, 1988).

One great example of the first viewpoint is the work of Shimp and Madden (1988) who, by making use of Sternberg's theory and components, set forth three analogous notions: liking, yearning, and

commitment/decision for the emotive, motivational and cognitive psychological processes of consumer-object relationships (Shimp & Madden, 1988). The interrelation between Sternberg's and Shimp and Madden's components is also evident in the eight kinds of consumer-object relations at the brand level that Shimp and Madden (1988) analogously present, also dependent on the presence, absence, and interactions between the three components:

- Nonliking – characterized by the absence of all three components of consumer-object relations (liking, yearning, and decision/commitment), meaning that consumers do not possess any particular feelings for a product or brand, whether because they are not engaged with the product category or are already more involved with at least one other brand in that category, for example;
- Liking – the only component present is 'liking', representing situations where a consumer may buy the brand and feel some sort of connection of affection towards it, but does not actively desire or is committed to purchasing from it;
- Infatuation – characterized by the sole presence of the 'yearning' component, signifying for the most part young consumers' strong desires to possess a 'hit' product from a 'hit' brand due to peer pressure in the pursuit of the satisfaction of symbolic needs that lead to infatuated consumer-object relations;
- Functionalism – characterized by the sole presence of the 'decision/commitment' component, meaning that purchases are made by necessity and under pure functionalism;
- Inhibited desire – characterized by the presence of the 'liking' and 'yearning' components, this relationship represents those situations where the only thing stopping consumers from making the purchase is some discouraging behavioural constraint external to them;
- Utilitarianism – characterized by the presence of the 'liking' and 'decision/commitment' components, utilitarianism signifies a very common consumer-object relation, where consumers are attached and committed to the product or brand, but do not display any kind of passionate relationship with it;
- Succumbed desire - characterized by the presence of the 'yearning' and 'decision/commitment' components, representing situations where consumers give in to other's consumption desires, resulting in a conflicting personal decision due to strong external factors or encouragements;
- Loyalty – characterized by the presence and interaction of all components, similar to Brand Loyalty and interpersonal love, where consumers feel affection, commitment and a strong purchase/repurchase desire towards a specific product or brand.

These eight kinds of consumer-object relations offer significant insight into the psychology behind Brand Love, helping to understand different levels of love or deep affection that different

consumers may feel for different brands while giving power to the theory that these feelings may be equivalent to those people experience in person-to-person relationships (Long-Tolbert & Gammoh, 2012; Shimp & Madden, 1988)

In turn, the second viewpoint in interpersonal relationship development is well represented by studies linking consumer emotions, relationship quality, and both consumers' and brands' characteristics and experiences (Fournier, 1998; Smit et al., 2007). Particularly focusing on Fournier's (1998) work, this author examines the quality, strength, and stability of consumer-brand relationships in a dynamic model influenced by both brands and consumers' behaviours and supported by a novel theoretical framework. Here, brand relationship quality is a multifaceted central key construct comprising the following elements proposed by Fournier (1998), including Sternberg's (1986) three components of love:

- Love/Passion – reminiscent of interpersonal feelings of love, the love and passion element portrays strong, enduring, and deep brand relationships that evoke separation anxiety upon withdrawal, a wide spectrum of feelings of love, biased attributions of blame, accommodation in the thinning of negative events, and ultimately biased positive perceptions of the partner in the relationship;
- Self-Connection – this element suggests the extent to which the brand expresses significant facets of the self, such as identity concerns, tasks, or themes that are key to relationship maintenance and endurance varying in type, objective centrality, and temporal span;
- Commitment – high levels of this element represent consumer behaviours supportive of strong brand relationships and their longevity in the form of emotional or investment-related commitments, thus fostering intention to use and stability through self-integration in relationship outcomes and alternative disparagement;
- Interdependence – strong consumer-brand relationships are also characterized by high levels of the interdependence element which, through frequent, diverse, and intense interactions is nurtured into consumption rituals deeply anchored in consumer's recurrent daily life activities;
- Intimacy – the intimacy element greatly benefits brand relationship quality due to the elaborate knowledge and meaning structures formed around dearly held brands, with superior product performance beliefs, brand meaning, and brand relationship memory constituting simple cues for strong intimacy and lasting relationship ties;
- Brand Partner Quality – analogous to interpersonal marital relationships, the brand partner quality element reveals the brand's perceived performance as a partner in the relationship with the consumer, through the assessment of five aspects: the brand's positive consumer orientation; the brand's reliability, dependability, and predictability as a partner; the brand's compliance to the unspoken relationship contract; conviction that the brand will

deliver the desired product or service; and lastly, but not least, confidence and assurance that the brand is accountable for its own actions.

It is also important to take note of findings in this line of work that discuss consumer-brand relationships' holistic nature, highlighting that individuals' life experiences and goal compatibility between them and the brand are just as important factors to be considered in understanding this phenomenon as the unique meaning and role of each brand relationship in each consumers' brand portfolio and added lifestyle value (Fournier, 1998). Additionally, Smit et al. (2007) also stress partner quality, brand personality characteristics (such as competent, outspoken, unique, or exciting), and product and purchase motivation as vital elements in enabling, developing, and maintaining consumer-brand relationships for increased relationship strength, durability, and length.

Naturally, there are some signs that theories of interpersonal love are not directly applicable to Brand Love. In Batra et al. (2012), the authors learned from two of their studies that the major incompatibilities are related to brands' lack of reciprocity in their love emotions or behaviours toward consumers, and with consumers' lack of altruism in Brand Love due to their high concern with what the brand could do for them and not the other way round. The fact that, in most cases, consumers don't spontaneously use the word "love" to express their feelings for brands and that Brand Love may even be considered less important than interpersonal love relationships by them only adds to the idea that feelings of love for another person may not be a perfect match with feelings of love toward brands, but the notion that the latter is undoubtedly a more intense and more complex emotion than plain liking remains factual (Batra et al., 2012; Carroll & Ahuvia, 2006; Kaufmann et al., 2016).

2.2 ONLINE CONSUMER BRAND ENGAGEMENT

The usage of the term "engagement" is not necessarily new in consumer-business relationship management and research, and it has been subject of attention for many different academic areas throughout the years, but only recently (as of about fifteen years ago) has it been a focal point of knowledge and practical insights for marketing literature (Brodie et al., 2013).

It has picked up the most steam since managers and marketing scholars grasped the idea that sustaining and nurturing a loyal customer base can bring about a strong and lasting competitive advantage in the marketplace, through pluses as reduced business and cash flow volatility, increased shareholder value, increased bargaining power with partners and suppliers, and increased market penetration and acceptance – and so this customer-based metric gained significance in organizational performance measurement beyond repurchase behaviour (Anderson et al., 2004; van Doorn et al., 2010).

As noted by Loureiro et al. (2017, p. 986) in their work on online brand engagement, many have tried to define engagement but most authors end up mentioning the same four key aspects of this construct: its multidimensionality, the positivity and "favourable expressions, emotions, and outcomes" associated with it, its interactive nature, and a universal agreement on its cognitive

processing, affection, and activation dimensions being the most relevant and essential to the core of the brand engagement construct, although dependent on environmental context and engagement object.

For instance, while Hollebeek et al. (2014, p. 151) conceptualize consumer brand engagement as “a consumer's positively valenced cognitive, emotional and behavioral brand-related activity during, or related to, specific consumer/brand interactions”, Mollen and Wilson (2010, p. 923) define engagement as a “cognitive and affective commitment to an active relationship with the brand as personified by the website or other computer-mediated entities designed to communicate brand value”, and van Doorn et al. (2010, p. 253) even conceptualize customer engagement behaviours as “the customers’ behavioral manifestation toward a brand or firm, beyond purchase, resulting from motivational drivers”.

Acknowledging and understanding the drivers and motivation behind customers’ active behaviours helps appreciate and leverage the desirable influence these can have on the firm and its performance. To this extent, van Doorn et al. (2010) suggest five dimensions to customer engagement behaviours:

- Valence – customer engagement behaviours may be positively valenced when they result in positive financial or nonfinancial consequences for the firm, or they may be negatively valenced when, for example, the nature of the recommendation or review doesn’t promote an adequate fit between the brand and the potential new customer;
- Form and Modality – customer engagement behaviours can be expressed in different ways, namely relating to the type of resources utilized in the engagement, such as time or money, and also relating to the type of impact they can have at the brand or customer level, and even relating to the type of behaviour – In-role, as defined by company guidelines; Extra-role, as a mode of co-creation with the firm; and Elective behaviours, as a way for consumers to achieve their consumption goals (Bolton & Saxena-Iyer, 2009);
- Scope - customer engagement behaviours may be transitory or ongoing, on a temporal basis, or have a more local or global impact, as depending on the form and modality chosen to express such engagement;
- Nature of impact – customer engagement behaviours can have varying degrees of impact on the company/brand and its stakeholders, namely in terms of their immediacy of impact on either brand or its stakeholders, of their intensity in terms of change provoked on the behaviours’ target audience, of their total reach, and of their longevity, as some behaviours may be preserved in some way, which is highly enhanced by the current digital era;
- Customer goals – considering the engagement behaviours’ target audience, the extent of its planning and the extent to which customer and company goals are aligned is very

important in order to assess the engaged customer's motivation and intentions, as well as degree of engagement and overall relationship and attitude towards the brand.

Thus, highlighting the Internet and digital world's impact on customer engagement and for the purpose of this research, the construct of Online Consumer Brand Engagement (OCBE) will be employed and operationalized in the form of three actionable antecedents present in Loureiro et al.'s (2017) study: Brand Involvement, Online Brand Experience, and Self-Brand Image Congruency.

2.2.1 BRAND INVOLVEMENT

Reflecting a consumer's level of interest in a brand and its personal relevance to the consumer, brand involvement has been regarded as a consumer brand engagement antecedent (De Vries & Carlson, 2014; Hollebeek et al., 2014). In fact, early definitions describe involvement precisely as "a person's perceived relevance of the object based on inherent needs, values, and interests" (Zaichkowsky, 1985, p. 342).

When it comes to categorization of (brand) involvement, Zaichkowsky (1985) mentions three areas with the potential to affect a consumer's involvement level: personal, as a set of motivational intrinsic interests, values and needs as mentioned earlier; physical, as the distinguishable and valuable characteristics that make the object interesting; and situational area, as the presence of something that momentarily enhances the objects' significance and interest for the consumer.

Benefiting from the increasing care given to the relationship and interactions between consumers and an object – which may be the act of purchasing, the consumption of a product or service, or even communication stimuli such as an advertisement or website, - involvement is certainly a fundamental construct in consumer-object relationship research, by helping predict consumer behaviour in different involvement level situations, and define involvement strategies (De Vries & Carlson, 2014; Evrard & Aurier, 1996).

2.2.2 ONLINE BRAND EXPERIENCE

The primary concept of brand experience presents itself as a valuable asset in consumer-brand relationships giving its powerful lasting effect on consumer memory, in which sense Chase and Dasu (2014) discuss experience psychology and argue that, while consumers evoke an explicit memory when remembering past events or experiences, it is in fact an implicit memory of how the consumers were feeling for the length of said event or experience that is more easily and strongly recalled, thus demanding an effective emotional management on the behalf of brands in order to ensure that consumers' experiences are in line with the brand's intentions.

Theorized to be "subjective, internal consumer responses (sensations, feelings, and cognitions) and behavioral responses evoked by brand-related stimuli [e.g., colors, shapes, typefaces, designs, slogans, mascots, brand characters] that are part of a brand's design and identity, packaging, communications, and environments", brand experience clearly demands managerial attention and

its increasing understanding only supports the development of effective marketing strategies (Brakus et al., 2009, p. 53).

Furthermore, Brakus et al. (2009) also clarify that brand experience can come about in varying strengths, intensities, valences (positive or negative), time-spans, spontaneously, deliberately and even expected or unexpectedly.

However, one cannot forget that in this day and age, the landscape of global branding and of the global marketplace have been revolutionized and almost completely taken over by the advent of the Internet and technologies it brought about in such a way that, in spite of some inherent challenges, an online presence has become mandatory for brands – with some brands even operating fully online (Morgan-Thomas & Veloutsou, 2013).

In this sense, Online Brand Experience (OBE) “captures the individual's internal subjective response to the contact with an online brand” and encapsulates both goal-oriented and cognitive processing, and the emotional and affective processing of brand experiences (Morgan-Thomas & Veloutsou, 2013, p. 22; Rose et al., 2011). Conversely, and as already mentioned above, Mollen and Wilson (2010, p. 923) define the analogous concept of online engagement as “a cognitive and affective commitment to an active relationship with the brand as personified by the website or other computer-mediated entities designed to communicate brand value”, therefore only emphasising the idea that continuous interactive experiences between consumers and brands are critical for brand performance success, with user experience design jumping to the top of priorities for managers (Morgan-Thomas & Veloutsou, 2013).

Hence, the present study will adopt the simple yet effective definition on OBE hinted by Loureiro et al. (2017) and put forward by Morgan-Thomas and Veloutsou (2013, p. 22), which describes OBE as an “holistic response to the stimuli within website environment”.

2.2.3 SELF-BRAND IMAGE CONGRUENCY

It is no secret that the successful development, communication and maintenance of a strong brand image, based on a brand concept or specific meaning, is key for brands’ lasting triumph in the marketplace (Bhat & Reddy, 1998). Moreover, Bhat and Reddy (1998) reported that brands, and more specifically brand concepts, can either be functional and satisfy urgent and practical needs, or symbolic and satisfy consumers’ self-expression and prestige needs in the first place.

Tapping into self-concept theories, that is the “image shaped by the very person holding the image” (Hong & Zinkhan, 1995, p. 54), Sirgy (1982) summarizes Grubb and Grathwohl's (1967) qualitative model of individual self-enhancement as follows, claiming that:

- The self-concept is of value to the individual, thus making their behaviour directed at the protection and enhancement of their self-concept, which is formed through interactions with parents, peers, teachers, and significant others;

- Acting as social symbols, the individual communicates a symbolic meaning to him or herself and others by purchasing, displaying, and using goods;
- The behaviour of consuming goods as symbols will contribute to the enhancement of the self-concept.

Additionally, Sirgy (1982) presents a matrix of the different types of self-congruity resulting from the interaction of value-laden self-image beliefs and product-image perceptions, which essentially shows how a positive or negative self-image belief can interact with a positive or negative product-image perception and consequently influence self-congruity to be positive and therefore desirable for both managers and consumers who will strive for achieving or maintaining the looked-for self-image, or influence self-congruity between these concepts to be negative and therefore demanding of immediate action and attention to avoid dissonance and belief discrepancies.

These rulings call for careful management of the relationship between brands and the meanings consumers associate with them, as well as the relationship with consumers' self-images and perceptions (Jamal & Goode, 2001). This is on the account of earlier findings reporting that self-concept and brand image congruency, as per evaluated by the consumers themselves, resulted in higher brand preference and purchase intention, thus making marketing communications congruent with the consumers' self-concept to be more effective and accurate in their expected results (Hong & Zinkhan, 1995).

With this, self-brand image congruency pertains to the fit between a consumer's self-concept and their particular perception of a brand's personality which, by fulfilling the consumer's motivational needs for self-esteem and self-consistency, ultimately leads to brand preference and Brand Loyalty (De Vries & Carlson, 2014; Kressmann et al., 2006; Sirgy, 1982).

For the purpose of this study, the conceptualization presented by Loureiro et al. (2017, p. 990) and based on Sirgy (1982) of self-brand image congruency will be adopted, thus defining this construct as "the fit between a consumer's self-concept and the brand image (the attributes and the personality of a brand perceived by consumers)".

2.3 BRAND SATISFACTION

Although frequently paired or compared, Brand Love and Brand Satisfaction are two very distinct constructs that each deserve marketers' and practitioners' full attention and dedication. By conceptualizing Brand Love as a mode of satisfaction experienced by some but not all satisfied consumers, Carroll and Ahuvia (2006) discuss four big aspects/dichotomies in which Brand Love and Brand Satisfaction differ: whilst Brand Love has a greater affective connotation, Brand Satisfaction has a bigger focus on cognition; whilst Brand Love concerns to a lasting ongoing relationship between consumers and brands, Brand Satisfaction is more transaction-specific and episodal; whilst Brand Love does not entail expectancy nor disconfirmation, Brand Satisfaction is strongly linked to the confirmation or disconfirmation of consumers' expectations in each

transaction; and lastly, whilst Brand Love is accompanied by declarations of love and self-brand integration, Brand Satisfaction is independent of this.

The satisfaction construct in marketing research is seen by Fournier and Mick (1999) as an attitude resembling judgement ensuing a purchase or pertaining to a series of consumer-product interactions in a dynamic, holistic, and context-depending process. It is a highly relevant construct as, as it builds up over time, satisfaction is a great enabler for consumption-related “cognitive judgments” and “affective reactions” that ultimately lead to the establishment of an emotional bond between brand and consumer (Mano & Oliver, 1993, p. 451; Roy et al., 2013).

But what exactly is satisfaction to consumers? According to Oliver (1999, p. 34), satisfaction is “the consumer's sense that consumption provides outcomes against a standard of pleasure versus displeasure”. In other words, this means that whether it be for a single consumption act or for ongoing consumption, satisfaction entails a confirmation of consumer's expectations about a given product or service performance and rationale while its counteract, dissatisfaction, entails a disconfirmation of said expectations – thus resulting in a positive or negative evaluation by means of consumer's interactive engagement process with brands (Loureiro et al., 2017).

Satisfaction so presents itself as a fantastically interesting yet complex construct, since it can be regarded as an antecedent of Brand Love, as its accumulation can enable the creation of an emotional bond among brand and consumer, or as a consequent, as it can, under the right circumstances, either directly or indirectly through Brand Love prompt Brand Loyalty – with the indirect path usually indicating stronger Brand Loyalty on the account of consumers (Roy et al., 2013).

It is important to clarify the discussion above about satisfaction being transaction-specific but also as susceptible to building up over time: this is well explained by Thomson et al. (2005) when they argue that consumers can experience satisfaction right after the consumption act, but their individual levels of emotional attachment may vary and tend to develop and become preferably stronger little by little with the increasing number of interactions between brand and consumer.

In this investigation, and mirroring Khan et al.'s (2020) work, Brand Satisfaction is considered a perceived functional benefit of Brand Love and is studied under the more detailed Brand Satisfaction affective and cognitive dimensions, following the authors' adoption of the affective and cognitive Brand Satisfaction components of consumers' post-consumption evaluative judgment as previously seen in Roy et al. (2013).

2.4 POSITIVE E-WOM

In its traditional shape, Word-Of-Mouth (WOM) communications are a phenomena that usually occurs in post-purchase settings and consists of “informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services and/or their sellers” (Westbrook, 1987, p. 261).

Westbrook (1987) goes further and discusses three different identified states of a consumer's involvement in a product or use situation and claims that each of the three have a significant affective footing (Dichter, 1966, as cited in Westbrook, 1987). The three stages are as follows:

- Product involvement, where a consumer is highly involved with the product and feels the urge to talk about its purchase and the satisfaction, enjoyment, and benefits it entails;
- Self-involvement, where a consumer hopes to gain attention, recognition, or status through their purchase by telling others about it;
- and Other-involvement, where a consumer hopes to help others by sharing their experience or knowledge of using the product.

As seen earlier, Brand Love and word-of-mouth go hand in hand in constructing consumers' identity through conversations they have with other people about their loved brand or brands, with high levels of positive WOM usually being a good indicator of the presence of Brand Love in a consumer-brand relationship (Aro et al., 2018; Batra et al., 2012). Additionally, the contrary also posits to be true, meaning that a consumer who is already satisfied and experiencing strong and positive feelings such as love for a brand is more predisposed to spread positive word-of-mouth, visit the brand's website and to buy brand merchandising, in an active engagement behaviour that stems from Brand Love and indicates that Brand Love is positively associated with word-of-mouth (Aro et al., 2018; Bergkvist & Bech-Larsen, 2010; Carroll & Ahuvia, 2006; Wallace et al., 2014).

But with the advent of social media and expansion of the Internet into our daily lives, WOM has evolved from the traditional means of interpersonal and mass communication to involving "individuals sharing information with other individuals in a verbal form, including face-to-face, phone, and the Internet", in a marketing landscape now ruled by user-generated content in online communities, online journals, and social network and consumer review sites (Hawkins & Mothersbaugh, 2010, p. 238).

In fact, with an astonishing 4.80 billion internet users and 4.48 billion active social media users worldwide as reported by DataReportal (2021) in their Digital 2021 July Global Statshot Report – almost 61% and 57% of the world population, respectively – the online world is unquestionably one of the most attractive means of communication and business for both practitioners and consumers, as enhanced by the COVID-19 global pandemic that forced everyone to embrace the digital world if they hadn't done so already.

Henceforth dubbed online word-of mouth (e-WOM), it is undoubtedly a highly relevant construct that brings us closer and helps shape our identity and relationships, as consumers trust the most the opinions of their peers, family members and friends and are keen to hear their true experiences, thoughts, and advice on a product or brand, but also highly trust the opinions of the so-called opinion leaders and influencers they follow on social media (Hawkins & Mothersbaugh, 2010).

The e-WOM notion thus highlights the dynamic, broad, and convenient scope offered by the internet and refers to “any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet” (Hennig-Thurau et al., 2004, p. 39).

Logically, practitioners have successfully recognized the power that electronic word-of-mouth can have on their success in the marketplace and sales and market share growth, and have in recent years started to adopt burgeoning word-of-mouth marketing activities, defined by Kozinets et al. (2010, p. 71) as “the intentional influencing of consumer-to-consumer communications by professional marketing techniques” which can be operationalized in social media, viral, buzz, and guerrilla marketing, for example.

This has resulted in a shift from the simplistic two-step flow of communication where companies’ marketing activities are delivered directly to the target market segment mostly through mass media or similar sources, to the dynamic multistep flow of communication where opinion leaders come into play as important intermediates that actively seek and share information and feedback back and forth between the mass media and their followers, in a process greatly facilitated by social media and the internet (Hawkins & Mothersbaugh, 2010).

As Wallace et al. (2014) suggest, we are in the presence of a construct that presents a cost to the consumers since offering a recommendation takes time and initiative, and requires a certain level of involvement with the brand and appeal to the consumers’ inner selves, given that otherwise they will not find any incentives or desire to share their opinions and experiences with others. Accordingly, Hennig-Thurau et al. (2004, p. 50) have put forward a set of motives for consumers to engage in e-WOM, such as “social benefits, economic incentives, concern for others, and extraversion/self-enhancement”, therefore showing the attractiveness this activity offers for both businesses and consumers.

With this, and keeping in mind that according to Batra et al. (2012), Brand Love explains the variation in consumer experiences such as positive WOM and resistance to negative information, it was only logical to take a modern approach to this construct and investigate Positive Electronic Word-of-Mouth as a valuable and actionable consequent of Brand Love in the smartphone industry.

2.5 BRAND LOYALTY

The Merriam-Webster (n.d.-a) dictionary defines ‘loyal’ as “unswerving in allegiance” or “showing loyalty” to another person, a cause, institution, or even a product, thus highlighting the notion of faithful relationships not only between people, but also towards love objects. This is in line with businesses’ main goal for the past few decades, that is to pursue these kinds of strong brand relationships with their customers in the hopes of obtaining market-related benefits - mostly through consumer satisfaction strategies.

However, when Reichheld et al. (2000, p. 138) discussed the “satisfaction trap” – summarised in their ultimate advice for companies as “It’s not how satisfied you keep your customers, it’s how many satisfied customers you keep!” – a shift towards fully understanding loyalty and loyalty strategies started to be undertaken by most researchers and businesses, as they began assimilating the potential impact of a loyal customer base on profits and business performance (Oliver, 1999). Moreover, it has been noted that loyalty and customer retention present a highly attractive asset for businesses and particularly to brands due to the reduced cost of present customer retention and maintenance when in comparison to the high costs and effort needed to acquire new customers (Fornell & Wernerfelt, 1987).

Additionally, Oliver (1999) helps assert the notion that satisfaction is but a component of loyalty behaviour given that the presence of satisfaction is usually a given when a consumer is loyal, but the reverse isn’t always true as not all satisfied consumers are loyal.

But what exactly is Brand Loyalty? Traditionally, it has been defined through a behavioural outcome lens, usually classifying loyal customers based on their repurchase of a brand, without considering any other alternatives and having done no brand-related information seeking, as according to Newman and Werbel (1973).

Notwithstanding, Oliver (1999, p. 34) wittily identified the problem with these simplistic process definitions and proposed an updated definition that grasps the psychological dimension of loyalty, therefore consisting in “a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior”. This definition is in line with the Brand Loyalty dichotomy found in literature that states that Brand Loyalty, as a measure of attachment, comprises a behavioural dimension (as stated above), regarded as the habitual purchase or repurchase of a brand, and an attitudinal dimension, characterized by strong desires to commit to the one brand and no other by virtue of unique value associations pinned on said brand (Aaker, 1991; Chaudhuri & Holbrook, 2001; Oliver, 1999).

As can be noted, Richard Oliver is one of the greatest promoters of Brand Loyalty research. The author puts forward a continuum-like framework in which Brand Loyalty flows through three distinct stages - cognitive, affective, and conative loyalty – where each stage depends on the completion of the preceding. Specifically, Oliver (1999) clarifies that loyalty is usually formed on a consumer’s mind in a cognitive sense in a first instance, then evolves into an affective sense, and only ultimately in a conative manner, which is then translated into a repurchase-encouraging behaviour.

Cognitive Brand Loyalty, as the first stage, occurs when consumers’ views and expectations of the brand are shaped by previous vicarious or experience-based attribute information about it, resulting in a shallow consumer state based on a brand belief; when on the previous stage satisfaction is processed, it paves the way for affective Brand Loyalty, which occurs in the presence of a “strong emotional attachment with the brand” that stems from pleasurable cumulative

satisfaction and ultimately leads to positive attitudes and experiences with the brand, although also still subject to switching and demanding for a deeper commitment level, such as; conative Brand Loyalty, which entails a brand-specific commitment to repurchase and is the last step in the loyalty process, occurring when consumers' levels of satisfaction are met, kept, and fulfilled, thus being translated in a motivated repurchase intention that can later be fulfilled through a mix of an action control sequence and desire to carry the intention through whatever hindrances (Oliver, 1999; Salem & Salem, 2019, p. 5).

Taking these remarks into consideration, consumer Brand Loyalty will be applied and measured in the present research according to its three interrelated dimensions of cognitive, affective, and conative Brand Loyalty. As one of the strongest and widely recognized outcomes of Brand Love, and considered one of the most excellent measures of organizational success (Nyadzayo & Khajehzadeh, 2016), it poses a very interesting incorporation into this study given the chosen product category and Carroll and Ahuvia's (2006) findings pertaining to different levels of loyalty and other Brand Love outcomes reliant on hedonic versus utilitarian product categories, and on self-expressive brands.

2.6 WILLINGNESS TO PAY A PRICE PREMIUM

The last, but surely not the least of the Brand Love consequents to be included in this research is Willingness to Pay a Price Premium. This construct, seen by Khan et al. (2020) as another of Brand Love's behavioural outcomes, symbolizes "the amount a customer is willing to pay for his/her preferred brand over comparable/lesser brands of the same package size/quantity" (Netemeyer et al., 2004, p. 211).

According to Aaker (1996), the 'price premium' construct is deeply linked to Brand Loyalty when in comparison to one or more brands that offer similar or less benefits, with this association depending on the brands involved. By effectively capturing customers' loyalty, the price premium is most likely the best measure of brand equity – that is, the set of assets and liabilities associated to a brand name and symbol that add to or subtract from the value a product or service provides to a firm or that firm's customers - and benefits from the segmentation of the market into loyalty groups (loyal buyers, customers who are brand switchers, and noncustomers), thus allowing for a better marketing strategy, understanding of the reference brand's equity profile, and of its brand value (Aaker, 1996).

As a positive behavioural outcome of Brand Love and emotional attachment to brands, Willingness to Pay a Price Premium can be translated into a higher predisposition from consumers to invest money (along with time and energy) into their relationship with said brands, thus displaying a degree of price insensitivity or, in other words, by being more willing to making financial sacrifices in order to avoid separation anxiety or distress – especially when there is a perceived quality differential in comparison to other brands (Batra et al., 2012; Khan et al., 2020; Thomson et al., 2005).

In light of these theoretical evidences, and keeping in mind that the Willingness to Pay a Price Premium construct is one of the benefits to be reaped from companies' investment on the development of Brand Love not only financially, but also managerially by helping marketers assess the brands' perceived value and define the pricing strategy (Garg et al., 2016), it only made sense to include this comprehensive concept in this study and evaluate its performance and interaction with the other constructs under the specific theme of Brand Love in smartphone brands.

CHAPTER 3. RESEARCH MODEL

The present section relates to the research model, that is, the schematized overview of the research process that displays the hypothesized relationships among the different constructs (variables) and guides the researcher's work in supporting, or not, said hypotheses. Composed by a problem definition and the development of a conceptual model and inherent hypotheses, the research model is very useful in fulfilling the research objectives and answering the research questions defined.

In the current marketing landscape, the study of the factors that not only lead to the consumption of smartphones on behalf of consumers but to the every so often long-lasting consumption of a specific smartphone brand poses a great issue, especially when aiming to study those factors that transpire from the presence, communication, and interactions amongst brands and consumers online – this, of course, without overlooking the generous outcomes coming from this singular type of consumer-brand relationship that is Brand Love.

Drawing closely on Loureiro et al.'s (2017) own research and conceptual model, this study takes the central construct of Brand Love and relates it to its key antecedent of Online Consumer Brand Engagement and to its vital outcomes of Brand Loyalty, Positive e-WOM, and Willingness to Pay a Price Premium. Special care is also given to Brand Satisfaction, a construct that too is expected to serve as a Brand Love antecedent and has its own set of consequents shared with Brand Love, on Brand Loyalty and on Positive e-WOM.

3.1 DEFINING THE PROBLEM

Since the Industrial Revolution that technological advances have been in the limelight in many aspects of people's personal, professional, and social lives. From cars to industrial pieces of machinery, printers to laptops, from touch screen to wireless technologies, just about every breakthrough brought about a huge change in people's habits, behaviours, and actions.

Having evolved from the first telephone and with a little help from the Internet, smartphones are no exception to the rule and have become essential gadgets that provide instant connection, communication, and information exchange from and to anywhere in the world.

With the speedy proliferation of smartphones, businesses saw a golden opportunity to connect instantly with their existing or potential customers through company websites, institutional blogs, social media, or discussion forums to name a few, and thus work on building brand equity, a strong customer base, brand image, brand reputation, meaningful and profitable customer relations, and everything associated with the great benefits the online world can bring businesses.

As many academics point out, studies aiming to identify and comprehend the behaviour and influences of the various factors that enable consumers to feel love for a brand are scarce but of the utmost importance to both researchers and practitioners as antecedents help gain a better understanding of how, why, and when Brand Love is formed and how it can be maximized and

leveraged for the benefit of all stakeholders involved in the process (Bergkvist & Bech-Larsen, 2010; Loureiro et al., 2017; Roy et al., 2013). Antecedents identified in extant literature are as wide-ranging and disperse as brand trust, brand identification, respect, sense of community, consumer delight, and even individual romanticism (Noel Albert & Merunka, 2013; Bergkvist & Bech-Larsen, 2010; Garg et al., 2016; Roy et al., 2013).

Moreover, this type of research is even scarcer when pertaining to online environments and to the smartphone industry given the recency and novelty of this line of work.

As a matter of course, the problem to take into consideration for the present research concerns the understanding of how Online Consumer Brand Engagement leads to or influences Brand Love in smartphone brands, in an online context. At heart, all Online Consumer Brand Engagement antecedents, as well as all Brand Love consequents considered in this research (Brand Loyalty, Positive e-WOM, and Willingness to Pay a Price Premium) will have to be taken into consideration in order to fully comprehend the impact of OCBE on Brand Love and what it entails for stakeholders.

3.2 DEVELOPMENT OF THE CONCEPTUAL MODEL

Being the basis of this research, constructs are defined by Neo (2017) as concepts that can directly or indirectly be measured or observed in some way, and only then being considered a variable. Thence, guaranteeing construct validity is crucial in making sure that the fit between the construct and its operational measure is so suiting that no essence is lost in the process and so what is being measured perfectly matches the researcher's intention and chosen constructs (Neo, 2017).

Table 1 below provides a summary of concept conceptualisation and consequent theoretical validity by presenting the main sources for each construct.

	Concept	Source
Brand Love	Brand Love is a recent construct that consists in more than a strong emotion for a brand and more than a simple transference of interpersonal love to a love object, as it displays cognitive, affective, and behavioural elements. It is a complex construct in which a consumer's long term, positive and pleasurable relationship with a brand culminates in a strong affective bond that goes beyond momentary experience.	(Batra et al., 2012; Carroll & Ahuvia, 2006)
Online Consumer Brand Engagement	Online Consumer Brand Engagement consists in a form of online engagement between consumers and brands, as it relates to consumers' overall positive brand related activities in relation to specific online interactions between them and the brand. Since these activities are of positive cognitive, emotional, and behavioural nature, this construct is operationalized in the Brand Involvement, Online Brand Experience, and Self-Brand Image Congruency actionable constructs.	(Hollebeek et al., 2014; Loureiro et al., 2017)

	Concept	Source
Brand Satisfaction	Brand Satisfaction is a construct conceptually close, but very distinct from Brand Love, and is related to consumers' perceptions and expectations of pleasure or displeasure derived from consumption. It is regarded as a perceived functional benefit of Brand Love and entails a cognitive and an affective dimension.	(Khan et al., 2020; Oliver, 1999)
Positive e-WOM	Positive e-WOM is a powerful marketing construct comprising positively valenced statements published on the internet by different types of consumers, which can be current, past, or future customers of the brand to which their comments pertain to. There are different motives for consumers to engage in this type of communication, and companies have started to understand that this comprises an important communication channel they can use to their advantage and to build relationships with consumers.	(Hennig-Thurau et al., 2004; Kozinets et al., 2010)
Brand Loyalty	Brand Loyalty consists in a cognitive, affective, and conative successive process through which consumers develop a strong sense of commitment that prompts them to repeat purchase and repatronize a preferred brand's product or service above all competitors, external influences or deviating efforts, in a display of almost unbreakable attachment.	(Oliver, 1999)
Willingness to Pay a Price Premium	Willingness to Pay a Price Premium is a construct that translates the amount that a consumer is willing to pay extra for the value their preferred brand provides, over all its competitors. It is one of the greatest measures of consumers' active commitment and of the different sacrifices they are willing to make for their favourite brand.	(Netemeyer et al., 2004; Thomson et al., 2005)

Table 1 - Construct Conceptualisation

Brand Love doesn't just happen overnight. As seen earlier, it is a rather complex construct that requires the existence of special circumstances for it to become a reality, while also being the catalyst for an intricate and looked-for set of outcomes.

Putting an emphasis on some definitions of Online Consumer Brand Engagement helps shed a light on this issue, as scholars generally highlight the strong motivational force that elicits positively valenced cognitive, affective, and behavioural manifestations on behalf of consumers towards a dynamic interactive relationship they dearly share with a brand, in this case in an online environment (Hollebeek et al., 2014; Mollen & Wilson, 2010; van Doorn et al., 2010). By offering a motivational perspective on online engagement between consumers and brands, it is fathomable that a prosperous avenue for Brand Love is paved in this setting, as Brand Love relies heavily on positive post-consumption manifestations and interactions, which are also highly related to Brand Satisfaction (Carroll & Ahuvia, 2006).

Herewith, the three antecedents that make up the OCBE construct: Brand Involvement, Online Brand Experience, and Self-Brand Image Congruency, all enhance the relevance, interaction,

internal subjective and behavioural responses, commitment, symbolism, and self-brand congruency that create the perfect mix for the birth of a passionate, satisfied, understanding, and committed relationship in which there is a nearly perfect consumer-brand cognitive and affective alignment (Bhat & Reddy, 1998; Brakus et al., 2009; Morgan-Thomas & Veloutsou, 2013; Sirgy, 1982; Zaichkowsky, 1985). Hence, the following hypotheses are proposed:

H1^(*): Online Consumer Brand Engagement has a positive influence on Consumer Brand Satisfaction.

H2^(*): Online Consumer Brand Engagement has a positive influence on Consumer Brand Love.

Since Carroll and Ahuvia (2006) have established that, although conceptually distinct, Brand Love consists in a mode of satisfaction that only a few lucky satisfied consumers are able to experience, it is implicit that in order for Brand Love to be manifested, consumers must experience satisfaction beforehand as a result of their product/service and brand interactions. If satisfaction is nurtured and maintained over time with more and more positive and meaningful brand experiences, its accumulation can eventually lead to a tightening of the emotional bond between brand and consumer (Roy et al., 2013).

As this argument goes in line with Carroll and Ahuvia's (2006) definition of Brand Love involving a satisfied consumers' passionate emotional attachment to a trade name, it is posited that the build-up of satisfaction over time will unequivocally lead to Brand Love. Therefore, it is only natural that the following hypothesis is proposed:

H3^(*): Consumer Brand Satisfaction has a positive impact on Consumer Brand Love.

As previously debated, it is largely expected that the Brand Love felt and displayed by previously satisfied consumers provides a helping hand in the understanding and prediction of such post-consumption behaviours as the commitment to repurchase and the enthusiastic willingness to share positive opinions, experiences, or remarks about the brand and its products, either online or offline, to acquaintances or even to complete strangers (Carroll & Ahuvia, 2006).

Given that commitment has been identified by Oliver (1999) as the core element of loyalty and keeping in mind that Loureiro et al. (2017) argued that satisfaction is both a predecessor and a reward in the interactive engagement process between consumers and brands, it is possible to hypothesize that satisfaction itself facilitates the growth of a strong commitment element in consumer-brand relationships that will ultimately be translated into consumer Brand Loyalty. Hence, the following hypothesis is proposed:

H4^(*): Consumer Brand Satisfaction has a positive influence on Consumer Brand Loyalty.

Sequentially, when consumers' expectations about a certain product or service performance are met and a satisfactory and rewarding evaluation results from said interaction, consumers may feel motivated to engage in Positive e-WOM communications as a way of giving positive support back

to the company (Hennig-Thurau et al., 2004; Loureiro et al., 2017). Thus, the following hypothesis emerges:

H5^(*): Consumer Brand Satisfaction has a positive influence on Consumer's Positive e-WOM.

Furthermore, Brand Love's behavioural outcomes play a key role in the successful accomplishment of this central construct and provide a comprehensive base for understanding Brand Love's importance and relevance in today's modernised marketplace.

Starting with Brand Loyalty, this measure of attachment is highly valuable as it not only indicates treasured brand and product/service benefits such as quality, uniqueness, and competitiveness, but also renders increased sales, a robust customer basis, and brand equity for instance (Aaker, 1991). Once again taking on Carroll and Ahuvia's (2006) reasoning that emotionally committed consumers are inherently satisfied and prone to repeat purchase and other loyalty displays, one can argue that in the presence of strong passionate feelings and attachment to a brand, consumers start taking attitudes and actions that meet Oliver's (1999) three-stage framework previously clarified, as a result from their growing desires to commit and interact with the brand they love, feel close to and identify with. As a result, the following hypothesis is presented:

H6^(*): Consumer Brand Love has a positive effect on Consumer Brand Loyalty.

The e-WOM construct is virtually inseparable from Brand Love, due to the simple fact that feelings of love, whether toward a person or a love object such as a brand, leave people infatuated and wanting to share their happiness and relationship or partner perks with the world. With positive WOM communications and behaviours indicating the presence of Brand Love, and Brand Love encouraging consumers to engage in WOM activities that result in socio-economic benefits for both consumers and companies – this also being applicable to electronic WOM activities – it is clear that there is a shared interest in this type of active engagement behaviour that is sought for individual and collective benefit by all parties involved (Aro et al., 2018; Batra et al., 2012; Carroll & Ahuvia, 2006; Hennig-Thurau et al., 2004).

This means that efforts directed at fostering Brand Love will ultimately result in positive word-of-mouth communications that, in an online context, will help consumers express their feelings and share their positive experiences, and companies in reaping lucrative benefits from their e-WOM campaigns. Therefore, the following hypothesis is presented:

H7^(*): Consumer Brand Love has a positive effect on Consumer's Positive e-WOM.

The last of the behavioural outcomes of Brand Love and emotional brand attachment is Willingness to Pay a Price Premium, which indicates the financial amount a consumer prefers one brand over its competitors. When consumers love a brand, they are willing to make sacrifices for the sake of the relationship they share by investing money, time, and energy which, according to Batra et al. (2012), consists in a passion-driven behaviour that conveys the brand's importance to the consumer and enhances attachment. So, it is only logical to hypothesize that consumers' feelings

of love towards brands lead to a strong willingness to invest resources in the brand and in the relationship created.

H8^(*): Consumer Brand Love has a positive effect on Consumer's Willingness to Pay a Price Premium.

The elaboration of a conceptual model is vital to research, as it paints a clear picture of the relationships between the proposed constructs and of the organic flow of the research and inherent analysis, thus acting as a guiding light to the whole definition, implementation, and operationalization of the study.

Bearing this in mind, this study's conceptual model is presented in Figure 2 below. It provides a clear-cut overview of the constructs' interrelationships and resulting research hypotheses regarding the central construct of Brand Love.

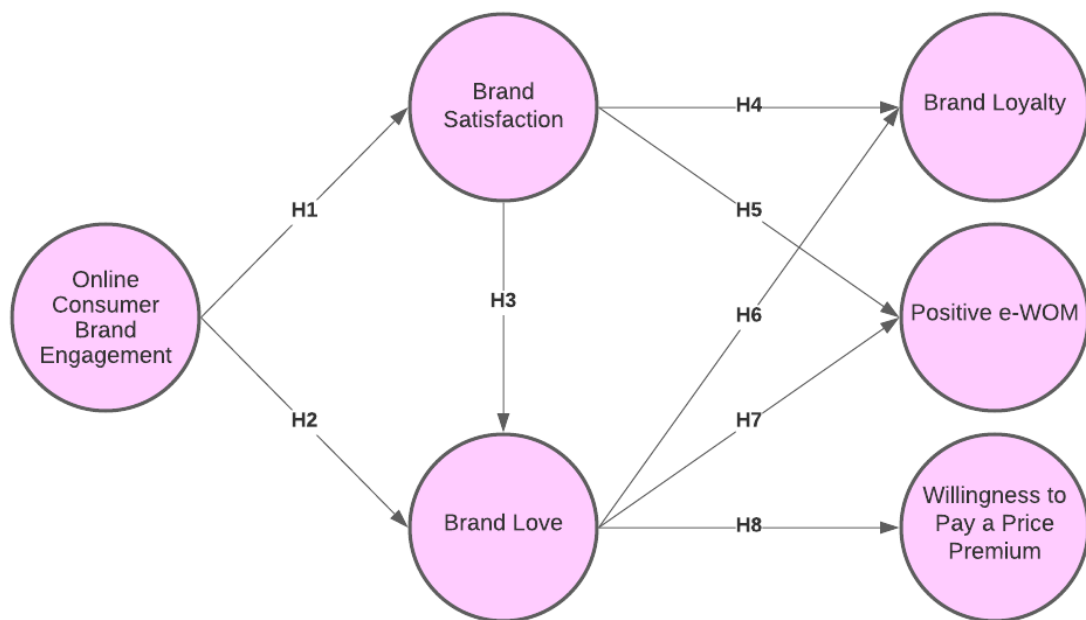


Figure 2 - Conceptual Model

If this model proves true and fitting for the research, causal conclusions concerning situations in which these elements of consumer-brand relationships are present and may aid in the identification or explanation of Brand Love will be derived.

CHAPTER 4. METHODOLOGICAL APPROACH

Chapter 4, concerning to the methodological approach to be implemented in the present study, is now presented. Detailed descriptions and explanations regarding the research methodology, data collection and analysis methods are provided with the aim of clarifying the methodology chosen and how it will be applied.

4.1 RESEARCH METHODOLOGY

Research can be defined as “the creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies and understandings” (Australian Government, 2012, p. 7), while comprising the “discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws” (Merriam-Webster, n.d.-b). In simpler terms, and according to Gil (2008), research is a formal and systematic process of attaining new knowledge and answers to specific problems in the field of social reality, through the development of the scientific method.

Given that the present study aims to derive valuable insights regarding a specific body of knowledge, it thus entails a research paradigm – that is, the researchers’ way of understanding and studying the reality based on a set of beliefs and a theoretical framework that influence and define the study’s ontology, epistemology, methodology and methods (Rehman & Alharthi, 2016).

Whilst many sources restrict research design only to methodology and what it encompasses, the components of ontology and epistemology are of great importance since they relate to pertinent issues such as the research’s context, nature, and connection with theory (Jonker & Pennink, 2010).

Specifically, ontology consists of reality and the assumptions one holds regarding their perceived reality, which in terms of nature can be internal or external depending on how they were constructed and/or communicated to the individual (Jonker & Pennink, 2010; Wahyuni, 2012), thus making up a complex social phenomena by which knowledge is socially constructed by different actors in their interactions (Jonker & Pennink, 2010). According to this conceptualization, there are different ontological views to be considered, such as objectivism, constructivism, and realism (Matthews & Ross, 2010).

In turn, epistemology deals with the sources of knowledge or, as Wahyuni (2012, p. 69) puts it, the beliefs that help “generate, understand and use the knowledge” in relation to its “methods, validity, nature, sources, limits and scope” (Jonker & Pennink, 2010, p. 61). In light of this concept, there are three different positions that can help better select the knowledge to be used in the research and assist in the formulation of research questions: positivism, interpretivism, and realism (Matthews & Ross, 2010).

Last but not least, the methodology component comprises a set of techniques that help the researcher investigate the issue identified (Sobh & Perry, 2006) and guide him in the choice of the

type of data necessary to the study and of the specific tools required to collect said data (Rehman & Alharthi, 2016). These culminate in the more operational methods, which entail the practical application of specific means through which data is collected and analysed (Rehman & Alharthi, 2016; Wahyuni, 2012). Nevertheless, an important notion to retain about these concepts and their connections is that while research paradigms and design guide the construction and fulfilment of the research project, the adoption of one, two, or more different methods does not necessarily imply a certain ontological or epistemological perspective (Rehman & Alharthi, 2016), allowing the researchers to freely choose the most suitable techniques for gathering the information needed. Therefore, a methodological approach can mostly be quantitative and involve formal measurement and statistical analysis; qualitative and involve non-formal in depth examinations through case studies, interviews, or observations; or mixed in a combination of both types of methods and providing a broader and more realistic understanding of the research issue (Almalki, 2016; Marczyk et al., 2005).

With this briefing of what comprises a research paradigm, its choice and design, it is time to decide on the paradigm to use in this dissertation. In this sense, Sobh and Perry (2006) consider the existence of four distinct research paradigms, each supported by a set of philosophical assumptions - positivism, realism, constructivism, and critical theory. However, some authors also consider the existence of pragmatism but more in the sense of a research approach and less as a research paradigm, as it displays a disregard for the nature of reality and focuses on the convenient usage of methods for the sole purpose of meeting the research objectives (Hussain et al., 2013).

With this in mind, the present study will follow the research paradigm regarding positivism, which takes the natural scientists' attitude, views, and understandings, and applies them to the study of social sciences and phenomena (Wahyuni, 2012). Some characteristics of positivism are related to the stance of the researcher involving the research subjects and social phenomena, which is primarily objective, independent, and highly observant in its ability to collect large amounts of quantitative data, which are then statistically analysed in order to fulfil the quest for generalization and, consequently, for causal explanation and logical progression (Matthews & Ross, 2010; Szyjka, 2012; Zeithaml et al., 2020).

As a result, the positivist paradigm and its hypothetico-deductive method make for an adequate framework for the present quantitative research, as it also allows the use of qualitative methods of data collection like the survey by questionnaire to be used in this study (Saunders et al., 2009).

In such a way, the most suitable research design for the present study is that of a cross-sectional study: not only because it is in accordance with the logical causal deductions of the positivist paradigm to be followed, but also because the insights and contribution of a large number of participants will be collected at a specific point in time via a survey by questionnaire that will enable the subsequent analysis regarding the constructs and items in question, as well as valuable cross-cultural, gender, or age comparisons (Matthews & Ross, 2010).

It will therefore consist of an exploratory descripto-explanatory mono method quantitative study operationalized by means of a qualitative data collection method – namely, a structured survey by questionnaire using Likert-type scales - and non-probabilistic self-selection sampling processes, so

that findings can be somewhat generalizable for the population in question and theory, and generate insights on the topic, the conceptual model, and on the relationships between constructs (Saunders et al., 2009).

4.2 DATA COLLECTION METHOD: SURVEY BY QUESTIONNAIRE

The use of a questionnaire, which is defined as a “formalized set of questions for obtaining information from respondents”, is, when done right, particularly useful in collecting quantitative primary data that is reliable and provided by motivated respondents from various backgrounds (Malhotra, 2010, p. 303).

Often applied with the goal of studying attitudes and behaviours in social sciences, surveys, or more correctly surveys by questionnaire, comprise a traditional way of describing reality through their non-experimental descriptive design and have proven to fulfil efficiency, flexibility, ethical, geographical, and internal and external validity requirements for successful data collection and interpretation (Mathers et al., 2007).

To this extent, a survey by questionnaire was designed, employed, and disseminated in order to assess consumers’ feelings of love toward the smartphone brand they are currently sporting and experiencing through their personal smartphone.

4.2.1 QUESTIONNAIRE DESIGN

This survey was created in the online platform Google Forms, due its ease of use for both researcher and respondents. This allowed for a simple, intuitive, and appealing survey that ensured privacy, uncomplicated navigation, obligation to respond to key questions as defined by the researcher, and also the possibility to withdrawal from participation at any point of the survey.

The survey launched online in English and in Portuguese on the evening of April 8th, and was disseminated via Facebook, Instagram, LinkedIn, and word-of-mouth until the afternoon of August 3rd when response collection was disabled. It is worthy to mention that during the almost four months that the survey was live, a small marketing campaign was conducted on social media in order to draw attention to the research and attract more participants. Besides the various regular posts across the social media platforms mentioned, this campaign has differentiated itself from most survey shares because it also included four teasing, viral-marketing inspired posts (see APPENDIX A through APPENDIX D), multiple appealing Instagram and Facebook stories, and two Instagram stories games – “Would you rather” and “Get to know me” – all related to technology and with amusing but subtle calls-to-action urging viewers to take part in the research.

By making the most of the social media tools available, of viral marketing principles, and of some strategies usually utilized by social media influencers, the feedback received on this modern and differentiated campaign was very positive and spontaneous, which resulted in very good adhesion to the research.

Opening the survey is a quick brief on its scope, purpose, anonymity assurance, and design, so that respondents have a clear picture of what is expected of them and how their data and intel will be processed in the context of the present research. Additionally, a consent declaration and a filter question regarding the brand of the respondents' current smartphone were shown beforehand, so that only adequate and informed respondents would go through with the survey.

The following section regards all the questions regarding the Brand Involvement, Online Brand Experience, Self-Brand Image Congruency, Brand Satisfaction, Brand Love, Positive e-WOM, Brand Loyalty, and Willingness to Pay a Price Premium constructs that will aid in hypotheses testing.

Last but not least, the last section of the survey relates to demographic questions about the respondents, namely: Gender, Age, Full degree of education, Nationality, Marital status, and Professional status.

Filter Question		1 question
CONSTRUCTS	Brand Involvement	6 questions
	Online Brand Experience	9 questions
	Self Brand Image Congruency	5 questions
	Brand Satisfaction	8 questions
	Brand Love	6 questions
	Positive e-WOM	4 questions
	Brand Loyalty	11 questions
	Willingness to Pay a Price Premium	3 questions
Sociodemographic Data		6 questions

Table 2 - Summary of the questions presented in the survey by questionnaire

As such, in total the structured survey employed was composed of 59 questions distributed by three main sections, with 52 of those questions pertaining to the eight essential research questions related to the theoretical constructs in study, as can be seen in Table 2 above, and on APPENDIX E.

Although there were two distinct survey links, one for the English version and another for the Portuguese version, the data collected was treated as one and both Excel output files merged together in a single survey output Excel file and standardized so that data treatment and analysis in the IBM® SPSS® Statistics 27 and IBM® SPSS® Amos 27 software would be swift and straightforward.

4.2.2 SCALES AND MEASURES OF THE VARIABLES

The scales and measures of the variables included in the survey by questionnaire employed in this research were based on the literature review elaborated earlier and so comprise structured and previously validated scales and measures by each author and their peers throughout the years and in numerous investigations, meaning that there is evidence of their validity and reliability.

Given that all the scales and respective items were found to be in English and the survey was employed in English and Portuguese, it was necessary to translate and counter-translate the items so that the original and essential meaning of each one would not be lost.

All items were assessed by respondents on a 7-point Likert-type scale ranging from “Strongly disagree”, corresponding to 1, to “Strongly agree”, corresponding to 7, in terms of individuals’ level of agreement with the statements in the questionnaire regarding the brand they have chosen to evaluate and are presented and discussed below.

The first set of scales and items presented were adopted from the anchor paper to this research belonging to Loureiro et al. (2017) and are concern Table 3 through Table 7.

Brand Love

The Brand Love construct was measured using Bagozzi et al.'s (2014) (as cited in Loureiro et al., 2017) 6 item adapted scale, on a 7-point Likert-type scale where 1= Strongly disagree and 7= Strongly agree, as follows:

This brand says something true and deep about who I am as person
I feel myself desiring this brand
I feel emotionally connected to this brand
I will be following for a long time this brand online
If this brand would delete its online presence, I will feel anxiety about it
My overall evaluation toward this brand is positive

Table 3 - Brand Love Items

Online Consumer Brand Engagement

As already mentioned, the Online Consumer Brand Engagement construct is composed of three different constructs: Brand Involvement, Online Brand Experience, and Self-Brand Image Congruency. Therefore, the scales and measures of each of these constructs are presented below separately.

Brand Involvement

The Brand Involvement construct was measured based on a 6-item scale adapted from De Vries and Carlson (2014):

This brand means a lot to me
This brand is significant for me
I consider this brand to be a relevant part of my life
For me personally, this brand is important
I am interested in this specific brand
I am involved with this brand

Table 4 - Brand Involvement Items

Online Brand Experience

The Online Brand Experience construct was measured based on a 9-item scale adapted from Brakus et al. (2009), which includes 3 dimensions – affective, behaviour and intellectual – but

excludes the fourth dimension of sensory dimension proposed by the authors, given that it was regarded not suitable for the online context of this study, according to what was mentioned earlier. The three dimensions used include each a reverse item, important to assess respondents' attention and true experiences:

This brand is an emotional brand
This brand induces feelings and sentiments
I do not have strong emotions for this brand
This brand encourages me to engage in physical activities (e.g. booking a holiday, buy the product)
Following this brand results in physical experiences (e.g. doing sports, wearing make-up)
This brand does not encourage me to engage in physical behaviours
This brand animates me to think about it and its message
Experiencing this brand stimulates my curiosity
I am not motivated to think about this brand

Table 5 - Online Brand Experience Items

Self-Brand Image Congruency

Similarly to Brand Involvement, the Self-Brand Image Congruency construct was also measured based on a scale adapted from De Vries and Carlson (2014), with 5 measurable items:

This brand is a lot like me
This brand reflects what I am
This brand is exactly how I see myself
This brand image corresponds to my self-image in many respects
Through this brand, I can express what I find important in life

Table 6 - Self-Brand Image Congruency Items

Positive e-WOM

The construct regarding Positive Electronic Word-of-mouth was measured using a scale adapted from Ismail and Spinelli (2012), concerning four measurable and comprehensive items:

I encourage friends and my family to buy this brand
Whenever someone seeks advice, I would recommend this brand
When the brand is mentioned in a conversation (online and/or offline), I would recommend it
I have already recommended this brand (online and/or offline) to my friends and family

Table 7 - Positive e-WOM Items

The next set of scales and items, in Table 8 and Table 9, relate to and were taken from the work of Khan et al. (2020).

Brand Satisfaction

This construct was measured through two dimensions – Brand Satisfaction Affective and Brand Satisfaction Cognitive – each with a total of four items. As such, Brand Satisfaction was measured

based on an 8-item scale adapted from Brakus et al. (2009), Churchill and Surprenant (1982), and Oliver (1980):

Using this brand puts me in a good mood
I am very happy with this brand
This brand is likeable
This brand is trustworthy
This brand is a good value of money
I am satisfied with the innovative features of this brand
This brand is a unique brand in this category
I am satisfied with the functional quality of this brand

Table 8 - Brand Satisfaction Items

Willingness to Pay a Price Premium

Willingness to Pay a Price Premium was a construct measured based on a 3-item scale adapted from Anselmsson et al. (2014) and Batra et al. (2012):

Buying this brand seems like a good idea, although more expensive
I am willing to pay a higher price for my favourite brand
I will continue to buy this brand even if identical brands are cheaper

Table 9 - Willingness to Pay a Price Premium Items

Last, but not least, Brand Loyalty was included in this study as a suggestion based on the work of Salem and Salem (2019).

Brand Loyalty

The Brand Loyalty construct was measured through three dimensions: Brand Loyalty Cognitive, Affective, and Conative – the first and last with four items, and the Affective dimension with three items. Hence, Brand Loyalty was measured based on an 11-item scale adapted from Oliver's (1999) work and Back and Parks (2003), displayed in Table 10 below:

This brand provides me superior product quality as compared to other competitors in the marketplace
No other brands perform better than this brand
The overall quality of this brand is the best in the marketplace
I believe this brand provides more benefits than other brands in the marketplace
I love purchasing from this brand
I feel better when I purchase this brand
I like this brand more than other competing brands in the marketplace
If I am given a chance, I intend to continue buying from this brand
I consider this brand to be my first choice
This is the only brand of this type of product that I will buy
When I go shopping, I don't even notice competing brands

Table 10 - Brand Loyalty Items

Table 11 below presents a summary of the scales, items, and measures to be used in the operationalization of each construct, as well as the respective sources for said information.

		ITEMS	SCALE	SOURCE
OCBE	Brand Involvement	BI_1 This brand means a lot to me BI_2 This brand is significant for me BI_3 I consider this brand to be a relevant part of my life BI_4 For me personally, this brand is important BI_5 I am interested in this specific brand BI_6 I am involved with this brand	Likert-type Scale (1 - 7)	(De Vries & Carlson, 2014)
	Online Brand Experience	OBE_1 This brand is an emotional brand OBE_2 This brand induces feelings and sentiments OBE_3 I do not have strong emotions for this brand (r) OBE_4 This brand encourages me to engage in physical activities (e.g. booking a holiday, buy the product) OBE_5 Following this brand results in physical experiences (e.g. doing sports, use make-up) OBE_6 This brand does not encourage me to engage in physical behaviors (r) OBE_7 This brand animates me to think about it and its message OBE_8 Experiencing this brand stimulates my curiosity OBE_9 I am not motivated to think about this brand (r)	Likert-type Scale (1 - 7)	(Brakus et al., 2009)
	Self-Brand Image Congruency	SBIC_1 This brand is a lot like me SBIC_2 This brand reflects what I am SBIC_3 This brand is exactly how I see myself SBIC_4 This brand image corresponds to my self-image in many respects SBIC_5 Through this brand, I can express what I find important in life	Likert-type Scale (1 - 7)	(De Vries & Carlson, 2014)
	Brand Satisfaction	BS_1 Using this brand puts me in good mood. BS_2 I am very happy with this brand. BS_3 This brand is likeable. BS_4 This brand is trustworthy. BS_5 This brand is a good value of money. BS_6 I am satisfied with the innovative features of this brand. BS_7 This brand is a unique brand in this category. BS_8 I am satisfied with the functional quality of this brand.	Likert-type Scale (1 - 7)	(Brakus et al., 2009; Churchill & Surprenant, 1982; Oliver, 1980)
	Brand Love	BL_1 This brand says something true and deep about who I am as person BL_2 I feel myself desiring this brand BL_3 I feel emotionally connected to this brand BL_4 I will be following for a long time this brand on Facebook BL_5 If this brand would delete its Facebook account, I will feel anxiety about it BL_6 My overall evaluation toward this brand is positive	Likert-type Scale (1 - 7)	(Bagozzi et al., 2014)
	Positive e-WOM	PWOM_1 I encourage friends and my family to buy this brand PWOM_2 Whenever someone seeks advice, I would recommend this brand PWOM_3 When the brand is mentioned in a conversation (online and/or offline), I would recommend it PWOM_4 I have already recommended this brand (online and/or offline) to my friends and family	Likert-type Scale (1 - 7)	(Ismail & Spinelli, 2012)
	Brand Loyalty	BLT_1 Brand XYZ provides me superior product quality as compared to other competitors in marketplace. BLT_2 No other brands perform better than brand XYZ. BLT_3 Overall quality of brand XYZ is the best in marketplace BLT_4 I believe brand XYZ provides more benefits than other brands in Marketplace. BLT_5 I love purchase from brand XYZ. BLT_6 I feel better when I purchase brand XYZ. BLT_7 I like brand XYZ more than other competing brands in marketplace. BLT_8 If I am given a chance, I intend to continue buying from brand XYZ. BLT_9 I consider brand XYZ to be my first choice. BLT_10 This is the only brand of this type of product that I will buy. BLT_11 When I go shopping, I don't even notice competing brands.	Likert-type Scale (1 - 7)	(Back & Parks, 2003; Oliver, 1999)
	Willingness to Pay a Price Premium	WTPPP_1 Buying this brand seems like a good idea, although more expensive. WTPPP_2 I am willing to pay a higher price for my favorite brand. WTPPP_3 I will continue to buy this brand even identical brands are cheaper.	Likert-type Scale (1 - 7)	(Anselmsson et al., 2014; Batra et al., 2012)

Table 11 - Scales and measures of the constructs

4.2.3 POPULATION AND SAMPLE

Defining a target population is crucial for any research, as it helps direct data collection methods to individuals who have the unique set of characteristics required for the research to be appropriate, valid, and meaningful. Essentially, Malhotra (2010, p. 340) defines target population as “the

collection of elements or objects that possess the information sought by the researcher and about which inferences are to be made”.

In the present research, the target population are individuals over the age of 16 who own a smartphone, regardless of gender, nationality, educational background, ethnicity, sexual orientation, income level, or other social labels.

Equally important is sampling, which means applying “any procedure that draws conclusions based on measurements of a portion of the entire population” (Zikmund & Babin, 2010, p. 58) and is particularly useful in shorter budget and time frames, is adequate to large population sizes and still pays attention to particular cases, thus providing results that show safety in generalizations to the whole population. In the context of this study, the sampling technique used was a non-probabilistic self-selection sampling process in which individuals could express their willingness to take part in the research, and as a mean so that findings could be somewhat generalizable for the population in question and generate theoretical and practical insights on the topic, the conceptual model and on the relationships between constructs (Saunders et al., 2009). In total, a sample of 328 respondents was obtained, with only 327 responses being considered valid.

4.2.4 PRE-TEST

A pre-test was developed and employed in the form of a provisional form in Google Forms, in order to assess and assure item translation quality and adequability, as well as to evaluate respondent comprehension and possible difficulties with the survey. Respondents were carefully chosen so that there were at least 30 answers of all backgrounds, because gender, age, and nationality were important factors to assess in this study.

From an initial total of 119 items, the scales and measures were simplified and Batra et al.'s (2012) Brand Love scale was, as suggested in this study's anchor paper, replaced with the one they used in their work: Bagozzi et al.'s (2014) (as cited in Loureiro et al., 2017) 6 item scale. Additionally, and following Loureiro et al.'s (2017) valuable observation, OBE's sensory dimension was removed from the overall set of items, given that this dimension “was not considered in the current study as not regarded suitable for the context” (Loureiro et al., 2017, p. 992). This ultimately resulted in 52 questionnaire items, distributed by the constructs in study.

There were 33 total answers, however only 32 were valid because the questionnaire specifically asked respondents to name a brand which they followed online and had strong positive feelings for, but one of the respondents said 'None' and continued with the questionnaire by scoring every item the value 1 (strongly disagree). The 32 valid brands mentioned by respondents were of many different categories and characteristics, ranging from beauty bloggers, retail, car, or technology brands, for example.

This posed as a valuable understanding that the investigation had to be narrowed down to a single product category, so that respondents found it easier to recall a loved brand within a category they are very familiar with and towards which they typically have strong feelings and opinions for. As

such, it was decided that in the final questionnaire respondents had to name their current smartphone's brand, given that this is a widely and thoroughly used essential personal item in peoples' everyday lives.

This pre-test was also useful in assessing the scales' internal consistency and reliability. By means of an analysis to each of the scales' Cronbach alpha, exhibited in Table 12 below, it is possible to conclude that most of the scales have a questionable but sometimes acceptable (> .6) or good (> .8) level of reliability, as George and Mallery (2019) and Malhotra (2010) state.

Scale	Cronbach's alpha
Brand Involvement	0.922
Online Brand Experience	0.623
Self-Brand Image Congruency	0.891
Brand Satisfaction	0.875
Brand Love	0.733
Positive e-WOM	0.914
Brand Loyalty	0.923
Willingness to Pay a Price Premium	0.843

Table 12 - Cronbach's alpha for the pre-test

There was, however, one scale – Online Brand Experience – that required some attention going forward in the investigation due to its reduced level of reliability (.623), although still acceptable.

4.3 DATA ANALYSIS METHODS

No research is successful without the definition of specific measures and techniques that aim to maximize the guarantee of internal and external validity and reliability of its analyses and findings. In this sense, the measures to be employed in order to ensure the proposed conceptual model's consistency, as well as their particular reference values, will be discussed next.

First and foremost, the application of a survey by questionnaire calls for Statistical Analysis of its results, namely through the central tendency measures of Mean, Median, and Mode, as well as the dispersion measure of Standard Deviation, and Skewness and Kurtosis.

When it comes to the measures of central tendency, very clear and straightforward definitions are presented by Hair et al. (2020), who define mean as the arithmetic average sensitive to outliers and appropriate for interval or ratio data; the median, or the 50th percentile, as the value located right at the middle of a (ordinal) distribution and, in case of an odd number of observations, corresponds to the central value, while on an even number of observations it corresponds to the average of the two values at the centre; and the mode as the value most frequently observed in a data distribution that can be categorical. The median and the mode are not sensitive to outliers in the data set, thus providing more robustness to the analysis.

Adding to these measures that illustrate the sample distribution, is the essential standard deviation measure of dispersion, which shows the data distribution's observations' variability from the mean, which consists in the sum of the square individual deviation scores, divided by the number of respondents minus 1, and thus shows the level of agreement among the respondents on a particular question (Hair et al., 2020). The standard deviation has the minimum value of 0, and values above that progressively indicate more variability and distance from the mean.

Moreover, the skewness and kurtosis relate to the shape of the distribution. Skewness consists in a measure of a distribution's deviation from symmetry, that is, from a normal distribution where the mean, mode and median are in the same location, and can be positively skewed when the tail tends to higher values, or negatively skewed when the tail tends to lower values (Schindler, 2019). Hair et al. (2020) warn that when these values of skewness surpass +1 or -1, one is in the presence of a substantially skewed data distribution. Complimentarily, kurtosis measures a distribution's peakedness or flatness, in which a normal distribution's kurtosis is 0², and values above +1 or below -1 indicate that either the curve is too peaked or too flat, respectively (Hair et al., 2020; Schindler, 2019). For the particular case of the present research, the boundary values to be utilized as reference are the ones suggested by Curran et al. (1996), who recommend that these should be inferior to 2.0 and 7.0, for skewness and kurtosis respectively.

Next, Exploratory Factor Analysis (EFA) consists in an interdependence technique that allows for the definition of the underlying correlation structure among the variables under analysis, by providing the necessary tools for the analysis and identifying sets of highly interrelated variables, or factors, which represent various relevant dimensions present in the data and independent from a priori estimation limitations (Hair et al., 2014). The use of the multivariate statistical technique of Exploratory Factor Analysis adds value to the research by identifying underlying variable relationships or patterns and combining them into a smaller number of factors that retain the maximum information possible and are more easily analysed, thus promoting data examination and comprehension (Hair et al., 2020).

There are several techniques available to go through with EFA, but this study will focus and adopt Principal Axis Factoring as a factor extraction method, and the Varimax criterion for factor rotation and interpretation.

According to Marôco (2014), Principal Axis Factoring is an extraction method that assumes that each variable is formed by a portion common to the factor structure and a variable-specific portion, with the initial communalities corresponding to the proportion of each item's variance explained by a linear combination of the remaining items, with a series of calculations being undertaken until the variation of communalities is below a certain convergence limit value, and the correlations among variables are a little more palpable.

Varimax in turn, is a method of orthogonal factor rotation that allows for a simplified interpretation of factors, as it attempts to deliver very understandable clusters of factors by loading a small number of variables highly onto each factor and consequently maximizing loading dispersion within factors (Field, 2009).

To start off the analysis, the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) and Bartlett’s test of sphericity are essential in ensuring that the data are appropriate for Factor Analysis. Specifically, the KMO is a sample adequacy measure that embodies the “ratio of the squared correlation between variables to the squared partial correlation between variables” in the proportion of variance that can be explained by latent factors (Field, 2009, p. 647; Kaiser, 1970; Matos & Rodrigues, 2019). The KMO statistic produces values between the unsuitable 0 and the most desirable 1, with any values in between being categorized as according to Table 13 below:

KMO Value	Sample Adequacy Interpretation
< 0.5	Unacceptable
[0.5 - 0.6[	Miserable
[0.6 - 0.7[	Mediocre
[0.7 - 0.8[	Middling
[0.8 - 0.9[	Meritorious
[0.9 - 1]	Marvellous

Table 13 - Reference values and interpretation for Kaiser-Meyer-Olkin's (KMO) test

Source: Kaiser & Rice (1974, p. 112)

In turn, Bartlett’s test of sphericity examines the correlation matrix in full for statistically significant correlations among at least a few of the variables and assesses if the correlation matrix is proportional to an identity matrix (Field, 2009; Hair et al., 2014). When this test results in a significance value equal to or smaller than 0.05, it means that the null hypothesis is rejected and there is evidence that sufficient correlations among the variables exist and are (overall) significantly different from zero, meaning that it is possible to proceed with the analysis (Field, 2009; Hair et al., 2014).

Another important criterion in EFA has to do with communalities, which consist in the proportion of each variable’s common variance that can be explained by the factors and needs to be a value greater than .5 for it to be satisfactory and to guarantee that the variable in question will work well during the execution of the Factor Analysis (Matos & Rodrigues, 2019; UCLA: Statistical Consulting Group., n.d.).

Moving onto a Reliability Analysis, Cronbach’s alpha is, in the words of Field (2009) and Hair et al. (2014), the most used measure of scale internal consistency and reliability. Despite being sensitive to increases in the number of scale items, this coefficient shows values that range from 0 to 1, with any values under .6 usually indicating inadequate internal consistency reliability (Malhotra, 2010). Nonetheless, George and Mallery (2019) provide the following value interpretation for this coefficient shown in Table 14 below:

Cronbach's alpha Value	Consistency and Reliability Interpretation
< 0.5	Unacceptable
[0.5 - 0.6[	Poor
[0.6 - 0.7[	Questionable
[0.7 - 0.8[	Acceptable
[0.8 - 0.9[	Good
[0.9 - 1]	Excellent

Table 14 - Reference values and interpretation for Cronbach's alpha

Source: George & Mallery (2019, p. 244)

As such, most authors and researchers assume Cronbach's alpha values of .7 or greater as a good lower limit of acceptability, advising that values under .7 should be removed until scale reliability is secured (Hair et al., 2014).

Moving forward with the validation of the measurement model, emphasis is given to the measures of Composite Reliability (CR) and Average Variance Extracted (AVE) when it comes to assessing construct validity and accuracy of measurement. Specifically, CR is defined by Malhotra (2010, p. 693) as the "total amount of true score variance in relation to the total score variance" as equivalent to the traditional conception of reliability in classical test theory, and should retrieve values of .7 or higher for the reliability and the consequent validity of the constructs and the model to be assured. In turn, the measure of Average Variance Extracted is a measure of convergent and discriminant validity, helpful in the assessment of the average percentage of variance in the observed variables or constructs that its explained by the latent construct and its items, which should ideally result in a convergence of at least .5 (Hair et al., 2014; Malhotra, 2010).

Factor loadings, which can be unstandardized and have no boundaries or standardized and vary between -1 and +1, are also important in assessing convergent validity on latent constructs, with values of at least 0.5 and ideally of 0.7 or higher required to draw positive conclusions on this rational (Hair et al., 2014).

No EFA is truly complete without the use of a confirmatory perspective to validate the results and assess their replicability, and a Confirmatory Factor Analysis (CFA) through Structural Equation Modelling (SEM) as Hair et al. (2014) and George and Mallery (2019) mention, although rather intricate, is an optimal and rising way to do so in the attempt to identify the underlying structure, magnitude and direction of relationships among the variables. As such, SEM rests in a multivariate technique composed by a structural and a measurement model that, by combining Factor Analysis and Multiple Regression, allows for the examination of a set of interrelated dependence relationships among the measured variables and latent constructs, as well as between the latter, thus exposing several equations that explain these dependent and interdependent relationships (Hair et al., 2014).

The theoretical background discussed earlier is an essential foundation for SEM because, as Malhotra (2010) rightfully states, all constructs and relationships under analysis must be backed up by robust and clear theoretical arguments. By elaborating on the causal inferences provided by the supporting theory on dependent and independent variable interaction and incorporating the measurement error associated, SEM is helpful in testing hypotheses, whether by confirming or rejecting said hypotheses (Hair et al., 2014).

As a way of refining the analysis and obtaining richer results from this complex technique, the more specific technique of Path Analysis (PA) was employed. Path Analysis aims at determining the strength of the paths depicted in path (arrow) diagrams by making use of simple bivariate correlations, which makes this technique a special combination of the SEM components through the use of a structural model, but not of the measurement model (Hair et al., 2014; Malhotra, 2010).

There are a series of model fit quality indices that are used to assess the model's validity. The fit indices and their respective generally recommended values for model validity, subject to model characteristics, are based on Marôco (2021), and are shown below in Table 15:

Fit Measure	Reference Values and Interpretation	
Chi-Square and <i>p-value</i>	The smaller, the better; <i>p-value</i> ≤ 0.05	
Chi-Square/degrees of freedom	> 5	Bad
	]2; 5]	Acceptable
	]1; 2]	Good
	≈ 1	Very Good
Goodness of Fit Index (GFI)	< 0.8	Bad
	[0.8; 0.9[	Sufferable
	[0.9; 0.95[	Good
	≥ 0.95	Very Good
Comparative Fit Index (CFI)	< 0.8	Bad
	[0.8; 0.9[	Sufferable
	[0.9; 0.95[	Good
	≥ 0.95	Very Good
Parsimony Goodness of Fit Index (PGFI)	< 0.6	Bad
	[0.6; 0.8[	Good
	≥ 0.8	Very Good

Fit Measure	Reference Values and Interpretation	
Parsimony Comparative Fit Index (PCFI)	< 0.6	Bad
	[0.6; 0.8[	Good
	≥ 0.8	Very Good
Root Mean Square Error of Approximation (RMSEA) and <i>p-value</i>	> 0.08 - 0.10	Unacceptable
	]0.05; 0.08]	Acceptable
	≤ 0.05	Very Good
	<i>p-value</i> ≤ 0.05	

Table 15 - Reference values and interpretation for assessing model quality in SEM

Source: Marôco (2021, p. 55)

CHAPTER 5. DATA ANALYSIS AND DISCUSSION

In this chapter, the data collected through the application of the survey by questionnaire elaborated are analysed under several detailed sections, as a way of better organizing the insights to be explored and discussed later on. The data were treated through the IBM® SPSS® Statistics 27 and IBM® SPSS® Amos 27 software.

5.1 SAMPLE CHARACTERIZATION

A total of 328 individuals were surveyed, although one respondent's answers were not considered valid to the present study and consequently not considered in the analysis, thus making up the total of 327 valid responses. The response mentioned was not considered because the individual answered '0' to the question asking about their current smartphone's brand, and then proceeded to score every question as the middling value of '4', therefore not providing useful nor valuable data.

Out of the 327 valid responses, 207 appertain to individuals of the female sex and 120 to individuals of the male sex, which means that 63.6% of respondents were females, and 36.7% were males.

When it comes to the age distribution, a quick look at the table provided below shows that, besides this being a nicely distributed sample as there are 11 people under the age of 20 and one individual over the age of 70 which is noteworthy, respondents predominantly have ages in the 20 to 29 years old range, followed by the 30 to 38 years old range, that together make up more than 75% of the total sample. The following ranges show less expressive representations and are sorted starting with the 8.9% of the 40 to 49 years old range, 6.8% of the 50 to 59 years old range, 4% of the 60 to 69 years old range, 3.4% of under 20s and 0.3% of the over 70s age range. This means that we're in the presence of a predominantly youthful sample, most likely due to the fact that the questionnaire was mainly disseminated through online platforms and social media such as Facebook, Instagram, and Facebook Messenger for instance.

As far as academic qualifications are concerned, the large majority of individuals have completed their Bachelor's Degree (46.2%), followed by those who have completed their Master's Degree (26%), and those who have completed Secondary education (15.6%). Only 1.5% of respondents claim to have only completed Primary education. This indicates that the sample is very well educated, which might also be explained by the means used to disseminate the questionnaire.

For the most part, respondents are single as stated by 246 of them (75.2%), whereas the rest are either married (21.4%), divorced (3.1%), or widowed (0.3%).

When it comes to the respondents' professional status, there is a clear lead from the top three professional categories – Student (45.3%), Employee (26.6%), and Working/Studying (14.4%) – that together represent more than 86% of the sample. On the bottommost end of the spectrum is the

category concerning the Retired individuals who, by being only 8 in the total sample, make up 2.4% only.

The sample is composed of a very interesting and rich variety of nationalities, from a total of 47 different ones that represent virtually all parts of the globe: Europe, North and South America, Australia, Asia, and Africa. The vast majority of individuals are Portuguese – 179, or 54.7% - which makes sense given that Portugal is the origin country of the present research. Notwithstanding, the Britons, North Americans, and Dutch make up the top three nationalities following the Portuguese, corresponding to 11%, 3.4%, and 3.1% of respondents, respectively.

Presented next is Table 16 - Sample Characterisation, which details the demographic characteristics of the study sample, comprised of 327 valid responses, and provides support to the analysis made above.

DEMOGRAPHIC DATA		FREQUENCY	RELATIVE FREQUENCY	CUMULATIVE FREQUENCY
Sex	Female	207	63.3%	63.3%
	Male	120	36.7%	100%
	Total	327	100%	
Age Group	Up to the age of 19	11	3.4%	3.4%
	20 to 29 years old	209	64.3%	67.7%
	30 to 39 years old	40	12.3%	80.0%
	40 to 49 years old	29	8.9%	88.9%
	50 to 59 years old	22	6.8%	95.7%
	60 to 69 years old	13	4%	99.7%
	Over the age of 70	1	0.3%	100%
	Total	325	100%	
Academic Qualifications	Primary education	5	1.5%	1.5%
	Secondary education	51	15.6%	17.1%
	Baccalaureate	10	3.1%	20.2%
	Bachelor's Degree	151	46.2%	66.4%
	Postgraduate Studies	15	4.6%	70.9%
	Master's Degree	85	26%	96.9%
	Doctorate	10	3.1%	100%
	Total	327	100.00%	
Marital Status	Single	246	75.2%	75.2%
	Married	70	21.4%	96.64%
	Divorced	10	3.1%	99.69%
	Widowed	1	0.3%	100.00%
	Total	327	100%	

DEMOGRAPHIC DATA		FREQUENCY	RELATIVE FREQUENCY	CUMULATIVE FREQUENCY
Professional Status	Unemployed	13	4%	4%
	Self-employed	24	7.3%	11.3%
	Employee	87	26.6%	37.9%
	Student	148	45.3%	83.2%
	Working/Studying	47	14.4%	97.6%
	Retired	8	2.4%	100%
	Total	327	100%	
Nationality	North American	11	3.4%	3.4%
	Australian	3	0.9%	4.3%
	Austrian	3	0.9%	5.2%
	Brazilian	4	1.2%	6.4%
	British	36	11%	17.4%
	Canadian	3	0.9%	18.3%
	Chinese	1	0.3%	18.7%
	Croatian	2	0.6%	19.3%
	Czech	2	0.6%	19.9%
	Danish	1	0.3%	20.2%
	Dutch	10	3.1%	23.2%
	Filipino	1	0.3%	23.5%
	Finnish	1	0.3%	23.9%
	French	4	1.2%	25.1%
	German	6	1.8%	26.9%
	Greek	2	0.6%	27.5%
	Hungarian	1	0.3%	27.8%
	Indian	1	0.3%	28.1%
	Indonesian	1	0.3%	28.4%
	Iranian	1	0.3%	28.7%
	Iranian-Canadian	1	0.3%	29.1%
	Irish	1	0.3%	29.4%
	Israeli	1	0.3%	29.7%
	Italian	8	2.4%	32.1%
	Lithuanian	1	0.3%	32.4%
	Malaysian	3	0.9%	33.3%
	Mexican	2	0.6%	33.9%
	Nepalese	1	0.3%	34.3%
Norwegian	2	0.6%	34.9%	
Pakistani	1	0.3%	35.2%	
Portuguese	179	54.7%	89.9%	

DEMOGRAPHIC DATA		FREQUENCY	RELATIVE FREQUENCY	CUMULATIVE FREQUENCY
	Romanian	2	0.6%	90.5%
	Russian	1	0.3%	90.8%
	Serbian	1	0.3%	91.1%
	Singaporean	1	0.3%	91.4%
	Slovak	1	0.3%	91.7%
	Slovenian	5	1.5%	93.3%
	South African	2	0.6%	93.9%
	Spanish	6	1.8%	95.7%
	Swedish	2	0.6%	96.3%
	Swiss	1	0.3%	96.6%
	Taiwanese	1	0.3%	96.9%
	Tanzanian-Kenyan	1	0.3%	97.2%
	Turkish	1	0.3%	97.6%
	Ukrainian	1	0.3%	97.9%
	Vietnamese	5	1.5%	99.4%
	Welsh	2	0.6%	100%
	Total	327	100%	

Table 16 - Sample Characterisation

5.2 FILTER QUESTION

As a way of enriching and differentiating the analyses to be carried out, the filter question “What brand is your current smartphone?” was chosen to start off the questionnaire, following a study and data protection briefing, as well as a consent statement. This question was selected in the hope of obtaining relevant statistics that could relate to the demographic data and/or the constructs under analysis and thus produce pertinent insights.

A total of 14 distinct smartphone brands were mentioned by respondents, with Apple unmistakably taking the lead by being representative of 42.5% of the total sample, followed by Samsung (23.2%), Huawei (16.8%), and the slightly less representative Xiaomi (11.3%).

The 10 remaining brands are Google, Motorola, Alcatel, Nokia, OnePlus, TCL, Asus, Oppo, the Portuguese LAIQ, and ZTE, and have very little significance as together they only represent about 6% of the total sample.

Table 17 below shows the results obtained when analysing the respondent’s current smartphone brands.

BRAND	FREQUENCY	RELATIVE FREQUENCY	CUMULATIVE FREQUENCY
Alcatel	2	0.6%	0.6%
Apple	139	42.5%	43.1%
Google	4	1.2%	44.3%
Huawei	55	16.8%	61.2%
Asus	1	0.3%	61.5%
Motorola	4	1.2%	62.7%
Nokia	2	0.6%	63.3%
OnePlus	2	0.6%	63.9%
Oppo	1	0.3%	64.2%
Samsung	76	23.2%	87.5%
LAIQ	1	0.3%	87.8%
TCL	2	0.6%	88.4%
Xiaomi	37	11.3%	99.7%
ZTE	1	0.3%	100.0%
Total	327	100%	

Table 17 - Respondents' Smartphone Brands

5.3 DESCRIPTIVE STATISTICS

This next section makes use of descriptive statistics to portray and summarize the characteristics of the data set under examination. Ergo, the presented below Table 18 through Table 25 show, for each item of each construct, the measures of Mean (this measure is also presented for the totality of the items), Median, Mode, Standard Deviation, Skewness, and Kurtosis.

Brand Love

The mean obtained for each item relative to the Brand Love construct is situated between 2.55 and 5.54, which indicates a significant disparity in values either below or above the medium threshold of 4 (median value in a scale from 1 to 7). Given that lower values indicate disagreement with the statement and higher values indicate agreement, it is possible to conclude by the overall mean of 3.5 that in general, respondents showed a certain level of disagreement with the items measuring Brand Love.

	MEAN	MEDIAN	MODE	STANDARD DEVIATION	SKEWNESS	KURTOSIS	
BL_1	2.74	3.50	2	1	1.759	0.710	-0.545
BL_2	3.59		4	1	1.940	0.076	-1.248
BL_3	3.11		3	1	1.878	0.479	-0.953
BL_4	3.49		3	1	2.041	0.190	-1.312
BL_5	2.55		2	1	1.785	0.879	-0.456
BL_6	5.54		6	6	1.349	-1.182	1.534

Table 18 - Descriptive Statistics - Brand Love

Specifically, item BL_5 “If this brand would delete its online presence, I will feel anxiety about it” is the one consumers gave the least importance to, while item BL_6 “My overall evaluation toward this brand is positive” was the one most importance was attributed to, with the minimum and maximum mean scores recorded for this scale, respectively.

The median corresponds to 2 points on the first and fifth items, to 3 points on the third and fourth items, to 4 points on the second item, and to 6 points on the sixth item. As far as the mode is concern, the first five items show a mode of 1 point, while the last item shows a mode of 6 points.

The standard deviation associated with each item is also of significance because, varying from 1.349 up to 2.041, this measure shows that there is an overall relatively high degree of dispersion from the mean, indicating that respondents’ answers were fairly heterogeneous on all items.

Skewness, ranging from -1.182 to 0.879, and kurtosis, ranging from -1.312 to 1.534, display excellent values that indicate non severe normality in the distribution by fulfilling the recommended requisites of values under 2 and 7, respectively.

Online Consumer Brand Engagement

Brand Involvement

The Brand Involvement items all exhibit different mean values that range from 3.58 to 4.69 points. Making up a mean of 4.23 as an ensemble, it is certain that respondents attribute some significance to the statements made by each BI item.

	MEAN	MEDIAN	MODE	STANDARD DEVIATION	SKEWNESS	KURTOSIS	
BI_1	4.46	4.23	5	5	1.635	-0.475	-0.422
BI_2	4.58		5	5	1.665	-0.460	-0.515
BI_3	3.93		4	5	1.860	-0.059	-1.149
BI_4	4.12		4	5	1.801	-0.156	-0.968
BI_5	4.69		5	6	1.781	-0.640	-0.589
BI_6	3.58		4	1	1.881	0.102	-1.183

Table 19 - Descriptive Statistics - Brand Involvement

Keeping in line with this understanding, values for the median are of only 4 or 5 and of 5 or 6 for the mode, except for item BI_6 “I am involved with this brand” which presents a mode of 1 and is also the lowest scoring in terms of mean and one of the lowest in median, thus indicating that nearly all consumers surveyed do not really have conscience of being involved with the brand they mentioned. In contrast, item BI_5 “I am interested in this specific brand” also stands out for being the one that contributes the most to this scales’ positive scores, being the item that displays the highest mean, mode, and one of the highest medians.

The standard deviation associated with the BI items fluctuates little between 1.635 and 1.881, but still indicates heterogeneity in the answers and a significant degree of dispersion from the mean.

Skewness values are, for all items, situated far below the recommended cut-off value of 2, as they range from -0.640 to 0.102 as is desirable. Similarly, kurtosis also presents values from -1.183 to -0.422 that are very desirable and well below the mentioned cut-off.

Online Brand Experience

All nine items of OBE present rather consistent mean values, varying from 2.68 to 3.82, in an overall low mean value of 3.24 points.

	MEAN	MEDIAN	MODE	STANDARD DEVIATION	SKEWNESS	KURTOSIS	
OBE_1	3.02	3.24	3	1	1.860	0.540	-0.909
OBE_2	3.07		3	1	1.827	0.471	-0.975
OBE_3	3.36		3	1	2.003	0.386	-1.122
OBE_4	2.93		2	1	1.869	0.578	-0.898
OBE_5	2.68		2	1	1.789	0.748	-0.666
OBE_6	3.49		3	1	1.975	0.241	-1.156
OBE_7	3.10		3	1	1.732	0.270	-1.106
OBE_8	3.70		4	1	1.870	-0.007	-1.206
OBE_9	3.82		4	4	1.884	0.026	-1.082

Table 20 - Descriptive Statistics - Online Brand Experience

The median is of 3 for most items, with items OBE_4, OBE_5, OBE_8, and OBE_9 presenting median values of 2 and 4, respectively. In line with this, the mode has a predominantly negative behaviour by presenting the value of 1 on all items except for the reversed OBE_9 “*I am not motivated to think about this brand*” which presents a mode of 4 points.

At this point, special consideration should be given to the reversed items in this scale: OBE_3, OBE_6, and OBE_9. Low descriptive statistic scores on these items do not necessarily imply bad results, as, for example, the mode value of 1 on items OBE_3 and OBE_6 indicates a strong disagreement with the statements and that the surveyed consumers do, in fact, have strong emotions for the brand each one mentioned and feel compelled by it to engage in physical behaviours.

Similarly to the previous constructs, OBE also presents a substantial degree of heterogeneity and dispersion from the mean, as 1.732 and 2.003 are the values delimiting this constructs’ standard deviation value range.

Skewness and kurtosis show yet again a great behaviour by avoiding the cut-off values by far, since they range from -0.007 to 0.748 and from -1.156 to -0.666, in that order.

Self-Brand Image Congruency

Self-Brand Image Congruency was, by far, the scale that presented the lowest mean value which, at a scanty 2.98, reveals that respondents did not give much importance to the statements made nor

agreed very much with them. In effect, the items' means vary from 2.78 to 3.33 and are therefore not up to scratch.

	MEAN	MEDIAN	MODE	STANDARD DEVIATION	SKEWNESS	KURTOSIS	
SBIC_1	3.33	2.98	4	4	1.731	0.174	-0.902
SBIC_2	2.98		3	1	1.707	0.422	-0.822
SBIC_3	2.78		2	1	1.676	0.580	-0.719
SBIC_4	2.88		3	1	1.699	0.547	-0.764
SBIC_5	2.94		3	1	1.707	0.445	-0.853

Table 21 - Descriptive Statistics - Self-Brand Image Congruency

The lowest median value is 2 on item SBIC_3 and the highest is 4 on item SBIC_1. The mode here also displays a primarily negative behaviour by presenting values of 1 on all items, except for SBIC_1 "This brand is a lot like me" which, with a mode of 4, is the item that presents the highest value for this measure, although respondents most often neither showed agreement nor disagreement with the statement.

The standard deviation, once again, by displaying values between 1.676 on the third item and 1.731 on the first item, shows some heterogeneity among the answers and a certain level of dispersion from the mean. The second and the fifth items in this scale present the same value for standard deviation (1.707).

Skewness and kurtosis values are noticeably good and either all positive or all negative, however always complying greatly with the reference values. Specifically, skewness ranges from 0.174 to 0.580 and kurtosis ranges from -0.902 to -0.719, which makes not severe non normality a reality for SBIC.

Brand Satisfaction

Brand Satisfaction is the construct that displays the highest overall mean with a unique 5.01 points and a range that goes from the modest 3.75 up to the exceptional 5.72 points.

	MEAN	MEDIAN	MODE	STANDARD DEVIATION	SKEWNESS	KURTOSIS	
BS_1	3.75	5.01	4	4	1.745	-0.121	-0.976
BS_2	5.36		6	6	1.349	-0.843	0.360
BS_3	5.31		6	6	1.418	-0.922	0.581
BS_4	5.39		6	6	1.439	-1.038	0.880
BS_5	5.15		5	6	1.483	-0.765	0.105
BS_6	5.62		6	6	1.239	-0.870	0.220
BS_7	3.76		4	1	1.947	0.070	-1.215
BS_8	5.72		6	6	1.196	-0.981	0.923

Table 22 - Descriptive Statistics - Brand Satisfaction

In fact, there are only two items that do not present individual means in the range of fives: BS_1 “Using this brand puts me in a good mood” with a mean of 3.75, and BS_7 “This brand is a unique brand in this category” with a similar mean of 3.76 points. The item displaying the highest value of mean is BS_8 “I am satisfied with the functional quality of this brand”, which is a great indicator for smartphone brands.

The median and the mode follow this reasoning since the only items not displaying the value 6 (for both measures) or 5 (for median also), are precisely the lowest mean scoring items. As such, item BS_1 has both a median and mode value of 4, whilst item BS_7 displays a median of 4 and a mode of 1.

For standard deviation, the same thinking as previously still applies and with values between 1.196 and 1.947, it is possible to conclude that there is an evident dispersion from the mean and heterogeneity.

Skewness and kurtosis both comply with the recommended values and guaranteed not severe non normality of the distribution, as desired. As such, while skewness presents predominantly negative values situated between -1.038 and 0.070, kurtosis on the other hand presents predominantly positive values ranging from the one of two negative values -1.215 to 0.923.

Positive e-WOM

Positive e-WOM is the construct presenting the second-highest overall mean, at 4.88 points. Its items’ individual means vary from PWOM_3’s 4.76 points to PWOM_2’s 5.01 points, meaning that respondents generally agree to recommending the smartphone brand they mentioned whenever someone seeks advice.

	MEAN	MEDIAN	MODE	STANDARD DEVIATION	SKEWNESS	KURTOSIS	
PWOM_1	4.89	4.88	5	5	1.648	-0.742	-0.010
PWOM_2	5.01		5	5	1.527	-0.801	0.250
PWOM_3	4.76		5	5	1.675	-0.641	-0.270
PWOM_4	4.84		5	5	1.886	-0.768	-0.434

Table 23 - Descriptive Statistics - Positive e-WOM

Every one item in this scale displays the same value, of 5, for both median and mode, once again being an indicator of agreement with PWOM’s statements.

Nonetheless, the standard deviation values between 1.527 and 1.886 suggest heterogeneous answers and dispersion from the mean.

Skewness and kurtosis present negative values all round, except for kurtosis on the second item. In particular, skewness ranges from -0.801 to -0.641 and kurtosis from -0.434 to 0.250, which gives security in saying not severe non normality is assured.

Brand Loyalty

Brand Loyalty displays a great overall mean score of 4,38, with all items showing mean scores of 3.22 or higher. Effectively, item BLT_8 *“If I am given a chance, I intend to continue buying from this brand”* shows the highest mean in this set, standing at 5.17 points.

Accordingly, the maximum median is 6, for item BLT_8, and the minimum is 3, precisely for item BLT_11 *“When I go shopping, I don’t even notice competing brands”* which is the one displaying the lowest mean score and thus hints that the consumers surveyed do tend to consider other smartphone brands before making the final purchase.

	MEAN	MEDIAN	MODE	STANDARD DEVIATION	SKEWNESS	KURTOSIS	
BLT_1	4.92	4.38	5	5	1.566	-0.688	-0.022
BLT_2	3.93		4	4	1.816	-0.082	-0.934
BLT_3	4.42		5	5	1.758	-0.418	-0.670
BLT_4	4.56		5	5	1.660	-0.482	-0.511
BLT_5	4.43		5	5	1.786	-0.345	-0.728
BLT_6	3.91		4	4	1.890	-0.064	-1.016
BLT_7	4.94		5	7	1.801	-0.729	-0.398
BLT_8	5.17		6	7	1.694	-0.909	0.083
BLT_9	4.89		5	7	2.006	-0.704	-0.735
BLT_10	3.84		4	1	2.078	-0.036	-1.368
BLT_11	3.22		3	1	2.032	0.508	-1.028

Table 24 - Descriptive Statistics - Brand Loyalty

The mode for this construct is very interesting as it’s range fully matches the scale used in the questionnaire: from 1 to 7. Notably, items BLT_7 *“I like this brand more than other competing brands in the marketplace”*, BLT_8 *“If I am given a chance, I intend to continue buying from this brand”*, and BLT_9 *“I consider this brand to be my first choice”*, all display modes of the highest possible score, therefore demonstrating respondents’ every so often strong preference and fondness in relation to their evoked brand.

The standard deviation for Brand Loyalty ranges from 1.566 to 2.078 and consequently denotes a significant heterogeneity and deviation from the mean.

Although very acceptable, skewness and kurtosis show predominantly negative values. Namely, skewness scores vary from -0.909 to 0.508, and kurtosis scores vary from -1.368 to 0.083 and thus assure not severe non normality for the distribution.

Willingness to Pay a Price Premium

Last but not least, the Willingness to Pay a Price Premium mean scores are fairly positive, starting on 3.99 points and going up to 4.35 points of item WTPPP_1 *“Buying this brand seems like a good idea, although more expensive”*. Intuitively, the overall mean score for this scale is 4.17 points.

The median is 4 for the second and third items and 5 for the first, whereas the mode is 5 for the first two items and 6 for the last, WTPPP_3 “*I will continue to buy this brand even if identical brands are cheaper*”, thus indicating a clear intention to rebuy on behalf of respondents.

	MEAN	MEDIAN	MODE	STANDARD DEVIATION	SKEWNESS	KURTOSIS
WTPPP_1	4.35	4.17	5	1.976	-0.288	-1.141
WTPPP_2	4.16		4	1.901	-0.180	-1.177
WTPPP_3	3.99		4	2.060	-0.068	-1.347

Table 25 - Descriptive Statistics - Willingness to Pay a Price Premium

Standard deviation is, in similarity with the other scales, indicative of a rather significant degree of deviation from the mean and heterogeneity by being situated between 1.901 and 2.060.

Once more, skewness and kurtosis assure not severe non normality for the distribution despite showing negative values for all items and ranging from -0.288 to -0.068 and from -1.347 to -1.141, respectively.

In conclusion, the overall mean of each construct is mostly positive, with emphasis due to Brand Satisfaction, but with due attention to be given to Self-Brand Image Congruency and Online Brand Experience as these constructs present overall mean scores below the median threshold of 4, on the scale utilised in the survey by questionnaire.

Both median and mode present generally positive yet low values, although prominence should be given to items BLT_7 “*I like this brand more than other competing brands in the marketplace*”, BLT_8 “*If I am given a chance, I intend to continue buying from this brand*”, and BLT_9 “*I consider this brand to be my first choice*” since these are the only items scoring a mode of 7.

The standard deviation shows dispersion from mean and a certain level of heterogeneity among answers for all constructs under analysis, along with skewness and kurtosis scores that are well under the cut-off values of 2 and 7, respectively, on all constructs and thus guarantee not severe non normality of each distribution.

5.4 FACTOR ANALYSIS

In this section, factor analysis presents several scores concerning the correlation analysis between the variables, namely through analysis as Kaiser-Meyer-Olkin’s (KMO) test, Bartlett’s test of sphericity, Number of factors retained, Cumulative variance explained in percentage, Communalities, and Factor Loadings.

In this sense, Table 26 through Table 33 shown below present said measures and tests for each construct under examination and thus help further the analysis undertaken in the present research.

Brand Love

Starting off with Brand Love, a quick look at the table above provides an overview of this constructs' behaviour on all measures and the specific values of communalities indicate that, after removing item BL_6 "My overall evaluation toward this brand is positive", the remaining items are satisfactory in supporting the proportion of the variable's common variance that is explained by the factors.

	KMO	BARTLETT'S TEST (sig.)	NO. OF FACTORS RETAINED	% CUMULATIVE VARIANCE EXPLAINED	COMMUNALITIES	FACTOR LOADINGS
BL_1	0.886	0.000	1	65.768	0.656	0.810
BL_2					0.688	0.829
BL_3					0.800	0.894
BL_4					0.633	0.796
BL_5					0.511	0.715

Table 26 - Factor Analysis - Brand Love

The KMO value obtained for this construct is of .886, which is considered meritorious and provides evidence of correlation between the items. Additionally, Bartlett's test of sphericity presents a *p-value* of approximately .000 which, by being well lower than the cut-off of 0.05, supports the previous claim of correlation between the items and provides a green light to proceed with the analysis.

The items explain 65.768% of Brand Love and there was only one factor retained, with the factor loadings for each item varying between 0.715 and 0.894. This means that the items have a great explanation power of the sole factor retained, with item BL_3 "I feel emotionally connected to this brand" being the strongest one in this sense.

Online Consumer Brand Engagement

Brand Involvement

All Brand Involvement items present communality scores above .5, which is considered to be satisfactory and thus provides safety in the execution of factor analysis without eliminating any item. These communality scores present a minimum of .572 on item BI_6 and a maximum of .834 on the second item.

Posing as indicators of success in the analysis are the KMO and Bartlett's test which, by presenting respective values of .888 and .000, suggest that there are sufficient correlations, distinct from zero, between the items and therefore indicate that BI is a robust scale.

	KMO	BARTLETT'S TEST (sig.)	NO. OF FACTORS RETAINED	% CUMULATIVE VARIANCE EXPLAINED	COMMUNALITIES	FACTOR LOADINGS
BI_1	0.888	0.000	1	73.521	0.804	0.897
BI_2					0.834	0.913
BI_3					0.711	0.843
BI_4					0.808	0.899
BI_5					0.682	0.826
BI_6					0.572	0.756

Table 27 - Factor Analysis - Brand Involvement

The items cumulatively explain 73.521% of variance and the factor loadings for the only factor retained fluctuate in a range from 0.756 to 0.913, meaning that all items contribute at least 75% to the factor retained.

Online Brand Experience

After an initial factor analysis to the OBE construct, it was decided to eliminate the reversed items OBE_3 “I do not have strong emotions for this brand”, OBE_6 “This brand does not encourage me to engage in physical behaviours”, and OBE_9 “I am not motivated to think about this brand”, because they did not display factor loadings for any factor or presented very weak communality values, which means that they had no influence on the understanding and measurement of the variable. Hence, OBE’s analysis was carried out only on its regularly scored items, which returned acceptable communalities in the .508 to .732 range.

	KMO	BARTLETT'S TEST (sig.)	NO. OF FACTORS RETAINED	% CUMULATIVE VARIANCE EXPLAINED	COMMUNALITIES	FACTOR LOADINGS
OBE_1	0.801	0.000	1	62.629	0.713	0.844
OBE_2					0.732	0.856
OBE_4					0.541	0.735
OBE_5					0.508	0.713
OBE_7					0.727	0.853
OBE_8					0.537	0.733

Table 28 - Factor Analysis - Online Brand Experience

After this intervention, the KMO obtained was of a meritorious .801, and Bartlett’s test of sphericity resulted in a desirable *p-value* of approximately .000, meaning that the analysis was well underway.

The remaining items collectively explain 62.629% of the cumulative variance concerning the only factor retained, with the item’s factor loadings ranging from 0.713 to 0.856, with the highest factor loading value pertaining to item OBE_2 “This brand induces feelings and sentiments”.

Self-Brand Image Congruency

Self-Brand Image Congruency’s communalities for each item range from .628 to .901, which is very satisfactory and allows for the continuation of the analysis with all five items that make up this construct.

	KMO	BARTLETT'S TEST (sig.)	NO. OF FACTORS RETAINED	% CUMULATIVE VARIANCE EXPLAINED	COMMUNALITIES	FACTOR LOADINGS
SBIC_1	0.888	0.000	1	79.738	0.704	0.839
SBIC_2					0.887	0.942
SBIC_3					0.901	0.949
SBIC_4					0.868	0.932
SBIC_5					0.628	0.792

Table 29 - Factor Analysis - Self-Brand Image Congruency

Similarly to Brand Involvement, the KMO and Bartlett’s test resulted in values of .888 and .000, respectively, and therefore suggest that there are meaningful correlations between the items.

With all items collectively explaining 79.738% of cumulative variance, one factor was retained and coupled with great factor loadings that go from contributing around 79% to almost 95% to the construction of this one factor. Item SBIC_5 “Through this brand, I can express what I find important in life” is the one with the smallest contribution.

Brand Satisfaction

Brand Satisfaction was the construct that suffered the most from the cuts made on the account of poor communalities and weak explanation power. In this regard, the only items standing proudly were BS_2 “I am very happy with this brand”, BS_3 “This brand is likeable”, and item BS_4 “This brand is trustworthy”. These items present satisfactory communalities greater than .5 and item BS_3 is the one displaying the highest value (.920).

	KMO	BARTLETT'S TEST (sig.)	NO. OF FACTORS RETAINED	% CUMULATIVE VARIANCE EXPLAINED	COMMUNALITIES	FACTOR LOADINGS
BS_2	0.692	0.000	1	69.259	0.617	0.785
BS_3					0.920	0.959
BS_4					0.541	0.736

Table 30 - Factor Analysis - Brand Satisfaction

After removing those items, the KMO relative to this construct is of an almost middling .692 which, despite not constituting the greatest of values, is deemed acceptable for the present research since it is backed up by a *p-value* of approximately .000 on Bartlett’s test of sphericity and a

cumulative variance explained of almost 70%, thus still providing a solid base for factor analysis to continue.

The final items have factor loadings that range from 0.736 to 0.959, which means that these items do a good job in explaining, representing, and supporting the retained factor.

Positive e-WOM

The entire set of Positive e-WOM items displays communalities above the .5 cut-off, and more specifically between .668 and .835, so all items were kept following the initial factor analysis.

	KMO	BARTLETT'S TEST (sig.)	NO. OF FACTORS RETAINED	% CUMULATIVE VARIANCE EXPLAINED	COMMUNALITIES	FACTOR LOADINGS
PWOM_1	0.849	0.000	1	76.370	0.793	0.891
PWOM_2					0.835	0.914
PWOM_3					0.758	0.871
PWOM_4					0.668	0.817

Table 31 - Factor Analysis - Positive e-WOM

This constructs' items collectively display a meritorious KMO value of .849 and a desirable *p-value* of approximately .000 in Bartlett's test of sphericity, therefore suggesting that there are meaningful correlations between the items and that the analysis could go through.

The only factor retained has a cumulative variance explained percentage of 76.370% and is supported by factor loadings that contribute at least 81% to its construction. The item displaying the greatest factor loading (0.914) is PWOM_2 *"Whenever someone seeks advice, I would recommend this brand"*.

Brand Loyalty

When it comes to this construct, it was necessary to eliminate item BLT_11 *"When I go shopping, I don't even notice competing brands"* since it displayed a communality value of .479, fairly under the recommended cut-off value.

Following this intervention, the remaining item's communalities are all satisfactory and vary from .577 to .741.

Unlike Brand Satisfaction, the Brand Loyalty construct presents the highest Kaiser-Meyer-Olkin's test value among all constructs under analysis in this study: a marvellous .931, which is firmly supported by a *p-value* of approximately .000 in Bartlett's test of sphericity.

	KMO	BARTLETT'S TEST (sig.)	NO. OF FACTORS RETAINED	% CUMULATIVE VARIANCE EXPLAINED	COMMUNALITIES	FACTOR LOADINGS
BLT_1	0.931	0.000	1	67.272	0.621	0.788
BLT_2					0.682	0.826
BLT_3					0.664	0.815
BLT_4					0.697	0.835
BLT_5					0.696	0.835
BLT_6					0.577	0.760
BLT_7					0.727	0.853
BLT_8					0.728	0.853
BLT_9					0.741	0.861
BLT_10					0.593	0.770

Table 32 - Factor Analysis - Brand Loyalty

The items explain 67.272% of Brand Loyalty and there was only one factor retained, with the factor loadings for each item varying between BLT_6's 0.760 and BLT_9's 0.861, thus displaying a very robust sustenance for the factor retained.

Willingness to Pay a Price Premium

It was not necessary to remove any item pertaining to the WTPPP construct, since all three items display communalities between .666 and .740, which is considered satisfactory.

	KMO	BARTLETT'S TEST (sig.)	NO. OF FACTORS RETAINED	% CUMULATIVE VARIANCE EXPLAINED	COMMUNALITIES	FACTOR LOADINGS
WTPPP_1	0.743	0.000	1	71.116	0.666	0.816
WTPPP_2					0.740	0.860
WTPPP_3					0.727	0.853

Table 33 - Factor Analysis - Willingness to Pay a Price Premium

The KMO obtained for this construct was of a middling .743, and Bartlett's test resulted once again in a pleasant *p-value* of approximately .000, which implies that there are sufficient correlations, distinct from nought, between the items.

The items cumulatively explain 71.116% of variance and the factor loadings for the one factor retained vary in a range from 0.816 to 0.860, meaning that each of these items contribute at least 81% to the factor retained. The item that contributes most is WTPPP_2 *"I am willing to pay a higher price for my favourite brand"*.

In summary, the constructs under study were largely very successful in factor analysis.

When it comes to communalities, all remaining items presented values greater than .5, which indicates that they are significant and important to the scale to which they pertain to. Since this

relates to a unidimensional analysis, on the account of the use of Likert-type scales, it was necessary to proceed with the elimination of the items that did not meet the cut-off value for communalities, while also considering the factor loading they displayed for the retained factor they concerned to.

In total, 10 items were eliminated in the course of factor analysis: BL_6 *“My overall evaluation toward this brand is positive”*, OBE_3 *“I do not have strong emotions for this brand”*, OBE_6 *“This brand does not encourage me to engage in physical behaviours”*, OBE_9 *“I am not motivated to think about this brand”*, BS_1 *“Using this brand puts me in a good mood”*, BS_5 *“This brand is a good value of money”*, BS_6 *“I am satisfied with the innovative features of this brand”*, BS_7 *“This brand is a unique brand in this category”*, BS_8 *“I am satisfied with the functional quality of this brand”*, and BLT_11 *“When I go shopping, I don’t even notice competing brands”*.

The KMO statistic produced a mediocre value for Brand Satisfaction, a middling value for Willingness to Pay a Price Premium, meritorious values for Brand Love, Brand Involvement, Online Brand Experience, Self-Brand Image Congruency, and Positive e-WOM, and a marvellous value for Brand Loyalty. In turn, Bartlett’s test of sphericity displayed great results for all constructs (.000) which only helped strengthen those constructs that showed shier KMO values and support the rest that presented meritorious or marvellous values.

The cumulative percentage of variance explained presents values always greater than 60% and ranging from 62.629% to 79.738%, which consist in quite positive results for the chosen constructs.

5.5 RELIABILITY AND VALIDATION OF THE CONCEPTUAL MODEL

Out of the set of tests made to the data set, it was essential to evaluate the reliability and validation of the constructs, as well as corresponding scales, that make up the conceptual model, as a way of securing result validity and legitimacy.

In this way, Cronbach’s alpha was calculated, and the results obtained are shown in Table 34 below.

	CRONBACH'S ALPHA
Brand Love	0.904
Brand Involvement	0.941
Online Brand Experience	0.908
Self-Brand Image Congruency	0.950
Brand Satisfaction	0.863
Positive e-WOM	0.924
Brand Loyalty	0.952
Willingness to Pay a Price Premium	0.880

Table 34 - Cronbach's alpha results

It is possible to understand that Brand Satisfaction and Willingness to Pay a Price Premium are the only constructs that present values inferior to .9, with the regarded as good values of .863 and

.880, respectively. All the other scales present Cronbach's alpha values greater than the minimum boundary for excellence of .9, with Brand Loyalty showing the closest value to 1 (.952). Accordingly, since all constructs present great reliability and consistency results, the scales' internal consistency and reliability are confirmed.

Up next, Table 35 displayed in the following page makes it possible to analyse convergent and discriminant validity, through AVE, the constructs' reliability and validity through CR, and congruence validity through Standardized Coefficients.

Referring to AVE, the table allows to observe that all constructs present values greater than the reference value of .5, which confirms the representation of adequate convergent and discriminant validity. In particular, Brand Loyalty is the construct that displays the weaker AVE, with .53, and Positive e-WOM is the construct displaying the most robust AVE value (.76).

As for CR, a similar analysis is possible given that all constructs present values well above the .7 reference value. In this sense, there is superb item reliability, with values ranging from Brand Satisfaction's .87 to Brand Loyalty's .96.

Last but certainly not least, all standardized coefficients (β) are positive and superior to 0.6, with a minimum of 0.625 on item OBE_4 "This brand encourages me to engage in physical activities (e.g. booking a holiday, buy the product)", and a maximum of 0.923 on item PWOM_2 "*Whenever someone seeks advice, I would recommend this brand*".

Hence, after these considerations, it is possible to acknowledge that construct reliability, validity and accuracy of measure are assured.

	Standardized Coefficient	AVE	CR
BL_1	0.809	0.66	0.92
BL_2	0.830		
BL_3	0.885		
BL_4	0.799		
BL_5	0.709		
BI_1	0.788	0.59	0.92
BI_2	0.782		
BI_3	0.740		
BI_4	0.800		
BI_5	0.703		
BI_6	0.802		
OBE_1	0.826	0.55	0.91
OBE_2	0.822		
OBE_4	0.625		
OBE_5	0.643		
OBE_7	0.778		
OBE_8	0.716		
SBIC_1	0.814	0.70	0.93
SBIC_2	0.852		
SBIC_3	0.871		
SBIC_4	0.860		
SBIC_5	0.790		
BS_2	0.853	0.63	0.87
BS_3	0.828		
BS_4	0.695		
PWOM_1	0.887	0.76	0.94
PWOM_2	0.923		
PWOM_3	0.875		
PWOM_4	0.802		
BLT_1	0.779	0.53	0.96
BLT_2	0.807		
BLT_3	0.791		
BLT_4	0.822		
BLT_5	0.858		
BLT_6	0.794		
BLT_7	0.822		
BLT_8	0.823		
BLT_9	0.814		
BLT_10	0.764		
WTPPP_1	0.828	0.71	0.90
WTPPP_2	0.827		
WTPPP_3	0.871		

Table 35 - Construct and Item Reliability and Validity

5.6 STRUCTURAL EQUATION MODELLING

Keeping in mind the goal of testing the hypotheses previously enunciated, this following section presents the analysis and models produced during the Structural Equation Modelling anticipated for the analysis of the relationships among variables in this research.

First up, the Measurement Model presents quite reasonable values for the various fit indices, as can be seen in Table 36 below. More specifically, the values presented are $X^2 = 2157.019$; $df = 776$; $X^2/df = 2.780$; with a *p-value* of approximately .000; GFI = 0.743; CFI = 0.906; PGFI = 0.639; PCFI = 0.816; and RMSEA = 0.074 with a *p-value* of approximately 0.000. Also found in the same table are the Structural Model's fit indices results, which are as follows: $X^2 = 2329.260$; $df = 783$; $X^2/df = 2.975$; with a *p-value* of approximately .000; GFI = 0.722; CFI = 0.894; PGFI = 0.626; PCFI = 0.813; and RMSEA = 0.078 with a *p-value* of .000 approximately.

Although these are not the best overall values to emerge from Structural Equation Modelling, these are still reasonably optimistic for *p-value*, X^2/df , CFI, PGFI, PCFI, and RMSEA, and somewhat acceptable for GFI since the other fit indices hold both models together. The fact that the overall fit indices do not present fantastic values is explained by the complexity of the research model implemented, which is understood as an impairment by the adopted methodology.

	MEASUREMENT MODEL FIT INDICES	STRUCTURAL MODEL FIT INDICES
X^2	2157,019	2329,260
df	776	783
X^2/df	2,780	2,975
<i>p-value</i>	≈ 0,000	≈ 0,000
GFI	0,743	0,722
CFI	0,906	0,894
PGFI	0,639	0,626
PCFI	0,816	0,813
RMSEA	0,074	0,078
<i>p-value</i>	≈ 0,000	≈ 0,000

Table 36 - Measurement and Structural Model Fit Indices

As a consequence, some items had to be removed, which matched perfectly with the items removed previously in Factor Analysis. As such, the 10 items here removed are BL_6 "My overall evaluation toward this brand is positive", OBE_3 "I do not have strong emotions for this brand", OBE_6 "This brand does not encourage me to engage in physical behaviours", OBE_9 "I am not motivated to think about this brand", BS_1 "Using this brand puts me in a good mood", BS_5 "This brand is a good value of money", BS_6 "I am satisfied with the innovative features of this brand", BS_7 "This brand is a unique brand in this category", BS_8 "I am satisfied with the functional quality of this brand", and BLT_11 "When I go shopping, I don't even notice competing brands".

Figure 3 presented below provides a clear look on the Measurement Model generated (see also APPENDIX F and APPENDIX G for the Measurement and Structural Model outputs retrieved from the IBM® SPSS® Amos 27 software).

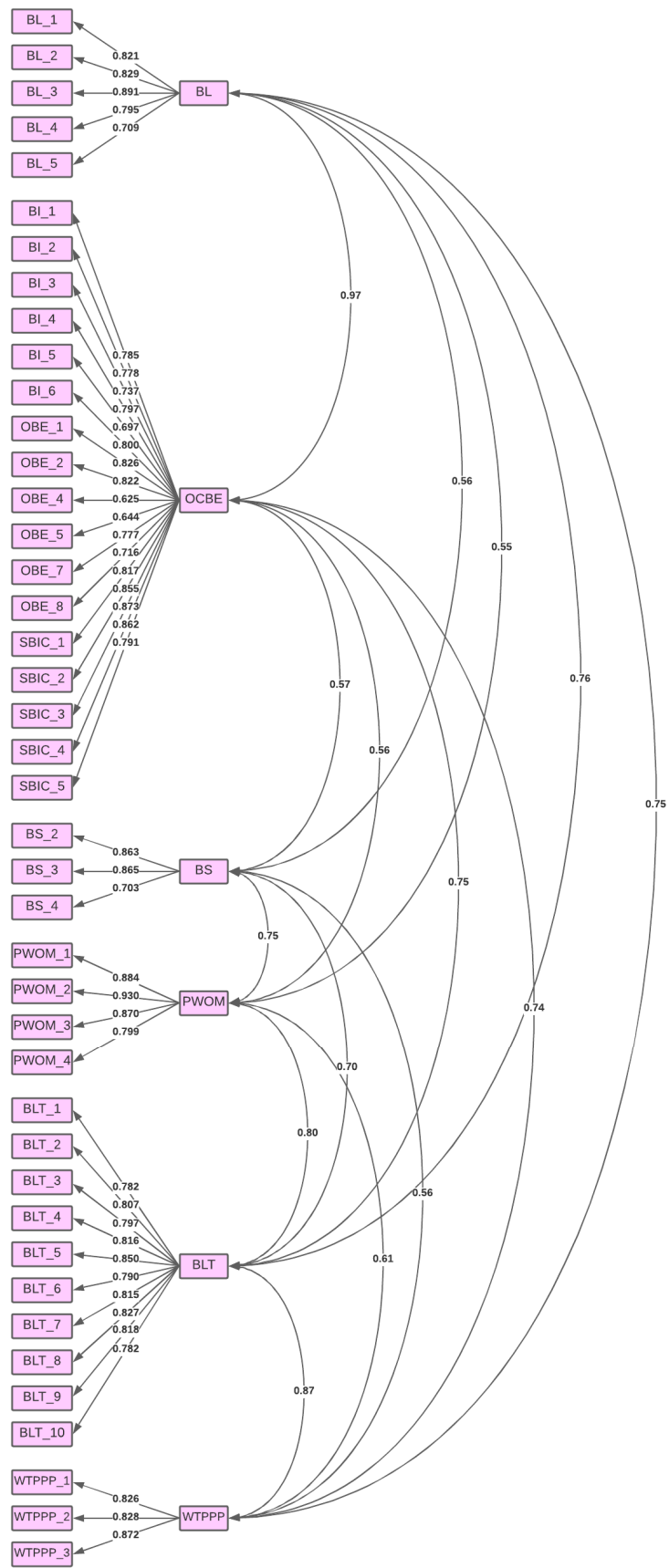


Figure 3 - Measurement Model

Successively, hypotheses testing results are shown next in Figure 4, and an overview of the supported and not supported hypotheses is exhibited in Table 37 below.

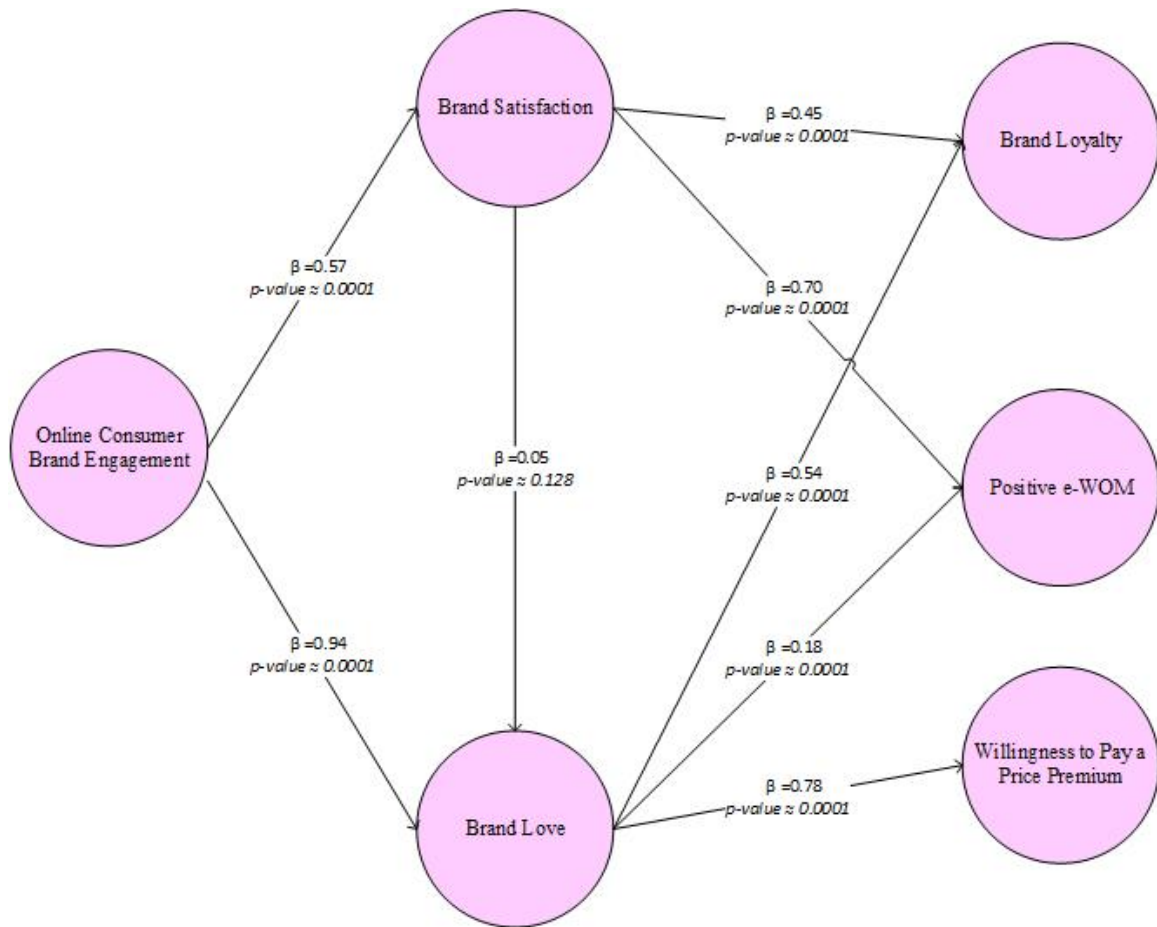


Figure 4 - Coefficient Estimation - Research Hypotheses and Conceptual Model

It is then possible to conclude that, on the account of presenting a $p\text{-value}$ of approximately .128 and therefore superior to the .05 cut-off, as well as an almost insignificant impact of Brand Satisfaction on Brand Love translated by its standardized coefficient (β) of only 0.05, hypothesis H3 is logically not supported. All the other proposed hypotheses are supported.

HYPOTHESIS	β	$p\text{-value}$	RESULT
H1: OCBE -> BS	0.57	$\approx 0,0001$	SUPPORTED
H2: OBCE -> BL	0.94	$\approx 0,0001$	SUPPORTED
H3: BS -> BL	0.05	$\approx 0,128$	NOT SUPPORTED
H4: BS -> BLT	0.45	$\approx 0,0001$	SUPPORTED
H5: BS -> PWOM	0.70	$\approx 0,0001$	SUPPORTED
H6: BL -> BLT	0.54	$\approx 0,0001$	SUPPORTED
H7: BL -> PWOM	0.18	$\approx 0,0001$	SUPPORTED
H8: BL -> WTPPP	0.78	$\approx 0,0001$	SUPPORTED

Table 37 - Summary of Hypotheses Results

All supported and confirmed hypotheses present a fitting *p-value* $\approx .0001$, and positive influences of Online Consumer Brand Engagement on Brand Satisfaction and Brand Love, of Brand Satisfaction on Brand Loyalty and Positive e-WOM, and of Brand Love on Brand Loyalty, Positive e-WOM, and Willingness to Pay a Price Premium are sustained by virtue of the observed positive standard coefficient (β) values. More specifically, hypotheses H1, H4, H5, H6, and H8 display $\beta = 0.57$, $\beta = 0.45$, $\beta = 0.70$, $\beta = 0.54$, and $\beta = 0.78$, respectively. Hypothesis H7 is the one with the lowest β value, with Brand Love only having an influence of 0.18 on PWOM, while H2 is the hypothesis displaying the highest β value, with OCBE having an impact of 0.94 on Brand Love.

CHAPTER 6. CONCLUSIONS

Following the previous analysis and rationale, Chapter 6 now presents a comprehensive outline of the results obtained and findings discovered. In doing so, final considerations on the work developed are made, with special mentions to the most relevant and interesting conclusions on Brand Love in smartphone brands being made, as well as notices on the limitations encountered and suggestions on future lines of investigation.

6.1 FINAL CONSIDERATIONS

The present research aims to study consumer-brand behaviour and relationships in the unique circumstance of Brand Love in the exclusive environment of smartphone brands. In particular, this study focuses on the antecedents of Brand Love in relation to smartphone brands, without overlooking its key outcomes, by seeking to determine the constructs that contribute to this argument and subsequently to answer the research questions posited.

In the wake of a thorough research on consumer behaviour, consumer psychology, brand behaviour, and technology, it was possible to select, out of the many Brand Love related constructs present in extant literature, the constructs that were adopted in the present research. As such, an intensive literature review on Brand Love, its antecedents Online Consumer Brand Engagement and Brand Satisfaction, and its outcomes of Brand Loyalty, Positive e-WOM, and Willingness to Pay a Price Premium, allowed for the elaboration of a conceptual and research model that in turn made it possible to create a survey by questionnaire that assisted in the necessary data collection for posterior analysis.

The survey by questionnaire elaborated and employed was disseminated via social media and online platforms which allowed for the gathering of a very respectable sample of 328 responses, with only one being considered invalid. The data collected were treated in the *IBM® SPSS® Statistics 27* and *IBM® SPSS® Amos 27* software under different measures, methods, and fit indices, that culminated in the validation and confirmation, or not, of the proposed hypotheses. Therefore, it was possible to evaluate the validity of the research model and provide answers to the research questions. All hypotheses formulated were founded on the aforementioned literature review and acclaimed authors, which contributed to the production of the model hereby presented.

Even though one hypothesis was not supported, the fact that all constructs and respective scales employed were soundly proven and sustained by extant literature made it so all results relative to the scales and their validation and reliability were very satisfying and rewarding – even if some scales' items (10 in total) had to be dropped in the course of analysis.

The application of Structural Equation Modelling allowed to support the proposed hypotheses, which showed very sturdy and optimistic values of β and statistically significant *p-values*, with the exception of hypothesis H3, which displayed a non-statistically significant *p-value* of $\approx .128$ and a frail β of only 0.05 of Brand Satisfaction influence on Brand Love.

Although hypothesis H3 was backed by extensive literature, the fact that it is not supported goes in the opposite direction of previous work on Brand Love and its antecedents (Carroll & Ahuvia, 2006; Khan et al., 2020). Though the previous theoretical discussion on Brand Satisfaction and its close liaison to Brand Love is logical and true, it is possible that product and/or individual characteristics are responsible for this inference on the lack of influence between the first and the latter (Johnson & Fornell, 1991).

The supported hypotheses - H1, H2, H4, H5, H6, H7, and H8 – revealed that Online Consumer Brand Engagement has a quantifiable positive influence of 0.57 on Brand Satisfaction and 0.94 on Brand Love, Brand Satisfaction has a positive influence of 0.45 on Brand Loyalty and of 0.70 on Positive e-WOM, and that Brand Love has positive influences of 0.54, 0.18, and 0.78 on Brand Loyalty, Positive e-WOM, and Willingness to Pay a Price Premium, respectively.

The results of supporting hypotheses H1 and H2 are in accordance with Loureiro et al. (2017), who assert that Online Consumer Brand Engagement has a positive and direct relationship with both Brand Satisfaction and Brand Love. Hypotheses H4 and H5 are also supported, which goes in line with Roy et al.'s (2013) theoretical propositions, as well as Oliver's (1999) and Hennig-Thurau et al.'s (2004) findings and discussions about Brand Satisfaction and its outcomes of Brand Loyalty and Positive e-WOM. Supporting hypothesis H6 is in agreement with the work of Salem and Salem (2019) and Khan et al. (2020) in supporting positive direct associations between Brand Love and Brand Loyalty, while the result of supporting hypothesis H7 is consistent with Loureiro et al.'s (2017) and Khan et al. (2020) findings about Brand Love having a direct and positive impact on Positive e-WOM. Finally, yet importantly, the result of supporting hypothesis H8 is also in line with Khan et al.'s (2020) discoveries that Brand Love exerts a positive direct influence on Willingness to Pay Price Premium, remarkably also in the specific context of the smartphone industry.

The outcomes of the hypotheses testing just explored are depicted below in Figure 5.

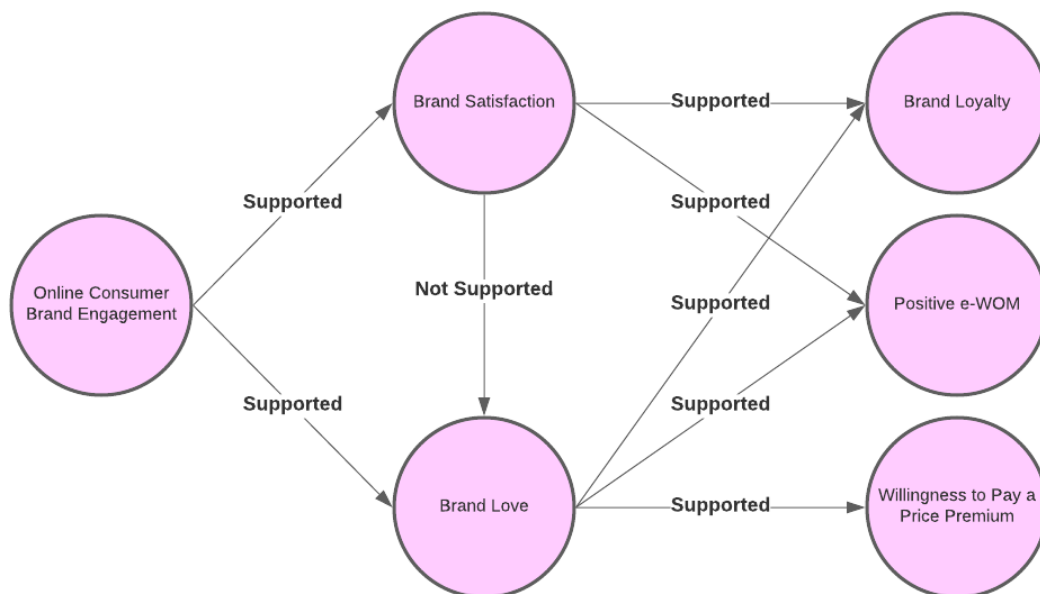


Figure 5 - Results of the Hypotheses under examination in the Conceptual Model

On the grounds of these results, it is possible to answer the research questions formulated earlier.

Regarding Q1 (*Can Online Consumer Brand Engagement and Brand Satisfaction predict Brand Love?*), and although both constructs had great potential antecedent power on Brand Love as according to extant literature, it was proven that in the specific case of this research in an online context and on smartphone brands, Brand Satisfaction is not a great predictor of Brand Love, as its corresponding hypothesis (H3) was not supported. Hence, Online Consumer Brand Engagement is this study's ultimate Brand Love antecedent.

Accordingly, and moving onto Q2 (*What impact does Online Consumer Brand Engagement have on Brand Love?*), it is clear that Online Consumer Brand Engagement demonstrates a theoretically sound, positive, and direct influence on Brand Love that is translated in the strongest impact out of all analysed, characterised by $\beta = 0.94$ and $p\text{-value} \approx .0001$.

As far as Q3 (*What are the most influential outcomes of Brand Love?*) is concerned, and enunciating in descending order of impact, the most influential outcome of Brand Love is Willingness to Pay a Price Premium, with $\beta = 0.78$ and $p\text{-value} \approx .0001$, followed by Brand Loyalty with $\beta = 0.54$ and $p\text{-value} \approx .0001$, and finally by Positive e-WOM with the frailest influence, with $\beta = 0.18$ and $p\text{-value} \approx .0001$. These results, although with distinct forces, are all supported by literature and hereby confirmed.

One final important consideration to be made is related to the Willingness to Pay a Price Premium, found in this research to be the strongest and most influential outcome of Brand Love. The fact that, in an online context and on a product category associated with relatively high prices and individual product value such as smartphones, consumers show that they are willing to pay a tad more in order to purchase and secure a product from their favourite brand is a very important remark to be taken into consideration by both marketers and practitioners.

This is a great indicator that consumer's feelings of love for smartphone brands can result in very profitable consumer-brand relationships that should be nurtured with adequate marketing campaigns, corporate communications, brand image, interactions, and overall meaningful brand experiences, so that both consumers and brands can make the most out of these Brand Love relationships.

As such, managers should thrive to build Brand Love in a conscious and responsible way with their consumers, as well as identify those consumers that show predisposition to build Brand Love with, as a way of seeking Brand Love's attractive outcomes of Brand Loyalty, Positive e-WOM, and Willingness to Pay a Price Premium.

6.1.1 THEORETICAL CONTRIBUTIONS

The insights and knowledge produced by this study represent significant contributions to current marketing literature in several ways. Firstly, this research offers a deeper understanding into the recent phenomenon of Brand Love that still remains relatively uncharted and its interactions with other relevant marketing constructs still uncertain. Thus, the conclusions produced regarding

Online Consumer Brand Engagement as a robust Brand Love antecedent, and Positive e-WOM, Brand Loyalty, and Willingness to pay a Price Premium as important Brand Love outcomes, constitute key results to literature that ought to be further explored due to the research model's vast potential.

Secondly, by representing a new and adapted take on Loureiro et al.'s (2017) own research model, not only by incorporating new constructs and consequently more complex relationships, but also because it was applied to the realm of smartphone brands, this study takes a contemporary approach that provides key observations to the highly competitive and ever growing smartphone market.

Lastly, since the insights provided by this study concern the online environment, and consumers' interactions with smartphone brands online, a solid basis for investigations on consumer behaviour, branding, and marketing in an online context is supplied, as well as novel understandings on this matter.

In this sense, the present research helps lay a promising foundation for future investigations to further explore not only the research model here utilised, but Brand Love and Brand Love antecedents in its broader sense, given its terrific value for both brands and consumers.

6.1.2 MANAGERIAL CONTRIBUTIONS

Besides being relevant to literature, this research is also beneficial to current management practices and its findings could be interesting to managers.

The deeper understanding provided by the insights and knowledge produced are valuable in raising awareness on Brand Love, and managers' attention on the urgent need to understand, foster, manage, and maintain Brand Love with their current and potential customer base. More precisely, it is imperative that practitioners recognise and truly comprehend the antecedents that help promote Brand Love, as well as know how to manage them and Brand Love so that they are in control of the outcomes generated.

Additionally, results show that consumers are very connected with brands online, and that there is a great potential for profitable online expansion on behalf of practitioners. Building a strong online image and communication channels to interact meaningfully and in real time with consumers are only some of the strategies that could be carried out by managers.

As noted earlier, this study's results also enlighten practitioners on the fact that consumers that display Brand Love towards their smartphone brand show, above all the other advantages, a great predisposition to pay a price premium in order to own a smartphone from their favourite brand. This insight should be explored consciously, since there is space for pricing policies to be reviewed under the Brand Love lens, which constitutes a tremendous opportunity for brands to possibly reposition themselves or refurbish their image in the marketplace.

6.2 LIMITATIONS OF THE STUDY

As virtually every study, it is only natural that this research presents some limitations that may act as prudence alerts and recommendations for future investigations.

First and foremost, the inability to study all of Brand Love's antecedents identified in extant literature made it so only a restrict set of them could be utilized in the present research and respective research model, which may be seen as limiting of new and exciting results – despite the results obtained under the conditions specific being very solid, relevant, and exciting for marketing literature and practise.

Furthermore, given that the sampling technique chosen was of non-probabilistic nature, and that the target audience was very ambitious and global, it is probable that the sample does not allow for a fully confident generalization of the data collected and analysed. However, the sample is still significant and contemplates answers for all sexes, age groups, professional and educational backgrounds, marital statuses, and nationalities, with the female sex, 20 to 29 years old age group, Bachelor's Degree qualification, single status, student as a professional activity, and Portuguese nationality being the most prevalent sociodemographic categories among the surveyed group.

Another limitation has to do with the fact that this is a cross-sectional study, meaning that respondents' answers were collected at a specific point in time and therefore it is not possible to explore and analyse temporal changes in respondents' contributions. The enlightenment a longitudinal study would bring to such a contemporary research set in the ever-changing environment of the smartphone industry and brand management, would be of great value in enabling the further deepening of the insights produced.

Additionally, as the conceptual and research model presented are very ambitious and complex, results may have been penalized by the underlying methodology and data treatment methods.

Note should also be taken about the fact that the entirety of this study, operationalized in the investigation, data collection, and data treatment phases, was undertaken during the course of the global COVID-19 pandemic. It is likely that the ongoing pandemic has, either temporarily or permanently, changed consumers' consumption habits and patterns. Consequently, the results presented may be under the influence of the pandemic's effect on consumers which reinforces the cross-sectional study concerns.

6.3 FUTURE INVESTIGATIONS

As the discussion of this study's limitations made clear above, there is an imperative need to reproduce this research on a longitudinal study basis. This would allow for a better understanding of consumers' opinions, consumption habits and behavioural patterns, as well as the assessment of the pandemic's effect on consumers and on the results discussed.

It would also be interesting to study the Brand Love antecedents identified in extant literature but not utilised in this study, in various combinations with the outcomes identified, as a way of

producing a more comprehensive framework of Brand Love in smartphone brands. This suggestion would naturally greatly benefit from the employment of simpler and less extensive research models, as it is expectable that model performance and results will be enhanced by the use of fewer constructs and scales.

A broader and more representative cross-cultural sample is also of great interest to future investigations, as samples with different general characteristics may produce different results, especially if the dominating cultures present in the sample are different to this investigation's.

Incorporating OCBE's sensory dimension into research would too be of greatest interest, since it would provide a new and relevant dimension to its study as a Brand Love antecedent, and thus possibly produce new key insights for scholars and practitioners.

Last, but definitely not least, academia would also benefit from the reproduction of this study's research model in other contexts and product categories, whether online or offline, as a way of assessing its universal applicability and validation.

BIBLIOGRAPHICAL REFERENCES

- Aaker, D. A. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. The Free Press.
- Aaker, D. A. (1996). *Building Strong Brands*. The Free Press.
- Albert, Noel, & Merunka, D. (2013). The role of brand love in consumer-brand relationships. *Journal of Consumer Marketing*, 30(3), 258–266. <https://doi.org/10.1108/07363761311328928>
- Albert, Noël, Merunka, D., & Valette-Florence, P. (2008). When consumers love their brands: Exploring the concept and its dimensions. *Journal of Business Research*, 61(10), 1062–1075. <https://doi.org/10.1016/j.jbusres.2007.09.014>
- Almalki, S. (2016). Integrating Quantitative and Qualitative Data in Mixed Methods Research—Challenges and Benefits. *Journal of Education and Learning*, 5(3), 288–296. <https://doi.org/10.5539/jel.v5n3p288>
- Anderson, E. W., Fornell, C., & Mazvancheryl, S. K. (2004). Customer Satisfaction and Shareholder Value. *Journal of Marketing*, 68(4), 172–185. <https://doi.org/10.1509/jmkg.68.4.172.42723>
- Anselmsson, J., Bondesson, N. V., & Johansson, U. (2014). Brand image and customers' willingness to pay a price premium for food brands. *Journal of Product and Brand Management*, 23(2), 90–102. <https://doi.org/10.1108/JPBM-10-2013-0414>
- Aro, K., Suomi, K., & Saraniemi, S. (2018). Antecedents and consequences of destination brand love — A case study from Finnish Lapland. *Tourism Management*, 67, 71–81. <https://doi.org/10.1016/j.tourman.2018.01.003>
- Australian Government. (2012). *Higher Education Research Data Collection Specifications for the Collection of 2011 Data*. February, 1–48.
- Back, K.-J., & Parks, S. C. (2003). A Brand Loyalty Model Involving Cognitive, Affective, and Conative Brand Loyalty and Customer Satisfaction. *Journal of Hospitality and Tourism Research*, 27(4), 419–435. <https://doi.org/10.1177/10963480030274003>
- Batra, R., Ahuvia, A., & Bagozzi, R. P. (2012). Brand Love. *Journal of Marketing*, 76(2), 1–16. <https://doi.org/10.1509/jm.09.0339>
- Bergkvist, L., & Bech-Larsen, T. (2010). Two studies of consequences and actionable antecedents of brand love. *Journal of Brand Management*, 17(7), 504–518. <https://doi.org/10.1057/bm.2010.6>
- Bhat, S., & Reddy, S. K. (1998). Symbolic and functional positioning of brands. *Journal of Consumer Marketing*, 15(1), 32–43. <https://doi.org/10.1108/07363769810202664>
- Biçakcıoğlu, N., İpek, İ., & Bayraktaroğlu, G. (2018). Antecedents and outcomes of brand love: The mediating role of brand loyalty. *Journal of Marketing Communications*, 24(8), 863–877. <https://doi.org/10.1080/13527266.2016.1244108>
- Bolton, R., & Saxena-Iyer, S. (2009). Interactive Services: A Framework, Synthesis and Research Directions. *Journal of Interactive Marketing*, 23(1), 91–104. <https://doi.org/10.1016/j.intmar.2008.11.002>
- Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand Experience: What Is It? How Is It Measured? Does It Affect Loyalty? *Journal of Marketing*, 73(3), 52–68. <https://doi.org/10.1509/jmkg.73.3.52>
- Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, 66(1), 105–114. <https://doi.org/10.1016/j.jbusres.2011.07.029>
- Carroll, B. A., & Ahuvia, A. C. (2006). Some antecedents and outcomes of brand love. *Marketing Letters*, 17(2), 79–89. <https://doi.org/10.1007/s11002-006-4219-2>
- Chase, R. B., & Dasu, S. (2014). Experience psychology — A proposed new subfield of service management. *Journal of Service Management*, 25(5), 574–577.

- <https://doi.org/10.1108/JOSM-03-2014-0094>
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing*, 65(2), 81–93. <https://doi.org/10.1509/jmkg.65.2.81.18255>
- Churchill, G. A., & Surprenant, C. (1982). An Investigation into the Determinants of Customer Satisfaction. *Journal of Marketing Research*, 19(4), 491–504. <https://doi.org/10.1177/002224378201900410>
- Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods*, 1(1), 16–29. <https://doi.org/10.1037//1082-989x.1.1.16>
- DataReportal. (2021). *Digital 2021: July Global Statshot — DataReportal – Global Digital Insights*. Digital 2021 July Global Statshot Report. <https://datareportal.com/reports/digital-2021-july-global-statshot>
- De Vries, N. J., & Carlson, J. (2014). Examining the drivers and brand performance implications of customer engagement with brands in the social media environment. *Journal of Brand Management*, 21(6), 495–515. <https://doi.org/10.1057/bm.2014.18>
- Delgado-Ballester, E., Palazón, M., & Pelaez-Muñoz, J. (2017). This anthropomorphised brand is so loveable: The role of self-brand integration. *Spanish Journal of Marketing - ESIC*, 21(2), 89–101. <https://doi.org/10.1016/j.sjme.2017.04.002>
- Evrard, Y., & Aurier, P. (1996). Identification and validation of the components of the person-object relationship. *Journal of Business Research*, 37(2), 127–134. [https://doi.org/10.1016/0148-2963\(96\)00054-9](https://doi.org/10.1016/0148-2963(96)00054-9)
- Field, A. (2009). *Discovering Statistics Using SPSS* (3rd ed.). SAGE Publications.
- Fornell, C., & Wernerfelt, B. (1987). Defensive Marketing Strategy by Customer Complaint Management: A Theoretical Analysis. *Journal of Marketing Research*, 24(4), 337–346. <https://doi.org/10.2307/3151381>
- Fournier, S. (1998). Consumers and Their Brands: Developing Relationship Theory in Consumer Research. *Journal of Consumer Research*, 24(4), 343–353. <https://doi.org/10.1086/209515>
- Fournier, S., & Mick, D. G. (1999). Redesccovering satisfaction. *Journal of Marketing*, 63(4), 5–23.
- Garg, R., Mukherjee, J., Biswas, S., & Kataria, A. (2016). An Investigation Into the Concept of Brand Love and Its Proximal and Distal Covariates. *Journal of Relationship Marketing*, 15(3), 135–153. <https://doi.org/10.1080/15332667.2016.1209047>
- George, D., & Mallery, P. (2019). IBM SPSS Statistics 25 Step by Step: A Simple Guide and Reference. In *IBM SPSS Statistics 25 Step by Step* (15th ed.). Routledge. <https://www.taylorfrancis.com/books/9781351033893>
- Gil, A. C. (2008). *Métodos e Técnicas de Pesquisa Social* (6th ed.). Editora Atlas.
- Grisaffe, D. B., & Nguyen, H. P. (2011). Antecedents of emotional attachment to brands. *Journal of Business Research*, 64(10), 1052–1059. <https://doi.org/10.1016/j.jbusres.2010.11.002>
- Gronroos, C. (1994). From Marketing Mix to Relationship Marketing: Towards a Paradigm Shift in Marketing. *Asia-Australia Marketing Journal*, 2(1), 9–29. [https://doi.org/10.1016/s1320-1646\(94\)70275-6](https://doi.org/10.1016/s1320-1646(94)70275-6)
- Grubb, E. L., & Grathwohl, H. L. (1967). Consumer Self-Concept, Symbolism and Market Behavior: A Theoretical Approach. *Journal of Marketing*, 31(4), 22. <https://doi.org/10.2307/1249461>
- Hair, J. F., Page, M., & Brunsveld, N. (2020). Essentials of Business Research Methods. In *Routledge Taylor & Francis Group* (4th ed.). Routledge.
- Hair Jr, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis* (7th ed.). Pearson Education.
- Hawkins, D. I., & Mothersbaugh, D. L. (2010). *Consumer Behaviour: Building Marketing Strategy* (11th ed.). McGraw-Hill/Irwin.
- Hazan, C., & Shaver, P. R. (1994). Attachment as an Organizational Framework for Research on

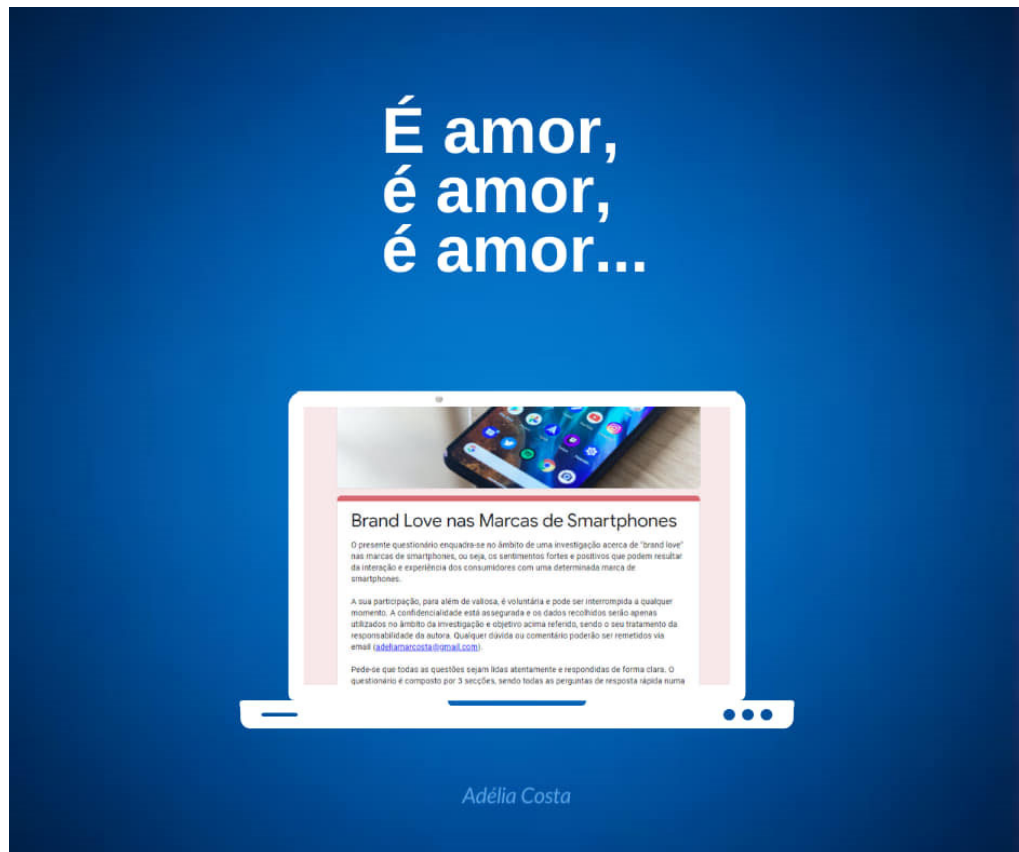
- Close Relationships. *Psychological Inquiry*, 5(1), 1–22.
https://doi.org/10.1207/s15327965pli0501_1
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38–52. <https://doi.org/10.1002/dir.10073>
- Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing*, 28(2), 149–165. <https://doi.org/10.1016/j.intmar.2013.12.002>
- Hong, J. W., & Zinkhan, G. M. (1995). Self-concept and advertising effectiveness: The influence of congruency, conspicuousness, and response mode. *Psychology & Marketing*, 12(1), 53–77. <https://doi.org/10.1002/mar.4220120105>
- Huber, F., Meyer, F., & Schmid, D. A. (2015). Brand love in progress – the interdependence of brand love antecedents in consideration of relationship duration. *Journal of Product and Brand Management*, 24(6), 567–579. <https://doi.org/10.1108/JPBM-08-2014-0682>
- Hussain, M. A., Elyas, T., & Nasseef, O. A. (2013). Research Paradigms: A Slippery Slope for Fresh Researchers. *Life Science Journal*, 84(4), 2374–2381.
<http://ir.obihiro.ac.jp/dspace/handle/10322/3933>
- Ismail, A. R., & Spinelli, G. (2012). Effects of brand love, personality and image on word of mouth: The case of fashion brands among young consumers. *Journal of Fashion Marketing and Management: An International Journal*, 16(4), 386–398.
<https://doi.org/10.1108/13612021211265791>
- Jamal, A., & Goode, M. M. h. (2001). Consumers and brands: A study of the impact of self-image congruence on brand preference and satisfaction. *Marketing Intelligence & Planning*, 19(7), 482–492. <https://doi.org/10.1108/02634500110408286>
- Johnson, M. D., & Fornell, C. (1991). A framework for comparing customer satisfaction across individuals and product categories. *Journal of Economic Psychology*, 12, 267–286.
- Jonker, J., & Pennink, B. (2010). The Essence of Research Methodology. In *Springer*. Springer Berlin Heidelberg. <https://doi.org/10.1007/978-3-540-71659-4>
- Kaiser, H. F. (1970). A Second Generation Little Jiffy. *Psychometrika*, 35(4), 401–415.
<https://link.springer.com/article/10.1007/BF02291817>
- Kaiser, H. F., & Rice, J. (1974). Little Jiffy, Mark IV. *Educational and Psychological Measurement*, 34(1), 111–117. <https://doi.org/10.1177/001316447403400115>
- Kaufmann, H. R., Loureiro, S. M. C., & Manarioti, A. (2016). Exploring behavioural branding, brand love and brand co-creation. *Journal of Product and Brand Management*, 25(6), 516–526.
<https://doi.org/10.1108/JPBM-06-2015-0919>
- Khan, M. A., Zulqarnain, M., Bhatti, Z. A., & Raza, A. (2020). Higher-Order Utilitarian and Symbolic Antecedents of Brand Love and Consumers' Behavioral Consequences for Smartphones. *Journal of Relationship Marketing*, 0(0), 1–27.
<https://doi.org/10.1080/15332667.2020.1756026>
- Kozinets, R. V., De Valck, K., Wojnicki, A. C., & Wilner, S. J. S. (2010). Networked narratives: Understanding word-of-mouth marketing in online communities. *Journal of Marketing*, 74(2), 71–89. <https://doi.org/10.1509/jmkg.74.2.71>
- Kressmann, F., Sirgy, M. J., Herrmann, A., Huber, F., Huber, S., & Lee, D. J. (2006). Direct and indirect effects of self-image congruence on brand loyalty. *Journal of Business Research*, 59(9), 955–964. <https://doi.org/10.1016/j.jbusres.2006.06.001>
- Long-Tolbert, S. J., & Gammoh, B. S. (2012). In good and bad times: The interpersonal nature of brand love in service relationships. *Journal of Services Marketing*, 26(6), 391–402.
<https://doi.org/10.1108/08876041211257882>
- Loureiro, S. M. C., Gorgus, T., & Kaufmann, H. R. (2017). Antecedents and outcomes of online brand engagement: The role of brand love on enhancing electronic-word-of-mouth. *Online*

- Information Review*, 41(7), 985–1005. <https://doi.org/10.1108/OIR-08-2016-0236>
- Malhotra, N. K. (2010). Marketing Research: An Applied Orientation. In *Journal of Marketing Research* (6th ed.). Prentice Hall.
- Mano, H., & Oliver, R. L. (1993). Assessing the Dimensionality and Structure of the Consumption Experience: Evaluation, Feeling, and Satisfaction. *Journal of Consumer Research*, 20(3), 451–466. <https://doi.org/10.1086/209361>
- Marczyk, G., DeMatteo, D., & Festinger, D. (2005). *Essentials of Research Design and Methodology*. Wiley, 1–305.
- Marôco, J. (2014). *Análise Estatística com o SPSS Statistics*. 6.^ª edição (6th ed.). ReportNumber.
- Marôco, J. (2021). *Análise de Equações Estruturais: Fundamentos Teóricos, Software & Aplicações* (3rd ed.). ReportNumber. www.reportnumber.pt/aee
- Mathers, N., Fox, N. J., & Hunn, A. (2007). Surveys and questionnaires. *Trent RDSU*, 1–57.
- Matos, D. A. S., & Rodrigues, E. C. (2019). *Análise Fatorial*. Escola Nacional de Administração Pública. [https://repositorio.enap.gov.br/bitstream/1/4790/1/Livro Análise Fatorial.pdf](https://repositorio.enap.gov.br/bitstream/1/4790/1/Livro%20Análise%20Fatorial.pdf)
- Matthews, B., & Ross, L. (2010). *Research methods: a practical guide for the social sciences*. Pearson.
- Merriam-Webster. (n.d.-a). *Definition of Loyal by Merriam-Webster*. Retrieved July 30, 2021, from <https://www.merriam-webster.com/dictionary/loyal>
- Merriam-Webster. (n.d.-b). *Definition of Research by Merriam-Webster*. Retrieved September 6, 2021, from <https://www.merriam-webster.com/dictionary/research>
- Mollen, A., & Wilson, H. (2010). Engagement, telepresence and interactivity in online consumer experience: Reconciling scholastic and managerial perspectives. *Journal of Business Research*, 63(9–10), 919–925. <https://doi.org/10.1016/j.jbusres.2009.05.014>
- Morgan-Thomas, A., & Veloutsou, C. (2013). Beyond technology acceptance: Brand relationships and online brand experience. *Journal of Business Research*, 66(1), 21–27. <https://doi.org/10.1016/j.jbusres.2011.07.019>
- Neo, J. R. J. (2017). Construct validity—Current issues and recommendations for future hand hygiene research. *American Journal of Infection Control*, 45(5), 521–527. <https://doi.org/10.1016/j.ajic.2017.01.028>
- Netemeyer, R. G., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Dean, D., Ricks, J., & Wirth, F. (2004). Developing and validating measures of facets of customer-based brand equity. *Journal of Business Research*, 57(2), 209–224. [https://doi.org/10.1016/S0148-2963\(01\)00303-4](https://doi.org/10.1016/S0148-2963(01)00303-4)
- Newman, J. W., & Werbel, R. A. (1973). Multivariate Analysis of Brand Loyalty for Major Household Appliances. *Journal of Marketing Research*, 10(4), 404. <https://doi.org/10.2307/3149388>
- Nyadzayo, M. W., & Khajehzadeh, S. (2016). The antecedents of customer loyalty: A moderated mediation model of customer relationship management quality and brand image. *Journal of Retailing and Consumer Services*, 30, 262–270. <https://doi.org/10.1016/j.jretconser.2016.02.002>
- Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17(4)(November), 460–469.
- Oliver, R. L. (1999). Whence Consumer Loyalty? *Journal of Marketing*, 63(1999), 33. <https://doi.org/10.2307/1252099>
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5–14. <https://doi.org/10.1002/dir.20015>
- Rehman, A. A., & Alharthi, K. (2016). An introduction to research paradigms. *International Journal of Educational Investigations*, 3(October), 51–59.
- Reichheld, F. F., Markey Jr, R. G., & Hopton, C. (2000). The loyalty effect – the relationship between loyalty and profits. *European Business Journal*, 12(3), 134–139.
- Rose, S., Hair, N., & Clark, M. (2011). Online Customer Experience: A Review of the Business-to-Consumer Online Purchase Context. *International Journal of Management Reviews*, 13(1), 24–

39. <https://doi.org/10.1111/j.1468-2370.2010.00280.x>
- Roy, S. K., Eshghi, A., & Sarkar, A. (2013). Antecedents and consequences of brand love. *Journal of Brand Management*, 20(4), 325–332. <https://doi.org/10.1057/bm.2012.24>
- Salem, S. F., & Salem, S. O. (2019). Effects of Social Media Marketing and Selected Marketing Constructs on Stages of Brand Loyalty. *Global Business Review*, 22(3), 1–24. <https://doi.org/10.1177/0972150919830863>
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students* (5th ed.). Pearson.
- Schindler, P. S. (2019). *Business Research Methods* (13th ed.). McGraw-Hill/Irwin.
- Shimp, T. A., & Madden, T. J. (1988). Consumer-Object Relations: a Conceptual Framework Based Analogously on Sternberg's Triangular Theory of Love. *Advances in Consumer Research*, 15(Bloch), 163–168.
- Sirgy, M. J. (1982). Self-Concept in Consumer Behavior: A Critical Review. *Journal of Consumer Research*, 9(3), 287. <https://doi.org/10.1086/208924>
- Smit, E., Bronner, F., & Tolboom, M. (2007). Brand relationship quality and its value for personal contact. *Journal of Business Research*, 60(6), 627–633. <https://doi.org/10.1016/j.jbusres.2006.06.012>
- Sobh, R., & Perry, C. (2006). Research design and data analysis in realism research. *European Journal of Marketing*, 40(11/12), 1194–1209. <https://doi.org/10.1108/03090560610702777>
- Sternberg, R. J. (1986). A triangular theory of love. *Psychological Review*, 93(2), 119–135. <https://doi.org/10.4324/9780203311851>
- Szyjka, S. (2012). Understanding Research Paradigms: Trends in Science Education Research. *Problems of Education in the 21st Century*, 43, 110–118.
- Thomson, M., MacInnis, D. J., & Park, C. W. (2005). The Ties That Bind: Measuring the Strength of Consumers' Emotional Attachments to Brands. *Journal of Consumer Psychology*, 15(1), 77–91. https://doi.org/10.1207/s15327663jcp1501_10
- UCLA: Statistical Consulting Group. (n.d.). *Factor Analysis | SPSS Annotated Output*. Retrieved September 24, 2021, from <https://stats.idre.ucla.edu/spss/output/factor-analysis/>
- van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer engagement behavior: Theoretical foundations and research directions. *Journal of Service Research*, 13(3), 253–266. <https://doi.org/10.1177/1094670510375599>
- Wahyuni, D. (2012). The Research Design Maze: Understanding Paradigms, Cases, Methods and Methodologies. *Journal of Applied Management Accounting Research*, 10(1), 69–80.
- Wallace, E., Buil, I., & de Chernatony, L. (2014). Consumer engagement with self-expressive brands: Brand love and WOM outcomes. *Journal of Product and Brand Management*, 23(1), 33–42. <https://doi.org/10.1108/JPBM-06-2013-0326>
- Westbrook, R. A. (1987). Product/Consumption-Based Affective Responses and Postpurchase Processes. *Journal of Marketing Research*, 24(3), 258–270. <https://doi.org/10.1177/002224378702400302>
- Zaichkowsky, J. L. (1985). Measuring the Involvement Construct. *Journal of Consumer Research*, 12, 341–352.
- Zeithaml, V. A., Verleye, K., Hatak, I., Koller, M., & Zauner, A. (2020). Three Decades of Customer Value Research: Paradigmatic Roots and Future Research Avenues. *Journal of Service Research*, 23(4), 409–432. <https://doi.org/10.1177/1094670520948134>
- Zikmund, W. G., & Babin, B. J. (2010). *Essentials of Marketing Research* (4th ed.). South-Western Cengage Learning.

APPENDICES

APPENDIX A: First Marketing Post Created to Promote the Survey and Research



APPENDIX B: Second Marketing Post Created to Promote the Survey and Research

Não lhe resistes.

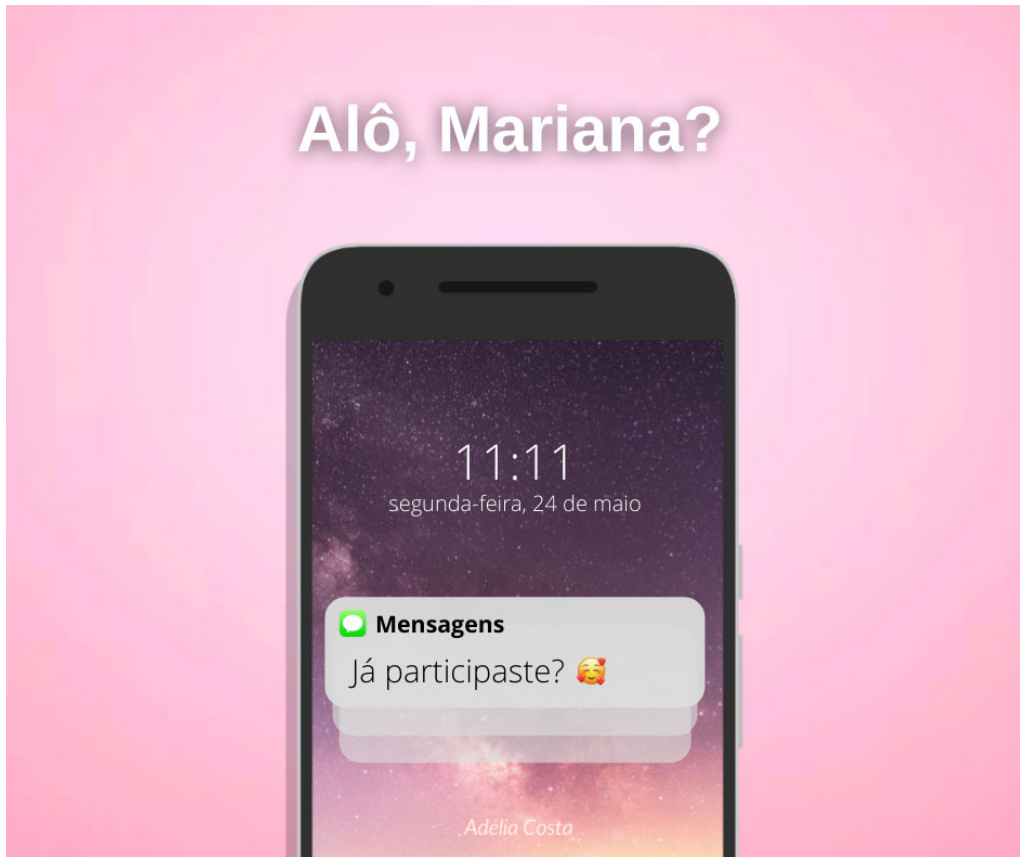


Adélia Costa

APPENDIX C: Third Marketing Post Created to Promote the Survey and Research



APPENDIX D: Fourth Marketing Post Created to Promote the Survey and Research



APPENDIX E: Survey by Questionnaire

Brand Love in Smartphone Brands

This questionnaire is part of an investigation into "brand love" towards smartphone brands, that is, the strong, positive feelings that may result from consumers' interaction and experience with a particular smartphone brand.

Your participation, besides being valuable, is voluntary and can be interrupted at any time. Confidentiality is assured and the data collected will only be used within the scope of the research and objective above mentioned, and its treatment is of responsibility of the author. Any questions or comments may be forwarded via email (adeliamarcosta@gmail.com).

We ask that all questions are read carefully and answered clearly. The questionnaire is composed of 3 sections, with all questions being of short and direct answer in a total duration of about 5 minutes.

Thank you in advance for your attention!

Adélia Costa

Section I

I freely, specifically, informedly, and unequivocally consent to my participation in this study*

Yes

No

What brand is your current smartphone? *

Section II

To answer the questions, please refer to the brand you have mentioned.

Each item should be rated on a scale of 1 to 7, where 1 = Strongly disagree and 7 = Strongly agree.

In the questions that mention the word "online", this means all the online presence of the brand, whether on social media, its own website, Internet of Things, etc.

9. I do not have strong emotions for this brand *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

10. This brand encourages me to engage in physical activities (e.g. booking a holiday, buy the product) *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

11. Following this brand results in physical experiences (e.g. doing sports, wearing make-up) *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

12. This brand does not encourage me to engage in physical behaviours *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

13. This brand animates me to think about it and its message *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

14. Experiencing this brand stimulates my curiosity *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

15. I am not motivated to think about this brand *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

16. This brand is a lot like me *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

17. This brand reflects what I am *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

18. This brand is exactly how I see myself *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

19. This brand image corresponds to my self-image in many respects *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

20. Through this brand, I can express what I find important in life *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

21. Using this brand puts me in a good mood. *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

22. I am very happy with this brand. *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

23. This brand is likeable. *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

24. This brand is trustworthy. *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

25. This brand is a good value of money. *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

26. I am satisfied with the innovative features of this brand. *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

27. This brand is a unique brand in this category. *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

28. I am satisfied with the functional quality of this brand. *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

29. This brand says something true and deep about who I am as person *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

30. I feel myself desiring this brand *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

31. I feel emotionally connected to this brand *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

32. I will be following for a long time this brand online *

	1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

33. If this brand would delete its online presence, I will feel anxiety about it *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

34. My overall evaluation toward this brand is positive *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

35. I encourage friends and my family to buy this brand *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

36. Whenever someone seeks advice, I would recommend this brand *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

37. When the brand is mentioned in a conversation (online and/or offline), I would recommend it *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

38. I have already recommended this brand (online and/or offline) to my friends and family *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

39. This brand provides me superior product quality as compared to other competitors in the marketplace *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

40. No other brands perform better than this brand *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

41. The overall quality of this brand is the best in the marketplace *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

42. I believe this brand provides more benefits than other brands in the marketplace *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

43. I love purchasing from this brand *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

44. I feel better when I purchase this brand *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

45. I like this brand more than other competing brands in the marketplace *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

46. If I am given a chance, I intend to continue buying from this brand *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

47. I consider this brand to be my first choice *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

48. This is the only brand of this type of product that I will buy *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

49. When I go shopping, I don't even notice competing brands *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

50. Buying this brand seems like a good idea, although more expensive. *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

51. I am willing to pay a higher price for my favourite brand. *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

52. I will continue to buy this brand even if identical brands are cheaper. *

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Section III

Sociodemographic Characterisation

Gender *

- Female
- Male

Age *

Full degree of education: *

- No schooling
- Primary education
- Secondary education
- Baccaulaureate
- Bachelor's Degree

- Postgraduate Studies
- Master's Degree
- Doctorate

Nationality *

Marital status *

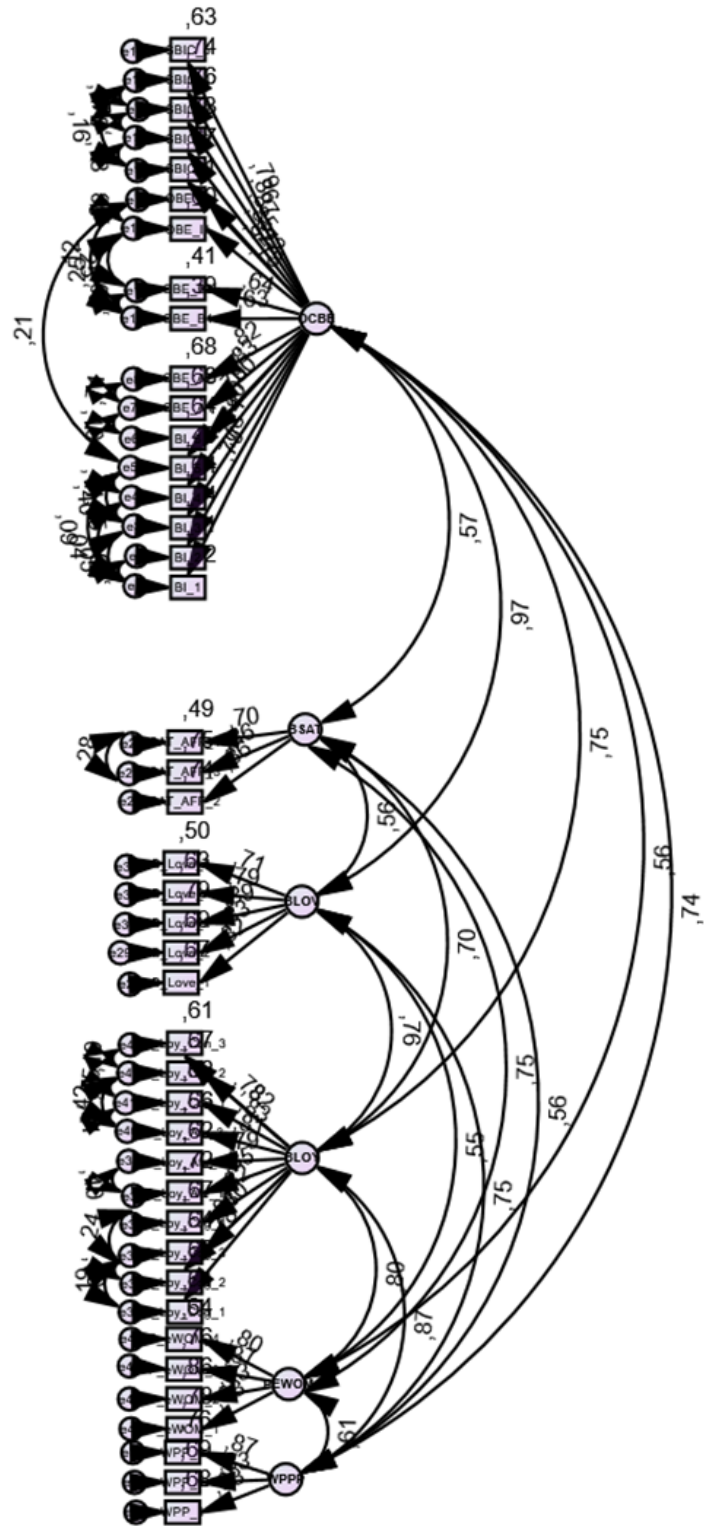
- Single
- Married
- Divorced
- Widowed

Professional status *

- Unemployed
- Self-employed
- Employee
- Student
- Working/Studying
- Retired

End of Questionnaire

APPENDIX F: Measurement Model – Amos Output



APPENDIX G: Structural Model – Amos Output

