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**The Role of Social Media Marketing to Raise  
Brand Awareness, Build Brand Reputation,  
Foster Brand Engagement and Drive  
Purchase Intention in FMCG Start-Ups: The  
Portuguese F&B Industry**

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## **Abstract**

**Title:** The Role of Social Media Marketing to Raise Brand Awareness, Build Brand Reputation, Foster Brand Engagement and Drive Purchase Intention in FMCG Start-Ups: The Portuguese F&B Industry

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Social media marketing has transformed how start-ups connect with consumers, offering a unique opportunity to build strong brands in resource-constrained environments. This study examines the role of social media marketing in enhancing brand awareness, brand reputation and brand engagement to drive purchase intention amongst Portuguese F&B start-ups.

This study employs a mixed-methods approach to examine these relationships. Qualitative data were collected through six semi-structured in-depth interviews (five with members and founders of Portuguese F&B start-ups and one with an entrepreneurship expert) and three age-segmented focus groups with Portuguese consumers (aged 18–24, 25–34 and 35–65). These insights were complemented by quantitative analysis of survey data.

Findings reveal that social media marketing positively and directly impacts purchase intention, brand awareness, brand reputation and brand engagement. However, only brand awareness and brand engagement demonstrate direct and indirect positive effects on purchase intention. Moderation and mediation analyses reveal that the effectiveness of social media marketing is consistent across demographic groups, with social media usage emerging as a stronger predictor of purchase intention than income. Furthermore, innovation is evidenced as the predominant dimension of brand reputation.

This research contributes theoretically by validating past conclusions in the entrepreneurial context of the Portuguese F&B industry. From a managerial perspective, the findings emphasize prioritizing brand awareness and engagement strategies through social media marketing while highlighting the unique aspects of their products/services to build reputation.

**Keywords:** Social Media Marketing; Start-ups; Brand; Awareness; Reputation; Engagement; Purchase Intention.

## **Resumo**

**Título:** O Papel do Marketing de Redes Sociais para Aumentar Consciência de Marca, Construir Reputação de Marca, Fomentar Envolvimento com a Marca e Impulsionar intenção de Compra em Start-Ups de FMCG: Foco na Indústria Portuguesa de F&B.

**Autor:** Bernardo de Santana Fonseca Ribeiro Rodrigues

O marketing de redes sociais transformou a forma como as start-ups se conectam com os consumidores, oferecendo uma oportunidade única para construir marcas fortes em ambientes com recursos limitados. Este estudo analisa o papel do marketing de redes sociais no aumento da notoriedade, reputação e envolvimento com a marca para impulsionar a intenção de compra entre start-ups F&B portuguesas.

Este estudo utiliza uma abordagem de métodos-mistos. Os dados qualitativos foram recolhidos através de seis entrevistas semiestruturadas (cinco com membros e fundadores de start-ups portuguesas de F&B e uma com um especialista em start-ups e empreendedorismo) e de três grupos de discussão com consumidores portugueses segmentados por idades (18–24, 25–34 e 35–65 anos). Estes insights foram complementados por análises quantitativas de dados de um questionário.

Resultados revelam que o marketing de redes sociais impacta positiva e diretamente a intenção de compra, notoriedade, reputação e envolvimento com a marca. Contudo, apenas notoriedade e envolvimento com a marca demonstram efeitos positivos diretos e indiretos na intenção de compra. As análises de mediação e moderação indicam que a eficácia do marketing de redes sociais é consistente entre grupos demográficos, sendo o uso das redes sociais um preditor mais forte da intenção de compra do que o rendimento. Além disso, a inovação destaca-se como a dimensão predominante de reputação da marca.

Este estudo contribui teoricamente ao validar conclusões passadas no contexto empreendedor português de F&B. De uma perspetiva de gestão, os resultados enfatizam priorizar estratégias de notoriedade e envolvimento com a marca.

**Palavras-Chave:** Marketing de Redes Sociais; Start-ups; Marca; Notoriedade; Reputação; Envolvimento; Intenção de Compra.

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## List of Abbreviations

| <b>Abbreviation</b> | <b>Definition</b>                                |
|---------------------|--|
| AVE                 | (Average Variance Extracted)                     |
| BA                  | (Brand Awareness)                                |
| BE                  | (Brand Engagement)                               |
| BR                  | (Brand Reputation)                               |
| CAGR                | (Compound Annual Growth Rate)                    |
| CBBE                | (Customer-Based Brand Equity)                    |
| CI                  | (Confidence Interval)                            |
| F&B                 | (Food and Beverage)                              |
| FMCG                | (Fast-Moving Consumer Goods)                     |
| ISO                 | (International Organization for Standardization) |
| PI                  | (Purchase Intention)                             |
| R&D                 | (Research and Development)                       |
| RQ                  | (Research Question)                              |
| SMEs                | (Small and Medium-Sized Enterprises)             |
| SMM                 | (Social Media Marketing)                         |
| VIF                 | (Variance Inflation Factor)                      |

# **1. Introduction**

## **1.1. Background**

It is well established the importance that marketing has on businesses, as their marketing efforts have a direct impact on its marketplace and economic performance. Consequently, businesses devise and execute marketing strategies with the intention of optimizing their resources to achieve marketing objectives within a target market (Morgan et al., 2019). This is particularly the case in the FMCG sector, which is characterized by rapid changes in consumer preferences and business practices, in which brands must be agile in implementing marketing strategies (Niros et al., 2023). In this context, social media has become a useful tool for marketing purposes due to its ability to leverage sales and grow customer base, through new kinds of social interactions inherent to these platforms (Appel et al., 2020).

In the case of start-ups operating in the F&B industry, social media marketing is an inexpensive and scalable solution to compete against established players. Thus, it is important to assess its benefits and implications in an entrepreneurial context.

## **1.2. Problem Statement**

This dissertation aims to gain insights into how start-ups in the Portuguese F&B industry perceive social media marketing and assess if this digital marketing tool is in fact a good approach for businesses nowadays. For this, it is relevant to examine the impact of social media marketing on brand awareness, brand reputation and brand engagement, which are crucial variables for the growth and strategic development of emerging brands. Moreover, this research intends to assess the overall influence of these variables on purchase intention.

### **1.2.1. Research Questions**

**RQ 1:** How does social media marketing impact brand awareness, brand reputation and brand engagement for start-ups in the Portuguese F&B industry? What is the impact of these variables on purchase intention?

**RQ 2:** Do brand awareness, brand reputation and brand engagement mediate the relationship between social media marketing and purchase intention for start-ups in the Portuguese F&B industry?

**RQ 3:** If social media marketing drives purchase intention amongst Portuguese F&B start-ups,

to which demographic groups is it more effective? Does higher social media usage and income lead to a stronger purchase intention?

**RQ 4:** Amongst all brand reputation dimensions, which is more impactful on the overall brand reputation of start-ups in the Portuguese F&B industry?

### **1.3. Relevance**

In recent years, Portugal has emerged as a significant hub for start-ups, driven by incentives promoting foreign investment and initiatives supporting the start-up ecosystem (AICEP, 2024). Consequently, the number of start-ups in Portugal has increased significantly, reaching 4,719 in 2024, which represents a 16% year-on-year increase (Startup Portugal, 2024).

As of January 2024, there were 8.84 million internet users in Portugal, of whom 7.43 million were active social media users (Data Reportal, 2024). This indicates that a significant proportion of the population is active on social media, which makes social media marketing an important digital marketing tool for start-ups seeking to build their brand and engage with consumers.

From a managerial perspective, this research is pertinent for start-ups to gather insights into the use of social media marketing and how they can benefit from this digital marketing tool.

From an academic perspective, this dissertation addresses a gap in the literature by examining the role of social media marketing within the entrepreneurial context of the Portuguese F&B industry.

## **2. Literature Review**

### **2.1. Start-Up Definition and Characteristics**

Despite the pervasive usage of the term, there is no consensus regarding the definition of the concept of a start-up, as it is perceived and understood differently across various contexts and business ecosystems (Blank & Dorf, 2012). Nonetheless, a commonly agreed upon definition is that a start-up is a “(...) temporary organization in search of a scalable, repeatable and profitable business model” (Blank & Dorf, 2012, p. 17). These organizations focus on leveraging innovation to disrupt established markets or create entirely new ones in conditions of extreme uncertainty and limited resources (Ries, 2011; Spender et al., 2017).

In accordance with Portuguese legislation, a start-up is defined as a legal entity that should meet the following criteria:

- a) The entity must have been operational for a period of less than 10 years;
- b) It must employ fewer than 250 employees;
- c) It must have an annual turnover that does not exceed €50 million;
- d) It must not result from the transformation or split of a large company, nor have any direct or indirect majority ownership by a large company;
- e) It must have its headquarters or a permanent representation in Portugal, or at least 25 employees in Portugal.

Additionally, the entity must meet specific innovation or investment criteria. It must be recognized as a high growth innovative company or having secured venture capital funding from legally authorized entities supervised by the Portuguese Securities Market Commission (Assembleia da República, 2023, Artigo 2.º).

### **2.2. The Fast-Moving Consumer Goods (FMCG) Sector**

FMCG are products that are sold quickly in high volumes at a relatively low price, resulting in small contribution margins for companies. Additionally, due to their perishable nature and low level of consumer involvement in the purchasing decision, given that these goods are often essential items, FMCG products typically exhibit high demand, leading to high inventory turnover rates. Thus, FMCG companies have extensive points of sale and distribution networks to ensure product availability (NielsenIQ, 2022).

### **2.2.1. The Portuguese F&B Industry**

The Portuguese F&B industry, primarily composed of SMEs, constitutes a vital component of the country's economy. This industry is included in the manufacturing sector, contributing approximately 14% to its total value added to the economy. Moreover, the F&B industry is experiencing pronounced growth, with total turnover increasing from €23 billion in 2017 to €25.8 billion in 2021 (AICEP, 2024).

Additionally, the Portuguese F&B sector is export-oriented, with exports reaching €8.9 billion in 2022. This reflects a CAGR of 8.8% between 2018 and 2022, with Spain, Brazil and the United Kingdom as the most prominent export destinations. The sector's high export levels and the ability to reach distant international markets are indicative of its differentiation, production capacity and high product quality (AICEP, 2024).

In 2021, F&B companies accounted for 5% of the total business R&D investment in Portugal, which equated to €101 million. This emphasis on innovation stems from broader industry trends, namely the quality of raw materials alongside growing consumer concerns over environmental and health issues, resulting in an increasingly competitive industry. The need for product differentiation has created fertile ground for start-ups, which are now leading the sector's evolution (AICEP, 2024).

## **2.3. The Interplay of Brand Knowledge and Brand Equity**

### **2.3.1. Brand Knowledge**

Keller (1993) defined brand knowledge as the entirety of information and associations that consumers retain in their memory about a brand. This concept has two core components: brand awareness and brand image.

Brand awareness is defined as the strength of the brand node in consumers' memory, encompassing their ability to recognize and recall the brand under various conditions (further discussed in 2.4. Brand Awareness). Conversely, brand image is the set of associations linked to the brand node that is present in consumers' memory, which reflects their perceptions about the brand and can be assessed in relation to its type, favorability, strength and uniqueness. These brand associations have significant implications when creating and maintaining a brand, functioning as differentiation elements that shape consumer perceptions and attitudes towards the brand, influencing their purchasing behavior (Aaker, 1996).

### 2.3.2. Customer-Based Brand Equity (CBBE)

According to Keller & Lehmann (2006), CBBE is one of the three dimensions of the brand equity concept, representing “the differential effect of brand knowledge on consumer response to the marketing of the brand.” (Keller 1993, p. 8). Thus, the CBBE model includes three essential topics: (1) differential effect, (2) brand knowledge (previously explained in 2.3.1. Brand Knowledge) and (3) consumer response to marketing actions.

Keller (1993) defines differential effect as the discrepancy between consumer responses to a brand's marketing and their responses to the marketing of a fictitious or unbranded product or service. In contrast, consumer response to marketing refers to “consumer perceptions, preferences and behavior arising from marketing mix activity” (Keller 1993, p. 8).

As such, positive CBBE stems from consumers reacting favorably to a particular brand's marketing mix elements relative to a similar set of elements ascribed to a fictitiously named or unnamed product, due to the consumers' perception of marketing actions and specific brand knowledge. Thus, a favorable response is extremely beneficial for companies, considering the positive impact it has on profits.

#### 2.3.2.1. Keller’s Brand Equity Pyramid

Keller (2001) denotes that to build a strong brand, managers must follow a sequence of logical steps: (1) establish proper brand identity, (2) create appropriate brand meaning, (3) elicit the right brand responses, (4) build appropriate relationships with consumers. To accomplish these steps, brands must establish six brand-building blocks in a model that Keller (2001) conceptualized in Figure 1.

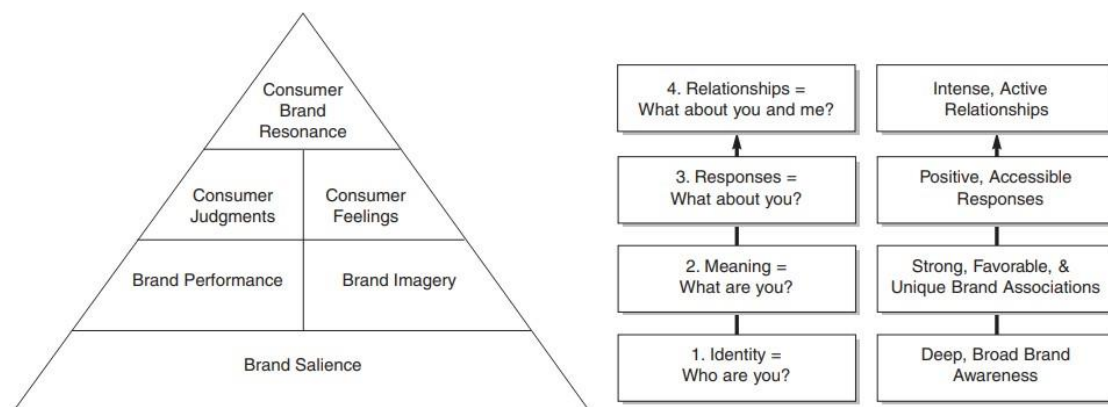


Figure 1 - Customer Based Brand Equity Pyramid by Keller (Keller, 2001)

- **Brand Salience:** Relates to consumers brand awareness and it can be distinguished in terms of depth and breadth. Depth is the ease with which customers recognize or recall a brand, while breadth pertains to the range of purchase or consumption occasions for which the brand is recalled.
- **Brand Meaning:** Composed of two categories of brand associations prevalent in consumers' minds – performance and imagery. Brand performance relates to the mental associations of functional aspects as opposed to brand imagery which refers to consumers' emotional and intangible associations.
- **Brand Responses:** Customers response to the brand's marketing activities, encapsulating judgements and feelings. Brand judgements consist of customers synthesizing performance and imagery associations to develop distinct opinions about the brand. In contrast, brand feelings are the emotional responses and reactions consumers experience in relation to the brand.
- **Brand Relationships:** Level of intensity and depth of consumers' psychological bond with the brand and its impact on consumer behavior.

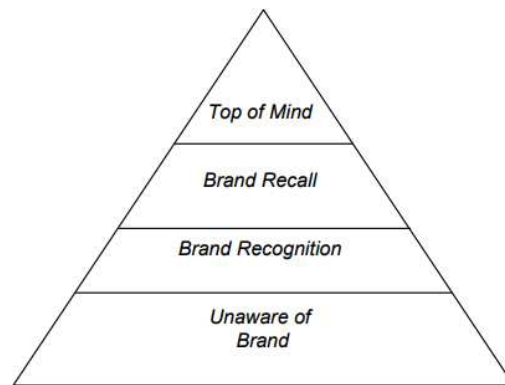
## **2.4. Brand Awareness**

As previously noted, brand awareness is a keystone concept in brand equity and marketing literature and it can be defined as a consumer's ability and ease to recognize and associate a brand with its specific product category (Aaker, 1991; Keller, 1993) under different conditions (Rossiter & Percy, 1987).

According to Aaker (1991), and emphasized by Keller (1993), brand awareness encompasses two primary dimensions: brand recognition and brand recall.

- **Brand Recognition:** Consumers ability to correctly discern a brand as one with which they have had prior contact when presented with the brand as cue.
- **Brand Recall:** Consumers ability to retrieve a brand name from memory when presented with a relevant cue, such as the product category or the specific needs fulfilled by the category.

Aaker (1991) expands on these dimensions by exploring different levels of brand awareness (Figure 2). Brand awareness can be conceptualized as a four-stage journey ranging from complete unfamiliarity to top-of-mind awareness. The latter is attained when, in an unaided recall test, it is a consumer's first-named brand, outperforming competitor brands in the consumer's mind.



*Figure 2 - Brand Awareness Pyramid Model by Aaker (Aaker, 1991)*

Additionally, Aaker (1991) states that brand awareness creates value in four ways:

- 1) Anchor to which other associations can be attached: Brand recognition is the essential first step in brand communication, as consumers require a readily identifiable name. The name acts as a “special file folder in the mind which can be filled with name-related facts and feelings.” (Aaker 1991, p. 63). In the absence of an established anchor, associations may remain isolated or misfiled, thereby limiting the brand's capacity to exert influence over purchase decisions. This is of particular importance for new products or services, since it is challenging for consumers to learn about their features and benefits without prior recognition. In contrast, once recognition has been established, the task is simply to establish a new association.
- 2) Familiarity/Liking: Recognition fosters a sense of familiarity with the brand that is appealing for consumers. This effect is particularly prevalent in the context of low-involvement products, where consumers may base their purchasing decisions on mere familiarity rather than a comprehensive assessment of the product's attributes.
- 3) Substance/Commitment: As Aaker (1991, p. 65) observed, "name awareness can be a signal of presence, commitment and substance" for consumers. Additional factors such as extensive advertising, longevity, widespread distribution or broad consumer adoption contribute to the perception of established brands. While not based on specific brand knowledge, these factors play an essential role in influencing consumer

perceptions of a company's commitment to its brand and its ability to back it with advertising.

- 4) Brands to Consider: Increased likelihood that a brand will be included in the consumer's initial consideration set during the purchase process. Brands with strong recall have a distinct advantage as they are more easily retrieved from memory without extensive prompting, increasing their likelihood of being selected for further consideration.

## **2.5. Brand Reputation**

In the field of marketing, brand reputation is a multidimensional concept, referring to the overall perception and beliefs held by stakeholders about a brand based on their experiences and the information available to them (Brown & Dacin, 1997; Rust et al., 2021). Consequently, brand reputation reflects the collective brand knowledge of all stakeholders, which ultimately influences company performance (Rust et al., 2021).

Considering the growing influence of reputation on stakeholder support of companies, various models have been created to assess reputation. Accordingly, Fombrun et al. (2015) developed the *RepTrack System*, a framework designed to measure and analyze corporate reputation by exploring seven dimensions that influence stakeholders' perceptions: products/services, innovation, workplace, governance, citizenship, leadership and performance. This differs from the *IPSOS* model which assesses corporate reputation by using a multi-layered reputation pyramid, focusing on familiarity, favorability, emotional attachment, trust and advocacy (Ajder & Ross, 2020).

A third model is the *OnStrategy's* certified model (ISO 10668 and ISO 20671), which is the one adopted for this research and is presented in Figure 3.

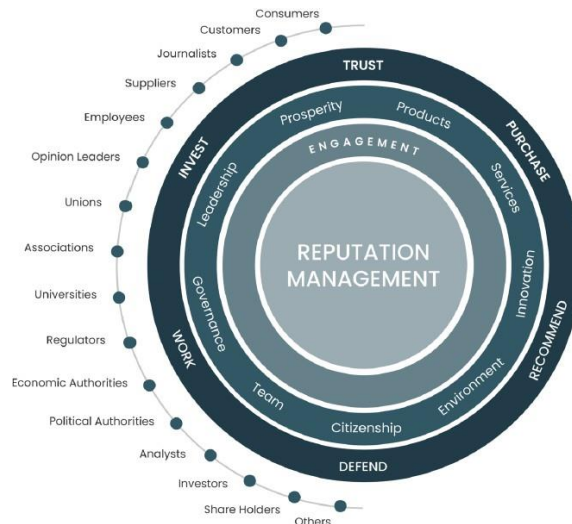


Figure 3 - OnStrategy's Brand Reputation Model (OnStrategy, n.d.)

Considering the dissertation topic and problem statement, a focus will be made on the following five dimensions of brand reputation:

- **Product Quality:** Perceived excellence of the brand's products including adequate, efficient and reliable product solutions. Additionally, the product range must be clear and tailored to specific market demands and provides excellent value for money while effectively addressing consumer needs (OnStrategy, n.d.).
- **Service Quality:** Encompasses a significant portion of the customer experience and refers to stakeholders' perception of the brand providing adequate and efficient service across various channels including in-store, online and contact center interactions. It ensures proper, accurate and prompt responses to consumer needs while maintaining high levels of accessibility and availability (OnStrategy, n.d.).
- **Innovation:** The brand is recognized for its innovative products and services that stand out as unique in the market. It demonstrates a capacity to adapt quickly to change and is often first to market with new offerings. Furthermore, the brand maintains a commitment to consistent and sustainable innovation (OnStrategy, n.d.).
- **Environmental Responsibility:** The brand is committed to reduce the carbon footprint, promote biodiversity and water management. It limits harmful waste, pollutants and chemicals while utilizing efficient and renewable energy sources. Furthermore, the brand supports climate and environmental sustainability causes and advocates for the development of a circular economy (OnStrategy, n.d.).
- **Corporate Citizenship:** Reflects the brand's commitment to promoting health and wellbeing, as well as supporting education, culture and the arts. It supports humanitarian

causes, secures customer data and fosters industry knowledge (OnStrategy, n.d.).

## **2.6. Brand Engagement**

Brand engagement is defined by Hollebeek (2011) as the cognitive, emotional and behavioral investment a consumer makes in their interactions with a brand. This tripartite conceptualization of brand engagement seeks to capture consumer's level of immersion in the brand, affective response to the brand and the actions taken by consumers while interacting with the brand (Hollebeek, 2011). Mollen and Wilson (2010, p. 12) further develop this definition by applying the concept of engagement specifically to an online setting. The authors define it as the "(...) 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."

Kotler and Keller (2016) define the term engagement as "(...) the extent of a customer's attention and active involvement with brands' communication" (Kotler & Keller, 2016, p. 582). Thus, in this research engagement represents a more proactive response to a brand's communication than a simple impression, in which consumers merely view a brand message. In the context of digital marketing, engagement is frequently measured through the analysis of interactions such as likes, comments and shares on social media platforms, as well as other online channels, including company blogs and websites. Thus, the concept of engagement is important in the field of marketing, as it can enhance consumers' personal experiences with the brand and shape perceptions of the company's products and services (Kotler & Keller, 2016).

## **2.7. Purchase Intention**

Purchase intention is an essential variable in understanding consumer outcomes and denotes a consumer's deliberate plan or likelihood to purchase a product or service from a brand (Spears and Singh, 2004; Morrison, 1979). It is typically influenced by the consumers' evaluation of practical cost considerations required to facilitate a purchase. Additionally, purchase intention is also shaped by the extent to which a purchase aligns with social goals, such as self-presentation and conformity to social norms (Baker, Donthu, and Kumar, 2016).

Purchase intention precedes purchasing action (Chang & Wildt, 1994) and despite being an imperfect predictor of purchase behavior (Kalwani & Silk, 1982), it is a prominent explanatory variable of consumer purchasing decisions (Spears & Singh, 2004).

## **2.8. Brand Touchpoints, Customer Experience and the Customer Journey**

Digitalization has prompted a shift in the marketing landscape, with consumers increasingly seeking experiences rather than merely products (Achrol & Kotler, 2012). This transformation has brought a growing focus on customer experience which spans the entirety of the customer journey involving a multitude of touchpoints through which consumers interact with companies (Homburg, Jozić, & Kuehnl, 2017).

As customer journeys become more complex, managing these touchpoints effectively has become essential. For start-ups and SMEs characterized by transactional core business models, creating strong and positive experiences throughout the customer journey is crucial for companies aiming to achieve higher conversion rates across these touchpoints (Lemon & Verhoef, 2016). Creating a compelling customer experience through innovative practices is particularly significant for securing niche markets and differentiating oneself in highly competitive environments. When customer experience strategy is effectively executed, it encourages customers to engage with the brand in a meaningful way, thus driving customer loyalty and engagement (Homburg, Jozić, & Kuehnl, 2017).

Amongst the different touchpoints consumers engage with during the customer journey, brand-owned touchpoints are vital for companies as they have direct control over how customers experience and interact with the brand throughout the customer journey (Lemon and Verhoef, 2016). These touchpoints encompass all brand-owned media, including company-owned websites and pages/accounts on online social networks (Stephen & Galak, 2012). They also include brand-controlled elements of the marketing mix, such as but not limited to the product, packaging, price, service (Lemon and Verhoef, 2016).

## **2.9. Digital Marketing**

While mass marketing ignores segmentation and approaches the entire market with the same offer and marketing strategy (Kotler & Keller, 2016), direct marketing is personalized to specific segments and allows for a dialogue between the marketing team and consumers (Kotler, Armstrong & Opresnik, 2018). Consequently, direct marketing usually involves a call to action in the form of a special offer or targeted information tailored to the consumer's specific needs at a given moment (Risselada, Verhoef, & Bijmolt, 2014).

According to Kotler et al. (2009), digital marketing is the fastest-growing form of direct marketing. It involves direct engagement with targeted consumers, drawing immediate

responses and establishing consumer relationships. By tailoring content to the interests of specific market segments or individual consumers, companies can build customer engagement, develop brand communities and increase sales (Kotler, Armstrong & Opresnik, 2018). In essence, digital marketing can be defined as “achieving marketing objectives through applying digital technologies and media” (Chaffey & Ellis-Chadwick, 2016, p. 11). From a practical perspective, digital marketing involves managing various forms of a company’s online presence, such as the company’s website, blog, mobile apps, and social media platforms (Chaffey & Ellis-Chadwick, 2016).

### **2.9.1. Social Media Marketing**

As noted, social media marketing constitutes a form of digital marketing and can be defined as “the utilization of social media technologies, channels and software to create, communicate, deliver and exchange offerings that have value for an organization’s stakeholders” (Tuten & Solomon, 2021). This notion is further substantiated by Kotler and Keller (2016), who refer to social media marketing as online initiatives and campaigns with the aim of engaging customers or prospective customers, as well as raising awareness, enhancing brand image and driving sales.

Kotler et al (2018), suggest five main advantages of social media marketing for companies:

- 1) Targeted and Personalized Reach: Social media allows marketers to create tailored brand content for individual consumers and specific customer communities.
- 2) Interactive: The interactive nature of social media enables companies to start and participate in customer conversations while also gathering valuable consumer feedback.
- 3) Immediate and Timely: Social media allows marketers to communicate instantly with customers, delivering marketing content regarding brand happenings and initiatives.
- 4) Cost-Effectiveness: While creating and managing social media content can incur costs, most social media platforms are free or relatively inexpensive to use. Compared to traditional advertising channels, social media offers a more affordable alternative, making it accessible to small brands with limited advertising budgets, yielding higher returns on investment.
- 5) Engagement and Social Sharing Capabilities: Social media is particularly advantageous in creating customer engagement and a sense of community around a brand. Unlike the remainder of the communication channels, through social media, customers can participate and share brand experiences, information and ideas.

## 2.10. Conceptual Framework and Hypotheses

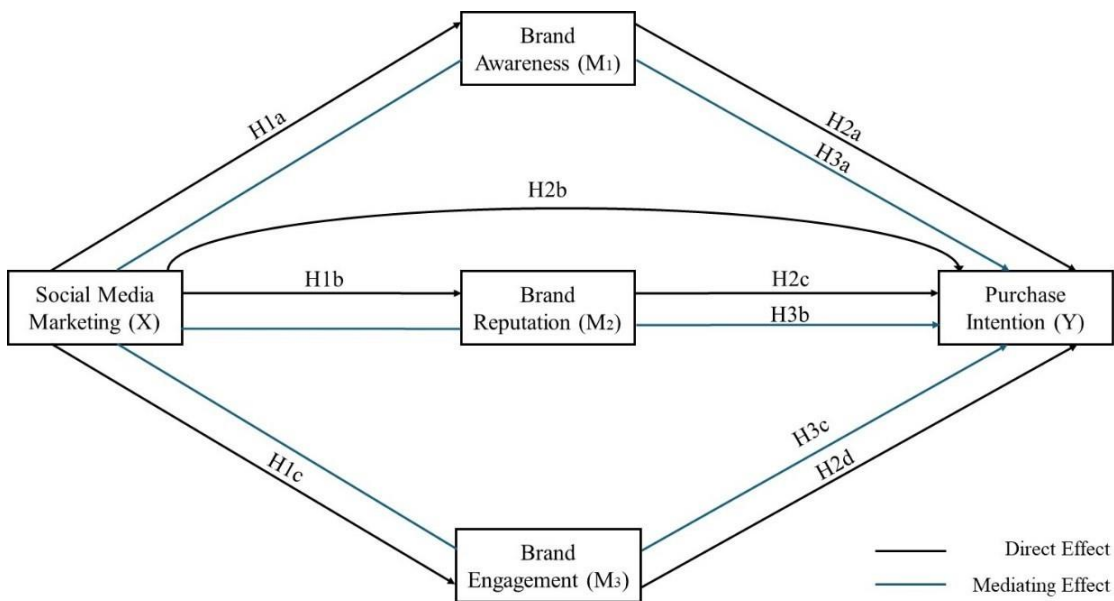


Figure 4 - Conceptual Framework (Own Elaboration)

**H1a:** Social media marketing done by Portuguese F&B start-ups positively impacts its brand awareness.

**H1b:** Social media marketing done by Portuguese F&B start-ups positively impacts brand reputation.

**H1c:** Social media marketing done by Portuguese F&B start-ups positively impacts brand engagement.

**H2a:** Brand awareness positively impacts purchase intention in start-ups that operate within the Portuguese F&B industry.

**H2b:** Social media marketing positively impacts purchase intention in start-ups that operate within the Portuguese F&B industry.

**H2c:** Brand reputation positively impacts purchase intention in start-ups that operate within the Portuguese F&B industry.

**H2d:** Brand engagement positively impacts purchase intention in start-ups that operate within the Portuguese F&B industry.

**H3a:** Brand awareness mediates the relationship between social media marketing and purchase intention in start-ups that operate within the Portuguese F&B industry.

**H3b:** Brand reputation mediates the relationship between social media marketing and purchase intention in start-ups that operate within the Portuguese F&B industry.

**H3c:** Brand engagement mediates the relationship between social media marketing and purchase intention in start-ups that operate within the Portuguese F&B industry.

**H4:** The effectiveness of social media marketing done by Portuguese F&B start-ups on purchase intention varies across different age segments.

**H5a:** Higher social media usage is positively correlated to a higher purchase intention in start-ups within the Portuguese F&B industry.

**H5b:** Higher income is positively correlated to a higher purchase intention in start-ups within the Portuguese F&B industry.

**H6:** Amongst all brand reputation dimensions, product quality is the most significant factor influencing brand reputation for start-ups in the Portuguese F&B industry.

### **3. Methodology**

#### **3.1. Research Approach**

This study follows a mixed-methods research approach, combining both qualitative and quantitative methods with the aim of providing a complete and holistic analysis of the research problem.

#### **3.2. Research Design**

This research employs an exploratory sequential design, whereby the qualitative findings from semi-structured in-depth interviews and focus groups form the basis for the subsequent quantitative data collection and analysis, ultimately addressing the research question (Creswell, 2014). Additionally, the quantitative research follows a single cross-sectional design within the framework of descriptive and inferential statistics.

#### **3.3. Sampling**

The target population of this study comprises three age segmented consumer groups: 18–24; 25-34 and 35-65 year old. This segmentation was due to the insights gathered in the exploratory research phase, particularly the in-depth interviews with start-ups (detailed in 4.1. Start-ups), as well as the differences in social media usage and engagement among Portuguese individuals across these age groups (Marktest, 2023).

Having defined the target population, two non-probability sampling techniques were employed in the research: convenience and snowball sampling. In the initial stage of the research, convenience sampling was employed by contacting start-ups and consumers who were readily accessible and willing to participate in in-depth interviews and focus groups, respectively. Nonetheless, criterion were employed to ensure that the interviewed start-ups operated in the Portuguese F&B industry and were present on social media platforms.

A mixed approach was used in the data collection process considering that, in an initial phase, the survey was distributed through social media to respondents who were readily available to participate. Subsequently, snowball sampling was employed, as participants were encouraged to refer the survey to individuals within their network who met the criteria for the target population.

### **3.4. Exploratory Research**

As previously noted, the exploratory research phase represents the initial stage of the research process and is indispensable to obtain preliminary insights from the study's three stakeholders: F&B start-ups, Start-up and Entrepreneurship expert and consumers. These insights were gathered through qualitative methods, namely semi-structured in-depth interviews and focus groups, to provide a contextual foundation of social media's usefulness as a marketing tool.

One-on-one in-depth interviews were conducted with members and founders of five Portuguese F&B start-ups: Swee, Plantz, Yogan Creamery, YoGoody and Corial Foods (Appendix 1), to examine the marketing strategies and tools they employ. Among the interviews the main focus was the role of social media in building brand awareness, reputation and engagement for these businesses. Furthermore, these interviews also sought to ascertain start-up founder's perceptions on the effectiveness of social media marketing in influencing purchase intention.

To add value, complement this research and better understand the nuances of the national start-up and entrepreneurship ecosystem, a semi-structured in-depth one-on-one interview was conducted with José Vale, Head of Innovation and Entrepreneurship at IAPMEI<sup>1</sup> (Appendix 2). The mission of this department is to promote entrepreneurship and manage support for innovative projects by start-ups.

Additionally, three focus groups were conducted, each with six participants segmented by the aforementioned age ranges: 18-24; 25-34 and 35-65 years old (Appendix 3). The objective of these focus groups was to evaluate media consumption habits and perceptions of the impact of social media marketing on brand awareness, reputation, engagement and ultimately, purchase intention within the Portuguese F&B industry.

### **3.5. Conclusive Research**

In the conclusive research phase, an online survey-based method is used to measure and test the hypotheses formulated in the exploratory research phase and in turn examine the relationships between the variables under study.

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<sup>1</sup> IAPMEI – Agência para a Competitividade e Inovação is a Portuguese government agency responsible for supporting SMEs, promoting competitiveness and business growth through the management of instruments and programs aimed at innovation, entrepreneurship and business investment. (<https://www.iapmei.pt/>)

### **3.5.1. Survey Design**

Considering that this research employs a single cross-sectional design, the data are collected from a population at a specific point in time in order to answer the research questions (Sekaran & Bougie, 2016).

The use of descriptive statistics enables the characterization of the population based on their media consumption habits and demographic characteristics, whilst inferential statistics allow the analysis of relationships between variables under study and the testing of established hypotheses (Field, 2018).

The closed-ended survey is therefore organized as follows (the complete survey guideline is provided in Appendix 4):

1. Consumer Brand Touchpoints;
2. Social Media Marketing Usage and Perceptions;
3. Brand Awareness;
4. Brand Reputation;
5. Brand Engagement;
6. Purchase Intention;
7. Demographics.

### **3.5.2. Data Collection**

The data were collected via an online survey on the Qualtrics platform, which not only allows statistical summary and exploration but also enables direct export of the data to SPSS, the statistical software used for subsequent analysis. The utilization of an online survey for data collection ensures the elimination of interviewer bias, which can occur when interviewers inquire more deeply into questions of personal interest. Additionally, this method provides respondents with a sense of anonymity, which is a particularly relevant consideration given the inclusion of sociodemographic questions in the survey (Malhotra, Nunan, & Birks, 2017).

Nevertheless, the online survey method also has some inherent disadvantages, such as low response rates, which can give rise to non-response bias. To increase participation, respondents who completed the survey were given the option of entering a raffle to win a €20 Fnac gift card. This strategy is in accordance with research indicating that small incentives can enhance survey participation (Dillman, 2000). Additionally, there is the disadvantage of lack of control over

the data collection environment, which can result in distractions or rushed responses and may compromise the quality of the data collected (Malhotra, Nunan, & Birks, 2017). To address this issue, an attention check was included in question 8 of the survey (Appendix 4).

In alignment with the overarching theme of social media marketing in this study, the survey was distributed via social media platforms where the three consumer demographic groups identified in the exploratory research phase are present. Consequently, the survey was disseminated via Facebook, Instagram and LinkedIn, where it was accessible for a period of 19 days, starting on 01/11/2024 and concluding on 19/11/2024.

### **3.5.3. Variables and Measurement**

*Social Media Marketing* is the primary independent variable in hypotheses H1, H2b, H3, and H4 (Figure 4). It was measured on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree) with three items describing the construct (Cronbach's Alpha = .883). The scale was adapted from the 5-point Likert scale of Saini et al. (2021).

*Brand Awareness* acts as an independent variable in H2a, a mediator in H3a, and a dependent variable in H1a (Figure 4). It was measured on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree) with five items describing the construct (Cronbach's Alpha = .834). The scale was adapted from the 5-point Likert scale of Yoo, Donthu, and Lee (2000).

*Brand Reputation* acts as an independent variable in H2c, a mediator in H3b, and a dependent variable in H1b and H6 (Figure 4). It was measured on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree) with six items describing the construct (Cronbach's Alpha = .832). The scale was adapted from Brown & Dacin, (1997).

*Brand Engagement* acts as an independent variable in H2d, a mediator in H3c, and a dependent variable in H1c (Figure 4). It was measured on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree) with three items describing the construct (Cronbach's Alpha = .809). The scale was adapted from the 10-point Likert scale of Hollebeek, Glynn, and Brodie (2014).

*Purchase Intention* is the ultimate dependent variable in hypotheses H2, H3, and H4 (Figure 4). It was measured on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree) with three items describing the construct (Cronbach's Alpha = .894). The scale was adapted from Kalwani & Silk (1982).

*Age Groups* is a moderating independent variable in H4. It was assessed through a closed-ended multiple-choice question on an ordinal scale. Respondents were categorized into predefined age ranges.

*Social Media Usage* was assessed through a closed-ended multiple-choice question on an ordinal scale.

*Income* was assessed through a closed-ended multiple-choice question on an ordinal scale.

*Product Quality, Service Quality, Innovation, Environmental Responsibility, Corporate Citizenship* are independent variables in H6. Measured on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree).

The use of a 7-point Likert scale in this survey was predicated on the notion that, when measuring attitudes, respondents often perceive their levels of agreement or liking to be slight, moderate, or substantial. A 7-point scale is optimal for capturing nuanced responses as it accommodates the aforementioned range by offering three points to the left of a neutral midpoint and three points to the right (Krosnick & Fabrigar, 1997). Furthermore, the expanded response options in a 7-point scale contribute to higher reliability and validity. A study conducted by Alwin and Krosnick (1991) indicated that 7 to 9-point scales are more reliable than scales with fewer points. In turn, scales larger than 7-points do not convey additional substantial information that greatly increases validity (Mattel and Jacoby, 1972).

#### **3.5.4. Data Analysis**

After the survey was completed, the data collected via Qualtrics were exported to SPSS for analysis, using both descriptive and inferential statistical methods with a 95% confidence interval. Descriptive statistics were used to characterize the sample population and the variables in the study (Appendix 5 and Appendix 6). Specifically, in the inferential statistics realm, a *parallel mediation* analysis was conducted using *Model 4 of the Andrew Hayes Process Macro* (Appendix 7), simultaneously including the three brand variables as mediators to examine hypotheses H1a through H3c. In turn, a moderation analysis was conducted to test hypothesis H4 using *Model 1 of the Andrew Hayes Process Macro*, where the variable ‘Age Groups’ was included as a moderating variable (Appendix 8). Moreover, *Pearson correlation* analyses were performed to assess hypotheses H5a and H5c (Appendix 9 and Appendix 10) while a *multiple linear regression* was used to test hypothesis H6 (Appendix 11).

### **3.5.5. Linear Regression Assumptions**

Considering the nature of the statistical analyses performed, eleven regression analyses were conducted to assess the linear regression assumptions (outlined in Appendix 12).

#### **3.5.5.1. Linearity**

To evaluate this assumption, the scatterplots that portray the standardized residuals against standardized predicted values were examined (Appendix 12). The residuals were observed to be randomly distributed around  $y = 0$ , without any discernible pattern, suggesting that the relationship between the variables is linear, thereby satisfying the assumption.

#### **3.5.5.2. Homoscedasticity**

Similarly to linearity, this assumption was also evaluated through the scatterplots that portray the standardized residuals against standardized predicted values (Appendix 12). The residuals were observed to have a consistent spread across the range of predicted values, suggesting that the variance of residuals is constant, which satisfies the homoscedasticity assumption.

#### **3.5.5.3. Normality of Estimation Errors**

The normality of the distributions was evaluated using the *Kolmogorov-Smirnov Test* ( $n > 50$ ) (Appendix 13). For distributions where the p-value was greater than .05, approximate normality was assumed when the absolute value of skewness was less than 2 and the absolute value of kurtosis was less than 7 (Hair et al., 2010; Byrne, 2010).

#### **3.5.5.4. Independence of Errors**

The independence of errors was examined through the Durbin-Watson Test. As noted in Appendix 14, all values are close to 2, indicating that the assumption is satisfied.

#### **3.5.5.5. Multicollinearity**

Multicollinearity was assessed through a correlation analysis (Appendix 15) further presented in Topic 5.1.3.2. Discriminant Validity between the variables in the study. As observed in Table 2 (in 5.1.3.2. Discriminant Validity), the correlation between all constructs is below .8. In the specific case of H6, the collinearity statistics presented in the coefficients table (Appendix 11)

show that all predictors have tolerance values above .2<sup>2</sup> and VIF values below 5<sup>3</sup>, thereby suggesting that there is no multicollinearity.

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<sup>2</sup> Threshold established by Menard. (1995), indicating that values below above this limit is indicative of multicollinearity.

<sup>3</sup> Threshold established by James et al. (2013), indicating that values above this limit suggest the presence of multicollinearity.

## **4. Exploratory Research Findings**

The exploratory research section presents the main findings from the in-depth interviews and focus groups. Detailed insights are provided in Appendix 1, Appendix 2 and Appendix 3.

### **4.1. Start-ups**

While the interviewed start-ups employ varying strategies for utilizing social media marketing, all identified it as the most effective marketing tool at their disposal. Considering the constraints imposed by limited budgets, start-ups are acutely aware of the substantial value inherent in social media marketing. Not only is it cost effective but also versatile in its capacity to reach both a broad audience and specific targets, depending on the start-ups strategic marketing objectives. This dual nature of social media marketing also allows start-ups to accurately understand who their target is.

The interviewed start-ups collectively view social media marketing as a key tool for generating brand awareness, given their limited recognition and visibility at points of sale. This strategic approach is especially important in the F&B industry, where brand recognition at retail points of sale plays a crucial role in influencing consumer purchase intention.

In the context of brand reputation, social media is considered an essential channel to communicate it, however, start-ups believe it is more effectively conveyed when complemented by below-the-line activities, such as in-store promotions, participation in trade shows and direct consumer interactions. Although start-ups emphasize the product quality dimension, they recognize the importance of all dimensions of brand reputation. However, there is a lack of clarity regarding whether brand reputation as a whole has a positive impact on purchase intention.

Start-ups consider consumer engagement on social media, such as liking, sharing, commenting on brand posts and participating in brand-led activities to be a crucial aspect of fostering robust consumer relationships. Nevertheless, there is a lack of clarity regarding the extent to which these relationships result in an increased likelihood of purchase. Similarly, while start-ups believe that social media marketing has the potential to drive purchase intention, given that consistent exposure and interaction with consumers often results in increased inquiries about product availability, they are unsure whether these interactions ultimately lead to a significant increase in purchase intention.

## 4.2. Start-up and Entrepreneurship Expert

The Head of Innovation and Entrepreneurship at IAPMEI, José Vale is considered an expert given his experience in public policies concerning start-ups and entrepreneurship.

Vale noted that the pronounced growth of the Portuguese start-up ecosystem stemmed from strategic programs and a supportive entrepreneurial environment. Two significant catalysts of the expansion of the Portuguese start-up ecosystem are the StartUP Portugal<sup>4</sup> strategy launched in 2016 and Web Summit, a major technology event that has been hosted in Lisbon since that same year (Appendix 2).

The StartUP Portugal strategy introduced two primary objectives: increase the number of start-ups in the country and improve conditions for already established start-ups. To do so, a national network of incubators was developed; incentives were improved, through the launch of financial instruments such as the StartUP Voucher and StartUP Visa; and internationalization was promoted. Concurrently, the emergence of Web Summit in Portugal, in 2016, further catalyzed the growth of the entrepreneurial ecosystem, offering Portuguese start-ups visibility and access to international investors.

Amidst the growth of the Portuguese start-up ecosystem, José Vale highlighted how social media has become a critical driver of start-up success, particularly in the F&B industry. This is due to social media marketing's cost-effective way of enhancing awareness, reputation and engagement, which is vital for start-ups to scale and expand from the niche markets they initially penetrate. Specifically regarding brand reputation, José Vale highlighted how start-ups may underestimate its importance, viewing its impact on purchase intention as limited to a small group of consumers. However, these consumers are often the brand's opinion-makers and thus addressing reputation concerns through a communication channel like social media marketing is crucial.

Lastly, José Vale reported that an important consideration regarding purchase intention in the Portuguese F&B industry pertains consumer's income level, suggesting a positive correlation between income and predisposition to acquire products from emerging F&B brands.

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<sup>4</sup> Startup Portugal is a non-profit organization with the mission of developing activities of public interest for the promotion of entrepreneurship, in close connection with public and private entities operating in the national entrepreneurship ecosystem. (<https://startuportugal.com/about/>)

### **4.3. Consumers**

Despite social media and television emerging as the dominant communication channels across all demographic groups, there were notable differences in participants' usage and perceptions of these channels. The youngest focus group participants (aged 18 - 24) indicated that they relied heavily on social media platforms as their primary source of information. In contrast, participants aged 25 - 34 exhibited a balanced approach to media consumption, utilizing both social media and television to a similar extent. In contrast, older participants (aged 35 - 65) demonstrated a clear preference for television.

In accordance with the observed disparities in media consumption patterns across demographic groups, social media is a more effective tool for fostering brand awareness among younger demographics (18 – 34 years old). These groups frequently become aware of new brands as a result of their social media presence, influencer campaigns and advertisements. Additionally, these consumers noted that repeated exposure and creative storytelling by F&B brands are significant factors in capturing their attention. In contrast, older participants (35 – 65 years old) only become aware of new F&B brands through social media when they are in the form of personal referrals, shared from friends or family members.

Regarding brand reputation, participants from all demographic groups emphasized the significance of environmental responsibility and corporate citizenship for brands operating in the F&B industry. Participants considered social media marketing to be an effective way for brands to address these concerns, provided that the communication must be perceived as authentic by the consumers to have the desired effect.

In the context of brand engagement, younger demographics (18 – 34 years old) placed significant importance on brands proactively engaging with consumers on social media platforms through the implementation of contests, challenges and responding to consumer feedback. The participants indicated that they felt a greater sense of connection to brands that demonstrated active listening and responsiveness to consumer input.

While the older demographic group (35 – 65 years old) also acknowledged the importance of social media engagement, they placed greater emphasis on its practical aspects. In particular, they valued brands that provided timely responses to their customer support queries and addressed concerns efficiently.

All participants acknowledged that social media marketing influenced their intention to purchase products from F&B brands, although the impact was found to vary across age groups. The younger participants (aged 18 - 24) were more likely to try new F&B products, with social media influencers and targeted advertisements exerting a significant influence. Individuals within the 25 - 34 age bracket were receptive to trying new F&B products if they encountered positive reviews and testimonials on social media. In contrast, older participants (aged 35 - 65) exhibited the least openness to trying new F&B products, as they have more traditional and less flexible consumption habits.

Overall, social media marketing was acknowledged as a highly effective tool across all demographic groups, with its impact shaped by the distinct preferences and priorities of each age group.

## **5. Conclusive Research Findings**

### **5.1. Data Development**

#### **5.1.1. Data Cleaning**

The survey received a total of 315 responses, of which 138 were valid. This was due to the removal of incomplete responses, duplicated entries identified by the IP address and failure to answer the attention check question correctly.

To identify multivariate outliers, a Mahalanobis distance analysis was conducted. However, considering the dual role of BA, BR and BE, which function as both dependent and independent variables depending on whether H1 or H2 are being tested, four separate Mahalanobis distance analyses were performed. Three analyses assessed the relationships between SMM and each of the brand variables individually, while the fourth analysis focused on the relationship between SMM, BA BR, BE and PI. Considering a significance level of  $p = .001$  and the degrees of freedom within each analysis, no extreme multivariate outliers were identified. The use of a smaller significance level in this instance is due to the subjective nature of the consumer perceptions characterized by variability.

#### **5.1.2. Reliability Analysis**

To ensure the reliability of the scale used to measure the variables of the study, Cronbach's alpha for each construct was computed. As noted in Appendix 16, all the computed Cronbach's alphas for each construct exceed .8, which according to Field (1998), indicates good reliability. Additionally, since the Cronbach's alpha for each construct did not significantly improve with the removal of any particular item, no items were excluded.

The output of the scale reliability analysis also demonstrates that all items within their respective constructs have 'Correlated Item-Total' values exceeding .3. This indicates that each item correlates well with its overall construct, further supporting the reliability of the scale (Norusis, 1994).

Furthermore, five variables were created in accordance with the study objectives: SMM, BA, BR, BE and PI. As indicated in Table 1, these variables were computed by calculating the mean of the items associated with each construct.

| <b>Construct</b> | <b>Expression</b>   |
|------------------|---|
| SMM              | $(\text{Question\_4\_1} + \text{Question\_4\_2} + \text{Question\_4\_3}) / 3$   |
| BA               | $(\text{Question\_5\_1} + \text{Question\_5\_2} + \text{Question\_5\_3} + \text{Question\_5\_4} + \text{Question\_5\_5}) / 5$                         |
| BR               | $(\text{Question\_7\_1} + \text{Question\_7\_2} + \text{Question\_7\_3} + \text{Question\_7\_4} + \text{Question\_7\_5} + \text{Question\_7\_6}) / 6$ |
| BE               | $(\text{Question\_8\_1} + \text{Question\_8\_2} + \text{Question\_8\_3}) / 3$   |
| PI               | $(\text{Question\_9\_1} + \text{Question\_9\_2} + \text{Question\_9\_3}) / 3$   |

*Table 1 - Computed Constructs*

In addition, a new variable ‘Age Groups’ was created to segment the age responses into the specific age ranges (18-24; 25-34; 35-65) aligned with the study objectives.

### **5.1.3. Construct Validity**

#### **5.1.3.1. Convergent Validity**

Convergent validity examines the internal consistency of items measuring the same construct (Bagozzi, 1981). As such, to assess the whether the items are measuring the same underlying constructs, factor analyses were conducted (Appendix 17). The results indicated high factor loadings<sup>5</sup> in every item across SMM, BA, BE and PI. Regarding the construct of BR, the results indicate the extraction of two distinct factors. The first factor demonstrates a high, positive correlation with “Social media marketing builds a start-ups reputation.”, “Social media marketing done by food and beverage start-ups effectively conveys product quality”, “Social media marketing done by food and beverage start-ups effectively conveys service quality”, “Social media marketing done by food and beverage start-ups makes me informed about a company’s innovation.”. Conversely, the second factor exhibits a high, positive correlation with the items "Social media marketing done by food and beverage start-ups makes me informed about a company's environmental responsibility and commitment" and "Social media marketing done by food and beverage start-ups informs makes me informed about a company's corporate citizenship.". This indicates that, despite a factor primarily assessing BR, a second factor can be identified as a sub-dimension of brand reputation, designated as "social responsibility." This is consistent with 2.5. Brand Reputation, which notes that brand reputation is a multidimensional construct.

In addition to the factor loadings, to establish convergent validity, the AVE, should not be lower than .5 (Fornell & Larcker, 1981). As noted in Appendix 17, the AVE across SMM, BA and PI is above the proposed threshold of .5, indicating that these constructs explain no less than 50%

<sup>5</sup> above .5, according to Hair et al. (2010)

of the indicator variance, therefore evidencing construct validity. In contrast, the constructs of BR and BE exhibit AVE values that are slightly below .5. Regarding BR, no items belonging to the social responsibility sub-dimension were excluded, as they constitute a significant aspect of the BR construct. Similarly, for the BE variable, although the AVE is below the recommended threshold, each item exhibits high factor loadings. This indicates that although each item makes a significant contribution to explaining the variance within the construct, some variance remains unexplained. Consequently, no items were removed or modified.

**5.1.3.2. Discriminant Validity**

Having assessed convergent validity, assessing discriminant validity is essential to ensure all constructs in the study are distinct (Cheung et al, 2023). According to the Fornell and Larcker (1981) criterion, discriminant validity is established when the shared variance within the construct is greater than the correlation between that construct and the remaining constructs in the model. Thus, the square root of AVE was computed and a correlation analysis conducted (Table 2).

| <b>Constructs</b> | <b>SMM</b>  | <b>BA</b>   | <b>BR</b>   | <b>BE</b>   | <b>PI</b>   |
|-------------------|-------------|-------------|-------------|-------------|-------------|
| SMM               | <b>.851</b> |             |             |             |             |
| BA                | .548        | <b>.735</b> |             |             |             |
| BR                | .469        | .450        | <b>.672</b> |             |             |
| BE                | .573        | .493        | .431        | <b>.659</b> |             |
| PI                | .577        | .602        | .422        | .571        | <b>.795</b> |

*Table 2 - Discriminant Validity Assessment Using the Fornell-Larcker Criterion (based on Appendix 15 and Appendix 17)*

As indicated in Table 2, the diagonal values representing the shared variance between the items within the construct are higher than the correlations, thereby establishing discriminant validity.

**5.2. Sample Characterization**

As noted in Appendix 5, the sample consisted of 36.2% of male respondents and 63% of female respondents, with .7% identifying as ‘other’. Additionally, respondents’ ages can be categorized into the three aforementioned age ranges as follows:

- 45.7% (63 respondents) are aged between 18-24 years old.
- 16.7% (23 respondents) are aged between 25-34 years old.
- 37.7% (52 respondents) are aged between 35-65 years old.

Another demographic variable assessed in the survey was the respondents' level of education. Most respondents (41.3%) hold a bachelor's degree, 25.4% have completed high school, 23.2% have obtained a master's degree and 8.7% have pursued postgraduate studies. In addition, .7% of respondents indicated that they had less than a high school education, while another .7% reported that they had obtained a doctorate or higher qualification.

Respondents reported varying statuses of employment, with a significant portion being students (46.4%). Within this group, 36.2% were enrolled in full-time studies, while 10.1% were student-workers. Furthermore, 39.9% of respondents are employed on a salary basis, 8% are self-employed, 1.4% are unemployed, 2.2% are retired and 2.2% indicated that they have other employment statuses. In addition to the employment status, the household monthly income was surveyed to capture consumer's socioeconomic traits. Most respondents (19.6%) indicated a household income between €1000 and €1999, with 18.1% of respondents falling into the €2000 to €2999 income bracket. Additionally, 14.5% of respondents indicated a monthly household income between €3000 and €3999, while 15.9% reported incomes between €4000 and €4999. A smaller portion of respondents, 9.4%, indicated earnings between €5000 and €5999, while 5.1% reported incomes between €6,000 and €6,999. Only 2.2% of respondents indicated a monthly household income between €7000 and €7999, while .7% reported a household income of €8000 or above. Notably, 13% of respondents chose to refrain from disclosing their household income.

### 5.3. Hypotheses Testing

The hypotheses testing subsequently presented is summarized in full in Appendix 18.

#### 5.3.1. Impact of Social Media Marketing on Brand Variables

##### 5.3.1.1. Hypothesis 1a

**H1a:** *Social media marketing done by Portuguese F&B start-ups positively impacts brand awareness.*

| Output Variable: Brand Awareness |       |          |         |        |          |       |
|----------------------------------|-------|----------|---------|--------|----------|-------|
| Model                            | R     | R-Square | F       | df1    | df2      | Sig.  |
| 1                                | .5480 | .3003    | 58.3656 | 1.0000 | 136.0000 | .0000 |

*Table 3 - Model Summary - Output Variable: Brand Awareness (based on Appendix 7)*

The correlation coefficient ( $R = .5480$ ) indicated in Table 3 suggests a moderate positive relationship between SMM and BA. Furthermore, the R-squared value (.3003) denotes that

30.03% of the variance in BA is explained by SMM. This notion that SMM has a strong explanatory power of BA is supported by the large F-value ( $F = 58.366$ ).

Output Variable: Brand Awareness

| Model |                        | Unstandardized Coefficients |            | t       | Sig.  | LLCI   | ULCI   |
|-------|------------------------|-----------------------------|------------|---------|-------|--------|--------|
|       |                        | B                           | Std. Error |         |       |        |        |
| 1     | (Constant)             | 3.1912                      | .2420      | 13.1853 | <.001 | 2.7125 | 3.6698 |
|       | Social Media Marketing | .3942                       | .0516      | 7.6397  | <.001 | .2922  | .4663  |

Table 4 - Coefficients Table - Output Variable: Brand Awareness (based on Appendix 7)

The unstandardized coefficient of SMM ( $B_1 = .3942$ ), as presented in Table 4, indicates that a one-unit increase in SMM will result in a .3942 increase in BA. This demonstrates a clear positive effect, thereby suggesting that an increased focus on SMM by start-ups in the Portuguese F&B industry will lead to a higher level of BA. Additionally, the p-value and CI ( $p = .0000 \Rightarrow < .05$ ;  $0 \notin CI = [.2922; .4663]$ ) demonstrate that SMM conducted by Portuguese F&B start-ups has a statistically significant direct positive effect on BA ( $a_1$ ). Therefore, the null hypothesis is rejected and H1a is supported by the data.

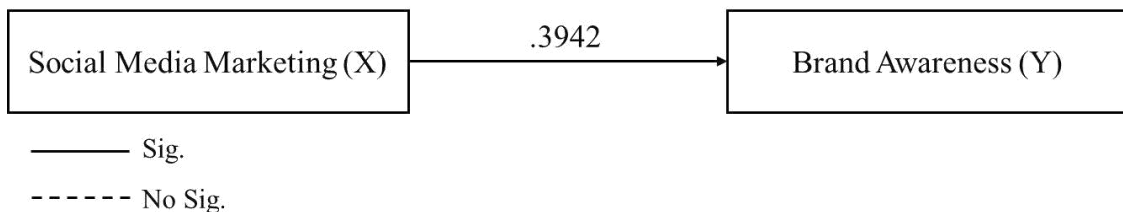


Figure 5 – Impact of Social Media Marketing on Brand Awareness (Own Elaboration)

### 5.3.1.2. Hypothesis 1b

**H1b:** Social media marketing done by Portuguese F&B start-ups positively impacts brand reputation.

| Output Variable: Brand Reputation |       |          |         |        |          |       |
|-----------------------------------|-------|----------|---------|--------|----------|-------|
| Model                             | R     | R-Square | F       | df1    | df2      | Sig.  |
| 1                                 | .4688 | .2198    | 38.3150 | 1.0000 | 136.0000 | .0000 |

Table 5 - Model Summary - Output Variable: Brand Reputation (based on Appendix 7)

As evidenced in Table 5, the correlation coefficient ( $R = .4688$ ) suggests a moderate positive relationship between SMM and BR. Furthermore, SMM accounts for 21.98% of the variance in BR ( $R\text{-square} = .2198$ ). This suggests that while SMM has a discernible impact on BR ( $F\text{-value} = 38.315$ ), the remaining 78.02% of variance is attributable to other factors.

| Output Variable: Brand Reputation |                        |                             |            |         |       |        |        |
|-----------------------------------|------------------------|-----------------------------|------------|---------|-------|--------|--------|
| Model                             |                        | Unstandardized Coefficients |            | t       | Sig.  | LLCI   | ULCI   |
|                                   |                        | B                           | Std. Error |         |       |        |        |
| 1                                 | (Constant)             | 3.3872                      | .2229      | 15.1974 | .0000 | 2.9464 | 3.8279 |
|                                   | Social Media Marketing | .2942                       | .0475      | 6.199   | .0000 | .2002  | .3881  |

Table 6 - Coefficients Table - Output Variable: Brand Reputation (based on Appendix 7)

The results of the Coefficients table (Table 6) indicate a significant positive relationship between SMM and BR. The unstandardized coefficient ( $B_1 = .2942$ ) indicates that a one-unit increase in SMM is associated with a .2942 unit increase in BR, which reflects the positive impact of SMM on BR.

The p-value and CI ( $p = .0000 \Rightarrow < .05$ ;  $0 \notin CI = [.2002; .3881]$ ) confirm that the effect of SMM on BR is statistically significant, thereby rejecting the null hypothesis and supporting the assertion that SMM has a direct and positive contribution to enhancing BR amongst Portuguese F&B start-ups ( $a_2$ ). Thus, H1b is supported by the data.

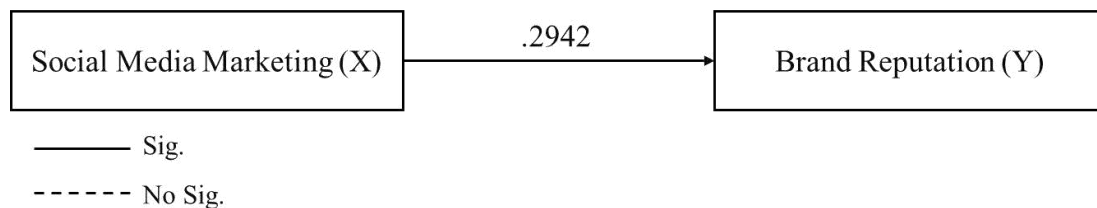


Figure 6 – Impact of Social Media Marketing on Brand Reputation (Own Elaboration)

### 5.3.1.3. Hypothesis 1c

**H1c:** *Social media marketing done by Portuguese F&B start-ups positively impacts brand engagement.*

| Output Variable: Brand Engagement |       |          |         |        |          |       |
|-----------------------------------|-------|----------|---------|--------|----------|-------|
| Model                             | R     | R-Square | F       | df1    | df2      | Sig.  |
| 1                                 | .5726 | .3279    | 66.3547 | 1.0000 | 136.0000 | .0000 |

Table 7 - Model Summary - Output Variable: Brand Engagement (based on Appendix 7)

The correlation coefficient ( $R = .5726$ ) in Table 7 indicates a moderate positive relationship between SMM and BE. Furthermore, the R-squared value (.3279) reveals that 32.79% of the variance in BE is explained by SMM. This suggests that while SMM has a substantial influence on BE ( $F = 66.355$ ), the remaining 67.21% of the variance is attributed to other factors.

Output Variable: Brand Engagement

| Model |                        | Unstandardized Coefficients |            | t      | Sig.  | LLCI  | ULCI   |
|-------|------------------------|-----------------------------|------------|--------|-------|-------|--------|
|       |                        | B                           | Std. Error |        |       |       |        |
| 1     | (Constant)             | .6828                       | .3355      | 2.0350 | .0438 | .0193 | 1.3464 |
|       | Social Media Marketing | .5828                       | .0715      | 8.1458 | .0000 | .4413 | .7243  |

Table 8 - Coefficients Table - Output Variable: Brand Engagement (based on Appendix 7)

Table 8 exhibits an unstandardized coefficient ( $B_1$ ) for SMM of .5828, indicating that for every one-unit increase in SMM, BE is expected to increase by .5828 units. Therefore, SMM has a pronounced positive influence in BE. Additionally, the p-value and CI associated with SMM ( $p = .0000 \Rightarrow < .05$ ;  $0 \notin CI = [.4413; .7243]$ ) indicate that the relationship between SMM and BE is statistically significant and unlikely to have occurred by chance.

The null hypothesis is rejected, as SMM directly and positively contributes to enhancing BE amongst Portuguese F&B start-ups ( $a_3$ ). Thus, H1c is supported by the data.

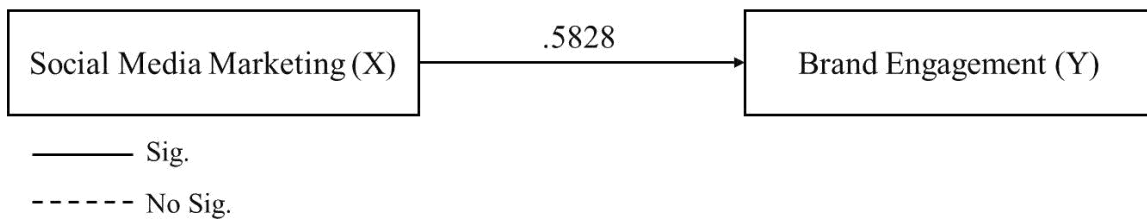


Figure 7 – Impact of Social Media Marketing on Brand Engagement (Own Elaboration)

Observing Figure 5, Figure 6 and Figure 7, it is possible to conclude that SMM has a greater positive impact on BE, followed by BA and a reduced impact on BR.

### 5.3.2. Impact of Social Media Marketing and Brand Variables on Purchase Intention

Output Variable: Purchase Intention

| Model | R     | R-Square | MSE    | F       | df1    | df2      | Sig.  |
|-------|-------|----------|--------|---------|--------|----------|-------|
| 1     | .7048 | .4967    | 1.2203 | 32.8158 | 4.0000 | 133.0000 | .0000 |

Table 9 - Model Summary – Output Variable: Purchase Intention (based on Appendix 7)

The multiple correlation coefficient ( $R = .7048$ ) indicates a strong, positive relationship between the predictors and PI. Additionally, the adjusted R-squared value suggests that 49.67% of the variance in PI is explained by SMM, BA, BR and BE. Therefore, despite the moderate explanatory power of the model, 50.33% of the variance remains unexplained.

Output Variable: Purchase Intention

| Model |                        | Unstandardized Coefficients |            | t      | Sig.  | LLCI   | ULCI   |
|-------|------------------------|-----------------------------|------------|--------|-------|--------|--------|
|       |                        | B                           | Std. Error |        |       |        |        |
| 1     | (Constant)             | .3460                       | .5190      | .6667  | .5061 | -.6805 | 1.3725 |
|       | Social Media Marketing | .2163                       | .0800      | 2.7050 | .0077 | .0581  | .3745  |
|       | Brand Awareness        | .4374                       | .1048      | 4.1714 | .0001 | .2300  | .6448  |
|       | Brand Reputation       | .0936                       | .1127      | .8304  | .4078 | -.1274 | .3166  |
|       | Brand Engagement       | .2431                       | .0749      | 3.2445 | .0015 | .0949  | .3912  |

Table 10 - Coefficients Table – Output Variable: Purchase Intention (based on Appendix 7)

### 5.3.2.1. Hypothesis 2a

**H2a:** Brand awareness positively impacts purchase intention in start-ups that operate within the Portuguese F&B industry.

As noted in Table 10, BA has an unstandardized coefficient ( $B_1$ ) of .4374, indicating that a one-unit increase in BA leads to a .4374 increase in PI, holding the remaining variables constant. This demonstrates that BA has a clear, positive impact on PI.

The p-value and CI associated with BA ( $p = .0001 \Rightarrow < .05$ ;  $0 \notin CI = [.2002; .3881]$ ), confirm that BA is a statistically significant predictor of PI. As such, hypothesis H2a is supported by the data as BA directly and positively contributes to increasing PI in start-ups within the Portuguese F&B industry ( $b_1$ ).

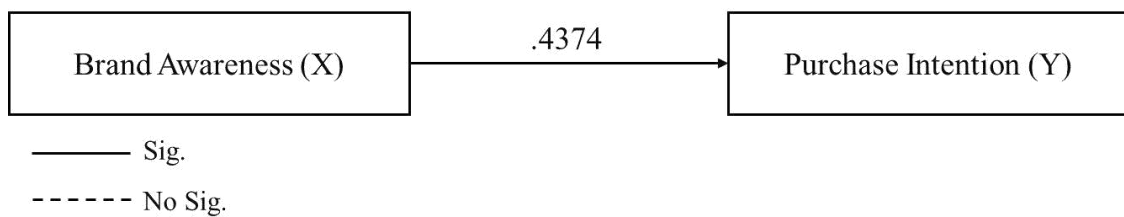


Figure 8 – Impact of Brand Awareness on Purchase Intention (Own Elaboration)

### 5.3.2.2. Hypothesis 2b

**H2b:** Social media marketing positively impacts purchase intention in start-ups that operate within the Portuguese F&B industry.

The unstandardized coefficient for SMM ( $B_1 = .2163$ ), as demonstrated in Table 10, indicates that a one-unit increase in SMM prompts a .2163 increase in PI, holding the remaining variables

constant. Accordingly, there is a discernable positive direct effect between SMM and PI (c').

The p-value and CI of SMM ( $p = .0077 \Rightarrow < .05$ ;  $0 \notin CI = [.0581; .3745]$ ), confirm that SMM is a statistically significant predictor of PI. Consequently, SMM effectively impacts PI in start-ups that operate in the Portuguese F&B industry and H2b is supported by the data.

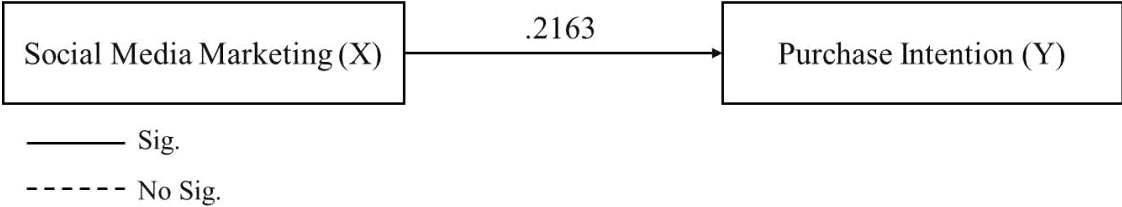


Figure 9 – Impact of Social Media Marketing on Purchase Intention (Own Elaboration)

**5.3.2.3. Hypothesis 2c**

**H2c:** Brand reputation positively impacts purchase intention in start-ups that operate within the Portuguese F&B industry.

As observed in Table 10, the unstandardized coefficient ( $B_1$ ) for BR is .0936, indicating that holding all other variables constant, a one-unit increase in BR leads to an expected increase of .0936 in PI. This suggests a small but positive direct relationship between BR and PI ( $b_2$ ).

However, the p-value and CI associated with BR ( $p = .4078 \Rightarrow > .05$ ;  $0 \in CI = [-.1274; .3166]$ ) indicate that the relationship between BR and PI is not statistically significant in this model. Thus, the null hypothesis that there is no relationship between BR and PI is accepted and hypothesis H2c is not supported by the data.

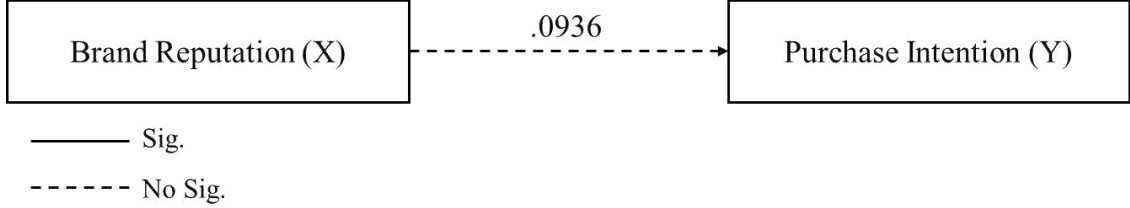


Figure 10 – Impact of Brand Reputation on Purchase Intention (Own Elaboration)

**5.3.2.4. Hypothesis 2d**

**H2d:** Brand engagement positively impacts purchase intention in start-ups that operate within the Portuguese F&B industry.

The unstandardized coefficient ( $B_1$ ) of BE is .2431 (Table 10), suggesting that a one-unit increase in BE results in a .2431 increase in PI, holding the remaining variables constant. This

demonstrates that BE has a direct positive impact on PI ( $b_3$ ).

The p-value and CI of BE ( $p = .0015 \Rightarrow < .05$ ;  $0 \notin CI = [.0949; .3912]$ ), confirm that BE is a statistically significant predictor of PI. As such, the null hypothesis is rejected and BE contributes to increasing PI in start-ups within the Portuguese F&B industry. Thus H2d is supported by the data.

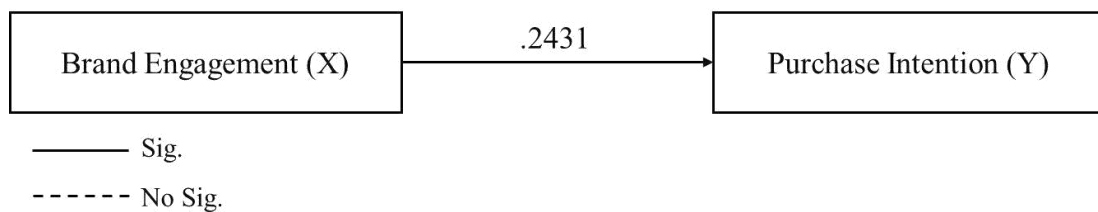


Figure 11 - Impact of Brand Engagement on Purchase Intention

### 5.3.3. Mediation Effects

Figure 12 presents the results of the *parallel mediation* analysis, which evaluates the independent mediating contributions of BA, BR and BE in the relationship between SMM and PI.

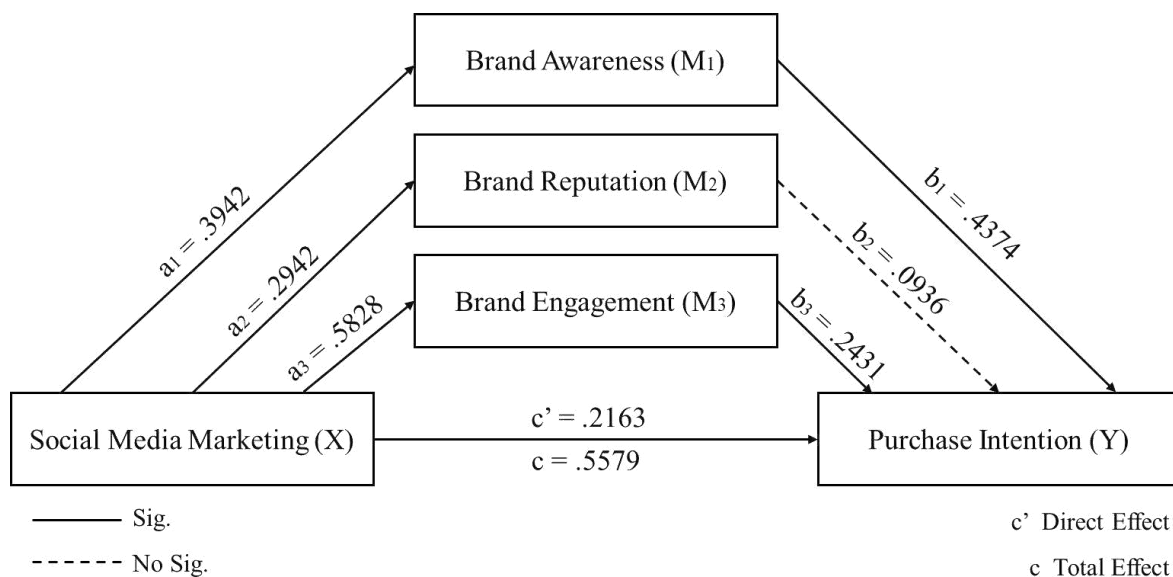


Figure 12 – Parallel Mediation, based on Appendix 7 (Own Elaboration)

#### 5.3.3.1. Hypothesis 3a

**H3a:** Brand awareness mediates the relationship between social media marketing and purchase intention in start-ups that operate within the Portuguese F&B industry.

| Path          | Effect Type  | Effect Size | Sig   | Confidence Interval |             |
|---------------|--|-------------|-------|---------------------|-------------|
|               |  |             |       | Lower Level         | Upper Level |
| SMM → PI      | Direct Effect (c')                                 | .2163       | .0077 | .0581               | .3745       |
| SMM → BA → PI | Indirect Effect (a <sub>1</sub> x b <sub>1</sub> ) | .1724       | -     | .0768               | .2869       |

Table 11 – Mediating Effect of Brand Awareness (based on Appendix 7)

The indirect effect of SMM on PI, through BA, is statistically significant ( $0 \notin CI = [.0768; .2869]$ ), suggesting that BA plays a meaningful role in mediating the relationship between SMM and PI.

Considering that direct and indirect effects are significant, it can be concluded that BA partially mediates the relationship between SMM and PI. Therefore, hypothesis H3a is supported by the data.

### 5.3.3.2. Hypothesis 3b

**H3b:** *Brand reputation mediates the relationship between social media marketing and purchase intention in start-ups that operate within the Portuguese F&B industry.*

| Path          | Effect Type  | Effect Size | Sig   | Confidence Interval |             |
|---------------|--|-------------|-------|---------------------|-------------|
|               |  |             |       | Lower Level         | Upper Level |
| SMM → PI      | Direct Effect (c')                                 | .2163       | .0077 | .0581               | .3745       |
| SMM → BR → PI | Indirect Effect (a <sub>2</sub> x b <sub>2</sub> ) | .0275       | -     | -.0350              | .0928       |

Table 12 – Mediating Effect of Brand Reputation (based on Appendix 7)

The indirect effect of SMM on PI, through BR, is not statistically significant ( $0 \in CI = [-.0350; .0928]$ ). Thus, it can be concluded that BR does not mediate the relationship between SMM and PI. Therefore, hypothesis H3b is not supported by the data.

### 5.3.3.3. Hypothesis 3c

**H3c:** *Brand engagement mediates the relationship between social media marketing and purchase intention in start-ups that operate within the Portuguese F&B industry.*

| Path          | Effect Type  | Effect Size | Sig   | Confidence Interval |             |
|---------------|--|-------------|-------|---------------------|-------------|
|               |  |             |       | Lower Level         | Upper Level |
| SMM → PI      | Direct Effect (c')                                 | .2163       | .0077 | .0581               | .3745       |
| SMM → BE → PI | Indirect Effect (a <sub>3</sub> x b <sub>3</sub> ) | .1416       | -     | .0585               | .2333       |

Table 13 - Mediating Effect of Brand Engagement (based on Appendix 7)

The indirect effect of SMM on PI, through BE, is statistically significant ( $0 \notin CI = [.0585; .2333]$ ), suggesting that BE plays a meaningful role in mediating the relationship between SMM and PI.

Considering the direct and indirect effects are significant, it can be concluded that BE partially mediates the relationship between SMM and PI. Therefore hypothesis H3c is supported by the data.

### 5.3.4. Full Model

Following a detailed examination of the relationships between variables, a full model representation was devised in Figure 13.

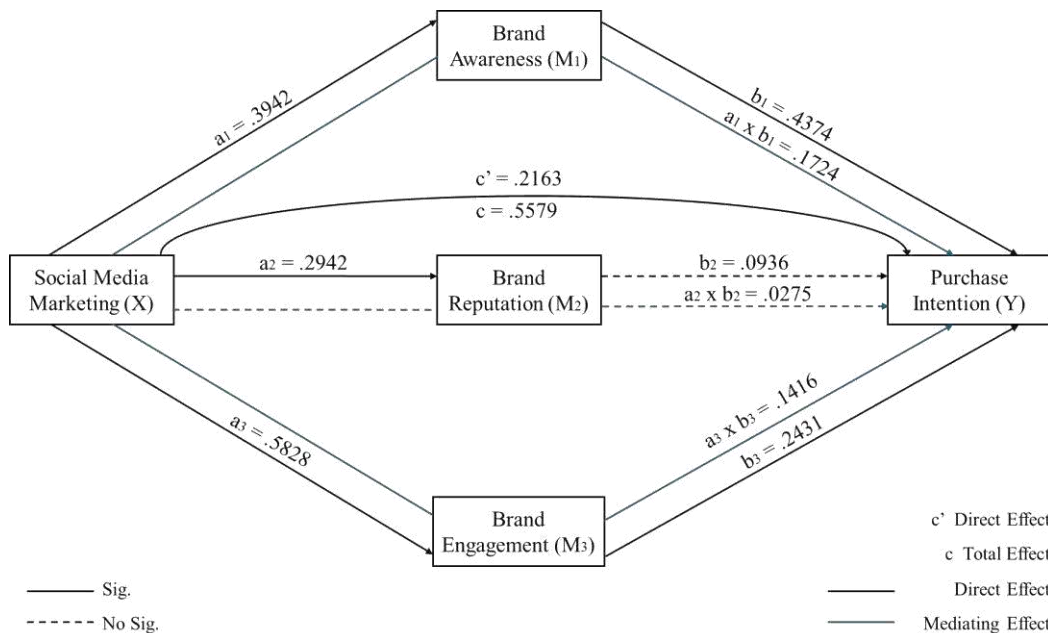


Figure 13 - Full Model, based on Appendix 7 (Own Elaboration)

Considering the model coefficients that result from the *parallel mediation* analysis (Appendix 7), the following equation was developed:

$$PI = b_0 + c' \cdot SMM + b_1 \cdot BA + b_2 \cdot BR + b_3 \cdot BE + \varepsilon \Leftrightarrow$$

$$\Leftrightarrow PI = .3460 + .2163 \cdot SMM + .4374 \cdot BA + .0936 \cdot BR + .2431 \cdot BE + \varepsilon$$

Where BA, BR and BE are influenced by SMM:

$$BA = a_{01} + a_1 \cdot SMM = 3.1912 + .3942 \cdot SMM + \varepsilon$$

$$BR = a_{02} + a_2 \cdot SMM = 3.3872 + .2942 \cdot SMM + \varepsilon$$

$$BE = a_{03} + a_3 \cdot SMM = .6828 + .5828 \cdot SMM + \varepsilon$$

Merging all expressions, the final regression equation was devised:

$$PI = 2.2248 + .55794 \cdot SMM + \varepsilon$$

The final regression equation highlights the significant role of SMM in influencing PI within the context of Portuguese F&B start-ups.

Furthermore, the indirect and total effects of SMM on PI are presented as follows:

$$\text{Total Indirect Effect of SMM on PI} = .1724 + .0275 + .1416 = .3415$$

$$\text{Total Effect of SMM on PI} = \text{Direct Effect of SMM on PI (c')} + \text{Total Indirect Effect of SMM on PI} = .2163 + .3415 = .5578$$

### 5.3.5. Hypothesis 4

**H4:** *The effectiveness of social media marketing done by F&B start-ups on purchase intention varies across different age segments.*

Output Variable: Purchase Intention

| R     | R-Square | MSE   | F       | df1    | df2      | Sig.  |
|-------|----------|-------|---------|--------|----------|-------|
| .6379 | .4069    | 1.491 | 18.1091 | 5.0000 | 132.0000 | .0000 |

Table 14 - Model Summary – Output Variables: Purchase Intention (based on Appendix 8)

As noted in Table 14, the overall model is statistically significant ( $F = 18.1091$ ;  $p\text{-value} < .0001$ ) and the predictors explain 40.69% ( $R\text{-square} = .4069$ ) of the variance in PI.

| Model    | Coeff. | Std. Error | t      | Sig.  | LLCI    | ULCI   |
|----------|--------|------------|--------|-------|---------|--------|
| Constant | 2.4801 | .5078      | 4.8841 | .0000 | 1.4756  | 3.4845 |
| SMM      | .5730  | .1041      | 5.5056 | .0000 | .3671   | .7789  |
| W1       | -.1093 | 1.0190     | -.1073 | .9147 | -2.1249 | 1.9063 |
| W2       | -.2942 | .6606      | -.4453 | .6568 | -1.6008 | 1.0125 |
| Int_1    | .0093  | .2127      | .0435  | .9654 | -.4116  | .4301  |
| Int_2    | -.1307 | .1414      | -.9246 | .3569 | -.4103  | .1489  |

Product terms key:

Int\_1 : SMM x W1

Int\_2 : SMM x W2

Table 15 – Coefficients of the Moderation Analysis (based on Appendix 8)

According to Table 15, the moderator (variable Age Groups) does not exhibit a statistically significant effect on PI (W1:  $p = .9147 \Rightarrow > .05$ ,  $0 \in CI = [-2.1249, 1.9063]$ ; W2:  $p = .6568 \Rightarrow > .05$ ,  $0 \in CI = [-1.6008, 1.0125]$ ). Similarly, the interaction effects indicate that the interaction between SMM and Age Groups is not statistically significant (SMM x W1:  $p = .9654 \Rightarrow > .05$ ,  $0 \in CI = [-.4116, .4301]$ ; SMM x W2:  $p = .3569 \Rightarrow > .05$ ,  $0 \in CI = [-.4103, .1489]$ ).

|     | <b>R-Square Change</b> | <b>F</b> | <b>df1</b> | <b>df2</b> | <b>Sig.</b> |
|-----|------------------------|----------|------------|------------|-------------|
| X*W | .0046                  | .5089    | 2.0000     | 132.0000   | .6023       |

Focal predict: SMM (X)  
Mod var: Age\_Grou (W)

*Table 16 - Test(s) of the highest order unconditional interaction(s) (based on Appendix 8)*

The R-squared change of .0046 suggests that the inclusion of the interaction terms did not significantly improve the model. However, the F statistic and p-value ( $F = .5089$ ;  $p = .6023 \Rightarrow > .05$ ) indicate a non-significant moderation effect.

This is further illustrated in Figure 14, as the regression equations are practically parallel (most notable between age groups 18-24 and 25-34, but also observable for the age group 35-65). Because the slopes of the regression equations for each age group are almost identical, it means that the rate of change in PI with respect to the effectiveness of SMM by Portuguese F&B start-ups is relatively consistent across age groups.

Despite the overall positive influence of SMM on PI, the lack of statistically significant interaction effects indicates that age groups, as a moderating variable, do not play a critical role in altering this relationship. Consequently, hypothesis H4a is not supported.

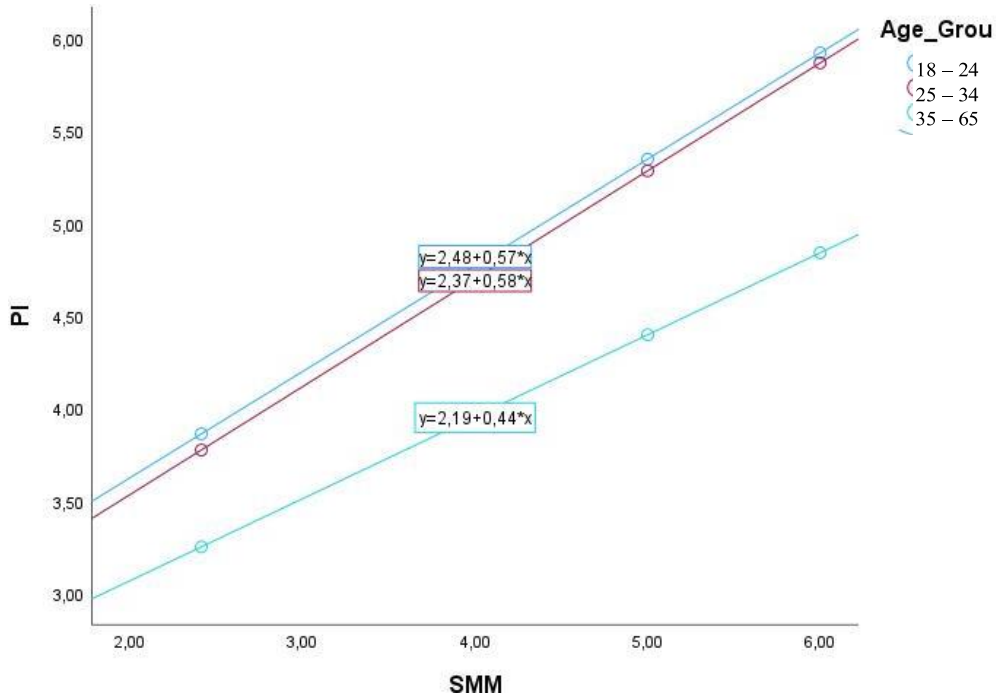


Figure 14 - Moderation Effect of Age Groups on the Relationship between Social Media Marketing and Purchase Intention

### 5.3.6. Correlation Analyses

#### 5.3.6.1. Hypothesis 5a

**H5a:** Higher social media usage is positively correlated to a higher purchase intention in start-ups within the Portuguese F&B industry.

|                    |                     | Social Media Usage | Purchase Intention |
|--------------------|---------------------|--------------------|--------------------|
| Social Media Usage | Pearson Correlation | 1                  | .322               |
|                    | Sig. (2-tailed)     |                    | <.001              |
|                    | N                   |                    | 1                  |
| Purchase Intention | Pearson Correlation | .322               | 1                  |
|                    | Sig. (2-tailed)     | <.001              |                    |
|                    | N                   | 138                | 138                |

Table 17 – Social Media Usage and Purchase Intention Correlation (based on Appendix 9)

The output of the *Pearson correlation* analysis (Table 17) reveals that the Pearson correlation coefficient between social media usage and PI is  $r = .322$ , indicating a moderate, positive relationship between these variables. Additionally, the significance level ( $p\text{-value} < .001 \Rightarrow < .05$ ) suggests that the correlation is statistically significant. Thus, hypothesis H4b is supported by the data.

### 5.3.6.2. Hypothesis 5b

**H5b:** Higher income is positively correlated to a higher purchase intention in start-ups within the Portuguese F&B industry.

|                    |                     | Purchase Intention | Income |
|--------------------|---------------------|--------------------|--------|
| Purchase Intention | Pearson Correlation | 1                  | -.157  |
|                    | Sig. (2-tailed)     |                    | .066   |
|                    | N                   | 138                | 138    |
| Income             | Pearson Correlation | -.157              | 1      |
|                    | Sig. (2-tailed)     | .066               |        |
|                    | N                   | 138                | 138    |

Table 18 – Income and Purchase Intention Correlations (based on Appendix 10)

As demonstrated in Table 18, the Pearson correlation coefficient ( $r = -.157$ ) indicates a weak, negative relationship between income and PI. This implies that as income levels rise, there is a slight tendency for PI to decline. Nevertheless, the p-value (.066) associated with the correlation is greater than .05, indicating that the relationship between income and PI is not statistically significant. It can thus be concluded that there is no meaningful correlation between income and PI, and that hypothesis H4c is not supported by the data.

### 5.3.7. Hypothesis 6

**H6:** Amongst all brand reputation dimensions, product quality is the most significant factor influencing brand reputation for start-ups in the Portuguese F&B industry.

| Model | R    | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|------|----------|-------------------|----------------------------|---------------|
| 1     | .331 | .110     | .076              | .95713                     | 1.608         |

Predictors: (Constant), Corporate Citizenship, Product Quality, Innovation, Service Quality, Environmental Responsibility

Dependent Variable: Brand Reputation

Table 19 - Model Summary of Brand Reputation Dimensions Multiple Regression (based on Appendix 11)

The multiple correlation coefficient ( $R = .331$ ) indicates a weak positive relationship between the predictors and BR. This is reinforced by the adjusted R-squared value which indicates that only 7.6% of the variance in BR is explained by the studied dimensions of BR.

| Model |            | Sum of Squares | df  | Mean Square | F     | Sig.  |
|-------|------------|----------------|-----|-------------|-------|-------|
| 1     | Regression | 14.913         | 5   | 2.983       | 3.256 | <.008 |
|       | Residual   | 120.924        | 132 | .916        |       |       |
|       | Total      | 135.837        | 137 |             |       |       |

Dependent Variable: Brand Reputation

Predictors: (Constant), Corporate Citizenship, Product Quality, Innovation, Service Quality, Environmental Responsibility

Table 20 - ANOVA (based on Appendix 11)

The p-value in Table 20 is below the significance level ( $p < .008 \Rightarrow < .05$ ), thus the null hypothesis that all coefficients equal zero and the predictors have no effect on BR is rejected.

| Model |                              | Unstandardized Coefficients |            | Standardized Coefficients Beta | t     | Sig.  | Collinearity Statistics |       |
|-------|------------------------------|-----------------------------|------------|--------------------------------|-------|-------|-------------------------|-------|
|       |                              | B                           | Std. Error |                                |       |       | Tolerance               | VIF   |
| 1     | (Constant)                   | 3.236                       | .509       |                                | 6.361 | <.001 |                         |       |
|       | Product Quality              | -.021                       | .125       | -.017                          | -.165 | .869  | .639                    | 1.566 |
|       | Service Quality              | .042                        | .129       | .037                           | .328  | .743  | .523                    | 1.911 |
|       | Innovation                   | .274                        | .108       | .246                           | 2.531 | .013  | .712                    | 1.404 |
|       | Environmental Responsibility | .026                        | .108       | .029                           | .241  | .810  | .479                    | 2.089 |
|       | Corporate Citizenship        | .094                        | .104       | .105                           | .898  | .371  | .496                    | 2.017 |

Dependent Variable: Brand Reputation

Table 21 – Brand Reputation Dimensions Multiple Regression Coefficients Table (based on Appendix 11)

Table 21 indicates that innovation is the only predictor with a statistically significant impact on BR ( $p\text{-value} = .013 \Rightarrow < .05$ ), suggesting that innovation is the most influential factor positively contributing ( $B_1 = .274$ ) to BR for start-ups in the Portuguese F&B industry.

Conversely, the remaining predictors do not have a statistically significant effect on BR, as their p-values exceed the significance level of .05. Thus, there is insufficient evidence to conclude that product quality, service quality, environmental responsibility and corporate citizenship have a consistent and meaningful effect on BR in this model, so H6 is rejected.

## **6. Conclusion**

### **6.1. General Discussion**

The exploratory research phase revealed that the main advantages perceived by the interviewed start-ups regarding social media marketing are its role in raising brand awareness, building brand reputation, fostering brand engagement and driving purchase intention. While these start-ups recognize brand awareness as a critical driver of purchase intention and acknowledge the importance of brand reputation and brand engagement, they remain uncertain about the extent to which the latter two brand variables positively influence purchase intention (4.1. Start-ups).

As presented in the Literature Review, Aaker (1991) highlights that brand awareness fosters familiarity, particularly for low-involvement products, by influencing recognition and increases the likelihood of a brand being included in a consumer's initial consideration set during the purchasing process. The interviews and focus groups (Topic 4) substantiated this notion in the context of the highly competitive Portuguese F&B industry, where brand recognition and recall are critical success factors.

Additionally, conclusive research demonstrates that social media marketing positively influences brand awareness, which in turn positively impacts purchase intention and partially mediates the relationship between social media marketing and purchase intention amongst Portuguese F&B start-ups. Thus, social media marketing is found to be an effective tool in raising brand awareness, further validating Aaker's assertion that brand awareness promotes purchase intention in the context of the Portuguese F&B industry.

Regarding brand reputation, while the OnStrategy model does not emphasize any particular brand reputation dimension, the interviewed start-ups suggested that product quality was the most impactful brand reputation dimension amongst the overall construct. However, focus groups, expert interview and conclusive research indicate that innovation is the most impactful brand reputation dimension. This denotes the importance of innovation in the Portuguese F&B industry, where differentiation and forward-thinking practices are highly valued.

Additionally, the focus groups highlighted consumers' concerns regarding reputation-related aspects of Portuguese F&B start-up brands, namely environmental responsibility and corporate citizenship. In this regard, the interviewed start-ups perceive social media marketing as an effective tool to address these concerns. Conclusive research supports the perception that social media marketing positively impacts brand reputation. However, there is not statistically

significant evidence to support a direct or indirect effect of brand reputation on purchase intention, concluding that reputation is not a main driver of purchase intention among Portuguese F&B start-ups, as also suggested by the start-up expert. This can be because start-ups are recently established brands by nature and brand reputation requires a prolonged market presence and consistent effort to build. Thus, while the importance of brand reputation highlighted by Fombrun et al. (2015), Brown & Dacin (1997), and OnStrategy (n.d.) is acknowledged, it is not found to be a determinant of purchase intention in the Portuguese F&B industry.

Brand engagement is essential for Portuguese F&B start-ups, considering they penetrate the F&B industry through niche markets, later expanding as they scale their business (noted in Topic 4.2.). In addition, the interviewed start-ups view social media marketing as an effective tool for fostering brand engagement, particularly among the 18-24 and 25-34 age groups, who demonstrate higher levels of interaction with social media content. In contrast, the 35-65 age group exhibits greater resistance to engagement initiatives by brands, eliciting less purchase intention (Appendix 3).

Conclusive research evidenced social media marketing has a positive effect on brand engagement, not only supporting interviewed start-ups assertion but Kotler et al. (2018) stance that a primary advantage of social media marketing is its ability to foster engagement. Additionally, conclusive research findings evidenced that brand engagement directly and indirectly influences the purchase intention of Portuguese F&B start-ups.

Kotler et al. (2018) additionally noted that a key advantage of social media marketing is its ability to target specific customer segments. Focus groups revealed some differences of consumer's perception on the effectiveness of social media marketing across the three studied age groups (Appendix 3). However, although conclusive research evidenced that social media marketing has a direct, positive influence on the purchase intention of Portuguese F&B start-ups, its effectiveness does not vary across age groups (Figure 14). This aligns with the perspective of the interviewed start-ups, which view social media marketing as a tool to reach a broad base of consumers, capable of accurately identifying and understanding their target audience.

Similarly, focus groups insights indicate not only significant differences in social media usage across the different demographic groups under analysis, but also a potential correlation between

income and purchase intention regarding Portuguese F&B products. Conclusive research evidenced a positive correlation between social media usage and purchase intention (Appendix 9), corroborating the interviewed start-ups perspective. However, no correlation between income and purchase intention was established (Appendix 10), contradicting the expert's perspective that higher family income leads to greater purchase predisposition (Appendix 2). This discrepancy may be attributed to non-response bias in the survey. Furthermore, contrary to focus group insights, conclusive research found social media marketing's impact on purchase intention to be consistent across three studied age groups.

In sum, social media marketing plays a crucial role in raising brand awareness and fostering brand engagement, both of which directly impact purchase intention. Besides purchase intention being heightened by social media marketing through the mediation effects of these brand variables, benefitting from its indirect effect, purchase intention is still influenced by social media marketing, via direct effect. While brand reputation, particularly driven by innovation, benefits from social media marketing, it does not significantly influence purchase intention nor has a mediating role.

## **6.2. Academic and Managerial Implications**

From an academic standpoint, this research validates assertions from past literature in the entrepreneurial context of the Portuguese F&B industry. Additionally, it expands the existing knowledge of the nuanced pathways through which social media marketing impacts purchase intention in the Portuguese F&B industry and demonstrates the broad applicability of this digital marketing tool.

From a managerial standpoint, this research provides actionable insights for Portuguese F&B start-ups to optimize their marketing strategies. It highlights the importance of leveraging social media marketing as a multifaceted and cost-effective tool to raise brand awareness, build brand reputation and foster brand engagement. Considering that social media marketing has a greater impact on brand engagement and, then, brand awareness (as demonstrated in 5.3.1. Impact of Social Media Marketing on Brand Variables), a prioritization of digital strategies focused on these brand variables should be made. This is of greater relevance considering their central role in influencing purchase intention (5.3.2. Impact of Social Media Marketing and Brand Variables on Purchase Intention).

The value of brand reputation lies in its ability to mitigate consumer concerns, with social media

marketing being an effective communication tool in this regard. Furthermore innovation is the most valued dimension of brand reputation by consumers, encouraging Portuguese F&B start-ups to improve and emphasize the unique aspects of their product offering.

Furthermore, Portuguese F&B start-ups should not target prospective customers on social media according to specific demographic characteristics such as age and income, considering these characteristics do not yield a greater purchase intention. Instead, behavioral characteristics, such as social media usage, are more accurate predictors of purchase intention.

## **7. Limitations and Further Research**

Key limitations to this research must be considered and further research is needed to address these gaps and expand on the findings.

First, the sample is skewed towards younger individuals aged 18-24 and older individuals aged 35-65, with a smaller representation of respondents in the 25–34-year-old group. Additionally, the sample is imbalanced regarding gender, with an overrepresentation of female respondents. Thus, the results are better interpreted for these segments. Future research should aim to address these imbalances.

Secondly, the use of a cross-sectional design limited the ability to draw long-term inferences regarding the relationships examined in the model. As such, future research should use a longitudinal design to assess long-term effects of social media marketing on purchase intention.

A third limitation of this study lies in its focus on the five most prominent dimensions of brand reputation. While these dimensions were central to the analysis, the model presented (Figure 3) highlights additional dimensions that contribute to a more comprehensive evaluation of this variable. Future research should incorporate these additional dimensions to provide a deeper understanding of their relative importance and impact on brand reputation. Moreover, it should evaluate the importance of authenticity in effectively communicating brand reputation.

A fourth limitation of this study was the inclusion of just three brand-related variables. As discussed in Section 5.3.2, approximately half of the variance in purchase intention remains unexplained. Future research should incorporate additional factors that could predict purchase intention, therefore refining the model.

Furthermore, considering this research focused on the effectiveness of social media marketing on purchase intention across age groups, future studies should also explore how variable relationships differ by age group.

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## Appendixes

### Appendix 1 - Start-up Semi-Structured In-depth Interview Insights

| Start-Up | Interviewee                   | Product Type                 | Insights  |
|----------|-------------------------------|------------------------------|---|
| Swee     | Tiago Rebelo<br>(Co-Founder)  | Plant Based Ice-Cream        | <p><b>Market Gap:</b> Swee fills a niche as an affordable, healthy, vegan ice cream, meeting the demand for plant-based, low-calorie options in the competitive Portuguese F&amp;B industry.</p> <p><b>Primary Marketing Channel:</b> With budget constraints, Swee uses social media (Instagram, TikTok, Facebook) to engage consumers cost-effectively, avoiding traditional advertising. Swee considers social media marketing to be its most effective marketing tool. Furthermore, Swee perceives social media marketing as an effective approach to address consumers' concerns regarding brand reputation.</p> <p><b>Founder Marketing:</b> Swee adopts a founders marketing strategy where founders represent the brand, fostering trust and authenticity.</p> <p><b>Authenticity Focus:</b> Swee's unfiltered social media posts, including founder slip-ups, create a relatable, transparent brand, aligning with consumer expectations for authenticity.</p> <p><b>Brand Awareness:</b> Tiago notes that Swee's awareness grew extensively through social media marketing. Furthermore Tiago considers brand awareness to be a critical driver of purchase intention.</p> <p><b>Direct Consumer Interaction:</b> Live streaming allows real-time consumer feedback, strengthening brand relationships and fostering a sense of community.</p> <p><b>Emotional Branding:</b> Swee's engagement strategy encourages consumers to connect with its mission, building a brand community based on shared values.</p> <p><b>Social Media Impact on Sales:</b> Growth in social media followers correlates with increased retail demand, suggesting social media drives brand awareness and purchase intention.</p> <p><b>Increased Brand Recognition:</b> Swee's social media efforts have boosted brand awareness, reflected in higher demand and retailer interactions, demonstrating the effectiveness of social media marketing.</p> <p><b>Purchase Intent and Conversion:</b> Social media has increased brand awareness and purchase intention, with observed sales growth and higher ice cream purchases driven by consumer interest.</p> |
| Plantz   | Jorge Boabaid<br>(Co-Founder) | Pre-Cooked Plant Based Meals | <p><b>Market Gap:</b> Plantz addresses the demand for easy to prepare, high-quality and healthy meals.</p> <p><b>Digital Marketing has the primary Marketing Channel:</b> Plantz focuses on digital channels due to their cost-effectiveness, namely social media platforms: Instagram and Facebook, using a mix of organic and paid content to target younger audiences. Jorge considers social media marketing allows to target broad and specific targets.</p> <p><b>Cost-Effectiveness:</b> The choice of performing social media marketing derives from its cost effectiveness.</p> <p><b>Use of Influencer Marketing:</b> Plantz selects influencers based on their relevance to the brand, with collaborations often initiated by the influencers themselves.</p> <p><b>Social Media Engagement:</b> Jorge considers social media to be essential for fostering engagement, particularly with younger consumers.</p> <p><b>Brand Awareness Milestones:</b> Plantz has gained significant brand recognition through social media, with real-world visibility seen in events. Jorge noted the importance of brand awareness in driving purchase intention.</p>   |

|                |   |   |
|----------------|---|---|
|                |   | <p><b>Email Marketing:</b> Plantz considers e-mail marketing key for converting engagement into sales by reaching interested consumers with targeted, direct communication.</p> <p><b>Reputation Factors:</b> Product quality, environmental responsibility, and innovation are key drivers of Plantz’s brand reputation. According to Jorge the communication of these drivers on social media must be authentic.</p> <p><b>Social Media’s Role in Building Reputation:</b> Jorge considers social media to be a good mean for communicating Plantz’s reputation. However, he notes that it should be complemented with below-the-line activities, namely in-store promotions, participation in trade shows and direct consumer interactions.</p> <p><b>Refined Targeting:</b> Through social media insights, Plantz has broadened its target demographic, adapting its message in order to better align with the preferences of a wider age group.</p>  |
| Yogan Creamery | Martinha Costa<br>(Founder and Manager) | Plant Based Ice-Cream <p><b>Market Gap:</b> Yogan Creamery addresses the growing demand for healthy, sustainable, and additive-free vegan dairy alternatives in Portugal, offering high-quality, locally-produced plant-based products that prioritize natural ingredients and environmental responsibility.</p> <p><b>Primary Marketing Channels:</b> Yogan Creamery focuses on social media for cost-effective marketing, targeting health-conscious consumers interested in plant-based products.</p> <p><b>Brand Awareness:</b> Martinha considers social media marketing to be an essential tool in generating brand awareness. In turn, Martinha considers brand awareness to be a significant driver of purchase intention.</p> <p><b>Content and Engagement Approach:</b> The brand shares its story and consumer testimonials, emphasizing transparency, authenticity, and relatable content, with occasional trade marketing efforts.</p> <p><b>Notoriety and Consumer Interaction:</b> Yogan uses social media to build brand awareness and engage with consumers, aiming to influence purchase behavior despite challenges in linking engagement to purchase intention.</p> <p><b>Core Elements of Brand Reputation:</b> Martinha considers product quality, more than sustainability, as essential Yogan’s brand reputation.</p> <p><b>Role of Social Media in Brand Reputation:</b> Martinha considers social media marketing to be effective in communicating Yogan Creamery’s reputation. However, it should be complemented with other marketing activities.</p> <p><b>Skepticism on whether Brand Reputation Drives Purchase Intention:</b> Martinha is uncertain on whether brand reputation as a whole significantly drives purchase intention.</p> <p><b>Challenges in Conversion Measurement:</b> Yogan struggles to measure the direct impact of social media on purchase intention.</p> <p><b>Impact of Social Media on Brand Recall:</b> Martinha considers social media enhances brand recall, helping consumers recognize Yogan products in stores, indirectly influencing purchase decisions.</p> |
| YoGoody        | Andreea Mihaescu<br>(Brand Manager)     | Plant Based Creamery <p><b>Market Gap:</b> YoGoody tackles limitations in the yogurt industry by offering a sustainable powdered yogurt alternative that eliminates the need for refrigeration, extends shelf life, and appeals to health-conscious consumers seeking convenience and eco-friendly options.</p> <p><b>Rebranding:</b> YoGoody rebranded in 2024 to reflect premium positioning. To do so, they leveraged on social media and influencer marketing alongside events, trade shows, and in-store communications to drive brand awareness.</p> <p><b>Cost-Effectiveness:</b> Andreea recognizes the considerable advantage social media marketing provides for YoGoody is in its cost-effectiveness.</p> <p><b>Social Media Strategy:</b> Focused on dynamic visuals, audience targeting, and content frequency; leveraged influencer marketing, to humanize the brand and engage with niche audiences.</p>   |

|              |                                   |                     |  |
|--------------|-----------------------------------|---------------------|--|
|              |                                   |                     | <p><b>Brand Awareness:</b> Andrea noted that building awareness is key to driving interest and purchase intention, revealing the recent rebranding strategy has shown early signs of increased sales observed. This campaign focused on creating a buzz and recognition in a crowded market.</p> <p><b>Brand Engagement:</b> Andreea considers engaging with consumers on social media through views, and impressions, to be crucial in not only fostering strong consumer relationships but also and driving consumer purchase intention.</p> <p><b>Reputation and Sustainability:</b> While sustainability is a key pillar of YoGoody’s identity, Andrea considers product quality to be the top priority in influencing brand reputation.</p>   |
| Corial Foods | Guilherme Pereira<br>(Co-Founder) | Insect Based Snacks | <p><b>Market Gap:</b> Fills a niche for health-conscious and adventurous consumers seeking high-protein food options while addressing the demand for eco-friendly food alternatives by offering insect-based products as a sustainable protein source.</p> <p><b>Marketing Strategy:</b> Corial Foods prioritizes digital marketing, leveraging social media platforms due to their cost-effectiveness and scalability. Guilherme considers a mix of paid advertising and organic content enables broad initial outreach followed by refined audience targeting.</p> <p><b>Effectiveness of Digital Marketing:</b> Guilherme notes that digital marketing has proven effective in driving brand awareness for Corial Foods. Additionally increased engagement through shares and comments contributes to higher visibility and potential purchases.</p> <p><b>Target Understanding:</b> Guilherme noted how social media marketing allowed for a greater understanding of Corial Foods’s target, revealing that an advantage of this digital marketing tool lies in its ability to target a broad base of consumers and subsequently refine its target.</p> <p><b>Importance of Brand Awareness:</b> Guilherme considers brand awareness to be a critical variable in driving purchase intention in Corial Foods.</p> <p><b>Challenges in Measuring Impact:</b> Guillerme revealed that its difficult to assess the direct impact of social media marketing on purchase intention of consumers.</p> <p><b>Feedback and Adaptation:</b> For Corial Foods, social media serves as a key channel for gathering consumer feedback, which informs product innovation and improvement efforts.</p> <p><b>Brand Reputation Driver:</b> Guilherme considers innovation and product quality to be the most prominent drivers of Corial Foods’ brand reputation. Nonetheless, Guilherme is uncertain about the extent to which brand reputation drives purchase intention.</p> |

| Organization | Interviewee | Position  | Insights   |
|--------------|-------------|---|--|
| IAPMEI       | José Vale   | Head of Innovation and Entrepreneurship at IAPMEI | <p><b>Role of IAPMEI:</b> IAPMEI is a key player in Portugal's entrepreneurial ecosystem, focusing on fostering competitiveness and innovation among SMEs and startups. Its efforts include providing support through financial tools, capacity building, and cluster-based initiatives.</p> <p><b>Growth of the Portuguese start-up ecosystem:</b> The significant growth of the Portuguese start-up ecosystem derived from strategic programs and a supportive entrepreneurial environment. Among these are the Start-UP Portugal strategy Web Summit's decision to host the event in Lisbon since 2016.</p> <p><b>Start-UP Portugal:</b> Strategic program with the objective of not only increasing the number of start-ups in Portugal but also improve conditions for already established start-ups.</p> <p><b>Start-Up Voucher:</b> A program that supports individuals at the idea stage of entrepreneurship, offering financial support, incubation, and capacity building to promote the creation of new businesses.</p> <p><b>Start-Up Visa:</b> Designed to attract international talent and startups to Portugal, this measure facilitates the entry of qualified individuals and their business ventures into the country.</p> <p><b>Ecosystem Strength:</b> Portugal's small size and connected entrepreneurial ecosystem provide a supportive environment for collaboration between startups, investors, and institutions. José Vale notes that events like the Web Summit have significantly contributed to the visibility and growth of the ecosystem.</p> <p><b>Cluster Importance:</b> Industry clusters, supported by IAPMEI, aggregate businesses to foster collective competitiveness and economic impact, playing a critical role in the country's strategic sectors.</p> <p><b>Strategic Focus:</b> The strategic focus of Portuguese start-ups is on innovation, internationalization, and sustainability.</p> <p><b>Social Media's Role in Branding:</b> For start-ups, social media is essential to build brand awareness, reputation and engagement as it offers a cost-effective alternative to traditional marketing channels.</p> <p><b>Opinion-Leaders:</b> On the specific notion of brand reputation, José Vale noted that while start-ups may underestimate its importance, believing it is not a significant driver of purchase intention, the limited number of consumers who value the specific dimensions of environmental responsibility and corporate citizenship are the brands opinion leaders.</p> <p><b>Challenges in Brand Recognition:</b> Portuguese startups often face difficulties in establishing global brand recognition due to the country's limited footprint in the international market. José Vale highlights that social media can be a pathway to overcoming this limitation, noting the extreme importance of brand awareness in driving purchase intention.</p> <p><b>Importance of Innovation:</b> In the context of F&amp;B start-ups, José Vale noted the importance of innovation amongst the brand reputation dimensions considering that start-ups typically penetrate though niche markets, later expanding.</p> <p><b>Influencers in Driving Awareness and Reputation:</b> In the particular case of start-ups José Vale notes that influencers play a decisive role in building brand awareness and reputation, as</p> |

|  |  |  |  |
|--|--|--|--|
|  |  |  | <p>their endorsement and content creation help bridge the gap between startups and their target audiences.</p> <p><b>Social Media's Impact on Engagement:</b> Startups leverage social media to foster brand engagement through interactions with users, which indirectly contribute to heightened brand awareness and improved reputation.</p> <p><b>Income and Purchase Intention:</b> José Vale suggested a positive correlation between income and purchase intention.</p> |
|--|--|--|--|

*Appendix 3 - Age Segmented Focus Groups Insights*

| Age Group | No of Participants | Insights   |
|-----------|--------------------|--|
| 18 - 24   | 6                  | <p><b>Media Consumption:</b> Relied heavily on social media as the primary source of information. Television was mentioned has the second source of information.</p> <p><b>Social Media Marketing:</b> Perceived advertisements on social media as more engaging and varied compared to repetitive ads on television.</p> <p><b>Brand Awareness:</b> Social media is a highly effective tool for fostering brand awareness. Participants remembered ads they had seen on social media marketing. Considered this happens due to their social media presence, influencer campaigns, and advertisements.</p> <p><b>Repeated Exposure:</b> Repeated exposure and creative storytelling by F&amp;B brands are significant in capturing their attention.</p> <p><b>Brand Reputation:</b> Emphasized the importance of environmental responsibility and corporate citizenship for F&amp;B brands. Additionally, participants believe social media marketing is effective for addressing these concerns, provided the communication is perceived as authentic.</p> <p><b>Brand Reputation Dimensions:</b> Innovation and environmental responsibility were mentioned has the most important brand reputation dimensions.</p> <p><b>Brand Engagement:</b> Valued brands that proactively engaged through contests, challenges, and responsiveness on social media. Assumed they felt a stronger connection to brands that actively listened and responded to consumer feedback.</p> <p><b>Purchase Intention:</b> Social media influencers and targeted advertisements significantly influenced their intention to try new F&amp;B products. Demonstrated openness to trying new F&amp;B products.</p> |
| 25 - 34   | 6                  | <p><b>Media Consumption:</b> Balanced approach to media consumption, using both social media and television to a similar extent.</p> <p><b>Social Media Marketing:</b> Social Media Marketing was considered an effective mean of advertisement, facilitating brand interaction,</p> <p><b>Brand Awareness:</b> Awareness is driven by positive reviews and testimonials encountered on social media.</p> <p><b>Brand Reputation:</b> Shared the belief in the importance of environmental responsibility and corporate citizenship for F&amp;B brands. Collectively considered authentic communication of these aspects was crucial for them to be receptive of the communication.</p> <p><b>Brand Reputation Dimensions:</b> Innovation, environmental responsibility, and corporate citizenship were mentioned has the most important brand reputation dimensions.</p> <p><b>Brand Engagement:</b> Valued active engagement on social media, including responsiveness to consumer input. Additionally, highlighted brands ability to adapt to social media trends to maintain relevance.</p> <p><b>Purchase Intention:</b> Receptive to trying new F&amp;B products if positive reviews and testimonials are present on social media.</p>   |
| 35 - 65   | 6                  | <p><b>Media Consumption:</b> Television emerged has the primary source of information. Social media was also mentioned.</p> <p><b>Brand Awareness:</b> Awareness of new F&amp;B brands via social media occurred only through personal referrals from friends or family.</p>   |

|  |  |
|--|--|
|  | <p><b>Brand Reputation:</b> Highlighted the importance of environmental responsibility and corporate citizenship for F&amp;B brands. Emphasized the need for authentic communication through social media marketing to address these concerns effectively.</p> <p><b>Brand Reputation Dimensions:</b> Product quality and innovation were mentioned as the most important brand reputation dimensions.</p> <p><b>Brand Engagement:</b> Valued the practical aspects of social media engagement. Placed importance on timely responses to customer support queries and efficient resolution of concerns. Showed great resistance to engagement initiatives by brands.</p> <p><b>Purchase Intention:</b> Least likely to try new F&amp;B products due to traditional and less flexible consumption habits. Social media marketing influenced purchase intention but to a lesser degree compared to younger groups.</p> |
|--|--|

#### *Appendix 4 – Survey*

## **Questionnaire**

### **Introduction**

*(To see the Portuguese version, please click on the right corner at the top of the page)*

*(Para ver a versão em português, por favor clique no canto superior direito)*

Dear Participant,

This questionnaire is part of my Master's thesis in Management with a specialization in Strategic Marketing at Católica Lisbon School of Business & Economics. The aim of this study is to explore the impact of **social media-driven digital marketing on purchase intention in start-ups within the food and beverage industry.**

As a sign of my appreciation for your participation, you will have the chance to win a **€20 Fnac gift card** by completing this survey!

The questionnaire is expected to take 7-9 minutes.

Please consider the following:

- All data collected will be treated with the utmost confidentiality and will be used exclusively for academic purposes.
- The analysis will only be carried out on the aggregated set of responses, without individual identification.
- Your participation is voluntary, so you can stop filling out the questionnaire at any time.
- Read each statement carefully and remember that there are no right or wrong answers. Your honest and personal opinion is valued.

For any clarification or comment, I am available via email: [s-bsfrrodrigues@ucp.pt](mailto:s-bsfrrodrigues@ucp.pt)

Thank you in advance for your time and collaboration!

Bernardo Rodrigues

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*Break*

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### **Screening Questions**

**Screening 1 (Residency):** Do you currently reside in Portugal?

- Yes
- No

**Screening 2 (Social-Media):** Do you use social media at least once a week?

- Yes
- No

— *Display question 1 if screening 1 and 2 = Yes, otherwise the survey finishes* —

---

*Break*

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### **Section 1 (Consumers Brand Touchpoints)**

In this section we want to understand the different ways you encounter food and beverage brands.

**Question 1:** Through which of the following communication channels do you consider you most frequently encounter advertisements, information, or content about food and beverage brands?

- Traditional Media (Television; Radio; Press; Out-of-Home)
- Digital and Social Media (Website/App; Social Networks; Video/Podcasts/Blogs; Gaming)
- Events & Sponsorship (Sports/Music; Education/Health; Culture/Arts; Public Betterments; Conferences/Summits)
- Direct Marketing (Ambassadors/Promoters; Call Center/Telemarketing; Mailing/SMS; Brochures/Cards; Merchandising)
- Stores and Point of Sale (Location; Environment Design/Facilities; Storage/Information; Managers/Staff)

- *Display question 2 if question 1 = Digital and Social Media, otherwise skip to question 3* -

**Question 2:** Please specify which digital or social media channels do you most frequently encounter advertisements, information, or content about food and beverage brands?

- Social Media Platforms
- Brand Websites or Mobile Apps
- Podcasts
- Blogs or Online Articles
- Gaming Platforms (e.g., in-game ads, Twitch)

---

*Break*

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### **Section 2 (Social Media Marketing Usage and Perceptions):**

In this section, we aim to explore your use of **social media** and your perceptions of about it. When presented with the term “social media platforms” only consider the following: Facebook, Instagram, LinkedIn, TikTok, YouTube.

**Question 4:** How many hours per week do you spend on social media platforms (Facebook, Instagram, LinkedIn, TikTok, YouTube)?

*(Note: To check your screen time, open the Settings App and click on “Digital Wellbeing and parental controls”)*

- Less than 5 hours per week (less than 1 hour per day)
- 5 to 10 hours per week (about 1-1.5 hours per day)
- 11 to 20 hours per week (about 1.5-3 hours per day)
- 21 to 30 hours per week (about 3-4 hours per day)
- More than 30 hours per week (more than 4 hours per day)

Social Media Marketing is the use of platforms by brands to connect with consumers by sharing content, promoting products or services and engaging in conversations “(...) designed to engage customers or prospects and directly or indirectly raise awareness, improve image, or elicit sales of products and services.” (Kotler & Keller, 2016, p. 582)

**Question 5:** Please indicate how much you agree with the following statements (Scale: 1 = Strongly Disagree; 7 = Strongly Agree)

- “Social media marketing done by emerging food and beverage brands captures my attention.”

- “I find it interesting to share/receive information on social media regarding new food and beverage brands.”
- “I find it interesting to discover new products of emerging food and beverage brands through social media.”

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*Break*

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### **Section 3 (Brand Awareness):**

In this section we aim to understand your perceptions of **brand awareness**.

Brand awareness refers to the strength of a brand's presence in the consumer's mind and “(...) involves the ability of a potential buyer to recognize or recall that a brand is a member of a certain product category” (Aaker, 1991).

**Question 6:** Please indicate how much you agree with the following statements (Scale: 1 = Strongly Disagree; 7 = Strongly Agree)

- “Emerging food and beverage brands on social media are easy for me to remember.”
- “Social media improves my ability to recognize upcoming food and beverage brands.”
- “Social media makes it easy to generate brand awareness for new food and beverage brands.”
- “Social media makes it easier for me to recall recently established food and beverage brands.”
- “When I think of food and beverage brands, those active on social media are the ones that come to mind first.”

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*Break*

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### **Section 4 (Brand Reputation):**

In this section, we seek to understand which dimensions of **brand reputation** are most important to you as well as your perceptions of brand reputation.

Brand reputation refers to the overall perception and beliefs that stakeholders, such as consumers, employees, and investors, hold about a company based on their experiences and the information available to them (Brown & Dacin, 1997; Gioia et al., 2000)

**Question 7:** How important are the following factors when considering a new food and beverage brand on social media (Scale: 1 = Not important at all; 7 = Extremely Important)

- Product Quality (Adequate and efficient product solutions; Safe and reliable product solutions; Value for money/ Affordable price solutions; Meets your needs)
- Service Quality (Adequate and efficient store service; Adequate and efficient online service; Accessibility and availability)
- Innovation (Innovative products/services; Different/Unique)
- Environmental Responsibility (Promotes the reduction of the carbon footprint; Limits harmful waste, pollutants and chemicals; Supports climate and environmental causes)
- Corporate Citizenship (Cares about health and wellbeing; Cares about education, culture and art; Supports humanitarian causes)

**Question 8:** Please indicate how much you agree with the following statements (Scale: 1 = Strongly Disagree; 7 = Strongly Agree)

- “Social media marketing builds a start-ups reputation.”
- “Social media marketing done by food and beverage start-ups effectively conveys product quality”
- “Social media marketing done by food and beverage start-ups effectively conveys service quality.”
- “Social media marketing done by food and beverage start-ups makes me informed about a company’s innovation.”
- Social media marketing done by food and beverage start-ups makes me informed about a company’s environmental responsibility and commitment.”
- “Attention Check: Please select strongly agree for this statement”
- Social media marketing done by food and beverage start-ups makes me informed about a company’s corporate citizenship.”

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*Break*

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### **Section 5 (Brand Engagement):**

In this section we aim to understand your perceptions of **brand engagement**.

Brand engagement is the cognitive, emotional, and behavioral investment a consumer makes in their interactions with a brand (Hollebeek, 2011). It reflects a motivational state arising from interactive, co-creative experiences with a brand (Brodie et al., 2011)

**Question 9:** Please indicate how much you agree with the following statements (Scale: 1 = Strongly disagree; 7 = Strongly Agree)

- “I enjoy participating in contests or promotions organized by emerging food and beverage brands on social media.”
- “I interact with newly established food and beverage brands on social media by liking, sharing or commenting their posts.”
- “I am likely to follow an up-and-coming food and beverage brands on social media to stay informed about their promotions and updates.”

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*Break*

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### **Section 6 (Purchase Intention):**

In this section we aim to understand your perception of **purchase intention**.

“Purchase intention refers to a consumer's deliberate plan or likelihood to buy a product (Spears and Singh, 2004; Morrison, 1979). It reflects the consumer's assessment of the product's value, practicality, and how well it helps achieve personal or social goals (O'Brien, 1971; Baker, Donthu, and Kumar, 2016)

**Question 10:** Considering the presented definition of purchase intention, please indicate how much you agree with the following statements (Scale: 1 = Strongly disagree; 7 = strongly agree)

- “A food and beverage start-up brand that does social media marketing increases my intention to purchase its products.”
- “New food and beverage brands that use social media marketing make me more curious about their products.”
- “I am likely to consider purchasing a product from a new food and beverage brand if it is frequently advertised to me on social media.”

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*Break*

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### **Section 7 (Demographics):**

As we conclude our survey, we have a few personal **demographic** questions to better understand our participants. Please rest assured that your responses will be handled with the utmost privacy and are important for our research.

**Question 11:** Which gender do you identify with?

- Male
- Female
- Other
- Prefer not to say

**Question 12:** Please indicate your age range?

- 18-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 50-54
- 55-59
- 60-64
- 65 or older
- Other: \_\_\_\_\_

**Question 13:** What is your current occupation?

- Student
- Student worker
- Salaried employee
- Self-employed
- Unemployed
- Retired
- Other (Please Specify): \_\_\_\_\_

**Question 14:** What is the highest level of education you have completed?

- Less than high-school.
- High-school completion.
- Bachelor's degree
- Postgraduate
- Master's degree

- Doctorate or higher

**Question 15:** Please select the option that best represents your gross monthly income?

- Less than €500
- €500 – €999
- €1.000 – €1.999
- €2.000 – €2.999
- €3.000 – €3.999
- €4.000 – €5.000
- €5.000 or more
- Prefer not to say

**Question 16:** Please provide me your e-mail address if you wish to entry the raffle for a chance to win a €20 Fnac Gift Card (If you do not wish to entry the raffle, please skip this question)?

Thank You for completing this questionnaire and taking part in my research. Your contribution is extremely valuable.

Sincerely,

Bernardo Rodrigues

*Appendix 5 - Frequency Distribution on Demographic Questions (Question 10; Question 11; Question 12; Question 13; Question 14)*

**Which gender do you identify with?**

|       |        | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | Male   | 50        | 36,2    | 36,2          | 36,2               |
|       | Female | 87        | 63,0    | 63,0          | 99,3               |
|       | Other  | 1         | ,7      | ,7            | 100,0              |
|       | Total  | 138       | 100,0   | 100,0         |                    |

**Please indicate your age range?**

|       |       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 18-24 | 63        | 45,7    | 45,7          | 45,7               |
|       | 25-29 | 20        | 14,5    | 14,5          | 60,1               |
|       | 30-34 | 3         | 2,2     | 2,2           | 62,3               |
|       | 40-44 | 1         | ,7      | ,7            | 63,0               |
|       | 45-49 | 3         | 2,2     | 2,2           | 65,2               |
|       | 50-54 | 8         | 5,8     | 5,8           | 71,0               |
|       | 55-59 | 23        | 16,7    | 16,7          | 87,7               |
|       | 60-64 | 17        | 12,3    | 12,3          | 100,0              |
|       | Total | 138       | 100,0   | 100,0         |                    |

### What is your current occupation? - Selected Choice

|       |                   | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | Student           | 50        | 36,2    | 36,2          | 36,2               |
|       | Student worker    | 14        | 10,1    | 10,1          | 46,4               |
|       | Salaried employee | 55        | 39,9    | 39,9          | 86,2               |
|       | Self-employed     | 11        | 8,0     | 8,0           | 94,2               |
|       | Unemployed        | 2         | 1,4     | 1,4           | 95,7               |
|       | Retired           | 3         | 2,2     | 2,2           | 97,8               |
|       | Other             | 3         | 2,2     | 2,2           | 100,0              |
|       | Total             | 138       | 100,0   | 100,0         |                    |

### What is the highest level of education you have completed?

|       |                         | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------------|-----------|---------|---------------|--------------------|
| Valid | Less than high-school.  | 1         | ,7      | ,7            | ,7                 |
|       | High-school completion. | 35        | 25,4    | 25,4          | 26,1               |
|       | Bachelor's degree       | 57        | 41,3    | 41,3          | 67,4               |
|       | Postgraduate            | 12        | 8,7     | 8,7           | 76,1               |
|       | Master's degree         | 32        | 23,2    | 23,2          | 99,3               |
|       | Doctorate or higher     | 1         | ,7      | ,7            | 100,0              |
|       | Total                   | 138       | 100,0   | 100,0         |                    |

### Please select the option that best represents your household's gross monthly income?

|       |                   | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | Less than €1,000  | 8         | 5,8     | 5,8           | 5,8                |
|       | €1,000 – €1,999   | 27        | 19,6    | 19,6          | 25,4               |
|       | €2,000 – €2,999   | 25        | 18,1    | 18,1          | 43,5               |
|       | €3,000 – €3,999   | 20        | 14,5    | 14,5          | 58,0               |
|       | €4,000 – €4,999   | 22        | 15,9    | 15,9          | 73,9               |
|       | €5,000 – €5,999   | 6         | 4,3     | 4,3           | 78,3               |
|       | €6,000 - €6,999   | 7         | 5,1     | 5,1           | 83,3               |
|       | €7,000 - €7,999   | 3         | 2,2     | 2,2           | 85,5               |
|       | €8,000 or more    | 2         | 1,4     | 1,4           | 87,0               |
|       | Prefer not to say | 18        | 13,0    | 13,0          | 100,0              |
|       | Total             | 138       | 100,0   | 100,0         |                    |

Appendix 6 - Descriptive statistics of Study Variables

| <b>Descriptive Statistics</b> |     |         |         |        |                |
|-------------------------------|-----|---------|---------|--------|----------------|
|                               | N   | Minimum | Maximum | Mean   | Std. Deviation |
| Social Media Marketing        | 138 | 1,00    | 7,00    | 4,4155 | 1,58706        |
| Brand Awareness               | 138 | 1,00    | 7,00    | 4,9319 | 1,14177        |
| Brand Reputation              | 138 | 1,33    | 7,00    | 4,6860 | ,99575         |
| Brand Engagement              | 138 | 1,00    | 7,00    | 3,2560 | 1,61516        |
| Purchase Intention            | 138 | 1,00    | 7,00    | 4,6884 | 1,53426        |
| Product Quality               | 138 | 1       | 5       | 4,29   | ,821           |
| Service Quality               | 138 | 1       | 5       | 4,01   | ,879           |
| Innovation                    | 138 | 1       | 5       | 3,44   | ,896           |
| Environmental Responsibility  | 138 | 1       | 5       | 3,70   | 1,098          |
| Corporate Citizenship         | 138 | 1       | 5       | 3,54   | 1,115          |
| Valid N (listwise)            | 138 |         |         |        |                |

| <b>Income</b> |                   |           |         |               |                    |
|---------------|-------------------|-----------|---------|---------------|--------------------|
|               |                   | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid         | Less than €1,000  | 8         | 5,8     | 5,8           | 5,8                |
|               | €1,000 – €1,999   | 27        | 19,6    | 19,6          | 25,4               |
|               | €2,000 – €2,999   | 25        | 18,1    | 18,1          | 43,5               |
|               | €3,000 – €3,999   | 20        | 14,5    | 14,5          | 58,0               |
|               | €4,000 – €4,999   | 22        | 15,9    | 15,9          | 73,9               |
|               | €5,000 – €5,999   | 6         | 4,3     | 4,3           | 78,3               |
|               | €6,000 - €6,999   | 7         | 5,1     | 5,1           | 83,3               |
|               | €7,000 - €7,999   | 3         | 2,2     | 2,2           | 85,5               |
|               | €8,000 or more    | 2         | 1,4     | 1,4           | 87,0               |
|               | Prefer not to say | 18        | 13,0    | 13,0          | 100,0              |
| Total         | 138               | 100,0     | 100,0   |               |                    |

| <b>Age_Grou</b> |       |           |         |               |                    |
|-----------------|-------|-----------|---------|---------------|--------------------|
|                 |       | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid           | 18-24 | 63        | 45,7    | 45,7          | 45,7               |
|                 | 25-34 | 23        | 16,7    | 16,7          | 62,3               |
|                 | 35-65 | 52        | 37,7    | 37,7          | 100,0              |
|                 | Total | 138       | 100,0   | 100,0         |                    |

**Social Media Usage**

|       |   | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---|-----------|---------|---------------|--------------------|
| Valid | Less than 5 hours per week (less than 1 hour per day)   | 29        | 21,0    | 21,0          | 21,0               |
|       | 5 to 10 hours per week (about 1-1.5 hours per day)      | 38        | 27,5    | 27,5          | 48,6               |
|       | 11 to 20 hours per week (about 1.5-3 hours per day)     | 44        | 31,9    | 31,9          | 80,4               |
|       | 21 to 30 hours per week (about 3-4 hours per day)       | 18        | 13,0    | 13,0          | 93,5               |
|       | More than 30 hours per week (more than 4 hours per day) | 9         | 6,5     | 6,5           | 100,0              |
|       | Total   | 138       | 100,0   | 100,0         |                    |

*Appendix 7 - Full Model Parallel Mediation Analysis (DV – Purchase Intention; IV – Social Media Marketing; Mediators – Brand Awareness, Brand Reputation, Brand Engagement)*

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Version 4.2 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D.                      www.afhayes.com  
Documentation available in Hayes (2022). www.guilford.com/p/hayes3

\*\*\*\*\*

Model : 4  
Y : PI  
X : SMM  
M1 : BA  
M2 : BR  
M3 : BE

Sample  
Size: 138

\*\*\*\*\*

OUTCOME VARIABLE:  
BA

Model Summary

|  |       |       |       |         |        |          |       |
|--|-------|-------|-------|---------|--------|----------|-------|
|  | R     | R-sq  | MSE   | F       | df1    | df2      | p     |
|  | ,5480 | ,3003 | ,9189 | 58,3656 | 1,0000 | 136,0000 | ,0000 |

Model

|          |        |       |         |       |        |        |
|----------|--------|-------|---------|-------|--------|--------|
|          | coeff  | se    | t       | p     | LLCI   | ULCI   |
| constant | 3,1912 | ,2420 | 13,1853 | ,0000 | 2,7125 | 3,6698 |
| SMM      | ,3942  | ,0516 | 7,6397  | ,0000 | ,2922  | ,4963  |

\*\*\*\*\*

OUTCOME VARIABLE:  
BR

Model Summary

|  |       |       |       |         |        |          |       |
|--|-------|-------|-------|---------|--------|----------|-------|
|  | R     | R-sq  | MSE   | F       | df1    | df2      | p     |
|  | ,4688 | ,2198 | ,7793 | 38,3150 | 1,0000 | 136,0000 | ,0000 |

Model

|          |        |       |         |       |        |        |
|----------|--------|-------|---------|-------|--------|--------|
|          | coeff  | se    | t       | p     | LLCI   | ULCI   |
| constant | 3,3872 | ,2229 | 15,1974 | ,0000 | 2,9464 | 3,8279 |
| SMM      | ,2942  | ,0475 | 6,1899  | ,0000 | ,2002  | ,3881  |

\*\*\*\*\*

OUTCOME VARIABLE:

BE

Model Summary

|  | R     | R-sq  | MSE    | F       | df1    | df2      | p     |
|--|-------|-------|--------|---------|--------|----------|-------|
|  | ,5726 | ,3279 | 1,7662 | 66,3547 | 1,0000 | 136,0000 | ,0000 |

Model

|          | coeff | se    | t      | p     | LLCI  | ULCI   |
|----------|-------|-------|--------|-------|-------|--------|
| constant | ,6828 | ,3355 | 2,0350 | ,0438 | ,0193 | 1,3464 |
| SMM      | ,5828 | ,0715 | 8,1458 | ,0000 | ,4413 | ,7243  |

\*\*\*\*\*

OUTCOME VARIABLE:

PI

Model Summary

|  | R     | R-sq  | MSE    | F       | df1    | df2      | p     |
|--|-------|-------|--------|---------|--------|----------|-------|
|  | ,7048 | ,4967 | 1,2203 | 32,8158 | 4,0000 | 133,0000 | ,0000 |

Model

|          | coeff | se    | t      | p     | LLCI   | ULCI   |
|----------|-------|-------|--------|-------|--------|--------|
| constant | ,3460 | ,5190 | ,6667  | ,5061 | -,6805 | 1,3725 |
| SMM      | ,2163 | ,0800 | 2,7050 | ,0077 | ,0581  | ,3745  |
| BA       | ,4374 | ,1048 | 4,1714 | ,0001 | ,2300  | ,6448  |
| BR       | ,0936 | ,1127 | ,8304  | ,4078 | -,1294 | ,3166  |
| BE       | ,2431 | ,0749 | 3,2445 | ,0015 | ,0949  | ,3912  |

\*\*\*\*\* DIRECT AND INDIRECT EFFECTS OF X ON Y \*\*\*\*\*

Direct effect of X on Y

|  | Effect | se    | t      | p     | LLCI  | ULCI  |
|--|--------|-------|--------|-------|-------|-------|
|  | ,2163  | ,0800 | 2,7050 | ,0077 | ,0581 | ,3745 |

Indirect effect(s) of X on Y:

|       | Effect | BootSE | BootLLCI | BootULCI |
|-------|--------|--------|----------|----------|
| TOTAL | ,3416  | ,0654  | ,2185    | ,4709    |
| BA    | ,1724  | ,0537  | ,0768    | ,2869    |
| BR    | ,0275  | ,0321  | -,0350   | ,0928    |
| BE    | ,1416  | ,0442  | ,0585    | ,2333    |

\*\*\*\*\* BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS \*\*\*\*\*

OUTCOME VARIABLE:

BA

|          | Coeff  | BootMean | BootSE | BootLLCI | BootULCI |
|----------|--------|----------|--------|----------|----------|
| constant | 3,1912 | 3,1906   | ,2912  | 2,6183   | 3,7539   |
| SMM      | ,3942  | ,3942    | ,0575  | ,2823    | ,5058    |

-----

OUTCOME VARIABLE:

BR

|          | Coeff  | BootMean | BootSE | BootLLCI | BootULCI |
|----------|--------|----------|--------|----------|----------|
| constant | 3,3872 | 3,3855   | ,2683  | 2,8595   | 3,9191   |
| SMM      | ,2942  | ,2944    | ,0556  | ,1827    | ,4021    |

-----

OUTCOME VARIABLE:

BE

|          | Coeff | BootMean | BootSE | BootLLCI | BootULCI |
|----------|-------|----------|--------|----------|----------|
| constant | ,6828 | ,6792    | ,2811  | ,1304    | 1,2282   |

SMM ,5828 ,5837 ,0635 ,4585 ,7091

-----  
 OUTCOME VARIABLE:

PI

|          | Coeff | BootMean | BootSE | BootLLCI | BootULCI |
|----------|-------|----------|--------|----------|----------|
| constant | ,3460 | ,3652    | ,4601  | -,5026   | 1,2916   |
| SMM      | ,2163 | ,2159    | ,0853  | ,0518    | ,3879    |
| BA       | ,4374 | ,4394    | ,1152  | ,2141    | ,6703    |
| BR       | ,0936 | ,0869    | ,1036  | -,1217   | ,2876    |
| BE       | ,2431 | ,2441    | ,0707  | ,1026    | ,3826    |

\*\*\*\*\* ANALYSIS NOTES AND ERRORS \*\*\*\*\*

Level of confidence for all confidence intervals in output:

95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

----- END MATRIX -----

*Appendix 8 - Moderation Analysis (DV – Purchase Intention; IV – Social Media Marketing; Moderator – Age Groups)*

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Version 4.2 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D. [www.afhayes.com](http://www.afhayes.com)  
 Documentation available in Hayes (2022). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model : 1  
 Y : PI  
 V : SMM  
 W : Age\_Grou

Sample  
 Size: 138

Coding of categorical W variable for analysis:

| Age_Grou | W1    | W2    |
|----------|-------|-------|
| 1,000    | ,000  | ,000  |
| 2,000    | 1,000 | ,000  |
| 3,000    | ,000  | 1,000 |

\*\*\*\*\*

OUTCOME VARIABLE:

PI

Model Summary

| R     | R-sq  | MSE    | F       | df1    | df2      | p     |
|-------|-------|--------|---------|--------|----------|-------|
| ,6379 | ,4069 | 1,4491 | 18,1091 | 5,0000 | 132,0000 | ,0000 |

Model

|          | coeff  | se     | t      | p     | LLCI    | ULCI   |
|----------|--------|--------|--------|-------|---------|--------|
| constant | 2,4801 | ,5078  | 4,8841 | ,0000 | 1,4756  | 3,4845 |
| SMM      | ,5730  | ,1041  | 5,5056 | ,0000 | ,3671   | ,7789  |
| W1       | -,1093 | 1,0190 | -,1073 | ,9147 | -2,1249 | 1,9063 |
| W2       | -,2942 | ,6606  | -,4453 | ,6568 | -1,6008 | 1,0125 |
| Int_1    | ,0093  | ,2127  | ,0435  | ,9654 | -,4116  | ,4301  |
| Int_2    | -,1307 | ,1414  | -,9246 | ,3569 | -,4103  | ,1489  |

Product terms key:

Int\_1 : SMM x W1  
 Int\_2 : SMM x W2

Test(s) of highest order unconditional interaction(s):

|     | R2-chng | F     | df1    | df2      | p     |
|-----|---------|-------|--------|----------|-------|
| X*W | ,0046   | ,5089 | 2,0000 | 132,0000 | ,6023 |

Focal predict: SMM (X)  
 Mod var: Age\_Grou (W)

Data for visualizing the conditional effect of the focal predictor:  
 Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

```

SMM      Age_Grou  PI      .
BEGIN DATA.
  2,4133   1,0000   3,8630
  5,0000   1,0000   5,3452
  6,0000   1,0000   5,9182
  2,4133   2,0000   3,7760
  5,0000   2,0000   5,2822
  6,0000   2,0000   5,8644
  2,4133   3,0000   3,2534
  5,0000   3,0000   4,3976
  6,0000   3,0000   4,8399
  
```

END DATA.

GRAPH/SCATTERPLOT=

SMM WITH PI BY Age\_Grou .

\*\*\*\*\* ANALYSIS NOTES AND ERRORS \*\*\*\*\*

Level of confidence for all confidence intervals in output:  
 95,0000

----- END MATRIX -----

*Appendix 9 - Correlation Analysis (Social Media Usage; Purchase Intention)*

|                    |                     | Social Media Usage | Purchase Intention |
|--------------------|---------------------|--------------------|--------------------|
| Social Media Usage | Pearson Correlation | 1                  | ,322**             |
|                    | Sig. (2-tailed)     |                    | <,001              |
|                    | N                   | 138                | 138                |
| Purchase Intention | Pearson Correlation | ,322**             | 1                  |
|                    | Sig. (2-tailed)     | <,001              |                    |
|                    | N                   | 138                | 138                |

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

*Appendix 10 - Correlation Analysis (Income; Purchase Intention)*

|                    |                     | Purchase Intention | Income |
|--------------------|---------------------|--------------------|--------|
| Purchase Intention | Pearson Correlation | 1                  | -,157  |
|                    | Sig. (2-tailed)     |                    | ,066   |
|                    | N                   | 138                | 138    |
| Income             | Pearson Correlation | -,157              | 1      |
|                    | Sig. (2-tailed)     | ,066               |        |
|                    | N                   | 138                | 138    |

Appendix 11 - Multiple Linear Regression (DV – Product Quality, Service Quality, Innovation, Corporate Citizenship, Environmental Responsibility; IV – Brand Reputation)

**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1     | ,331 <sup>a</sup> | ,110     | ,076              | ,95713                     | 1,608         |

a. Predictors: (Constant), Corporate Citizenship, Product Quality, Innovation, Service Quality, Environmental Responsibility

b. Dependent Variable: Brand Reputation

**ANOVA<sup>a</sup>**

| Model |            | Sum of Squares | df  | Mean Square | F     | Sig.              |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1     | Regression | 14,913         | 5   | 2,983       | 3,256 | ,008 <sup>b</sup> |
|       | Residual   | 120,924        | 132 | ,916        |       |                   |
|       | Total      | 135,837        | 137 |             |       |                   |

a. Dependent Variable: Brand Reputation

b. Predictors: (Constant), Corporate Citizenship, Product Quality, Innovation, Service Quality, Environmental Responsibility

**Coefficients<sup>a</sup>**

| Model |                              | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig.  | Collinearity Statistics |       |
|-------|------------------------------|-----------------------------|------------|---------------------------|-------|-------|-------------------------|-------|
|       |                              | B                           | Std. Error | Beta                      |       |       | Tolerance               | VIF   |
| 1     | (Constant)                   | 3,236                       | ,509       |                           | 6,361 | <,001 |                         |       |
|       | Product Quality              | -,021                       | ,125       | -,017                     | -,165 | ,869  | ,639                    | 1,566 |
|       | Service Quality              | ,042                        | ,129       | ,037                      | ,328  | ,743  | ,523                    | 1,911 |
|       | Innovation                   | ,274                        | ,108       | ,246                      | 2,531 | ,013  | ,712                    | 1,404 |
|       | Environmental Responsibility | ,026                        | ,108       | ,029                      | ,241  | ,810  | ,479                    | 2,089 |
|       | Corporate Citizenship        | ,094                        | ,104       | ,105                      | ,898  | ,371  | ,496                    | 2,017 |

a. Dependent Variable: Brand Reputation

**Collinearity Diagnostics<sup>a</sup>**

| Model | Dimension | Eigenvalue | Condition Index | Variance Proportions |                 |                 |            |                              |                       |
|-------|-----------|------------|-----------------|----------------------|-----------------|-----------------|------------|------------------------------|-----------------------|
|       |           |            |                 | (Constant)           | Product Quality | Service Quality | Innovation | Environmental Responsibility | Corporate Citizenship |
| 1     | 1         | 5,816      | 1,000           | ,00                  | ,00             | ,00             | ,00        | ,00                          | ,00                   |
|       | 2         | ,082       | 8,443           | ,02                  | ,06             | ,02             | ,01        | ,12                          | ,21                   |
|       | 3         | ,041       | 11,908          | ,02                  | ,04             | ,03             | ,77        | ,03                          | ,13                   |
|       | 4         | ,026       | 14,888          | ,07                  | ,03             | ,10             | ,17        | ,67                          | ,39                   |
|       | 5         | ,022       | 16,150          | ,57                  | ,02             | ,35             | ,02        | ,17                          | ,11                   |
|       | 6         | ,013       | 21,101          | ,32                  | ,85             | ,50             | ,03        | ,02                          | ,16                   |

a. Dependent Variable: Brand Reputation

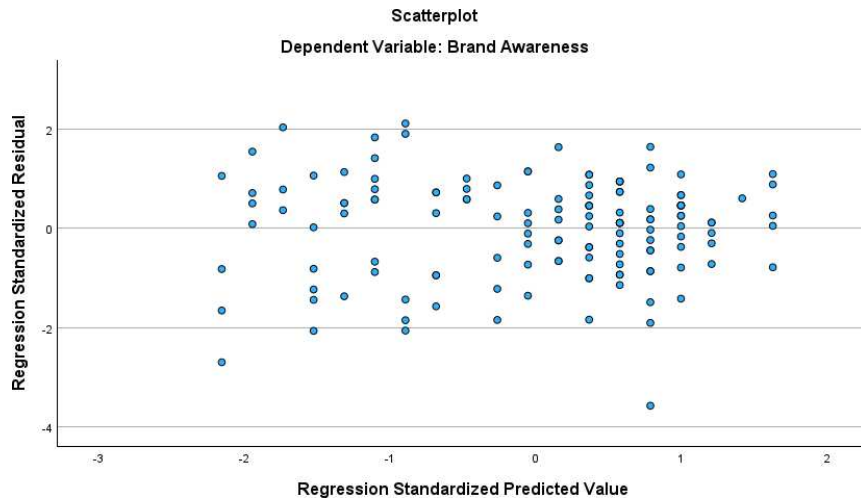
**Residuals Statistics<sup>a</sup>**

|                      | Minimum  | Maximum | Mean   | Std. Deviation | N   |
|----------------------|----------|---------|--------|----------------|-----|
| Predicted Value      | 3,6504   | 5,3094  | 4,6860 | ,32994         | 138 |
| Residual             | -2,77551 | 2,10535 | ,00000 | ,93950         | 138 |
| Std. Predicted Value | -3,139   | 1,890   | ,000   | 1,000          | 138 |
| Std. Residual        | -2,900   | 2,200   | ,000   | ,982           | 138 |

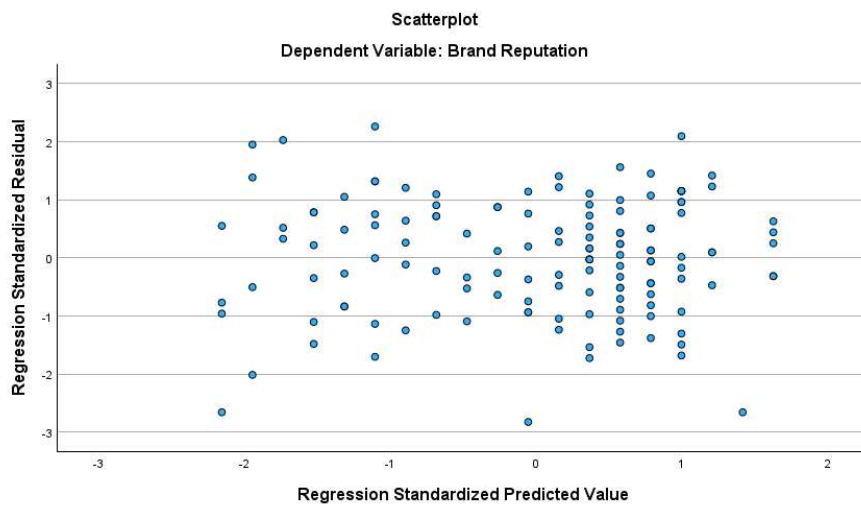
a. Dependent Variable: Brand Reputation

Appendix 12 - Scatterplots of Standardized Residuals vs. Standardized Predicted Values for Linearity and Homoscedasticity Assessment

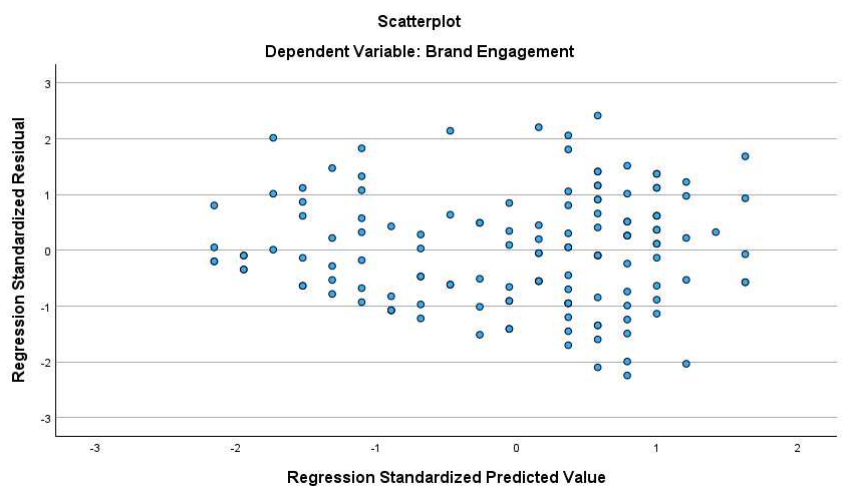
SMM predicting BA (Regression Model 1)



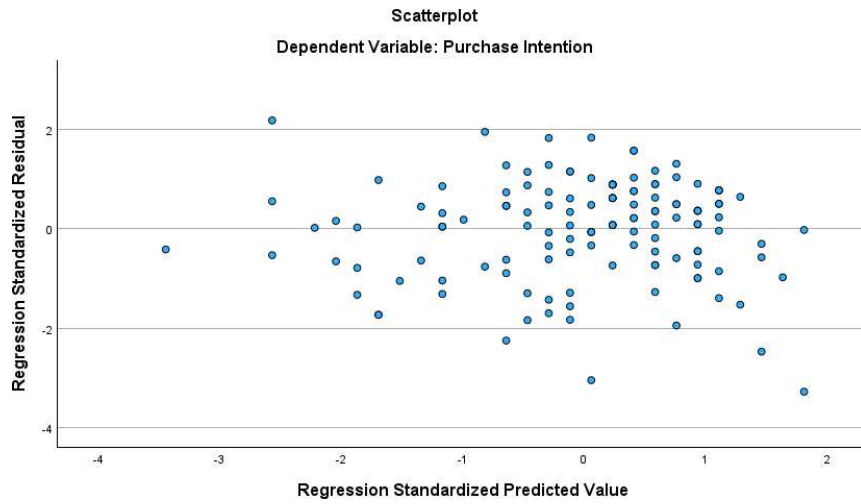
SMM predicting BR (Regression Model 2)



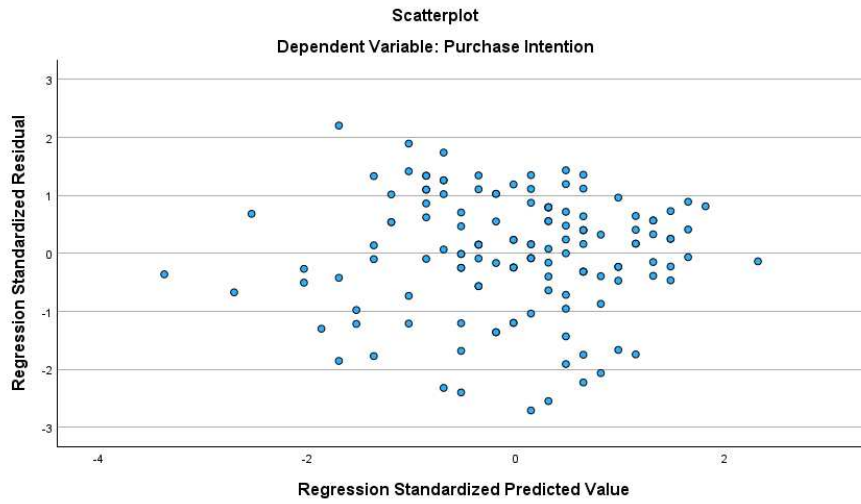
SMM predicting BE (Regression Model 3)



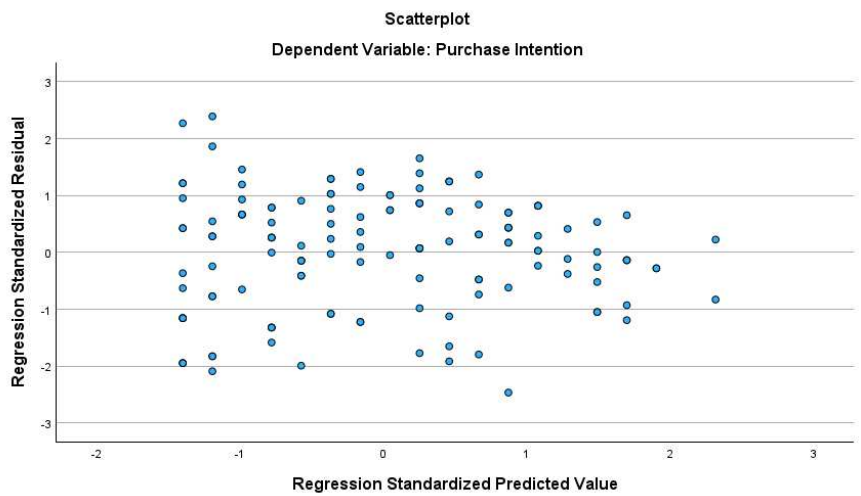
### BA predicting PI (Regression Model 4)



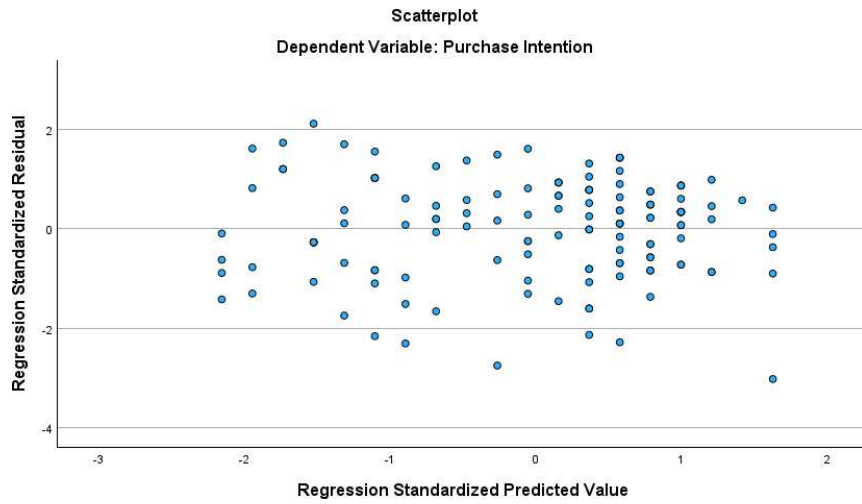
### BR predicting PI (Regression Model 5)



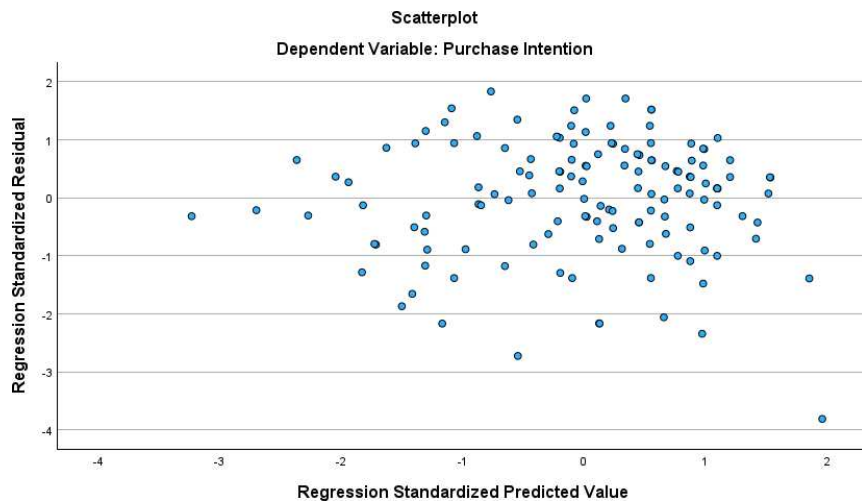
### BE predicting PI (Regression Model 6)



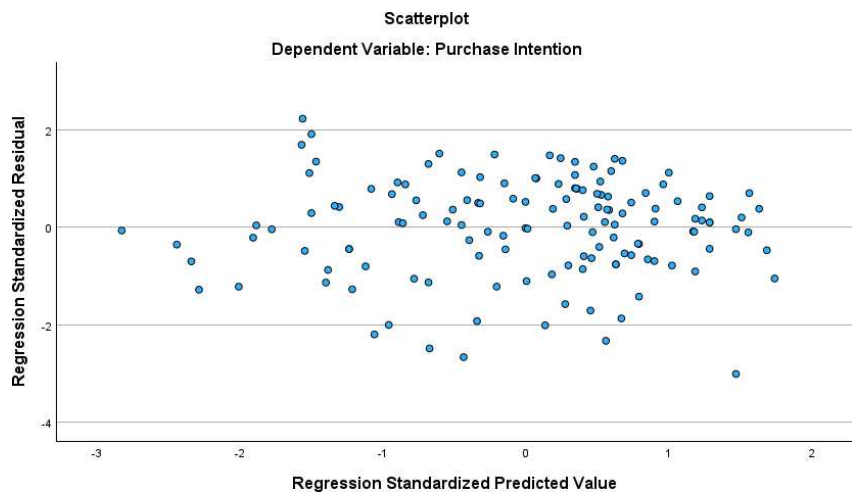
### SMM predicting PI (Regression Model 7)



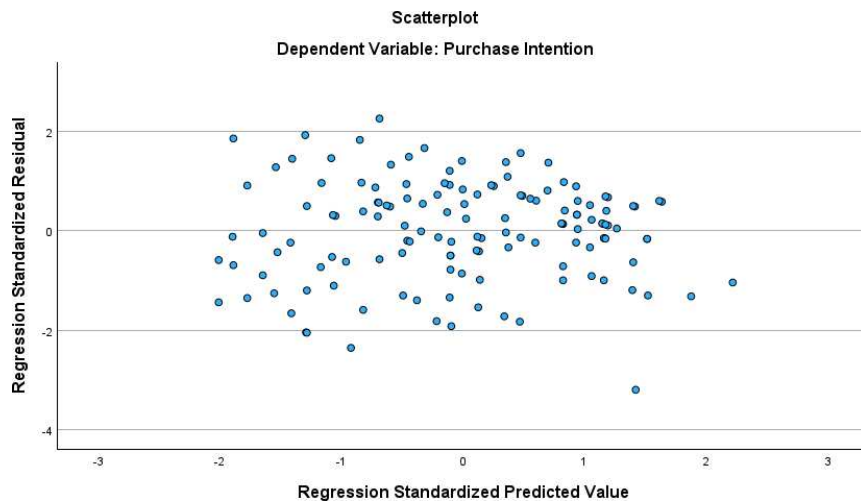
### SMM and BA predicting PI (Regression Model 8)



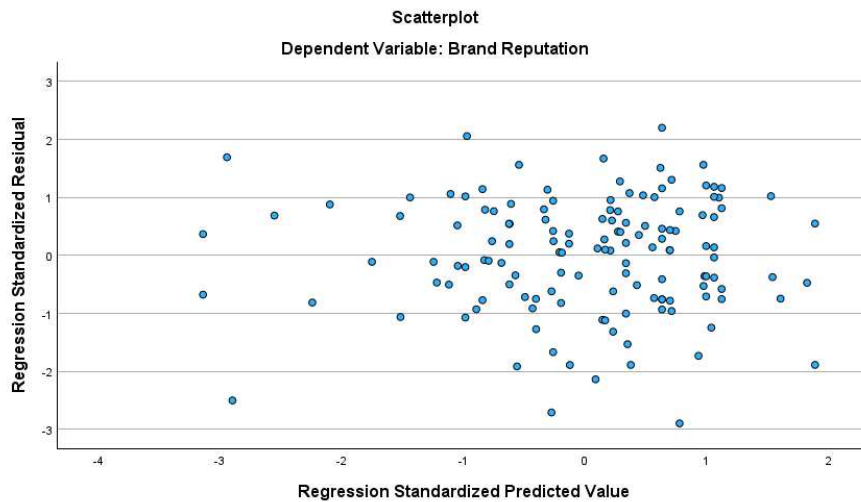
### SMM and BR predicting PI (Regression Model 9)



SMM and BE predicting PI (Regression Model 10)



PQ, SQ, I, ER and CR predicting PI (Regression Model 11)



Appendix 13 - Kolmogorov-Smirnov, Skewness and Kurtosis Statistics for the Standardized Residuals of the eleven Regression Models Performed

|                      | Kolmogorov-Smirnov |     |       | Skewness  |            | Kurtosis  |            |
|----------------------|--------------------|-----|-------|-----------|------------|-----------|------------|
|                      | Statistic          | df  | Sig.  | Statistic | Std. Error | Statistic | Std. Error |
| ZRE_SMM_BA           | .095               | 138 | .004  | -.582     | .206       | .543      | .410       |
| ZRE_SMM_BR           | .047               | 138 | .200  | -.301     | .206       | -.038     | .410       |
| ZRE_SMM_BE           | .059               | 138 | .200  | .138      | .206       | -.439     | .410       |
| ZRE_BA_PI            | .109               | 138 | <.001 | -.678     | .206       | .583      | .410       |
| ZRE_BR_PI            | .085               | 138 | .016  | -.570     | .206       | .041      | .410       |
| ZRE_BE_PI            | .071               | 138 | .084  | -.324     | .206       | -.378     | .410       |
| ZRE_SMM_PI           | .081               | 138 | .028  | -.523     | .206       | .099      | .410       |
| ZRE_SMM,BA_PI        | .077               | 138 | .042  | -.819     | .206       | 1.035     | .410       |
| ZRE_SMM,BR_PI        | .082               | 138 | .023  | -.583     | .206       | .292      | .410       |
| ZRE_SMM,BE_PI        | .072               | 138 | .073  | -.398     | .206       | .046      | .410       |
| ZRE_PQ,SQ,I,ER,CR_BE | .062               | 138 | .200  | -.476     | .206       | .142      | .410       |

Appendix 14 - Durbin-Watson Statistics for the conducted Regression Models

|                          | <b>Durbin-Watson</b> |
|--------------------------|----------------------|
| SMM → BA                 | 1.938                |
| SMM → BR                 | 1.962                |
| SMM → BE                 | 1.997                |
| BA → PI                  | 1.676                |
| BR → PI                  | 1.438                |
| BE → PI                  | 1.696                |
| SMM → PI                 | 1.849                |
| SMM,BA → PI              | 1.829                |
| SMM,BR → PI              | 1.710                |
| SMM,BE → PI              | 1.849                |
| PQ , SQ, I, ER, CR, → BR | 1.608                |

Appendix 15 - Correlation Analysis of Constructs

|                     |                        | <b>Correlations</b> |                 |                  |                  |                        |
|---------------------|------------------------|---------------------|-----------------|------------------|------------------|------------------------|
|                     |                        | Purchase Intention  | Brand Awareness | Brand Reputation | Brand Engagement | Social Media Marketing |
| Pearson Correlation | Purchase Intention     | 1,000               | ,602            | ,422             | ,571             | ,577                   |
|                     | Brand Awareness        | ,602                | 1,000           | ,450             | ,493             | ,548                   |
|                     | Brand Reputation       | ,422                | ,450            | 1,000            | ,431             | ,469                   |
|                     | Brand Engagement       | ,571                | ,493            | ,431             | 1,000            | ,573                   |
|                     | Social Media Marketing | ,577                | ,548            | ,469             | ,573             | 1,000                  |
| Sig. (1-tailed)     | Purchase Intention     | .                   | <,001           | <,001            | <,001            | <,001                  |
|                     | Brand Awareness        | ,000                | .               | ,000             | ,000             | ,000                   |
|                     | Brand Reputation       | ,000                | ,000            | .                | ,000             | ,000                   |
|                     | Brand Engagement       | ,000                | ,000            | ,000             | .                | ,000                   |
|                     | Social Media Marketing | ,000                | ,000            | ,000             | ,000             | .                      |
| N                   | Purchase Intention     | 138                 | 138             | 138              | 138              | 138                    |
|                     | Brand Awareness        | 138                 | 138             | 138              | 138              | 138                    |
|                     | Brand Reputation       | 138                 | 138             | 138              | 138              | 138                    |
|                     | Brand Engagement       | 138                 | 138             | 138              | 138              | 138                    |
|                     | Social Media Marketing | 138                 | 138             | 138              | 138              | 138                    |

Appendix 16 - Reliability Analysis for Constructs: Cronbach's alphas

| Construct | Cronbach alpha | Number of Items | Items   | Corrected Item-Total Correlation | Cronbach alpha if item is deleted |
|-----------|----------------|-----------------|---|----------------------------------|-----------------------------------|
| SMM       | 0.883          | 3               | "Social media marketing done by emerging food and beverage brands captures my attention."   | 0.701                            | 0.894                             |
|           |                |                 | "I find it interesting to share/receive information on social media regarding new food and beverage brands."                                  | 0.787                            | 0.821                             |
|           |                |                 | "I find it interesting to discover new products of emerging food and beverage brands through social media."                                   | 0.835                            | 0.776                             |
| BA        | 0.834          | 5               | "Emerging food and beverage brands on social media are easy for me to remember."  | 0.589                            | 0.814                             |
|           |                |                 | "Social media improves my ability to recognize upcoming food and beverage brands."  | 0.665                            | 0.792                             |
|           |                |                 | "Social media makes it easy to generate brand awareness for new food and beverage brands."  | 0.666                            | 0.802                             |
|           |                |                 | "Social media makes it easier for me to recall recently established food and beverage brands."  | 0.789                            | 0.758                             |
|           |                |                 | "When I think of food and beverage brands, those active on social media are the ones that come to mind first."                                | 0.546                            | 0.839                             |
| BR        | 0.832          | 6               | "Social media marketing builds a start-ups reputation."   | 0.610                            | 0.804                             |
|           |                |                 | "Social media marketing done by food and beverage start-ups effectively conveys product quality"  | 0.628                            | 0.801                             |
|           |                |                 | "Social media marketing done by food and beverage start-ups effectively conveys service quality."   | 0.693                            | 0.786                             |
|           |                |                 | "Social media marketing done by food and beverage start-ups makes me informed about a company's innovation."                                  | 0.64                             | 0.798                             |
|           |                |                 | "Social media marketing done by food and beverage start-ups makes me informed about a company's environmental responsibility and commitment." | 0.543                            | 0.818                             |
|           |                |                 | "Social media marketing done by food and beverage start-ups makes me informed about a company's corporate citizenship."                       | 0.527                            | 0.823                             |
| BE        | 0.809          | 3               | "I enjoy participating in contests or promotions organized by emerging food and beverage brands on social media."                             | 0.624                            | 0.773                             |
|           |                |                 | "I interact with newly established food and beverage brands on social media by liking, sharing or commenting their posts."                    | 0.698                            | 0.698                             |
|           |                |                 | "I am likely to follow up-and-coming food and beverage brands on social media to stay informed about their promotions and updates."           | 0.653                            | 0.744                             |
| PI        | 0.894          | 3               | "I enjoy participating in contests or promotions organized by emerging food and beverage brands on social media."                             | 0.858                            | 0.789                             |
|           |                |                 | "I interact with newly established food and beverage brands on social media by liking, sharing or commenting their posts."                    | 0.783                            | 0.857                             |
|           |                |                 | "I am likely to follow up-and-coming food and beverage brands on social media to stay informed about their promotions and updates."           | 0.740                            | 0.897                             |

Appendix 17 - Factor Loadings and AVE for Constructs

| Construct | Items   | N° Factors | Factor Loadings |          | AVE   | $\sqrt{AVE}$ |       |
|-----------|---|------------|-----------------|----------|-------|--------------|-------|
|           |   |            | Factor 1        | Factor 2 |       |              |       |
| SMM       | "Social media marketing done by emerging food and beverage brands captures my attention."   | 1          | 0.741           |          | 0.724 | 0.851        | 0.894 |
|           | "I find it interesting to share/receive information on social media regarding new food and beverage brands."                                  |            | 0.860           | -        |       |              | 0.821 |
|           | "I find it interesting to discover new products of emerging food and beverage brands through social media."                                   |            | 0.940           |          |       |              | 0.776 |
| BA        | "Emerging food and beverage brands on social media are easy for me to remember."  | 1          | 0.650           |          | 0.540 | 0.735        | 0.814 |
|           | "Social media improves my ability to recognize upcoming food and beverage brands."  |            | 0.738           |          |       |              | 0.792 |
|           | "Social media makes it easy to generate brand awareness for new food and beverage brands."  |            | 0.755           | -        |       |              | 0.802 |
|           | "Social media makes it easier for me to recall recently established food and beverage brands."  |            | 0.900           |          |       |              | 0.758 |
|           | "When I think of food and beverage brands, those active on social media are the ones that come to mind first."                                |            | 0.593           |          |       |              | 0.839 |
| BR        | "Social media marketing builds a start-ups reputation."   | 2          | 0.713           | 0.200    | 0.451 | 0.672        | 0.804 |
|           | "Social media marketing done by food and beverage start-ups effectively conveys product quality"  |            | 0.849           | 0.177    |       |              | 0.801 |
|           | "Social media marketing done by food and beverage start-ups effectively conveys service quality."   |            | 0.767           | 0.279    |       |              | 0.786 |
|           | "Social media marketing done by food and beverage start-ups makes me informed about a company's innovation."                                  |            | 0.617           | 0.349    |       |              | 0.798 |
|           | "Social media marketing done by food and beverage start-ups makes me informed about a company's environmental responsibility and commitment." |            | 0.177           | 0.865    |       |              | 0.818 |
|           | "Social media marketing done by food and beverage start-ups makes me informed about a company's corporate citizenship."                       |            | 0.194           | 0.769    |       |              | 0.823 |
| BE        | "I enjoy participating in contests or promotions organized by emerging food and beverage brands on social media."                             | 1          | 0.624           |          | 0.434 | 0.659        | 0.773 |
|           | "I interact with newly established food and beverage brands on social media by liking, sharing or commenting their posts."                    |            | 0.698           | -        |       |              | 0.698 |
|           | "I am likely to follow up-and-coming food and beverage brands on social media to stay informed about their promotions and updates."           |            | 0.653           |          |       |              | 0.744 |
| PI        | "I enjoy participating in contests or promotions organized by emerging food and beverage brands on social media."                             | 1          | 0.858           |          | 0.632 | 0.795        | 0.789 |
|           | "I interact with newly established food and beverage brands on social media by liking, sharing or commenting their posts."                    |            | 0.783           | -        |       |              | 0.857 |
|           | "I am likely to follow up-and-coming food and beverage brands on social media to stay informed about their promotions and updates."           |            | 0.740           |          |       |              | 0.897 |

Appendix 18 - Summary of the Hypotheses Testing Results

|  | <b>Outcome</b> |
|--|----------------|
| <b>H1a:</b> Social media marketing done by Portuguese F&B start-ups positively impacts its brand awareness.  | Supported      |
| <b>H1b:</b> Social media marketing done by Portuguese F&B start-ups positively impacts brand reputation.   | Supported      |
| <b>H1c:</b> Social media marketing done by Portuguese F&B start-ups positively impacts brand engagement.   | Supported      |
| <b>H2a:</b> Brand awareness positively impacts purchase intention in start-ups that operate within the Portuguese F&B industry.  | Supported      |
| <b>H2b:</b> Social media marketing positively impacts purchase intention in start-ups that operate within the Portuguese F&B industry.                                     | Supported      |
| <b>H2c:</b> Brand reputation positively impacts purchase intention in start-ups that operate within the Portuguese F&B industry.   | Not Supported  |
| <b>H2d:</b> Brand engagement positively impacts purchase intention in start-ups that operate within the Portuguese F&B industry.   | Supported      |
| <b>H3a:</b> Brand awareness mediates the relationship between social media marketing and purchase intention in start-ups that operate within the Portuguese F&B industry.  | Supported      |
| <b>H3b:</b> Brand reputation mediates the relationship between social media marketing and purchase intention in start-ups that operate within the Portuguese F&B industry. | Not Supported  |
| <b>H3c:</b> Brand engagement mediates the relationship between social media marketing and purchase intention in start-ups that operate within the Portuguese F&B industry. | Supported      |
| <b>H4:</b> The effectiveness of social media marketing done by Portuguese F&B start-ups on purchase intention varies across different age segments.                        | Not Supported  |
| <b>H5a:</b> Higher social media usage is positively correlated to a higher purchase intention in start-ups within the Portuguese F&B industry.                             | Supported      |
| <b>H5b:</b> Higher income is positively correlated to a higher purchase intention in start-ups within the Portuguese F&B industry.   | Not Supported  |

|   |               |
|---|---------------|
| <b>H6:</b> Amongst all brand reputation dimensions, product quality is the most significant factor influencing brand reputation for start-ups in the Portuguese F&B industry. | Not Supported |
|---|---------------|