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# Sustainable Marketing, Branding and CSR in the Digital Economy

Edited by

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Printed Edition of the Special Issue Published in *Sustainability*

www.mdpi.com/journal/sustainability

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This is a reprint of articles from the Special Issue published online in the open access journal *Sustainability* (ISSN 2071-1050) (available at: https://www.mdpi.com/journal/sustainability/ special_issues/marketing_brand_csr).

For citation purposes, cite each article independently as indicated on the article page online and as indicated below:

LastName, A.A.; LastName, B.B.; LastName, C.C. Article Title. *Journal Name* **Year**, *Volume Number*, Page Range.

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*Editorial*

# Luxury and Sustainability: Technological Pathways and Potential Opportunities

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## 1. Introduction

Emerging technologies have the potential to create new industries and transform existing ones, particularly the promotion of sustainable transitions in the luxury fashion industry [1]. The evolving COVID-19 pandemic has caused profound changes in the worldwide economic scenario, changing global consumers' priorities and expectations of positive influences exerted by business activities. In this vein, the epidemic crisis has acted as an accelerator for the transformation of companies towards value creation to meet sustainability requirements.

The pandemic has compelled all industries to become more sustainable, including the luxury industry. COVID-19 has indeed accelerated a transformational shift in the luxury industry to the 2030 United Nations Agenda in order to respond to the interests of the new generations who demand information on the social and environmental commitments of luxury brands [2]. In fact, many luxury companies have been accused of being slow to address social and environmental issues [3] and of having unsustainable behaviours (i.e., usage of nonreusable materials or endangered animals' skins, etc.). In particular, the luxury segments of fashion and textiles are considered the second-highest responsible for global carbon emissions just next to the oil industry. Luxury firms are being coerced by governments, non-governmental organizations, customers, and media into reducing the damage caused by the luxury supply chain [4]. These aspects are compromising the value of luxury brands, and customers are beginning to boycott these brands. In addition, the scarcity of resources in the face of growing demand makes sustainable practices in the luxury industry a critical need [5].

Therefore, more and more luxury companies are strengthening the nexus between sustainability pillars (i.e., environmental, economic, and social) by undertaking a more ethical pathway. Such firms are engaging in an ecological transformation of their value chain (from raw materials sourcing, production, logistics, and HR management to retailing and post-purchase recycling) by innovating their technology, procurement, production, packaging, operations, logistics, retailing, reuse, and recycling systems. In addition, luxury companies are absorbing sustainability issues in their medium- and long-term strategies, and they are externally communicating their efforts related to Sustainable Development Goals (SDGs) [6].

Based on these premises, a deep knowledge of the links between luxury and sustainability is crucial because sustainable luxury could enhance businesses' competitiveness as well as contribute to the transition towards a more sustainable way of living. Luxury is indeed considered an industry model, which is able to influence societal trends on a broad scale [7]. There is a need to consider how luxury could truly embody sustainability in harmony with its traditional image and values, as well as maintain authentic value in the eyes of consumers. In the light of recent economic challenges, emerging technologies are

catalysts and enablers that can convey sustainability to e-luxury consumers and brands. For years, luxury companies have been facing the issue of communicating their brand values to their consumers to give them a greater understanding of the brand as a whole. In addition, digital channels are particularly appealing to Generation Y and Generation Z consumers, who are also the most sustainability-conscious segment [8]. By embracing sustainability and successfully communicating their sustainability initiatives through diverse digital environments and touchpoints, companies can initiate a continuous virtuous cycle, where the brand is sensitizing consumers to sustainability, and the brand is in turn sensitized to specific causes or issues.

Regarding the remainder of this chapter, definitions of luxury and sustainability are provided to establish understanding of the key terms. Then, the compatibility between luxury and sustainability is explored. Finally, contributions to the collective volume are discussed to shed light on the forced or natural combination of both concepts.

## 2. Defining Luxury

The nomadic and multipurpose nature of luxury makes it particularly difficult to define. Definitions of luxury abound since it is a relative concept and therefore is multi-dimensional. Generally speaking, luxury is associated with the following dimensions [8]: (i) supreme quality linked to a better look, generous warranty, and sophisticated packaging; (ii) high price; (iii) scarcity and uniqueness due to the adoption of special components and skills for implementing both manufacturing and delivery processes; (iv) products and the context surrounding the products should exert a strong aesthetic appeal; (v) hedonism associated with the pleasurable experience provided by a luxury product; (vi) ancestral heritage and long history; (vii) superfluousness or uselessness to survival; (viii) exclusivity, in terms of difficulty to acquire a rare luxury product; and (ix) a unique, different, and strongly positioned brand image.

The perceptions of these dimensions have fluctuated and evolved over time [9] because luxury is not static: It takes on different forms and meanings in relation to the context of space and time. In this regard, Dubois et al. [10] suggested that luxury is a derivative of the Latin term "luxus", which implies an indulgent, lavish, or excessive lifestyle, with connotations of prosperity and elitism through the adoption of non-necessities. These aspects flow into a traditional conceptualization of luxury that characterizes the wealthy classes. Advances arising from the Industrial Revolution improved the standard of living in general, which led to new definitions of luxury [11]. The new luxury included affordable and large-scale commodities and services that have a premium position in the market and are targeted at mass segments of consumers. The availability of luxury items to the majority is the basis of the accessible luxury that is complemented by the concept of masstige (mass + prestige), according to which mass consumers seek prestige status at an affordable price [12]. Using this logic, the meaning of luxury shifts from what the product is (i.e., set of attributes) to what it represents in terms of the psychological and emotional experience of consumers [13].

The endless number of extant definitions of luxury is also due to the multiple perspectives adopted to delimit the concept's boundaries [14]. For instance, from a brand perspective, a luxury brand has been defined as a branded product or service that has high quality, a prestigious image, and a premium price, which provides authentic value (functional or emotional) and a deep connection with the customer [15]. From a consumer perspective, luxury has been defined as a subjective contextual interpretation of a lived experience [16]. Table 1 summarizes some studies' conceptualizations of luxury based on the attributes or dimensions associated with it.

**Table 1.** Definitions of luxury: An overview.

| Author(s) | Description | Research Focus |
|---|---|---|
| Dubois and Paternault [17] | Luxury products enable consumers to achieve their "dream value", which is provided by the products. | Luxury product |
| Kapferer [18] | The word luxury has different meanings: It can be an impression, which is subject; it can also be a concept or category; it can also be a term associated with moral disapproval. Luxury brands are multifaceted, comprising beauty, quality, exclusivity, sensuality, history, uniqueness, high price, artistry, and creativity. | Luxury brand |
| Nueno and Quelch [19] | Luxury brands are defined as brands where the ratio between functional utility and price is low, and the ratio between intangible and situational utility to price is high. Luxury brands provide a sense of indulgence, irrespective of the cost. | Luxury brand |
| Vigneron and Johnson [20] | Luxury brands are a type of prestige brand providing interpersonal values such as conspicuousness, uniqueness, and social value and personal values such as hedonic or emotional and quality value. | Luxury brand |
| Phau and Prendergast [21] | Luxury brands have a distinguished brand identity with elevated brand awareness and quality, they are exclusive, and they are able to maintain sales and preserve customer loyalty. | Luxury brand |
| Dubois et al. (2001) [22] | Luxury has six characteristics, namely: high price, quality, uniqueness and scarcity, attractiveness, history, and extravagance. | Luxury |
| Vickers and Renand [23] | Luxury goods can be conceptualized and differentiated from non-luxury ones by the instrumental performance exhibited, which is mainly measured by symbolic, experientialism, and functionalism interactionism. | Luxury product |
| Vigneron and Johnson [24] | Luxury is multidimensional and controlled by factors such as quality, uniqueness, conspicuousness, extended self, and hedonism. | Luxury |
| Beverland [25] | Luxury brand has six brand components: product integrity, value-driven emergence, culture, marketing, history, and endorsement. | Luxury brand |
| Okonkwo [26] | Luxury products include characteristics such as exclusivity, controlled limitedness, high price and quality, enhanced brand identity, emotional appeal, creativity, art, originality. | Luxury product |
| Wiedmann et al. [27] | Luxury can be conceptualized based on value, namely: financial, functional, individual, and social value. | Luxury |
| Berthon et al. [28] | Luxury can be conceptualized more by objective (material), collective (social), and subjective (individual) dimensions. It is more than a list of characteristics or attributes. Luxury products provide symbolic, experiential, and functional value. | Luxury |

**Table 1.** *Cont.*

| Author(s) | Description | Research Focus |
|---|---|---|
| Keller [29] | Luxury brands exhibit 10 attributes; popular among them are superior quality, image, and price. | Luxury brand |
| Hagtvedt and Patrick [30] | Luxury brands can be conceptualized as brands that have premium goods, which give pleasure to consumers and connect with them at an emotional level. | Luxury brand |
| Fionda and Moore [31] | The authors identified nine dimensions of the luxury brand: exclusivity, high price, history, culture, enhanced brand identity, product integrity, strong brand elements, strategy, and controlled limitedness. | Luxury brand |
| Juggessur and Cohen [32] | The terms "luxury" and "prestige" are synonyms; luxury brands have intangible value and superior design, status, quality, and fashion. | Luxury |
| Kapferer and Bastien [33] | Luxury is a social phenomenon; it is a tool for creating social distance. It is multisensory and experiential; qualitative over quantitative; hedonic over functionality. | Luxury |
| Tynan et al. [34] | Luxury brands are brands that provide non-essential products and services, which have attributes such as high price, quality, originality, exclusivity, rarity, and prestige, and offer value, such as experiential, functional, psychological, and symbolic. | Luxury brand |
| Kauppinen-Räisänen et al. [16] | Luxury is a subjective contextual interpretation of a lived experience, as opposed to being embedded within the offering itself. | Luxury |
| Ko et al. [15] | Luxury brand is a branded product or service that consumers perceive to: be of high quality; offer authentic value via desired benefits, whether functional or emotional; have a prestigious image within the market; be worthy of commanding a premium price; be capable of inspiring a deep connection or resonance with the consumer. | Luxury brand |

Source: Adapted from Sharma et al. [35].

The most recent contributions to the luxury literature tend to stress the importance of the experience as an attribute. Atwal and Williams [36] stated that luxury itself embodies the "Experience" concept. Kapferer [37] stressed that the need for luxury brands to be perceived as "exclusive" by their customers is strongly dependent on the design of new and satisfying experiences. Such experiences must be consistent and integrated in order to appeal to increasingly demanding omnichannel consumers [38] as well as fully coherent with the brand's distinguishing values (e.g., its signature, story, heritage) [39]. Although luxury brands have remained, for many years, deeply attached to the offline channel and to the flagship store, seen as a place for celebrating the brand and to deliver memorable customer experiences [40], the disruptions of recent years have encouraged most companies to fully embrace a digital transformation. Luxury brands have by now overcome an initial reluctance to accept digital transformation, which originated from a limited experience with digital touchpoints, the conceptualization of the store as the brand's embodiment [28], and from difficulties in opening a dialogue with younger, digitally native generations. It is probably the twofold need to reach new and dynamic targets while not alienating existing target groups [41] that led luxury brands to experiment with various digital solutions and completely redesign their online engagement strategies, so as to appeal to new and traditional segments. This issue is also known as "the Internet dilemma" [42] and represents

luxury brands being torn between maintaining their exclusive image and being exposed on open digital environments (e.g., social media, online communities, marketspaces). On the one hand, this has been negatively associated with luxury democratization; on the other, it has led luxury brands to embrace new values and trends while experimenting with new technologies [43].

## 3. Framing Sustainability

The basis of sustainable development and sustainability were established in the late 1980s by the World Commission on Environment and Development (i.e., The Brundtland Commission). It defined sustainable development as "the development that meets the needs of the present without compromising the ability of future generations to meet their own needs" [44] (p. 43). In the same direction, sustainability was intended as a permanent sustainable development of economic, social, and ecologic aspects of human existence [45]. Since the introduction of sustainability to the international policy discourse, there has been growing interest in the theme of sustainability, which contributed to an evolution of the concept in the following years. In 2015, the 2030 Agenda of the United Nations established 17 SDGs aimed at expanding previous efforts to eradicate poverty, increase development in poor countries, and decrease the human footprint before 2030 [46]. All actors are asked to pursue the SDGs; in particular, businesses are urged to develop socially and environmentally sustainable business models with which to make a significant contribution to the achievement of the 2030 Agenda. To respond to these expectations, the triple bottom line (TBL) approach [47] has been increasingly adopted by companies because it simultaneously focuses on economic, social, and environmental concerns, which are consistent with the 2030 Agenda.

At the same time, a proliferation of publications on sustainability occurred in the last decades to such an extent that sustainability science could be considered a distinct field [48]. However, there is no general consensus regarding the conceptualization of sustainability due to the complexity and dynamism of the concept, which may vary depending on the specific characteristics of the context as well as changes that may occur over time [46]. To synthesize the different interpretations of this concept, a wider and generalized definition of sustainability that stems from environmental social, organizational, and economic dimensions [49] given in Table 2.

**Table 2.** Dimensions of sustainability.

| Dimensions | Description | Author(s) |
|---|---|---|
| Environmental | Sustainability as respect for the environment and for all its resources | Berns et al. [50]; Pullman et al. [51] |
| Social | Sustainability as corporate social responsibility. There may follow a "corporate sustainability" aimed at meeting long-term stakeholders' needs | Dyllick and Hockerts [52]; Montiel [53]; Closs et al. [49] |
| Organizational | Sustainability as a firm's core ideology, driving corporate behaviours. Its legitimation requires the sharing of sustainable business principles among stakeholders and all the supply chain's actors | Closs et al. [49] |
| Economic | Sustainability as a source of positive performance. This implies the preservation of a sustainability-oriented culture in the firm and in all its interacting economic subjects | Margolis and Walsh [54]; Ambec and Lanoies [55] |

Source: Adapted from Guercini and Ranfagni [56].

The environmental dimension of sustainability sustains the conservation and proper use of air, water, and land resources; the regeneration of renewable resources; the substitutability of non-renewable resources; and compliance with the assimilative capacity of hazardous or polluting substances [57]. Environmental sustainability creates both ad-

vantages and disadvantages for firms. An improvement in operational performance (cost savings on energy/water usage, reduction in wastage), social outcomes (stakeholder satisfaction and trust), and strategic benefits (flexibility and improved competitiveness) are the most common advantages [58]. At the same time, extra time to follow burdensome bureaucratic procedures, and extra costs relating to environmental audit and assurance and/or for the adoption of new technology represent the main disadvantages [58]. The social dimension of sustainability concerns the well-being of people and communities, ensures an equally distributed level of human well-being (security, health, and education), and promotes an egalitarian society by reducing poverty, disparity in access to resources for consumption, and unfair working conditions [49]. The organizational dimension of sustainability is linked to the capability of an organization to contribute to sustainable development delivering simultaneously economic, social, and environmental benefits (the so-called TBL) [59]. This is possible if sustainability is incorporated in the firm's core ideology [49], constituting a business philosophy. The economic dimension of sustainability embraces two distinct aspects: one relating to conventional financial performance (e.g., cost reductions) and the other relating to the economic interests of external stakeholders, such as a broad-based improvement in economic well-being and standard of living [60]. Environmental, social, organizational, and economic sustainability dimensions are synergistic and not antagonistic [61]. Thus, there is currently a growing recognition of the need to adopt a more holistic view of sustainability.

### 4. Matching Luxury and Sustainability

Luxury is not traditionally associated with sustainability, so much so that the two concepts are perceived as oxymoronic. A decade ago, luxury and sustainability appeared to be conflicting topics due to their opposite nature [14]. Specifically, luxury is related to an excessive, exclusive, and prestigious lifestyle, whereas sustainability is connected to a frugal lifestyle aimed at reducing, protecting, and respecting the limited resources on the planet. In addition, the vertical social stratification of luxury is opposite to the horizontal mutual relationships of sustainability. Thus, sustainability issues were usually overlooked in the luxury industry [62].

However, a different view of the link between luxury and sustainability was established by recognizing that sustainability is embedded into luxury's DNA [63]. In particular, rare products of ultra-high quality, made by hand, and with respect for tradition overcome the contradiction between luxury and sustainability. In other words, luxury and sustainability converge in the features of durability and rarity [63]. On the one hand, luxury products are made to last and their durability reduces waste and obsolescence. On the other hand, rarity in the luxury market is linked to the use of rare constitutive resources (skins, leathers, pearls, etc.) that depend on environmental sustainability in terms of the preservation of natural resources. On this basis, luxury depends on sustainability and, at the same time, sustainability finds in luxury a potential ally [56].

The concept of sustainable luxury appears for the first time in Bendell and Kleanthous's [64] World Wildlife Fund report in which moving towards authentic luxury brands puts sustainability at its core. However, few pathways in this direction are outlined because much of sustainability research is focused on brands within the contexts of low-involvement and habitual consumption. The number of studies on sustainable luxury starts increasing from 2012 when debates on sustainability were opened by international organizations such as the United Nations [5]. As a result, research interest in these topics gained momentum and now represents a fast-growing field [65].

Sustainable luxury embraces environmentally and/or ethically conscious design, production, and consumption, and is aimed at correcting wrongs and unethical practices, such as animal cruelty, environmental damage, and human exploitation. In the sustainable luxury domain, companies face challenges documented in management and marketing studies. First, challenges in the supply chain require particular attention because existing supply chains need to be transformed to address sustainable concerns and deliver excellence

beyond shallow glamour. For instance, environmental preservation drives luxury firms to redefine their sourcing, manufacturing, and distribution processes, gaining efficiency, fostering innovation, and increasing brand value [43]. However, this transformational shift is hindered by barriers such as supply chain complexity, commercial pressures, and power distribution [66]. A second significant challenge is related to the effective embeddedness of sustainability into the strategic management of luxury firms. Carcano [67] identified four strategic archetypes that differ with respect to internal sustainability orientation (employees, governance structure) versus external sustainability orientation (environment, community) and with respect to the strategic approach (either corporate or spread across the company). An interesting strategic implication concerns the disruptive power of attempts to match luxury with sustainability [68]. In particular, the introduction of sustainable luxury products implies innovation in both consumption and production, increasing the difficulties for incumbents to remain competitive. In this scenario, the luxury market battle is not only economic and financial (e.g., market share, sale, and profit) but also involves sustainable initiatives to acquire new customers because sustainability allows firms to differentiate their offerings [62]. This reveals that sustainability is usually implemented to positively affect consumers' perceptions and purchase decisions. Thus, sustainability can act as a consumption driver above all for younger consumers, such as millennials and Generation Z [69]. Millennials demand that their favourite brands behave responsibly and ethically while maintaining an aura of luxury. An increase in sustainable consumer habits is positively correlated with an increase in luxury product consumption, and Generation Z will continue this shift in sustainable luxury consumption [70].

Despite the important body of knowledge on sustainable luxury, there is a need to further clarify the extent to which luxury and sustainability can be harmonized [8]. From a strategic point of view, sustainable activities comprise "the scope of design, production and consumption that is environmentally or ethically conscious ( . . . ) and oriented towards correcting various perceived wrongs within the luxury industry" [71] (p. 406). This leaves luxury brands with a wide range of possible sustainable activities to undertake, either internally or externally: On the one hand, companies are promoting sustainable behaviours within their own supply chain (e.g., reducing the environmental impact at various stages of production, sustainable sourcing, promoting inclusivity, ethical wages); on the other, they turn to community by supporting causes either directly (e.g., donations, subscriptions) or indirectly (e.g., partnerships, social media campaigns) [72].

In light of these considerations, emerging technologies take on a new prominence, as they allow companies to develop new forms of relationships with luxury customers, especially in communication terms. Communication aspects of sustainability activities tend to be oriented towards increasing the brand's value [73] rather than informing about the business's impact. By this logic, the communication strategy is aimed at focusing on a harmonious convergence between luxury and sustainability by demonstrating that the indulgent promises of luxury with a sustainability consciousness are kept [74]. Flagship stores are considered useful channels to better communicate the togetherness between luxury and sustainability, and the usage of multisensory signals improves the effectiveness of messages. While such deployment of the offline channel reflects the traditional role attributed to the store [30], the online channel offers many opportunities for luxury companies to engage their customers in their sustainability communications. The major advantage of the digital environment is that it brings companies and consumers closer together, enabling multiple interactions initiated by either the company or the consumer [75], and it also allows personalized and tailored communications that have a greater impact [76]. We suggest that such closeness, which is nourished daily through a company's active presence in multiple online social contexts, has been crucial to convey the new sustainable orientation of luxury brands to consumers and other incumbent stakeholders, as well as the numerous pressures from consumers and other incumbent stakeholders. In this way, companies can exploit the digital environment of exchange to promote their own sustainable actions to consumers, and, in turn, expose them to the brand's promotion of a sustainable culture. As shown by

Gautam and Sharma [77], building digital relationships with consumers has an influential effect on adoption and purchase intention for luxury fashion brands; Hasbullah et al. [78] later investigated how communities can affect sustainable luxury fashion purchases, in terms of endorsement and community feeling, through user-generated media content. In order to promote sustainable behaviours, brands must take into account the need to relate to their customers on a regular basis.

Obviously, it is important that communication efforts avoid being perceived as luxury "greenwashing": Organizations should not engage in unsubstantiated ethical and sustainability claims that lead to reputational risks and an increase in consumer cynicism and mistrust [79]. Generally, it is good practice that the perceived authenticity of a brand must match the credibility of its ethical or sustainable claims. Third-party control over sustainable practices in luxury is limited to few and recently established organizations, such as Positive Luxury's Butterfly Mark; therefore, most information on sustainability is shared by companies themselves. Miscommunication, either intended or erroneous, might be detrimental to a brand's reputation, undermining the relationship it has established with its customers.

## 5. Sustainable Luxury: Preliminary Remarks

As argued in the previous sections of this chapter, positive relationships exist between luxury and sustainability, and the way to the promising possibility of convergence to sustainable luxury has been paved. In this context, managerial studies have contributed to the body of knowledge in this domain, but the need for a future research agenda along several paths arises.

First, research should provide further evidence of the ways in which organizations can most effectively produce and sell their sustainable luxury offerings. Hence, product categories that are most suited to combining luxury and sustainability should be better identified since luxury is a large industry embracing a wide range of different products. At the same time, there is a need to understand how organizations across the diverse luxury sector can adopt more deeply sustainable practices. In this vein, the relationships between organizational values, luxury, and sustainability could be emphasized more in future studies. In addition, scholars conducting research in the organizational field could investigate the potential new opportunities offered by digital transformation and its tools, such as the Internet of Things, blockchain, cloud service platforms, recovery technologies, and other Industry 4.0 technologies in the sustainable luxury domain. Questions about how sustainable activities influence both staff motivation and work satisfaction still offer room for further research activities from the organizational perspective of luxury businesses. Additionally, strategies for communicating sustainable activities represent another topic to be investigated in depth. An interesting theme focuses on the balance between the accomplishment of sustainability credentials and the maintenance of luxury's exclusive allure.

Within the context of sustainable luxury, other fruitful directions for research concern the key characteristics of sustainable luxury consumers in terms of their motives, attitudes, and behaviours behind the consumption of sustainable luxury. In this regard, a possible under-researched area constitutes new ways of liquid consumption and collaborative fashion consumption that includes gifting, sharing, lending, second-hand purchasing, renting, and leasing. Beyond purchase behaviours, knowledge of post-purchase behaviours is also crucial to create sustainable luxury experiences.

## 6. Contributors to Special Issue

Today, sustainable marketing practices are important for developing a more comprehensive understanding of consumers' purchase decisions in a digital marketing environment. The contributions to this Special Issue are varied and interdisciplinary in their perspectives. The paper written by Herman Donner and Michael Steep entitled "Monetizing the IoT Revolution" investigates the IoT revolution and the impacts it produces

on business models in terms of personalised offers. YunJu Kim and Jong Woo Jun, in their paper "Factors Affecting Sustainable Purchase Intentions of SNS Emojis: Modeling the Impact of Self-Presentation", examines the combination of nascent digital tools and sustainability, particularly the relationships between social psychological antecedents and SNS users' intention to purchase emojis as antecedent to understand how to promote a more sustainable consumption of Social Networking Service (SNS) emojis. David Vrtana, Anna Krizanova, Eva Skorvagova and Katarina Valaskova's paper, entitled "Exploring the Affective Level in Adolescents in Relation to Advertising with a Selected Emotional Appeal", focuses on the relation between communication and emotions and highlights that the perception of advertising on adolescents is a key factor in the survival of subjective emotional states. Ke Zhang and Kineta Hung's paper, entitled "The Effect of Natural Celebrity–Brand Association and Para-Social Interaction in Advertising Endorsement for Sustainable Marketing", focuses on how brand communications interact with sustainability, demonstrating the link between celebrity endorsement and sustainable marketing strategies. Gordon Bowen, Dominic Appiah and Sebastian Okafor's paper, entitled "The Influence of Corporate Social Responsibility (CSR) and Social Media on the Strategy Formulation Process", offers granular insights into the influence of CRS on strategy formulation. The Special Issue ends with the paper "Discovering the Role of Emotional and Rational Appeals and Hidden Heterogeneity of Consumers in Advertising Copies for Sustainable Marketing" by Cheong Kim, Hyeon Gyu Jeon and Kun Chang Lee, who have tried to reveal the role of emotional and rational appeals, as well as the hidden heterogeneity of consumers, in the appeal–value–trust–satisfaction–WOM framework.

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*Article*

# Monetizing the IoT Revolution

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**Abstract:** Academics and businesses alike tend to fail at understanding how the IoT revolution is monetized. We outline three main categories of how IoT will impact business models: (a) improved customer matching and tracking of marketing returns, (b) individualized offers and pricing when consumer demand and price elasticities can be identified, and (c) smart device and usage monitoring that allows for outcome-based contracts and servitization. Data convergence creates context-based-intelligence, which enables a shift from using consumer profiles for targeted advertising to individualized offers and pricing. The required depth of both consumer data and understanding of context will require collaborative efforts between companies and blur the lines between industrial- and consumer-IoT applications. Outlining concerns for privacy and cybersecurity, we find that consumer demand for decision-simplicity and relevant content aligns with the business model of "free" services in return for data, despite consumer concerns relating to data collection.

**Keywords:** Internet of Things; business models; smart cities; big data; consumer data

## 1. Introduction

The Internet of Things (IoT) revolution makes it possible to collect real-time data on the preferences and activities of consumers and set these in a geographical and temporal context [1]. The rapid development of IoT is illustrated by the fact that 90% of the world's data was generated during the last two years, and that the pace is still exponentially increasing towards an amount of data that is 40 times the size of 2017 by 2020 [2]. This is fueled by appliances, vehicles and smartphones that are rapidly becoming data-gathering devices.

However, just as consumers tend to lack understanding of the data that is collected about them [3], companies typically fail at understanding how big data translates into monetization [4,5].

This study provides a review of the business impact of IoT by categorizing three main drivers of business model impact, covering both consumer- and industrial-IoT applications. The former refers to goods and services targeted to end-users such as smartphones, and the latter are services that create industry transformation such as data aimed at supply chain efficiency [6].

From an academic perspective, most smart-city research emphasizes public sector applications of IoT and government-driven initiatives to achieve goals relating to issues such as knowledge-transfer, mobility, and sustainability [7–10]. Research analyzing the business impact of IoT tend to be application specific, covering topics such as smart contracts [11], healthcare [12], or smart-city technologies for mobility [13,14]. From a business model perspective, a more holistic perspective on the impact of IoT is necessary [6,15–19].

The impact of data is rapid and is closely related to the development of low-cost sensors and network technologies such as LTE, Wi-Fi, Bluetooth, and the fifth-generation of mobile networks (5G) that make it possible to both collect and transfer ever larger amounts of information [20]. Improved cloud storage and computing solutions allow for cost-efficient and fast computing, in addition to insights through AI algorithms.

Despite enormous amounts of data collection, there is still a lack of understanding about how to capture value from data, among both academics and practitioners [5,6]. Most

corporate big data projects fail [21], and social scientists sometimes stress the difficulty in creating insight from big data [22], as large datasets could tell us large scale patterns but not create contextual depth [23]. Recent research stresses a need for additional research on the impact of IoT on society and business [6].

Closely related to how IoT will impact business models is the issue of cybersecurity and privacy. When consumers use services such as social-media, mapping tools that provide directions, platforms to find goods, services and housing, users trade personal information in return for a "free" service [24–26]. This allows companies to gain insight into consumer preferences and learn about what content they should be exposed to. Consumer insights enable data-driven business models, such as retailers that target their advertising efforts, automakers collecting data on driving patterns to predict breakdowns, and ridesharing services setting prices through monitoring of congestion and demand patterns [27–29].

The outline of this study is as follows. Section 2 provides a background on consumer profiling from a marketing perspective, as advertising is at the forefront of data driven industry disruption. Section 3 outlines three main ways of business model impact from IoT across industries: (a) improved customer matching and tracking of marketing returns; (b) individualized offers and pricing, and (c) device and usage monitoring. Section 4 summarizes concerns raised in relation to privacy and fairness. Section 5 concludes.

## 2. Background: Internet of Things and the Consumer Profile

Researchers have noted a shift in the overall analysis of IoT, going from a pure technology perspective to viewing IoT as a business ecosystem, and going from analysis of a singular firm towards an eco-system of organizations [19]. This aligns with researchers that have focused on analysis of networks, by separating the network value of partners ("who"), sources of value creation ("where"), and the benefits of collaboration ("why") [16,17]. The ever-increasing amounts of personal data that is collected, transferred, and analyzed illustrates that the eco-system approach is necessary to understand the impact of IoT on business models.

This shift in focus towards eco-system business models is known as "value designs" [15]. Four pillars are used to evaluate business models in such a framework; *value drivers*, the motivations to create value, and the *value nodes*, which refers to the parties, networks and processes for value creation. For a retailer, a *value driver* is the ability to increase sales, while the ability to find the right partners for data-sharing, or algorithm development is a *value node*. *Value exchanges* are the tangible and intangible flows of value between nodes in the ecosystem, such as money or insights. *Value extracts* are components that extract value, i.e., monetization, such as a specific service offering [15,19].

At the center of the above-conceptualized data eco-system are companies such as Google and Facebook that have their entire business models based on the collection of data, and an industry of data brokers, such as the company Acxiom, that collect consumer data and sell it to third parties. In 2012, their database was estimated to have information of about half a billion consumers, with about 1500 data points per person [28].

As consumer data is collected, transferred, and analyzed to guide decisions across industries, it is becoming an increasingly valuable asset that is bought and sold like any other commodity. Across industries, customer databases are a substantial part of corporate value [30]. Illustrations of this value are sales of customer databases, securities issued with consumer data as the underlying asset, that companies are developing new insurance solutions based on data transfers [26], and massive interest in IoT and data driven businesses from venture capital.

### 2.1. The Consumer Profile: Reaching the Right Person for Goods and Services

The technology sector is becoming an increasingly dominant part of the economy, and it is in large due to the concept of the consumer profile. The value of personal data can be described in terms of advertising. A newspaper ad is worth very little per view if

it we cannot identify those who are exposed to it; traditionally, a common truth among marketers was that; "*I know that half of my advertising dollars are wasted . . . I just don't know which half*" [31]. Not only have marketing efforts by companies traditionally been limited in terms of making sure that they are exposed to the right target audience, but the actual effectiveness of campaigns has been difficult, if not impossible, to measure. Looking at these issues, companies like Google have had a transformative impact—shifting marketing spending from traditional sources towards online search advertising, as it becomes possible to; (a) spend more selectively on those with a higher likelihood of responding through profiling based on location and search history, and (b) track the impact of advertising.

The more detailed the consumer profile becomes, the more targeted campaigns become—consequently increasing the price of each individual add. An example is so-called AdWords campaigns, where ads are shown based on search keywords, so that the company offer is shown when people search for their product or service type. This type of campaign typically includes several ads with different texts targeted at different groups of consumers based on their geography, device segmentation, and product type [32]. This is where the convergence of data sources and location-based information comes into play. In fact, many applications now run in the background of devices with the purpose of tracking location for advertising purposes [26].

Facebook now show ads based on geolocation and display ads based on the user's history of viewing pages, groups, and events. The ability to collect, store, and analyze big data will make it possible for say, a diaper manufacturer, to identify families with small children, who buy a competing brand, and use targeted offers to identify their price sensitivity and the cost of getting a specific customer to switch brand. It is likely that this will lead to marketing wars when companies identify and target their—and their competitors—target customers [33–35].

Marketing, customer acquisition, and retention is now fundamentally changing as it becomes possible to monitor the effectiveness of campaigns. The ability to measure ROI on advertising helps companies to direct effort where it has the most effect i.e., how many views of an ad resulted in a purchase, signup, web page visit or lead—all of which are tracked by Google for those who purchase ads [36]. As this type of data improves the consumer profile, customer lifetime value can be estimated and related to the cost of acquisition, and customer intent and position in the buying cycle can be identified (i.e., what products a customer wants or needs) [37]. When this type of estimation is done on data from social media interactions, comments, reviews, search queries, the concept of the *constantly connected consumer* becomes a reality [38], and a resulting shift towards a two-way dialog between companies and consumers.

## 2.2. Context-Based Intelligencroce: Reaching the Right Person, at the Right Time, at the Right Location

Data is now transforming industries beyond the initial application of consumer profiling for advertising purposes. Insights on demand, preferences, usage of goods and services create value through marketing and product offerings. The commercial value that is created by converging data is exponential, and this is resulting in both new service offerings and new ways for marketing when information on consumption, location, preferences and even health are merged to form an increasingly granular consumer profile. Drugstores CVS and Walgreens gain access to the number of steps taken from wearable devices, records of blood glucose values, and prescription history, in exchange for discounts to customers that participate [39]. Similarly, some life insurance premiums are now set based on data from fitness trackers [40], and insurance companies just received regulatory approval to use social media information to assess risk [41].

Offline and online activity is now converging in consumer profiles, so when Google and Mastercard collaborate, online searchers can be used to understand offline purchases— such as what browsing a certain product tells us on subsequent purchases at physical stores [42]. Similarly, Facebook buys third-party data on your characteristics and offline activity, to create an even more granular understanding [43]. Biometric and health data

such as heart-rate and movement is creating new opportunities and has already been found to be merged with social-media information to target consumers [44]. Facial recognition technologies are connected to payment in stores and public transit, and monitoring of public and private spaces is becoming increasingly prevalent [26]. This will allow companies to identify individuals entering a store, and the context of consumption.

When companies create insight from data, and use it to drive business decisions, this implies context-based intelligence, i.e., "*The ability to understand the limits of our knowledge and to adapt that knowledge to an environment different from the one in which it was developed*" [45]. Context-based intelligence and the convergence of personal data are closely related, as the latter enables the former and that every time an app or service is used, it creates additional data that feeds into services in what can be likened to a feedback loop.

An illustrative example of what context-based intelligence implies is that search engines personalize search results based on search history and social activity—so when Google knows more about an individual's habits, preferences, location, and network, it becomes possible to tailor search results even better—and notably increase advertising revenue when the match between product and likely buyer becomes increasingly accurate. Consumers actively participate in creating insight on their demand and preferences. A key part of this trend is what is referred to as the "*quantified self*" and "*lifelogging*"— people gaining self-knowledge through collected data about themselves. Typical examples are fitness trackers, "smart" scales, applications aimed at tracking locations of interest, identification of DNA and heritage, and identification of human microbiomes related to behavior [46].

App-based services are often based on the continuous tracking of movement, as location-based services (LBS): "*integrate a mobile device's location or position with other information so as to provide added value to a user*" [47]. This enables an ad for a coffee shop near you, or a free coupon to the gym close to your work. As we carry our smartphones everywhere, LBS is at the heart of monetizing consumer data. Looking forward, LBS will be increasingly integrated into a key variety of solutions—and be essential for autonomous applications and virtual reality—as knowing the location of various things at the same time and relating it to mapping data is essential for such systems.

## 3. Categories of IoT Impact on Monetization

As customers carry their wearable devices, they create data trails from activity such as searches, purchases, and movement. Companies will be able to continuously follow their changing needs and preferences over time. It is also possible to monitor usage and performance of devices, which in turn enables new business models.

We outline three main categories of impact from IoT on Monetization, that we define below.

### 3.1. Customer Matching and Tracking of Marketing Returns

Application integration, collaborations, and third-party data transactions enable better insights and linkage of offline and online activity. Social media companies are increasingly either buying or collaborating with companies that provide additional data points [48]. Examples of characteristics that are used by Facebook to filter advertising are "*1. Location 2. Age 3 . . . Gender 5. Language 6. Education level 7... School 9. Ethnic affinity 10. Income and net worth 11. Home ownership and type 12...14. Square footage of home 15 . . . 16. Household composition . . . . . . 21. Users in new relationships . . . 29. Mothers, divided by "type" (soccer, trendy, etc.) . . . 33. Employer . . . 39. Users who plan to buy a car (and what kind/brand of car, and how soon) . . . 50. Users who have donated to charity (divided by type) . . . 61. Early/late adopters of technology . . . 65. Number of credit lines . . . 66. Users who are active credit card users . . . 69. Users who carry a balance on their credit card . . . 71. Preference in TV shows. 80. Users who buy groceries (and what kinds) . . . 85. Users whose household makes more purchases than is average . . . 87. Types of restaurants user eats at.*" [49].

With this information, companies can have their content or campaigns displayed for the most relevant audience. Another industry example is what Google describes as their "Customer Match". A tool for companies to "*use your online and offline data to reach and re-engage with your customers across Search, Shopping, Gmail, and YouTube. Using information that your customers have shared with you, Customer Match will target ads to those customers and other customers like them.*" [36].

Consumer profiling is not only about the initial matching of campaigns with potential customer. It is now possible to track the effectiveness of a particular campaign when marketers can link exposure to an add and a subsequent action or purchase. Identifying if a campaign was effective and on whom a dollar spent on coupons, promotions or any other marketing effort made a difference, and on whom it was wasted.

Despite spending upwards of 20% of revenue on campaigns, large companies have historically had little insight into their effectiveness [50]. Marketing efforts are typically analyzed in isolation, and without knowledge about any counterfactual outcome. Consequently, most marketers often misattribute outcomes to marketing efforts, and finance departments tend to doubt if marketing spending is worthwhile as the returns are double counted—so when added together, the marketing ROI sometime adds up to twice the actual sales [51].

The need for looking at the whole picture when analyzing return on marketing investment (ROMI) is amplified by companies marketing their products through several touch points and sales channels—so when a consumer is exposed to car reviews, paid adds, YouTube content, billboards, and mail campaigns, the question of how to attribute a final sale arises. This is where companies take advantage of increasingly data-driven strategies as it becomes possible to track who got exposed to what and use algorithms to determine optimal marketing strategies [51]. IoT and data convergence is central for the ability to identify target audiences and measure ad effectiveness. An illustration is that the effectiveness of Facebook ads can now be tested by seeing how exposure in a persons feed translates into in-store purchases, phone orders, and bookings through their "*Offline Events*" service that also measures offline return on ad spend and allows companies to reach people based on thief actions they take offline, in addition to audiences believed to be similar to those they have offline data for [52].

The ability to communicate with consumers through smart devices is an essential enabler of the constantly connected consumer, as the data that is created when the application is used becomes additional data-points in the overall consumer profile. The device is also a medium of communication and a channel that enables additional sales and marketing.

As companies become able to identify their most likely consumers, the next step is to design the best fitting offering for those consumers, based on insights about the individual and context. We cover this in in the following section.

### 3.2. Individualized Offers and Pricing

From a marketing perspective, context-based-intelligence is about giving people the information they want, when they want it [53]. As smartphones create "hyper-context" into customer preferences, they enable strategies for timely and targeted campaigns [33]. Analyzing the future of marketing, Rust [54] notes that technology, notably AI and IoT, drives deeper customer relationships and expansion of the service economy. It is also noted that these trends make the 1960s-style 4 Ps increasingly obsolete.

#### 3.2.1. The Impact of Decision Simplicity

Smartphone users value simplicity and seldom actively search information on the internet—on average, making only 1.25 online searches [53], while spending 3.35 h on their mobile devices every day [55]—it becomes increasingly important that applications basically spoon-feed the user with information perceived as valuable [53]. Examples of this type of context-based intelligence is that an iPhone automatically keeps track of where a car was parked and shows suggested routes in the morning (knowing that it is likely that

the user will drive to work). Similarly, Facebook and LinkedIn show users increasingly relevant content by understanding how user interest and context interplays [49].

As brand loyalty is declining and consumers increasingly value simplicity, the ability for a company to have enough data points and contextual understanding will be essential for customer acquisition and retention. In fact, the single most important factor for making a customer "*sticky*" in the sense that they follow through on intended purchases, make continuous purchases, and recommend the products to others is "*decision simplicity*", meaning how easy it is to get information about the product or service that is deemed trustworthy and allows for an efficient comparison of options [56]. We find that a consequence of these consumer preferences is that what the customer wants aligns with the business model of search advertising based on consumer profiling.

### 3.2.2. Identification of Consumer Price Elasticities

Consumer profiling can provide insight into the preferences and purchasing power of consumers, so that a company can individualize offerings and prices. Individualized pricing is already seen in the insurance industry, with health and life insurance premiums set by fitness tracking data [40], or car insurance set by where and when someone drives [57]. Employers such as BP incentivize employees to allow for tracking of fitness and movement through wearables [58]. Similarly, it is now possible to identify financial risk using spending habits and bank account flow data, which is improving risk management in finance [59], and machine learning is now "*taking credit-risk scoring to the next level*" according to the company SAS [60]. Not only is risk management improved, but companies also have the ability to individualize interest rates and insurance premiums—i.e., prices—to a much higher degree.

Consumer profiling is also about how an individual is likely to spend and the ability to set prices through "*behavior-based pricing*" [61]. Researchers have given some attention to the overall market implications of targeted advertising, having found that it has the potential to increase business sector profits under certain conditions [62]. Other studies indicate that targeted advertising leads to increased market fragmentation and results in local monopolies [63]. Consumers could however benefit more than companies in some scenarios, with studies of individualized smartphone-based offers finding that profits increase from unilateral price differentiation, but that these returns are likely to be mitigated by competitors engaging in similar practices [35]. Similarly, the ability to set higher prices for consumers with a strong preference of the product is offset by increased price competition for value conscious shoppers that compare price [64].

A loyalty program at a grocery chain can serve as an example of how behavioral based pricing can be applied. Consumers receive offers based on past purchasing habits and other information on likely preferences. If a consumer has small children, they might get targeted offers for diapers. The customer relationship management program (CRM) keeps track if whether or not a consumer took up on specific offers. Thus, if a discount of $1.5 on a new brand of pasta sauce does not work this time around, perhaps a $2 offer will be offered next week. Over-time, it will be possible to identify price-sensitivities and break it down by product, so that offers can be tweaked to maximize the likelihood of a purchase. It will be possible to identify what promotions someone responds to and drives loyalty behavior, so that an exact customer value can be assigned based on expected contribution to profit over time.

As the limits of big data analysis decrease, it makes it possible to gain unprecedent insight into human behaviors and prediction of actions when the data is both deep in insight and large in numbers. Research aimed at linking personality with spending habits [65] enables identification of personality traits and likely spending from credit card data.

### 3.2.3. The Components of Individualized Offerings

We propose to conceptualize the impact of individualized goods, services, and pricing into three main categories of enabling data and analytics, as companies need to: (a) know

their consumer, (b) the context in which the consumer is currently in, and (c) understand how consumer needs and preferences interacts with context so that it can be translated into an offering of a good or service. (a) requires large amounts of data of previous activities, while (b) adds the complexity of dynamically updated data i.e., for context to be relevant, a company needs to be able to take advantage of an opportunity. (c) requires analytics, that finds the needle in the haystack in relation to understanding how past behavior translates to future behavior, and the impact of context.

### 3.3. Device and Usage Monitoring

The ability to gather, store, and process big data can have a profound impact on all aspects of the corporate *Value Chains*, i.e., the set of activities conducted to deliver a service or product [66], and create competitive advantage through more efficient logistics, operations, marketing, and service.

For supply chains, knowing the location of all products, supplies, and deliveries enables precise estimates of estimated time of arrival.

Smart devices create the ability to monitor the performance of a product, such as a car, which enables better life cycle management by predicting when the car needs servicing and what parts that will break—based on observations from hundreds of thousands of other cars—which in turn can be used to optimize capacity and inventory at local service centers. It also enables new and more efficient ways of contracting across the supply-chain, such as outcome-based contracts when the manufacturer can identify if a particular part performed in accordance with specification [22]. Smart devices allow companies to predict issues such as how breakdowns correlate with usage and weather, and lower risk by more precise predictions of how a piece of equipment will perform. However, to reap the benefits of IoT, all parties along the supply chain need to collaborate on what data to collect, and the standards it should take [67].

For capital goods, this ability to create insight from data enables a shift towards product-service system (PSS) business models that are focused on as a system of products and services that are continuously updated to meet customer needs [23]. PSS has been driving profits for goods manufacturers as services increase margins [68]. This entails a completely new value proposition and business model [69]. Similar to how software as a service (SaaS) changed how enterprise applications are sold, companies across all industries transition of from a product-centric business model towards a continuous service-centric business model, through what is known as *Servitization* [70].

For advanced—business-to-business—products, companies have used performance and usage data to optimize complex maintenance contracts and extended warranties, thus shifting towards a greater focus on service as IoT enables better risk management. Traditionally, risks have been too high for servitization of the core product [71]. However, better management of assets and the ability to monitor performance is changing this. Prominent examples of companies that have managed to do this shift are Rolls-Royce Aerospace, offering power-by-the-hour, so that the buyer buys say 20,000 h of operation rather than an airplane engine; Xerox having shifted from selling printers and copying machines to selling complete solutions for document management; and Alstom selling train-life services spanning installation and servicing of a train over several years. Typically, this implies a 10-year contract, where the manufacturer shares some of the risk that the equipment works, and the buyer has a payment scheme that is linked to actual usage [72]. The long-term nature of this type of business model, and the necessity to understand the customer business model, naturally leads to much closer business relationships—leading to both business model and organizational impact [73]. Often, new offerings emerge, with an example being that the network manufacturer Ericsson has shifted from selling network equipment towards solutions for telecoms providers spanning maintenance and data insights through AI [74].

When customer needs are understood, typically services adapt, such as a logistics company using trucks on a pay-per-mile model, with costs and maintenance as part of the

contract [72]—in contrast to just buying trucks. This shift across industries is often driven by outside forces. Notably, technologies that fundamentally change an industry—such as AVs that are predicted to change the automotive industry. Automakers are responding, as Ford is now stating that they have shifted from selling cars to selling mobility and investing in ridesharing applications and AV technology [75]. Similarly, Volvo has increased focus on monthly car plans rather than just selling cars [76]. And data is central in the ability to tailor the product to customer needs, optimize risk management, supply chain contracts, and manage the inbound and outbound logistics.

IoT makes it possible to better manage both revenue and costs, and risk will be shared across a greater number of parties that will be bound for longer-periods of time. This provides incentives to increase trust and fundamentally change how sales are done— illustrating how both operations and business models change.

Impact of Data on Pricing

As devices and applications collect ever more data, a key aspect that will change business models is the monetization of this data, shifting the model from making money from selling a product or a service towards gathering data, with the initial product and service being an enabler that is optimized for creating insight. This is a fundamental part of the data-for-service model of smartphone apps, but is also impacting sales of devices such as TVs that collect data on what users watch, and when [77,78], vacuum cleaners that collect home layout data [26], fridges that monitor how often someone opens the door [79], and cars that monitor travel patterns and in-car activity [80].

Even as smart devices might not be completely free, the value of the data will change the model for how companies gain competitive advantage. Companies that are skilled at monetizing their data will succeed in the marketplace through an impact on pricing. Across industries, data from smart devices can generate revenue, and enable lower priced products. This creates a business model where a traditional approach is blended with the data-for-service business model.

## 4. Concerns for Cybersecurity, Privacy, and Fairness

Several regulatory issues emerge relating to consumer profiling, such as that of fairness and transparency when consumers trade personal data in return for services, that of heightened risk associated with security breaches and the consequences of algorithmic bias as algorithms become pervasive in determining increasingly important commercial and social aspects of life.

### 4.1. Regulations, Privacy Policies, and the Return on Data

The current model where consumers trade their personal data in return for using a service has been criticized. However, there has been almost no analysis of the relationship between the utility gained by consumers and the value of the data they provide—the "*Return on Data*" [81]. As such, it is impossible for consumers to compare data-for-service deals. Thus, some researchers suggest that this return needs to be analyzed in conjunction with privacy laws [81]. Others suggest entirely new models for transacting data. Notably, the personal-data-economy (PDE) model implies that companies would buy data from individuals, giving every persona a piece of the action when data is monetized. Another alternative is the pay-for-privacy (PFP) model where users of a service would pay extra in return for not giving up data and receiving personalized adds [25]. Although promoted by some, actual implementation of these models would be highly complex. There are also concerns that these models might exacerbate existing inequality issues as lower income and less educated consumers would be unfairly targeted [25], and studies show that lower income individuals have a lower confidence in their ability to protect their digital data, in addition to also experiencing higher degrees of monitoring [82].

Algorithms are "*Unseen and almost wholly unregulated*" [83], so that when the consumer sees the service—but not the underlying consumer profiling data that enables it—it can

be likened to the tip of an ice-berg. Questions relating the impact of targeted offers and individualized pricing in relation to fairness arise when offerings are based on a consumer's perceived willingness to pay and psychological traits [84]. Potentially, companies would be able to identify psychological traits associated with bad financial decision-making and make offers that take advantage of those traits.

Almost every time an app is installed or even a device is used, some information is traded in return for this service—so the company gets access to location, photos, search activity, music listened to, and so forth [85]. As data is becoming more valuable and the amount of it that is collected increases, regulation is increasing, with the European Union through the General Data Protection Rights law (GDPR), leading in increasing individual rights coupled with an enforcement regime. The United States is characterized by a decentralized regime with little ability to enforce those regulations that exist, in addition to a greater focus on commercial needs [86].

On an individual basis, consumers are increasingly concerned about advertisers and companies getting access to their social media information. Sixty-one percent of respondents in a study of U.S. adults stated that they wanted to do more to protect their privacy [87]. Similar results can be seen in the recent studies in the U.K. [3]. We find that there is an inherent contradiction as individuals are increasingly concerned about their social media data being shared, while also demanding services that offer simplicity and ease of use.

At the moment, it is the privacy agreement or user agreement that regulates what data a company is allowed to collect, and what to do with it (such as transferring it to third-parties) [25]. However, only about 26% of free mobile apps and 40% of paid apps have such policies [88], and most privacy agreements allow for transfer of data to third parties in anonymized form [25,85], or a transfer of data in the case of a company acquisition, merger, or bankruptcy [26]. Academics have made the case that such policies are insufficient [89]. It is also increasingly difficult for consumers to keep track of what is collected, as many third-party applications are built as part of applications and collect data without active consent or privacy agreements [24]. If a policy does not exist, a company is often free to monetize consumer data without risk relating to privacy violations [26].

Consumers are also unlikely to read privacy policies [90], or, if they do, understand this type of documentation [91–94]. In 2014, half of internet users did not know what a privacy policy was [95]—and if they do, researchers question if they understand what they sign up for when installing an app or making a payment through their phone, when they buy a device such as smart TV that tracks usage [77,78], or a toothbrush that tracks brushing habits [85]. Even when providing active consent, consumers are unlikely to understand the full scope of profiling and its implications [25,26,96]. About half of U.S. adults state that they do not fully understand what happens with their data when they share information with companies [87,88,97].

### 4.2. Probabilistic Inference

Even if a consumer declines a service, or if new regulation makes it more difficult to collect data—technology is now able to fill in the data gaps. Non-consenting consumers are assigned characteristics from similar consumers for which there is a representative sample through probabilistic inference. Machine learning can now accurately identify romantic partners in 55% of cases with only anonymized relationship data and Facebook can identify social relationships even the users are unaware of [98]. Another study was able to identify 90% of consumers from anonymized credit card transactions, stating that even data with very little information provide limited anonymity [26].

### 4.3. Cybersecurity

As companies are collecting increasing amounts of data—some of it highly sensitive biometric data—the risks associated with cybercrime increases. As noted by Peppet [99], the high likelihood of security breaches and the challenges associated with meaningful

consumer consent results in serious concerns relating to discrimination, privacy, security, and consent. Large corporations have seen data breaches of millions of customer records with sensitive information such as social security numbers, address, and credit card information—with one example being the credit scoring company Equifax [100]. The risks associated with biometric data are even higher, as unlike a credit card, the characteristics of your iris or fingerprint cannot be changed [26]. Transfers of health and biometric data are increasing. In 2014, the Federal Trade Commission found that 12 mobile health applications transferred information to 76 third-parties, with some 18 parties receiving device-specific identifiers, 14 receiving user-specific identifiers, and 22 receiving other types of health information [101].

Cyber-threats will become potentially more harmful as algorithms become pervasive in determining key aspects of everyday life such as if a mortgage will be approved and even if a suspected criminal is going to get bail and the length of sentencing. Researchers have begun to address potential solutions for mitigating these risks, emphasizing the need to build trust in how data is managed among consumers [6,102].

With advances in machine learning, risks rise in relation to how such insights can be used when it is possible to identify if a young child has autism through how they use an app [103], depression and mood from how we move [104], and spend [105], linking personality to eye movement [106], the risk of insuring your car through how we drive [107], the likelihood to default on your debt based on spending habits [108], if you are likely to get fired on your new job based on assessment of cultural fit based on the language you use [109]. Online crime is now evolving into protection against increasingly advanced devious manipulation, rather than just brute force data theft. States and criminal organizations could potentially use deep fakes (i.e., fake audio and video that looks convincingly real) and adversarial machine learning for malign purposes and make small changes in datasets to infuse bias in algorithms [110].

## 5. Summary and Concluding Comments

We have outlined how data is impacting business models and how the convergence of various data layers from devices and applications creates increasingly granular consumer profiles. Specifically, this enables a shift from targeted marketing towards increasingly individualized offers and pricing. A key aspect of this development is that location-based-services set demand and preferences in a geographical context, creating context-based-intelligence.

The outlined development builds on earlier research, as it illustrates the need to view IoT from an eco-system perspective, rather than viewing firms in isolation [16,17]. As data convergence creates context-based-intelligence, companies increasingly need to collaborate to reap the benefits of IoT [67]. Demarcations between industrial- and consumer-IoT applications are increasingly blurred, when data is transferred and used for other applications than initially intended.

We find three primary channels through which data is transforming business models: (1) improved customer matching and tracking of marketing returns; (2) individualized offers and pricing, and (3) device and usage monitoring.

The first category has an impact on value proposition and marketing, through identification of the right target audience and the ability to track the efficiency of marketing campaigns.

The second phase of monetization of IoT data comes from identification of the right consumer, to identifying the best product, price, and timing for an individualized offer for that consumer. This type of individualized services and pricing is enabled by context-based-intelligence and is likely to lead to behavioral based pricing.

The required data components of individualized offers and pricing illustrates the implementation challenge, and the need for a deeper understanding of the data eco-system, as context-based-intelligence will require; (a) the ability for companies to know their consumer, through rich data on previous activities (b) the context in which the consumer is currently in, through near real-time data on geography and social-context, and (c)

understanding how consumer needs and preferences interact with context so that it can be translated into an offering of a good or service. As few organizations can achieve the scope of necessary data on consumers and context, collaborations will be necessary, and in-turn drive the commoditization of data.

The third category of IoT impact on business models comes from the ability to monitor devices usage and performance. This enables new ways of contracting across the supply-chain, such as outcome-based contracts with suppliers and more refined risk-sharing when relationships between companies shift from far-in-between transactions of goods to ongoing partnerships, as IoT enables what is known as *servitization* [73].

As devices gather data that can be monetized, competitive advantage will be gained by lower priced products supported by data revenue, resulting in blended business models that are part traditional and part data-for-service.

From a privacy and cybersecurity perspective, collection of biometric data and generation of psychological insights increase the risks associated with data breaches. We find a contradiction in that individuals are increasingly concerned about privacy, while consumer preferences towards ease-of-use applications perfectly align with consumer profiling.

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# Factors Affecting Sustainable Purchase Intentions of SNS Emojis: Modeling the Impact of Self-Presentation

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**Abstract:** To promote more sustainable consumption of Social Networking Service (SNS) emojis, it is necessary to understand the relationships between social psychological antecedents and SNS users' intention to purchase emojis. This study aimed to investigate motivational factors affecting users' intentions to purchase SNS emojis. We examined SNS users of Kakao Talk, the most widely used instant messaging service in South Korea, and investigated the relationships among five latent constructs: Self-presentation, symbolic values, playfulness, purchase intentions, and need for uniqueness. The results of this study indicate that self-presentation does not directly affect the intention to purchase emojis ($\beta = 0.10$, $p > 0.05$). Rather, self-presentation positively influences purchase intention through the mediating path of SNS users' perceived symbolic value ($\beta = 0.60$, $p < 0.001$) and playfulness ($\beta = 0.35$, $p < 0.001$) to purchase intention ($\beta = 0.29$, $p < 0.001$; $\beta = 0.37$, $p < 0.001$). Further, symbolic value affects playfulness ($\beta = 0.56$, $p < 0.001$), which in turn leads to consumers' intentions to purchase emojis. This study highlights that SNS users' need for uniqueness functions as a moderator in the relationship between self-presentation and their intentions to purchase emojis.

**Keywords:** SNS; emojis; self-presentation; symbolic value; playfulness; need for uniqueness

## 1. Introduction

As digital communication becomes dominant, people have various options to convey their ideas and emotions. SNS accelerates this trend and provides novel methods to help people communicate with each other. In particular, online communication using emoticons is noteworthy because they can be used to depict facial expressions and gestures parallel to those conveyed in face-to-face communication (F2F). In comparison to F2F communication, online communication is considered to be more ambiguous because of the lack of non-verbal cues (e.g., voice tone, facial cues, and body language) that help prevent potential misunderstandings [1]. However, the use of graphic representations helps online communicators to express specific emotional states and convey the delicate context of a message. By using these cues, individuals can overcome the ambiguity of text messages and may perceive their use as a strategy to enhance and improve communication quality.

This study focuses specifically on emoji-based communication among SNS users and factors affecting intentions to purchase emojis. Strictly speaking, the emoji is different from emoticons. According to Evans [1] (p. 1), an "emoji is an iconic, visual representation of an idea, entity, feeling, status or event, that is used alongside or instead of words in digital messaging and social media." Emoticons are typographical displayed images of faces, but emojis are pictorial expressions, like animated characters, which are generally combined with texts, thus creating a new form of written communication. Relatedly, there is also recent evidence showing that, in contrast to emoticons, emojis are becoming more frequently used in online communications [1] and are evaluated as more appealing,

positive, creative, and meaningful [2]. Consequently, emojis have become popular for clarifying online communication. Therefore, the effectiveness of using emojis in online communication could be different from using traditional emoticons and should be a matter of discussion. However, little is known and reported about consumers' motives for emoji consumption, and not many studies have found the underlying mechanisms that affect users' willingness to purchase emojis. Therefore, this study aims to fill this gap in the literature by exploring the gratifications of SNS emoji use and its effect on behavioral intentions to purchase emojis. Specifically, we make two main contributions to the extant literature. First, this study theoretically advances current research into consumers' social psychological traits (e.g., self-presentation) that contribute to sustainable purchase decisions. Although most extant research focuses on the consumer processes involved in building purchase intention for products, we posit that there is a possibility that people have more intention to purchase if they find symbolic value through external expression from their consumption of a product or service. Thus, this study concentrates on psychological predictors (i.e., self-presentation, symbolic value, playfulness) involved in building SNS users' intention to purchase emojis. Second, from the viewpoint of brand marketers, the current study is designed to explore how people perceive the use of emojis and their motives for including them in SNS communications. Since branded emojis should be regarded as commercial products, it is important for practitioners to understand consumers' social psychological perspectives that affect sustainable purchase intents. In this study, we aimed to identify these key factors to inform brand marketers' use of emojis as a creative and innovative branding tool.

The present study focuses on the case of Kakao Talk, which is the most popular social networking app in South Korea, launched by Kakao Inc., with its number of subscribers exceeding 45 million users as of July 2019 [3]. According to a recent statistic, 93% of South Korea's population uses Kakao Talk on their smartphones, and over 20 million of the total users purchased emojis while chatting [3]. Thus, given the proliferation of Kakao Talk emojis, this study aims to construct a theoretical framework to understand and assess dominant factors (i.e., self-presentation, symbolic value, playfulness) that lead to users' intentions to purchase emojis. In addition, the current research examines the moderating influence of SNS users' need for uniqueness on the relationship between self-presentation and emoji purchase intention.

## 2. Literature Review

### 2.1. Emoji Use and U&G Perspective

According to media richness theory [4], communication channels differ with respect to the amount of information that each channel can convey. The concept of media richness describes a specific communication channel's capability to deliver messages with rich information [5]. The theory suggests that four factors determine a communication channel's capacity for rich information: (1) The ability to convey multiple cues such as facial expression and gestures, (2) timely feedback such as the immediacy of response to a query, (3) language variety including various language symbols, and (4) the ability to convey personalized communication such as displaying personal emotions [4]. In this regard, for effective communication, messages must be conveyed on channels that exhibit adequate media richness capacities [5]. Consequently, communication channels such as SNSs, e-mail, and/or mobile instant messaging services hold varied attributes with differing media richness capacities.

Although instant messaging resembles other Computer-Mediated Communication (CMC), such as email with its text transmission feature, it has a unique feature that enables users to express emotions with facial expressions using emoticons. Therefore, this type of communication (i.e., instant messaging), which enables users to send nonverbal cues (i.e., emoticons) through text messages, is considered to provide information richness in the communication process [5]. Furthermore, human communication is more than simply speaking, writing, or interpreting words; it is conducted through complex steps such as context, grammar, experience, or non-verbal expressions [6]. However, CMC, which has become a major communication method in modern society, is limited in terms of contextual or non-verbal

expression, as compared to F2F. Accordingly, it is often pointed out that CMC might disrupt the correct understanding of a message's context or nature [7].

Some studies suggest that people can overcome the potential limits of CMC by using emoticons [8–10], and these nonverbal cues can help them communicate more accurately [11]. As such, people use emoticons and express various emotions such as happiness, sadness, and anger by combining different characters [12,13]. Previous studies have reported that using emoticons improves the quality of CMC, just like using facial expressions and/or body language in F2F [8,14]. Emoticons have evolved from a text-based form (e.g.,), ^) to a graphic-based form thanks to the development of IT technologies. This type of graphical representation is called an "emoji", and allows users to express their emotional state; therefore, emojis can be seen as informal communication tactics in digital communication [2,15]. Furthermore, along with the popularization of smartphones, emojis have developed and exist in various forms such as common objects, facial expressions, places, and animals.

Researchers assert that the uses and gratifications (U&G) perspective offers a deeper understanding of user acceptance of media or media content [16,17]. The U&G perspective postulates that people choose and use media based on their own needs [17]. In other words, this psychological communication perspective emphasizes an individual's voluntary attitude towards choosing and using a specific medium according to his/her needs and motivations [18]. In previous studies, researchers have attempted to explain SNS use from the perspective of U&G, and this theoretical approach has been an adequate and useful framework to understand users' needs and motives in the context of various CMC settings such as Facebook, Twitter, and WeChat [16,19–21]. Therefore, from this perspective, we will try to identify antecedents underlying emoji use that affect users' intentions to purchase emojis.

As shown in Table 1, this study examined prior research related to media usage. Although several past studies of emoticons or emojis have provided findings on new media usage, these studies have not examined the social psychological factors that encourage consumers to purchase emojis and how the particular branded content affects user adoption and usage behavior of a certain SNS app. In particular, the current study examines the social psychological factors for sustained purchasing and using of emojis. In this context, it is asserted that the U&G perspective provides a starting point for understanding why people use emojis in their SNS communication.

**Table 1.** Summary of related literature and results.

| Perspective/Subject | Researchers | Findings and Contributions to Emoji Usage Research | Research Gaps |
|---|---|---|---|
| CMC | Derks & Bos [8] | Emoticons are used in a way similar to facial behavior in face-to-face communication. | • Limited awareness of users' psychological and social factors in SNS communication and media-related behaviors. <br> • Little is known about the influence of branded content (i.e., emoji) adoption and use of SNSs in the marketing industry. <br> • No study has examined the social psychological motivation to use emojis delivering messages. |
| CMC | Jibril & Abdullah [9] Lo [11] | Identified emoticons can be approached as contributory to conversation, not merely compensatory to language. Considered emoticons as a communication tool in that, although presented as verbal cues, they perform nonverbal functions. | |
| Emoticon | Huaung, Yen, & Zhang [15] | Enjoyment, personal interaction, perceived information richness, and usefulness were proposed motivations for the use of emoticons. | |
| Emoticon | Tossell et al. [14] | A longitudinal research design was used for emoticon research and differences were found between genders; females sent more messages with emoticons. | |

**Table 1.** *Cont.*

| Perspective/Subject | Researchers | Findings and Contributions to Emoji Usage Research | Research Gaps |
|---|---|---|---|
| Emoji | Choi, Hyun, & Lee [2] Prada et al. [22] | Confirmed that image-based tactile emojis can improve the texting experience of visually impaired individuals. Found gender differences in emoji use were particularly evident in younger participants. Women reported using emojis more often and chose emojis with more positive attitudes. | |

## 2.2. Psychological Predictor: Self-Presentation

Researchers suggest that consumers' needs, psychological traits, and social context predict media use behavior [23,24]. In this study, we focus on self-presentation as a social psychological predictor involved in building users' intention to purchase emojis. As mentioned, SNS users use emoticons to communicate with other users accurately [8–11], and emojis enable users to express emotions easily [11]. In other words, expressing emotion by using emoticons or emojis is a different kind of self-presentation [2,15]. The concept of self-presentation refers to the process by which individuals attempt to build an identity by controlling self-images available to others [25]. Self-image includes how others perceive and evaluate him/her as well as how he/she views him/herself [25,26]. The process of controlling a person's own view of him/herself works as an important motivation related to his/her behavior patterns; therefore, management of one's own image and self-presentation are very important tasks in a person's life [25].

An individual's self-presentation can be expressed using various methods. Previous studies mostly focused on real-life self-presentations [26]; online communication provides a new platform for self-presentation [27]. Online users utilize a social space by building relationships with other online users and communicating with them, presenting themselves through online media, and being interested in how others perceive them [28]. Research has found that individuals tend to be less concerned about others' judgment of themselves in online settings than in real-life [28]. In other words, individuals are likely to present themselves in online settings more easily and freely, because relationship risks are low in online communication compared to those in real-life settings [28]. A recent study also suggests that self-presentation can be a powerful personal branding tool that affects consumer decision-making [29]. Therefore, an individual's desire to present themself can explain their motivation to participate in an online social space and, through this explanation, the relationship between motivation to use social media and a desire for self-presentation can be indirectly understood. Relatedly, it is claimed that brand marketers should design tools to trigger consumers' desire to express their individuality through personal profile descriptions [30]. In addition, it has been asserted that emoticons can support a favorable social image and serve as a means of self-presentation [31].

From the perspective of online self-presentation, one of the motivations for SNS use is to achieve self-esteem through self-presentation [32,33]. For example, according to a recent study by Moon and Um [34], scholars investigated SNS usage patterns and reported that SNS users tend to show positive self-presentation, which refers to the selection of behaviors to expose positive traits to others. Thus, as one of the most influential drivers affecting SNS usage, self-representation can affect level of SNS usage. In this regard, researchers suggest that SNS users who desire to make a positive self-presentation through their SNS use are likely to spend more time on online communication [33]. Therefore, the desire for self-presentation is expected to have a certain amount of influence on the intention to purchase emojis.

**Hypothesis 1 (H1).** *Self-presentation will positively influence SNS users' emoji purchase intention.*

*2.3. Symbolic Values*

People purchase products or services that are perceived to match their image, and are satisfied by purchasing them [35,36]. Consumers consider not only the functional attributes of products, but also express their self and personality in the process of consumption [37]. Therefore, the behavior of purchasing a product (or service) is an external expression of him/her-self [38]. In this study, our premise is that symbolic values perceived by emoji users may play a key role in mediating the effect of self-presentation.

Symbolic value refers to the extent to which a purchase enhances self-esteem and status in others' eyes [39]. Generally, symbolic value is regarded as an essential factor in consumers' purchase of a product [40,41]. In the current study, as non-verbal graphic cues, we posit that emojis are branded products for selling, and the use of emojis can be a symbolic presentation. Consumers are motivated to present an ideal image of themselves [34]. For example, it was found that the cuteness of branded emoticons conveys a sense of playfulness, which creates a favorable social image to others [31]. Despite different products or services, it is suggested that symbolic value functions as a more powerful motivation to make a purchase decision than other essential factors such as product quality and/or price [41]. Thus, this implies that symbolic value can serve as a crucial factor in predicting SNS users' purchase intention of emojis. As discussed, a major function of emojis is to provide non-verbal meaning in CMC communication. This suggests that the symbolic value of emoji uses in CMC communication should be discussed to judge whether emojis could properly play their role. Hence, the more strongly consumers feel that their use of emojis meets their desires to achieve symbolic values, the more likely they will be to purchase emojis. Therefore, the following hypothesis was established:

**Hypothesis 2 (H2).** *The symbolic value of emojis will positively influence SNS users' intention to purchase emojis.*

*2.4. Playfulness*

It has been verified that in mobile services, playfulness generally works as a more powerful factor than in other media services [41,42]. However, the effect of perceived playfulness between SNS messaging users has seldom been carefully investigated. In this study, the term playfulness refers to the essence of play accompanied by positive experiences using SNSs [5]. Perceived playfulness is found to influence consumers' behavioral intentions in various contexts, such as online games [31] and SNS channels [43]. Hsieh and Tseng [5] also found that using both text messages and emoticons in mobile instant messaging can increase information richness and is positively connected to a person's perceived playfulness. Using emoticons in text-based communication helps people experience more enjoyment when they use instant messaging [15]. Emojis, which are images used to express emotion, enable users to enliven online conversation by displaying emotion and humor, which adds to the fun or sense of playfulness experienced by users [5]. Therefore, the playfulness of emoji usage is a fundamental component in mobile media usage settings [5].

In addition, in research on emoticon or emoji use in online communication settings, it is argued that the playfulness emoji users feel during the course of using emojis might work as a very important motivation to use those emojis [15]. From the large body of CMC research, it is widely acknowledged that emotions can be delivered more effectively to others via the use of emojis [11]. Hence, in the context of SNS communication using emojis, the use of emojis can generate perceived playfulness in social interactions. Based on these findings, it can be hypothesized that playfulness might have a powerful influence on the intention to purchase emojis.

**Hypothesis 3 (H3).** *Playfulness will positively influence SNS users' emoji purchase intention.*

Given that self-presentation is a core motivating factor for why people express themselves in online communication, a direct relationship between self-presentation and symbolic values can be

postulated. This study also proposes that the quality of playfulness is evident in users when consuming entertaining content or media. Emojis are used to convey users' emotions in a more effective way, and thus communicating emotion is pleasurable for SNS users who seek positive self-presentation. In this regard, self-presentation could be an antecedent of playfulness during the use of emojis.

**Hypothesis 4 (H4).** *Self-presentation will positively influence the symbolic value of emojis.*

**Hypothesis 5 (H5).** *Self-presentation will positively influence SNS users' perceived playfulness.*

As discussed above, this study supposes that the motivation for emoji use comes from the desire of users to express themselves through the purchasing of emojis. This motive is linked to symbolic satisfaction as they can satisfy themselves through using emojis because the behavior fits the core desirable values of users. In this regard, our hypothesis is suggested as follows:

**Hypothesis 6 (H6).** *Symbolic values will positively influence SNS users' perceived playfulness.*

*2.5. Need for Uniqueness*

Need for uniqueness is defined as pursuing differentness relative to others through the acquisition and utilization of consumer goods [44], which can be a predictor of uniqueness-enhancing consumer behaviors. For example, in addition to visual aesthetics, clothing fashions are often considered to be a visible way to show individuality [45]. Avoiding similarity and being creative in dressing styles are important factors for consumers who prefer to be different from others [44]. In terms of sustainable product consumption, the need for uniqueness can lead to an increased rate of purchases with those items being used for shorter periods of time [46]. In a similar vein, one of the main reasons for purchasing entertainment content (e.g., event tickets, webtoons, movies, dramas, etc.) is a need for distinction via consumption [47]. In general, online users are provided with greater freedom to differentiate themselves by expressing their uniqueness through digital associations on the online platform [46]. Thus, the purchase of branded emojis allows SNS users to be associated with the embedded meaning of the brand and the symbolic meanings conveyed through emoji graphics [31,46]. Thus, purchasing emojis is a unique consumption practice for consumers who choose to show their individuality. Thus, the purchasing of emojis helps satisfy consumers' needs for uniqueness [31]. Based on the results of these studies, it is inferred that the level of need for uniqueness in an individual is closely related to the intention to purchase emojis. Therefore, the following hypothesis was tested in this study:

**Hypothesis 7 (H7).** *SNS users' need for uniqueness will moderate the effect of self-presentation on the intention to purchase emojis.*

Figure 1 illustrates the visual description of the study's research model and the relationships of individual hypotheses.
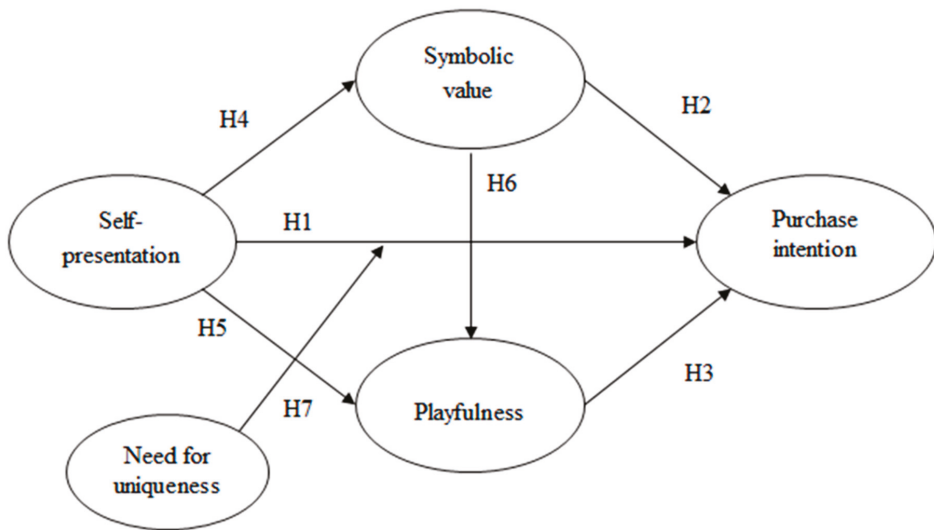
**Figure 1.** Research model.

## 3. Methodology

Although there are various research frames for exploring SNS users' emoji usage, the methodology employed in this study is an adaptation of previous experimental survey studies. When using a social psychological approach to study consumption behavior, researchers are advised to use an experimental framework to identify intrinsic motivating factors by presenting a specific use case [48]. For example, Lee and Cho [49] proposed an experimental survey to investigate how consumers' propensity for self-presentation and the need for uniqueness influence their attitudes toward branded webtoons. In this study, the researchers used actual branded webtoons to create a more realistic situation for survey participants. We used Kakao Talk emojis (see Figure 2) to make it easier for participants to imagine the purchase and use of emojis in SNS communication.

The current study used an online survey method to test the proposed research model. Following Gesselman et al. [50], participants who had actual experience of using Kakao Talk emojis were selected. To verify usage, in line with Konrad et al. [51], we asked the respondents to identify their most frequently used emojis in Figure 2. This procedure allowed us to verify that participants were actual emoji users. A total of 322 Korean users participated in this survey. Among the respondents, 148 (46%) were male and 174 (54%) were female. The respondents' ages ranged from 20 to 59 years, and their mean age was 39.9.

**Figure 2.** Examples of Kakao emojis.

*Instruments and Measures*

Five latent constructs were examined in this study: Self-presentation, symbolic values, playfulness, purchase intentions, and SNS users' needs for uniqueness. We tried to use preexisting measurement scales to ensure scale reliability and validity. Seven-point semantic-differential scales or Likert scales were used to measure questionnaire items. All the measures had satisfactory internal consistency as they displayed a Cronbach's alpha greater than 0.70 [52]. The measurement items used in the final structural equation model are presented in Table 2.

**Table 2.** Constructs, indicators, and key statistics.

| Latent Constructs | Indicators | *M* | *SD* | Confirmatory Factor Loadings |
|---|---|---|---|---|
| Self-presentation [53] | I care about my online image on SNS | 5.41 | 1.16 | 0.83 [b] |
| | I want to express myself through my own online image on SNS | 4.79 | 1.33 | 0.81 [a] |
| | I want to express what I want on SNS | 5.06 | 1.37 | 0.82 [a] |
| | Index | 5.09 | 1.28 | Cronbach α = 0.88 |
| Symbolic Value [54] | The use of emojis will indicate that I have taste | 4.56 | 1.42 | 0.72 [b] |
| | The use of emojis will prevent me from appearing to be negative | 4.31 | 1.38 | 0.84 [a] |
| | The use of emojis enhances the perception I have a desirable style | 4.34 | 1.33 | 0.87 [a] |
| | The use of emojis will help me fit into a desirable social setting | 4.57 | 1.34 | 0.79 [a] |
| | Index | 4.45 | 1.36 | Cronbach α = 0.92 |

**Table 2.** *Cont.*

| Latent Constructs | Indicators | M | SD | Confirmatory Factor Loadings |
|---|---|---|---|---|
| Playfulness [55] | The use of emojis is pleasurable | 5.24 | 1.31 | 0.78 [b] |
| | The use of emojis keeps me from becoming bored | 5.04 | 1.34 | 0.74 [a] |
| | I am interested in the uses of emojis | 5.17 | 1.27 | 0.79 [a] |
| | Index | 5.15 | 1.30 | Cronbach α = 0.95 |
| Purchase Intention [56] | I will buy emoji products | 4.49 | 1.56 | 0.74 [b] |
| | I will buy character dolls | 3.79 | 1.55 | 0.80 [a] |
| | I will buy character-related products | 4.03 | 1.53 | 0.78 [a] |
| | Index | 4.10 | 1.54 | Cronbach α = 0.89 |
| Need for uniqueness [46] | I often look for one-of-a-kind products or brands so that I create a style that is all my own | 4.25 | 1.21 | 0.89 [b] |
| | When buying merchandise, an important goal is to find something that communicates my uniqueness | 4.27 | 1.17 | 0.89 [a] |
| | I am often on the lookout for new products or brands that will add to my personal uniqueness | 4.28 | 1.19 | 0.90 [a] |
| | Index | 4.27 | 1.19 | Cronbach α = 0.96 |

Note: [a] Factor significance: $p < 0.01$, [b] loading was set to 1.0 to fix construct variance. The questionnaire was translated into Korean.

## 4. Results

### 4.1. Confirmatory Factor Analysis

Prior to the main hypothesis testing, we validated several underlying assumptions for structural equation modeling (normality, sampling adequacy, and no extreme multicollinearity) [57], and the assumptions were confirmed to be within acceptable boundaries. More specifically, the first step was to estimate the goodness-of-fit for the hypothesized research in model testing. In this study, the $\chi^2$/degrees of freedom ratio was estimated to be 2.78 in the hypothesized model ($\chi^2 = 239.227$, $df = 86$). The Comparative Fit Index (CFI) was 0.97, the Incremental Fit Index (IFI) was 0.97, the Turker-Lewis Index (TLI) was 0.95, and the Root Mean Square Error of Approximation (RMSEA) was 0.075. Based on these measures, we concluded that the model was acceptable. To improve the model fit, the significance of the regression weights was examined first. All variables were significant except for the relationship between self-presentation and purchase intentions ($p < 0.05$). Modification indices were then used to identify any theoretically meaningful paths/relationships omitted in the original model. We found that two pairs of observed variables had covariance, and we linked the errors to each other. The revised model was found to fit the data better than the original proposed model, $\chi^2$ (209.659)/$df$ (83) ratio = 2.52, CFI = 0.98, IFI = 0.98, TLI = 0.96, and RMSEA = 0.069. Thus, this model was deemed suitable for hypothesis testing.

### 4.2. Hypothesis Testing

Based on the potential factors for SNS users to purchase emojis, the proposed model (see Figure 1) was tested using structural equation modeling. To test the research hypotheses, AMOS 21 was used for data analyses. The significance of the regression weights was examined for all constructs. As shown in Table 3, the results showed that self-presentation was not positively related to purchase intention ($\beta = 0.10$, $p > 0.05$). Thus, H1 was not supported. In supporting H2 and H3, symbolic value was directly linked to purchase intention ($\beta = 0.29$, $p < 0.001$), and playfulness was also positively and significantly related to purchase intention ($\beta = 0.37$, $p < 0.001$). The self-presentation factor exhibited a statistically significant relationship with the two factors, symbolic value ($\beta = 0.60$, $p < 0.001$) and playfulness ($\beta = 0.35$, $p < 0.001$). Therefore, H4 and H5 are fully supported. Next, as expected, symbolic value positively influenced playfulness ($\beta = 0.56$, $p < 0.001$). Therefore, H6 was supported. The final

model is shown in Figure 3 (path coefficients are standardized values and *t*-values are mentioned in parentheses).

**Table 3.** Results of hypothesis testing.

| Hypothesis | Relationship | $\beta$ | C.R. | *p*-Value | Supported |
|---|---|---|---|---|---|
| H1 | Self-presentation → Purchase intention | 0.10 | 1.37 | 0.170 | No |
| H2 | Symbolic value → Purchase intention | 0.29 | 3.53 | 0.000 | Yes |
| H3 | Playfulness → Purchase intention | 0.37 | 4.12 | 0.000 | Yes |
| H4 | Self-presentation → Symbolic value | 0.60 | 9.45 | 0.000 | Yes |
| H5 | Self-presentation → Playfulness | 0.35 | 6.53 | 0.000 | Yes |
| H6 | Symbolic value → Playfulness | 0.56 | 10.03 | 0.000 | Yes |

Furthermore, this study investigated the moderating effect of SNS users' need for uniqueness on the relationship between self-presentation and SNS users' purchase intention of emojis. For this purpose, the levels of need for uniqueness of our data sample were divided as either high or low using the mean split method (M = 4.26, SD = 1.15, and a chi-square difference ($\Delta\chi^2$) test between the default model (without constraints) and the constrained model was conducted. The test results indicated that the need for uniqueness had a moderating effect on the relationship between self-presentation and emoji purchase intention ($\Delta\chi^2(1) = 9.240$, $p < 0.01$). That is, SNS users with a high degree of need for uniqueness may have stronger intentions to purchase emojis, and this effect operates through the channel of self-presentation. Therefore, H7 was fully supported. The results of the moderating test are summarized in Table 4.
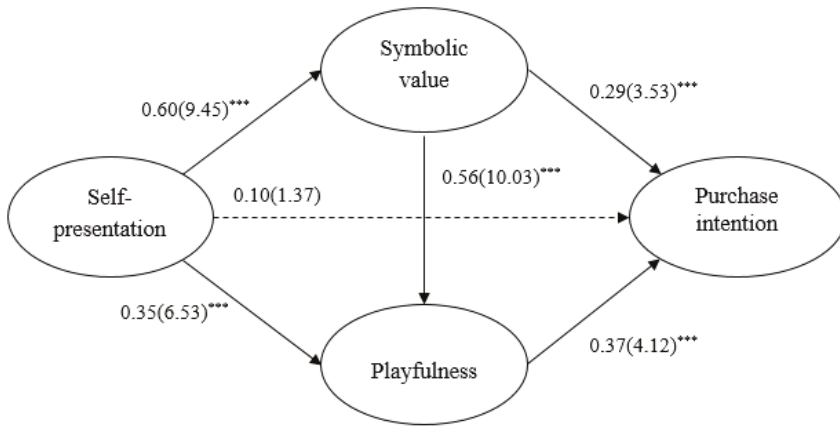


$\chi^2/df = 2.306$, IFI = 0.98, TLI = 0.97, CFI = 0.98, RMSEA = 0.064
(\**p* < 0.05; \*\**p* < 0.01; \*\*\**p* < 0.001 )

**Figure 3.** The results of hypothesis testing.

**Table 4.** Testing of moderating effect of need for uniqueness.

| Relationship | Standardized Coefficient ($\beta$) | |
|---|---|---|
| | **High Need for Uniqueness** | **Low Need for Uniqueness** |
| Self-presentation → Emoji purchase intention | 0.529 \*\*\* | 0.087 |

\*\*\* *p* < 0.001.

## 5. Discussion and Conclusions

The employment of emojis has been considered an important SNS marketing tactic [1]; research on when, why, and how people use SNS emojis is crucial to ensure the successful implementation of sustainable emoji consumption. This study aims to provide an improved understanding of individual psychological traits that may, in turn, help in encouraging and reinforcing sustainable emoji uses among SNS users. As a case study, Kakao Talk, which is the dominant instant messenger service in Korea, was chosen for analysis of users' emoji purchases. It is acknowledged in other studies that SNS users tend to have self-presentational characteristics, and this proposition was confirmed in the context of emoji use. According to the results of this study, self-presentation plays a significant role in affecting the degree of SNS users' perceived playfulness while networking. A remarkable finding from this study is that self-presentation did not directly influence SNS users' intention to purchase emojis (H1). More specifically, self-presentation affects purchase intention only via the path of proposed mediating variables (i.e., symbolic value and playfulness).

As reviewed, symbolic value refers to the psychological satisfaction achieved through purchasing products that express an individual consumer's self [39]. Given the assumption that emojis could be used to express users' emotions, the identified relationship between symbolic value and playfulness seems plausible. In addition, we also found direct positive relationships between self-presentation and the two psychological variables, symbolic value and playfulness. The greater the self-presentational tendency of individuals, the more they place symbolic values on emojis and possess a playful quality during social networking. In short, both self-presentation and symbolic values are involved in the concept of self, and self-presentational users can experience symbolic value when using emojis.

A direct positive relationship between symbolic value and playfulness implies that self-expressing consumer behavior is one of the significant causal elements stimulating consumers' perceived playfulness. In addition, both symbolic value and playfulness also have a positive impact on purchase intention. This means that emoji users who care more about symbolic values are likely to purchase emojis and tend to express their self-images though purchasing emoji characters. Moreover, playfulness lies at the core of user satisfaction and plays a key role in affecting emoji purchase intentions. This study also suggests that the need for uniqueness plays a moderating role in the relationship between self-presentation and users' sustainable emoji purchase intention in the context of SNS communication. This finding indicates that an individual's need for uniqueness does affect the purchasing process if the need is strong.

This study offers several important managerial implications for marketers who hope to incorporate emojis as a marketing tool. First, emojis should be playful and enjoyable. Emojis are not only an important communication tool to make up for the weaknesses of CMC, but can also substitute for enjoyment. Emojis can be purchased and consumed for entertainment purposes; hence, entertaining elements of emojis should be considered.

Another managerial implication from the study findings is that emojis can be used as an emotional avatar by SNS users. Users send emojis to family or friends to actively express their emotions, feelings, and moods, which means that the use of emojis can be an important communication strategy. There is no doubt that using visual icons is more impressive and effective than using literal texts. In line with this notion, emojis are often used to present users' symbolic images and desirable identities. Therefore, marketers can develop various types of emojis as a means of building interactive brand relationships with SNS users. Further, this study's finding implies that the SNS emoji is a new form of branded content to engage consumers. These findings can inform a sustainable business model for companies, as well as guidelines for marketers to promote sustainable consumption of items.

However, this study has some limitations. First, although Kakao Talk is the number one mobile messenger in South Korea, this study focused only on emojis in the Kakao context. If we added more mobile messenger services in South Korea or in other countries, we might have different findings. Future research could use more diverse emojis other than just Kakao, and emoji usages from additional countries could provide broader understandings based on cultural differences among emoji users.

Second, it is advised that researchers undertaking future studies should extend the sampling methods to capture a larger sample size and cover a more diverse population of respondents, particularly from different nationalities. Lastly, there might be possible extraneous variable effects that were not controlled for in this research. Thus, to increase the generalizability of the study findings, future studies should consider more controlled research settings. For example, future research should discern the possible effects of other variables such as age and gender. However, despite these limitations, we believe that this study provides meaningful foundational data for future research.

**Conflicts of Interest:** The authors declare no conflict of interest.

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# Exploring the Affective Level in Adolescents in Relation to Advertising with a Selected Emotional Appeal

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**Abstract:** The correlation and perception of advertising on adolescents have been shown to be a key factor in the survival of subjective emotional states. In this research, we map the affective level in relation to emotions in the context of assessing the marketing advertisement "Man on the Moon" by John Lewis company. We assess how an emotional appeal affects adolescents in various areas of the Slovak Republic, following several crucial demographic features of respondents. We examined the affective level by means of a psychodiagnostic tool in the form of a standardized tool of the scale of subjective emotional habitual well-being. To measure the emotional component of subjective well-being, we used descriptive words that expressed experienced emotions and feelings. From the collected data, we determined the frequency of positive and negative mood and verified the dependence between the variable region and emotion. We used Pearson's chi-square test. When evaluating the data, we found dependencies between the categorical variable region and emotion. We did not find a relationship between the variable gender and emotion. The geographical division within the national market has an impact on the experience of positive and negative emotions when looking at advertising with an emotional appeal to the story.

**Keywords:** advertising; emotions; emotional states; regions; emotional appeal; adolescents

## 1. Introduction

In the analysis of the Slovak advertising space and shopping behavior of adolescents, it is necessary to perceive several factors. These can positively or negatively influence consumer decisions [1]. In addition to the emotional impact, it is important to assess regional diversity. In the assessment process, *f*, it is important to focus on regional culture, social behavior, income, social status, and other factors that can significantly influence purchasing decisions. The most important factor is a socioeconomic status. In the case of comparing regional differences, we analyzed the income area of the population and their social preferences. According to the research from 2019, the difference in the average gross wage between the Bratislava and Presov regions represents up to 90%. An example is the comparison of gross wages in the town of Snina, where the average basic wage is 789 €. In the Bratislava Region, the average gross wage reaches 1,500 € before tax. This implies a basic regional difference. This can also be reflected in consumers' shopping behavior. The general result of their research is the fact that there are significant differences in the income of the population in Slovakia. In 2016, when the "Man on the Moon" advertising campaign was launched, the difference in population income between Western and Eastern Slovakia was 6%. Research carried out by Ineko confirms that, since 2015, there have been

significant differences in the poverty rate. The west of Slovakia is less endangered by poverty than the center and the east. Most of the population below the poverty line is in Presovsky and Kosicky regions. The situation may be influenced by several factors, such as a lower level of education or a lack of foreign investors. It is important to note that regional income disparities can negatively affect consumer shopping behavior [2,3].

The second important area that needs to be perceived in the context of regional disparities is social divergency. An important social difference is the perception of consumption inequality and status inequality. Inequality in consumer behavior is related to the income disparities which were described in the previous paragraph. High-income households have an unlimited ability to meet needs. Households whose incomes are significantly lower (e.g., eastern part of Slovakia) have a limited opportunity to satisfy their needs. This can lead to limited shopping behavior. Another inequality is status. This can depend on various factors such as income, living conditions, or level of education. Differences in the perception of these factors can cause status inequality. According to the research [4], there is also a certain degree of such inequality in Slovakia. Diversity occurs in different regions, depending on their maturity. The inhabitants of the western part of Slovakia are less attentive to the surroundings, more stubborn, and less friendly [4]. Another study proves that people working in Western Slovakia are characterized by a higher level of workaholism and a lower level of awareness of their own emotional experience. Residents from Eastern Slovakia are more friendly and have a higher level of awareness of their own emotional experience. Differences in the perception of awareness of one's own emotional experience may differ in the different ability to identify emotions, name the emotional influence, and distinguish between what they experience and what is reality [5]. This can also be reflected in the perception of advertising with an emotional appeal. Adolescents from the western part of Slovakia may perceive this advertisement more emotionally than adolescents from the eastern part of Slovakia. Ultimately, their emotional awareness after looking at an advertisement with an emotional appeal can also affect the level of their purchasing decision. For this reason, our research focuses on regional differences in the perception of advertising with an emotional appeal.

Businesses are currently trying to influence the emotional side of consumers. Balan et al. [6] define emotions as a state that consists of conscious mental responses to objects or situations and are associated with various physiological, behavioral, and cognitive changes. In connection with behavioral changes, it can be argued that emotions can also influence shopping behavior. Kranzbler et al. [7], in their research, argue that emotions are evaluation patterns that influence consumer behavior. The authors emphasized that emotions are crucial in influencing shopping behavior. A general assumption of Rathore and Ilavarasan's [8] research is that the current trend of evoking negative emotions in consumers can affect overall market performance. In this case, they can also negatively affect the application of marketing strategy, which is reflected in lower business performance. Therefore, companies should approach the creation of advertising campaigns respecting current trends.

The aim of our research is to point out the importance and influence of advertising with an emotional appeal to adolescents. Adolescence is the period of human development between the end of childhood and reaching adulthood. Periods from 13 (girls) and 15 (boys) to 25 years of age. We examine the frequency of positive and negative moods in adolescents and what is the relationship between the region and the perception of emotional appeal. We see the originality of the article in the fact that the same research in question in the conditions of the Slovak Republic has not yet been carried out. This is the first pioneering research to examine the frequency of positive and negative moods in adolescents in relation to advertising with a selected emotional appeal.

The second section describes and develops international research issues focusing on the field of emotional marketing in relation to adolescents. The third section describes the subject of our research and the methods used in processing and evaluating the results. In the fourth section of the article, the research results are elaborated in details. The discussion part of the article contains the interpretation of the results in relation to the realized international studies in the subject area. The discussion section contains generalizations of individual findings. Furthermore, future research

directions are emphasized in the discussion part. The article concludes with a description of the most important findings and limitations of our research.

## 2. Literature Review

Any effective advertising should appropriately generate affective responses that can support the customer–brand relationship. Stout and Leckenby's [9] research confirms the well-known fact that advertising using different emotions is more popular and influences consumer decision-making processes. The main goal of emotional advertising is to create and perceive the intensity of connections between the product, brand, and customer [10]. However, the most intensive connection occurs in the case of television advertising, regardless of age category. However, social networks also have an intense influence, which are now key in influencing adolescent behavior [11]. There are numbers of emotional expressions that businesses seek to promote in their advertisements. One of them may be the emotional appeal of the story, which may be completed by nostalgia. A typical period when it is possible to use the nostalgia associated with the story as an emotional appeal is Christmastime [12]. Quantitative studies determining the importance of emotional attitudes when watching advertising developed as early as the 1980s [13]. Research conducted in this area was conducted with adolescents, who seemed more emotional. The randomness of selected advertisements has led to potential interest from adolescents [11]. The problem in this area, however, was that the research focused on specific advertisements, not on adolescents' reactions. This showed a problem in evaluating adolescents' attitudes and perceptions. Since the 1980s, the focus on the subject area of research into emotions in advertising and the assessment of positive and negative attitudes toward the evaluation of advertising with an emotional appeal has declined considerably [11]. As there are currently decreases in the subject area of research into the impact of emotions in advertising on adolescents, we decided to examine this issue in the Slovak Republic. The credibility of the research is also proved by the lack of information, as similar research has not been carried out in the Slovak media market. According to the research, adolescents are more impulsive and conscious when watching advertisements than adults [14]. Therefore, we decided to focus on them in our research.

The impact of emotional activity through advertising on adolescents is crucial in influencing shopping behavior. The research by Barve et al. [15] shows that adolescents are intensely aware of the influences and effects of emotional appeals, which can also influence their behavior. The authors' research problem was to analyze the negative and positive effects of television advertising on adolescents. Using questionnaire methods and structured interviews, the authors found more emotional reactions in girls and higher rationality in boys. The result was the finding that adolescents watched advertisements to create gender stereotypes and fostered aggressive behavior and social apathy [15].

Similar to Barve et al. [15], Sinigh and Pandey [16] also analyzed the impact of advertising on adolescents. The results of their research were identified with the statements of Barve et al. [15]. They found that TV advertisements with an emotional appeal have the greatest impact on the female segment. Research has also shown that adolescents are exposed to 400,000 advertisements a year, with various emotional influences [16]. Evidence of the influence of emotions in advertising space is also verified by the studies of Nadanyiova [17] and Kliestikova [18]. They argue that the use of emotions in advertising can lead to higher customer–business interaction. The research findings have generalized this statement, and, therefore, their view is acceptable in companies with different production sectors.

Adolescents are also intensely affected by social networks. They seek to promote products and services through influencers to support shopping behavior and strengthen engagement. Emotions are a key factor in strengthening adolescents' engagement or behavior change. Therefore, according to the authors, it is necessary to evaluate the impact of emotions on young people [19]. Berne-Manero and Marzo-Navarro [19] show that not only television commercials but also social media commercials can change adolescents' behavior. Naskar et al. [20] also agree with this opinion. The research of Zollo et al. [21] and Gratiela [22] demonstrates that cognitive, personal integration, and social integration benefits mediate the relationship between the marketing impact of social media advertising

and consumer brand awareness. Zollo et al. [21] also declare that emotional brand experiences can also help strengthen customer loyalty. It is possible to agree with the above statement, as advertisements with an emotional appeal can also affect the overall loyalty to the brand. Advertisements' originality and appeal can lead to higher feedback [23]. Properly utilizing emotion in advertising can lead to a more positive attitude toward advertising and branding [24].

Our research is based on the subject part of the use of emotions in advertising. We try to point out the fact that there is a difference in the regional experience of adolescents' emotions. We also focus on the frequency of positive and negative moods in adolescents. Therefore, we decided that the subject of the research is the Christmas advertisement "Man on the Moon", from 2015, from the English retailer John Lewis. The company has built a strong global brand, using emotions in its advertising. Doherty [25] claims, in her research, that even potential customers can quickly identify with the John Lewis brand. This fact contributes to the recognition that the John Lewis brand is well conceptually global. The company's marketing strategy is focused on building employee loyalty and creating a global customer base using elements of emotional marketing [26]. In this way, the company tries to achieve a certain emotional response from customers.

Previous research has relied on the fact that Christmastime is associated with a certain nostalgia. Retailer John Lewis also made intensive use of this in the "Man on the Moon" advertising campaign. The most difficult task of the company in this period is to understand the emotional reaction of customers to the created advertisement [27].

The "Man on the Moon" advertising campaign was published on 6 November 2015. Its basic concept is the emotional appeal of the story. This has become an integral part of the whole advertisement. The "Man on the Moon" campaign is based on the unlikely relationship between a little girl Lily and a lonely old man who lives on the moon. The aim of the advertising concept is not to ensure direct sales of products but an emotional connection with the customer, in order to strengthen the brand [28]. The mission of the campaign is to emphasize the loneliness of the elderly during the Christmas holidays. Research conducted at the University of Southampton under the Active Aging Index has shown that the United Kingdom in the European Union has seen a higher increase in lonely old people. Research has further confirmed that the loneliness of older people, even during the Christmas holiday, is a serious social problem. Therefore, we should appeal to the younger generations not to feel this social problem [29]. The research results are valid for the countries of the European Union. In this sense, we can perceive the loneliness of older people as a global social problem. For this reason, the mission of the campaign is also to raise awareness and thus prevent the "loneliness" of older people even during the Christmas holiday. In order to evoke a certain emotional reaction in the customer, scenes, images, and music are used and appropriately conceived in the advertisement. The impression of advertising creates a sense of belonging, family, love, friendship, and cohesion [30]. In the opposite sense, however, it evokes the opposite reaction in the customer associated with nostalgia in the form of guilt and memories of the past. These can be associated, for example, with the loss of a grandparent, or a family relative or friend. Lonergan [31] stresses that advertising can evoke negative emotions in adolescents. He further emphasizes that, in advertising, there is a so-called commodification of loneliness in the form of strengthening loneliness at Christmastime. His findings underline that advertising evokes what is the exact opposite of Christmas.

Based on the facts about the "Man on the Moon" advertising campaign, the results of the Active Aging Index research, the impact of social networks on adolescents, and the lack of information about the impact of the emotions of the "Man on the Moon" campaign, we decided to conduct research in the Slovak Republic. Our goal was to determine the frequency of positive and negative moods in adolescents. Next, we wanted to find out if there is a difference in regional perception of emotions in the "Man on the Moon" advertisement.

## 3. Materials and Methods

Part of our research was also pre-research, the subject of which was focused on the general determination of the influence of emotional appeals in advertising space on adolescents. The statistical group consisted of young people (adolescents) aged 18–20 years. The statistical unit consists of an adolescent, aged 18–20 years, who is influenced by various forms of advertising.

We collected data from respondents in electronic form. Respondents had a non-standardized questionnaire available in electronic form in the period from 1 June 2019 to 31 July 2019, published via social networks. The questionnaire contained 4 questions aimed at general assessment of the impact of emotional appeals in advertising space. In the first question, the respondents indicated which of the selected emotions was associated with the Christmas period. The emotions mentioned in the first question were identical to the standardized tool of the subjective emotional habitual well-being scale in order to achieve better validation of the data. In the second question, the respondents expressed whether they notice in individual periods (Christmas, Easter, Valentine's Day, etc.) advertisements with an emotional appeal. The third question in the pre-research was focused on whether advertising with an emotional appeal (story, fear, joy, sincerity, or eroticism) influences the shopping behavior of potential customers. In the last question, we investigated the strength of the effect (influence) of advertising with an emotional appeal to customers.

The expected return of non-standardized questionnaires within the pre-research was 150. Out of the total expected number, 120 respondents completed the questionnaire. The return rate was 80% with all questions completed. Out of the total number of 120 respondents, 46 men and 77 women participated in the pre-research. The following table (Table 1) shows the categorization of men and women by age.

**Table 1.** Categorization of men and women participating in pre-research by age.

| Age | Men | Woman |
|---|---|---|
| 18 | 15 | 28 |
| 19 | 18 | 24 |
| 20 | 13 | 25 |
| Total number | 44 | 77 |

From the regional point of view, we recorded the highest return of questionnaires from the Kosice region (46 participants) and from the Presov region (42 participants). We recorded the lowest return of questionnaires from respondents from the Banska Bystrica region, from which 14 returned and 18 correctly completed questionnaires returned from Nitra.

The subject of our research was the mapping of the affective level in adolescents when looking for advertising with a certain emotional appeal. The statistical set consists of respondents aged 18–20 years. According to the results of various researches, we focused on this age category due to the considerable influence of advertisements with emotional appeals. The results of the pre-research allow gathering basic information about the emotional appeal of adolescents.

We used a standardized scale of subjective emotional habitual well-being to map the affective family of adolescents and to find out the results in relation to emotional marketing. It is a psychodiagnostic tool that provides a telling ability about the current emotional state of respondents [32]. To measure the emotional component of subjective well-being, we used a range of descriptive words that express emotions and bodily sensations. Descriptive words are referred to as items. In order to determine the frequency of occurrence of the experienced item, we analyzed the positive and negative mood and the relationship of the region to the experienced emotion. The positive mood in the scale is defined by the following items: joy, happiness, enjoyment, and physical freshness (Cronbach alfa in seven studies, ranging from 0.67 to 0.80; reliability coefficient $r = 0.63$) [32]. The negative mood on the scale is defined by the following items: shame, anger, guilt, fear, pain, and sadness (Cronbach alpha ranging from 0.68 to 0.74; stability coefficient $r = 0.66$; average intercorrelation between the two scales $r = -0.23$) [32]. For the needs of our research, we modified the range of subjective emotional

habitual well-being. We added basic identifying information like region, age, date, school, and gender to the introduction. We also modified the introductory text, adding the name of the "Man on the Moon" advertising campaign. We left the individual items standard.

During the period from 1 September 2019 to 1 January 2020, we carried out the research, where we collected all the necessary data. We carried out the procedure of the data collection from the respondents in a personal survey form, directly in the environment of secondary economic schools. Out of the total number of planned 250, 180 adolescents aged 18–20 participated in the research. The return rate of the standardized questionnaires was 72% with all questions completed. The research took place in five regions of the Slovak Republic, namely Banskobystricky, Kosicky, Nitriansky, Zilinsky, and Presovsky. We visited secondary economic schools in individual regions (Banska Bystrica Business Academy, Roznava Business Academy, Nitra Business Academy, St. Thomas Aquinas Business Academy Zilina, and Presov Business Academy), where we played the Christmas advertisement "Man on the Moon" for fourth-year students. While watching this advertisements, respondents should indicate the frequency which the item is being experienced with. They indicated the frequency of occurrence of the item on a scale from 1 to 6, with 6—almost always, 5—very often, 4—often, 3—occasionally, 2—a few times, and 1—almost never. The research was carried out anonymously and all its participants gave their consent to the processing of their results.

To determine the relevant sample size, we used a formula to calculate the size of the statistical sample, to be able to generalize the research results. According to the data of the Statistical Office of the Slovak Republic as of 1 January 2020, the number of young people aged 18–20 was 343,022. In our research, we were able to address a sample of 180 respondents, which corresponded to a 7% significance level. Therefore, it is possible to generalize these results to the whole age category (as the significance level from 1% to 10% is typically used to justify the statistical results) [33].

Out of the total number of 180 respondents, 53 men and 127 women took part in the research. In percentage terms, this represents 29% men and 71% women. When evaluating research results, it is also important to consider the regional aspect. The largest number of respondents came from the Nitra region, presenting 54, which is 30%; 48 respondents from the Košice region, which represents 27 %; 45 respondents from the Zilina region, which represents 25%; 24 respondents from the Banská Bystrica region, which represents 13%; and the smallest number of respondents was from the Prešov region, which had 9, representing 5%.

In order to correctly verify and validate the obtained data, we used various mathematical and statistical methods. These helped us to interpret and compare the results correctly. From the available mathematical–statistical methods of data analysis, we used Pearson's chi-square test in the article, which verified the dependence between the categorical variables region and emotion. Cramer's. In the test, we verified the strength of the dependence found between the categorical variables. Finally, we also used the Kruskal–Wallis test to determine the significance of differences in experienced emotions between regions [34].

## 4. Results

In the individual subsections, we describe the results of preliminary research and research.

### 4.1. Preliminary Research Results

As already mentioned in the previous chapter of the pre-research, 120 respondents participated. The aim was to determine the general influence of emotional appeals in advertising space on the potential shopping behavior of young people aged 18–20 years. In the individual questions, we generally found out whether advertisements with an emotional appeal influence the shopping behavior of adolescents.

In the first question, we found out which emotion most reminds respondents of the Christmas period. The subject of the pre-research is precisely this period; in the research, we focused mainly on advertising, the main motive of which is the Christmas period. Respondents were asked to mark one

emotion that describes Christmas. Individual emotions were used from the standardized methodology of the scale of subjective emotional habitual well-being (Table 2).

**Table 2.** Experienced emotions during Christmas, by age.

| Emotion | 18 | 19 | 20 |
|---|---|---|---|
| Feeling of guilt | 5 | 5 | 4 |
| Enjoyment | 13 | 11 | 5 |
| Shame | 2 | 1 | 1 |
| Fear | 0 | 1 | 1 |
| Pain | 0 | 2 | 12 |
| Joy | 17 | 13 | 10 |
| Sadness | 2 | 6 | 0 |
| Happiness | 3 | 3 | 3 |

The table shows that the largest number of respondents indicated positive emotions that are most associated with the Christmas period. Based on the general assumption, it is possible to identify with the answers of the respondents, as this period is just associated with happiness, joy, and enjoyment. Our goal was to point out if the advertisement, which has the emotional appeal of the story, can influence the emotional experience during this period. Furthermore, in the research, we focused on regional disparities that can affect the experience of positive and negative emotions during the Christmas period.

To analyse the emotions in the pre-research, we focused on the frequency of experiencing positive and negative emotions. We tested them with the Pearson chi-square test. For the purpose of determining the dependence, we also set the following hypotheses:

**Hypothesis 1.** *There is no dependence between the categorical features of a region and emotion.*

**Hypothesis 2.** *There is a dependence between the categorical features of a region and emotion.*

When verifying the hypotheses, we set the significance level at $\alpha = 0.05$. The following table (Table 3) shows the test results. The decision on the test result is given by the *p*-value.

**Table 3.** The result of Pearson's chi-square of independence.

| | Value | *df* | Asymptotic Significance (2-Sided) |
|---|---|---|---|
| Pearson Chi-Square | 8.583 [a] | 3 | 0.035 |
| Likelihood Ratio | 8.937 | 3 | 0.030 |
| *n* of Valid Cases | 120 | | |

The table shows that the value of Pearson's chi test is 0.035. We compared the given number with the significance level $\alpha = 0.05$. It is evident that the value of Pearson's chi test (0.035) is below the level of significance; thus, we accept the alternative hypothesis, H2. This means that there is a relationship between the categorical character of the region and the emotion.

Due to the existence of dependence, we decided to test its strength by using Cramer's V. The result of testing the strength of dependence is shown in the following table (Table 4).

**Table 4.** The result of Phi Cramer's V dependence testing.

| | | Value | Approximate Significance |
|---|---|---|---|
| Nominal by Nominal | Phi | 0.267 | 0.035 |
| | Cramer's V | 0.267 | 0.035 |
| *n* of Valid Cases | | 120 | |

The value of Cramer's V is 0.267, which represents the mean contingency between the categorical variables. From the above, it can be argued that there is a medium dependence between the observed

variables. It was also confirmed (*p*-value of Cramer´s V is below the significance level) that the coefficient is statistically significant.

In the second question, we focused on the perception of advertisements with emotional appeal during different seasons. Out of the total number of 120 respondents, 67 (which represents 53.33%) stated that they watched advertising with an emotional appeal during the analyzed periods. Twenty-seven respondents (representing 22.5%) stated that they did not notice advertisements of this type, and 30 respondents (representing 25%) said that they could not assess whether they had seen advertisements with an emotional appeal. From the above, it is possible to generalize that most respondents notice advertisement with an emotional appeal. In order to influence young people, such advertisements are essential.

In the third question, we focused on finding out whether, based on the appearance of an advertisement with an emotional appeal, the respondent would purchase a specific product. The following table (Table 5) shows the number of responses from respondents.

**Table 5.** Respondents' answers to the question concerning the purchase of the product.

|  | Definitely Yes | Rather Yes | Yes and No | Rather No | Definitely No |
|---|---|---|---|---|---|
| Number of respondents | 20 | 51 | 20 | 21 | 8 |
| Expression of the number in % | 16.66% | 42.50% | 16.66% | 17.50% | 6.66% |

The table shows that up to 59.16% of respondents, which represents an absolute majority, would decide on the basis of watching an advertisement with an emotional appeal to buy a product. The result can be seen as a positive aspect in creating marketing campaigns focused on the importance of emotions. Out of the total number of respondents, 20 could not confirm whether they would buy the product, and the remaining 29 stated that they would not buy the product based on the appearance of the advertisement.

We also categorized the individual results by age. Table 6 shows the answers of the respondents by age.

**Table 6.** Categorize answers by age to a question about buying a product.

| Criterion | 18 | 19 | 20 |
|---|---|---|---|
| Definitely yes | 9 | 5 | 6 |
| Rather yes | 19 | 19 | 13 |
| Yes and no | 4 | 10 | 6 |
| Rather no | 7 | 5 | 9 |
| Definitely no | 4 | 3 | 1 |
| Total numbers | 43 | 42 | 35 |

The table shows that most respondents are aged 18 who would decide to buy a product based on looking for an advertisement with an emotional appeal. Based on the above, it is possible to assume that advertising with an emotional appeal influences their purchasing decisions. Respondents aged 20 were more likely to say that such advertising would not influence their purchasing decision.

We also categorized the answers by gender. The results are shown in the following table (Table 7).

The table shows that mostly men would decide to buy a product based on watching an advertisement with an emotional appeal. More women said they would not buy the product based on watching this type of advertising.

In the last question of the pre-research, we compared the power of advertising with the emotional appeal to shopping behavior of adolescents. We examined the strength of activity by using a 5-point scale. Its explanation is shown in the following table (Table 8).

**Table 7.** Categorize answers by gender to a question about buying a product.

| Criterion | Man | Woman |
|---|---|---|
| Definitely yes | 11 | 9 |
| Rather yes | 25 | 26 |
| Yes and no | 1 | 19 |
| Rather no | 4 | 17 |
| Definitely no | 5 | 3 |
| Total numbers | 46 | 74 |

**Table 8.** The 5-point scale of determining the strength of advertising with emotional appeal to adolescents.

| Criterion | Explanation |
|---|---|
| 1 | It does not affect my shopping behavior at all. |
| 2 | It has a weak effect on my shopping behavior. |
| 3 | It works and does not affect my shopping behavior. |
| 4 | It has a strong effect on my shopping behavior. |
| 5 | It significantly affects my shopping behavior. |

The results of this question are shown in the following table (Table 9) as a percentage.

**Table 9.** Respondents' answers to a question concerning the power of emotional advertising on shopping behavior.

| | Does Not Affect at All | It Has a Weak Effect | It Works and It Does Not Work | It Has a Strong Effect | Significantly Affects |
|---|---|---|---|---|---|
| Number of respondents | 8 | 32 | 47 | 30 | 4 |
| Expression of the number in % | 6.66% | 26.66% | 39.16% | 25% | 3.33% |

The table shows that 28.33% of respondents have an advertisement with an emotional appeal. This can be explained by the fact that this advertisement may not only evoke a feeling of shopping behavior. Its effect can also be expressed by recalling memories of a certain event or a close person. Out of the total number of 39.16% of respondents, they stated that advertising affects and does not affect them. This can be generalized based on how strong the emotional appeal of advertising is and what is its main purpose and goal. For the remaining 33.32% of respondents, advertisements with an emotional appeal do not work, or if they work, they work only very weakly.

As in Question 3, we evaluated the results of Question 4 and focused on the results according to demographic data, the distribution by gender and by age. The results of the age categorization are shown in the following table (Table 10).

**Table 10.** Categorization of answers according to age to the question concerning the scope of advertising with emotional appeal.

| Criterion | 18 | 19 | 20 |
|---|---|---|---|
| 1 | 4 | 3 | 1 |
| 2 | 10 | 10 | 12 |
| 3 | 12 | 18 | 17 |
| 4 | 14 | 10 | 5 |
| 5 | 3 | 1 | 0 |
| Total numbers | 43 | 42 | 35 |

From the results of the table, it is possible to see that respondents, regardless of age, are influenced and not influenced by advertising with an emotional appeal. A smaller number of respondents said

that their advertising either strongly influences their shopping behavior or not at all. It follows from the above that it is important what advertising with what emotional appeal affects adolescents. Based on it, adolescents decide whether the purchase decision will be positive or negative.

In addition to age, we also categorized the answers by gender. The results are shown in the following table (Table 11).

**Table 11.** Categorization of gender responses to a question about the power of advertising with an emotional appeal.

| Criterion | Man | Woman |
|---|---|---|
| 1 | 5 | 10 |
| 2 | 8 | 1 |
| 3 | 18 | 29 |
| 4 | 18 | 21 |
| 5 | 2 | 8 |
| Total numbers | 51 | 69 |

As with the previous answers, the respondents agreed that advertisements with an emotional appeal can and cannot influence them. As already mentioned, the answers of the respondents may be related to the main motive and focus of the advertisement. In regard to gender, women are more influenced by such advertising than men.

*4.2. Research Results*

In the research, we focused on examining the affective level of adolescents in following an advertising campaign from the network of retailer John Lewis. As mentioned above, the concept of advertising is based on the story of a little girl and a lonely older man. The authors' opinions also point out that advertising should evoke negative emotional reactions associated with guilt.

4.2.1. Frequency of Positive and Negative Mood

We used a standardized methodology for the scale of subjective emotional well-being for the research. Within it, we defined individual items, which were divided into positive and negative emotions. The positive mood is defined by the following items: joy, happiness, enjoyment, and physical freshness. The negative mood is characterized by the following items: shame, anger, guilt, fear, pain, and sadness. The following table (Table 12) shows the numbers of positive and negative emotional moods perceived by adolescents. The individual numbers are divided according to the regions in which the research was carried out.

**Table 12.** Numbers of positive and negative mood of adolescents in individual regions.

| Regional Division | Positive Mood | Negative Mood | Number of Respondents |
|---|---|---|---|
| Banskobystricky | 4 | 20 | 24 |
| Kosicky | 17 | 31 | 48 |
| Nitriansky | 7 | 47 | 54 |
| Zilinsky | 16 | 29 | 45 |
| Presovsky | 2 | 7 | 9 |
| Total number | 44 | 136 | 180 |

Table 12 shows that the most negative emotions in seeing the "Man on the Moon" advertisement were experienced by adolescents from the Nitra region, which is located in the southern part of the republic. Out of a total of 54 respondents, 47 perceived the "Man on the Moon" advertisement negatively. In percentage terms, it is up to 87.03%. On the contrary, the most positive emotions were experienced by respondents from the Kosice region, which is located in the east of the republic. Out of the total number of 48, 17 respondents perceived the advertising positively. Considering the individual

regions where we conducted the research, this is the highest number of respondents who perceive the "Man on the Moon" advertisement positively. Already, the initial results suggest regional emotional reactions of adolescents.

### 4.2.2. Relationship Between the Frequency of Emotional Mood and Regional Division

The first research question focuses on assessing the existence of the relationship of regional division to the frequency of experienced emotional mood. In this case, we examined whether the individual defined variables (emotion and region) are interdependent. To verify, we used Pearson's chi test of independence, which is a modification of the $\chi^2$ test of good agreement for a pair of reported variables. Based on the above, we established the following scientific hypotheses:

**Hypothesis 3.** *There is no dependence between the categorical signs of a region and emotion.*

**Hypothesis 4.** *There is a relationship between the categorical features of a region and emotion.*

When verifying the hypotheses, we set the significance level at $\alpha = 0.05$. The following table shows the test result. The decision on the test result is given by the *p*-value of the test, which we marked in black in Table 13.

**Table 13.** The result of Pearson's chi-square of independence.

|  | Value | df | Asymptotic Significance (2-Sided) |
|---|---|---|---|
| Pearson Chi-Square | 8.555 [a] | 3 | 0.036 |
| Likelihood Ratio | 8.903 | 3 | 0.031 |
| *n* of Valid Cases | 180 |  |  |

Table 13 shows that the value of Pearson's chi test is 0.036. We compared the given number with the defined level of significance, $\alpha = 0.05$. In comparison, we found that the value of Pearson's chi test (0.036) is below the level of significance. It follows from the above that we accept the alternative hypothesis, H4. This means that there is a relationship between the categorical character of the region and the emotion.

Due to the existence of dependence, we decided to test its strength, using Cramer's V. The result of testing the strength of dependence is shown in Table 14.

**Table 14.** The result of Phi Cramer's V dependence testing.

|  |  | Value | Approximate Significance |
|---|---|---|---|
| Nominal by Nominal | Phi | 0.218 | 0.036 |
|  | Cramer's V | 0.218 | 0.036 |
| *n* of Valid Cases |  | 180 |  |

Table 14 shows the result of the dependence strength test. The value in the table is 0.218, which represents the mean contingency between the categorical variables. From the above, it can be argued that there is a medium dependence between the observed variables.

In the next step, we verified the existence of significant differences in the experienced emotional mood between individual regions. We verified the significance between the categorical variables by the Kruskal–Wallis test. For verification, we have defined the following hypotheses:

**Hypothesis 5.** *There is no significant difference in the perception of emotions between regions.*

**Hypothesis 6.** *There is a significant difference in the perception of emotions between regions.*

The results of the Kruskal–Wallis Test are shown in Table 15. It follows that there is a significant difference between the regions as the reported *p*-value of the test was 0.037.

**Table 15.** Verification of the significance of differences between categorical variables

| Null Hypothesis | Test | Sig. | Decision |
|---|---|---|---|
| The distribution of emotion is the same across categories of regions. | Independent-Samples Kruskal–Wallis Test | 0.037 | Reject the null hypothesis. |

We compared the resulting *p*-value of the test with the level of significance. In comparison, we found that the *p*-value is less than the significance level, $\alpha = 0.05$, defined by us. It follows from the above that we accept an alternative hypothesis about a significant difference in the perception of emotions between regions.

## 5. Discussion

Currently, there is a growing trend of creating advertisements with emotional appeal. Marketers try to create advertising that will bring them a higher conversion rate in a positive purchasing decision. Therefore, in many cases, they also use various emotional appeals to help them achieve this goal. However, there are companies whose goal is to strengthen the brand, increase competitiveness, and respond to a particular global social problem. One of these brands is the John Lewis company, which was the first department store to use emotions in advertising space. Each year, they try to use a different emotional appeal in their advertising campaigns. "Man on the Moon" is the most successful advertisement in a global sense. That is why it has become the main subject of our research.

The research presented in the introduction of the article focused on the importance of emotions in advertising and their effect on customers. It has been confirmed in individual research that the emotions that most influence the behavior of adolescents include love, happiness, sadness, and fear. The advertising that was the subject of our research was considered nostalgic by some authors. Nostalgia should be reinforced by arousing the guilt that is the basic concept of all advertising. In the numbers of positive and negative moods in adolescents, we could see that, out of the total number of 180 respondents, up to 136 of them expressed that advertising has a more negative effect on them. This showed negative emotions in adolescents, including guilt. This can be identified with the opinion of Lonergan, who argued that advertising commodifies loneliness in the form of its strengthening. The advertising team creates space for the perception of negative emotions [31,35].

The results from Table 12 initially showed us the differential regional dimensions of the perception of the positive and negative mood after watching the advertisement in question. Subsequently, Pearson's chi test of independence confirmed the dependence between the categorical variable region and the emotion we experienced. In verifying the existence of the significance of differences, we found out by the Kruskal–Wallis test that there is a significant difference in the perception of emotions between regions. Based on the performed tests and verification, we can say that there is a difference in the emotions experienced by adolescents with respect to the geographical division of the country.

Conducting the research, we also found the existence of regional differences after looking at advertising with an emotional appeal. This finding is also generalized by studies and research that have identified significant differences in regional and emotional perception in the introductory part of the article. Regional differences in emotions can be attributed to various factors. These can be, for example, ontogenetic assumptions, social relations, living conditions, the environment in which they grow up, the level of education attained, the culture of the region, and the like. All of these factors can contribute to different perceptions of advertising with an emotional appeal.

According to Sammour et al. [36], John Lewis seeks to implement an innovation strategy. Its elements are also manifested in the form of annual emotional advertisements. The authors further stated that this helps the overall success of the brand in the global market environment. Whether innovative elements are also used in the annual advertisements can be debated.

The authors do not give a concrete example of the application of these elements in brand marketing communication. Therefore, these elements can be considered as general. However, it can be agreed

that the annual emotional advertisements contribute to the global success of the John Lewis brand. Based on previous research, it can be argued that John Lewis has a strong global presence. Their annual advertising campaigns also play a significant role in their success. The strengthening of their success is also the fact that, every year, their Christmas advertisement is focused on a different social problem with specific marketing tools (different product placement, sales support, music, etc.) [37].

From the realized research of Barve et al. [15] and Sinigh and Pandey [16], it is possible to identify with some results. The conclusion of the authors was that adolescents intensely perceive the influences and correlation of advertisements with emotional appeal. This can also be reflected in their behavior and overall social experience. Our research has confirmed that adolescents perceive advertising with negative emotions. These are the ones that can be reflected in their future social behavior. In this, we also see room for further research. Furthermore, the authors' results focused on the differences in the emotional reactions of girls and boys. They found that girls seem more emotional when watching advertisement, and boys are more rational. This fact may be the subject of our further research. We will examine the extent to which girls seemed more emotional and boys more rational for watching the "Man on the Moon" ad. We also see space in further research in the area of comparison and dependence of categorical variables of sex and experienced emotion and age and experienced emotion. These areas will be examined autonomously.

The result of the research by the authors Nadanyiova [17] and Kliestikova [18] was a higher interaction between the customer and the company when looking at emotional advertising. The stated opinion of the authors can be confirmed. The primary goal of the John Lewis company is to build a strong brand among customers. Here you can see the link as emotional advertisement from the John Lewis company are considered worldwide successful. Using emotions in advertising can also strengthen the overall financial performance of the company. This can help increase the company's profits. [38,39].

Part of our research was the emotional assessment of the second advertising campaign "You Don't Think You Will Pay" from the Ministry of Transport of the Czech Republic. The advertising campaign contains an emotional appeal of fear. The aim of the campaign is to think about oneself. The campaign reflects the way we treat our surroundings and how we can be irresponsible, e.g., driving under the influence of alcohol or drugs, not paying attention while driving, using phones while driving, etc. The target group of the campaign was young people after obtaining a driving license.

We examined the campaign on the same sample of respondents, which filled in the standardized tool the scale of subjective emotional habitual well-being of how strongly they experience the given emotion. As a result, our assumption has already been confirmed. All respondents perceived the campaign negatively. The assessment of regional differences and emotional perception is irrelevant in this campaign, as its aim is to evoke a negative experience of the viewer. The dependence of experiencing emotions on the region has not been confirmed.

We can perceive the benefit of the study in two senses, both for the company and for the society. For the company, we see the benefit in the impact of advertising on the life of the company. The influence of people on advertising has been confirmed. In the pre-research part, we found that advertising with an emotional appeal influences the shopping behavior of young people. Research has shown that there is an influence of emotional appeal on the frequency of positive and negative mood. Although we did not confirm the frequency of emotional mood in one advertising campaign and the dependence between emotion and region, we can confirm that there was an impact on adolescents. Individual advertisements can evoke a certain sense of guilt in adolescents and thus contribute to real social values. Therefore, the study can also contribute to the sustainability of the global social values of society, by considering advertising with an emotional appeal.

From a business point of view, well-designed advertising responding to the current social problem can contribute to the rapid spread through social networks. So, it can quickly become a viral video that can reach several million views in a very short time. However, the question is why such advertising quickly becomes viral. The answer may be to respond to a specific issue that is the main motive

of the advertisement. This type of advertising can significantly influence the social perception of adolescents, their shopping behavior, and respect for traditional values. However, the advantage for a company can be rapid dissemination via social networks, brand strengthening, and competitiveness.

## 6. Conclusions

Based on the conducted surveys, it is possible to claim that emotions are of fundamental importance in advertising space. They can evoke not only positive but also negative emotions in the customer. These can be associated with the loss of a family relative or friend, or other misfortune. It is all the more difficult to perceive such emotions during holidays such as Christmas, when people should be with each other and spend time together. Advertisements that emphasize negative emotions during the Christmas holiday, for example, can also make a customer feel brand-detached. Therefore, it is always necessary to consider what emotion in the advertising space the company will use.

When conducting the research, we wanted to point out the differences in the perception of emotions in individual regions in the Slovak Republic. We've found that adolescents perceive advertisements with emotional appeal. Another important finding was the fact that there is a difference in the perception of positive and negative emotions depending on the geographical positioning. Research is limited by the number of respondents and by the use of Pearson chi independence test and Cramer's V methods. In the future, we would also continue with the calculation of Cronbach alpha and factor analysis. We can express a methodological reservation about the lack of information about other variables from the background of the research, about the respondents and their socioeconomic status, background, life situations, and study environment, which may be related to positive and negative perceptions. We plan to conduct the research on a regular basis. We want to find out if there is a difference in the perception of emotions with an interval of one to two years in the same adolescents. We plan to expand the research to include a comparison of age dependence and perception of an emotional advertising appeal. Research findings can be applied in the field of marketing, specifically in the creation of advertising campaigns using emotional appeals. Marketing managers can use this knowledge to get closer to the target segment.

The research findings can also contribute to the development of integrated marketing communication. Advertisements using emotional appeals can contribute to effective integration between multiple communication channels. Therefore, using emotions in advertising space, we can strengthen traditional communication models. We see our contribution in strengthening the basic factors by the following: choosing and using the right emotional appeal, the right response to a social problem respecting global cultural differences, and the right timing of advertising.

**Author Contributions:** Conceptualization, D.V. and A.K.; methodology: E.S. and K.V.; software, K.V.; validation, D.V. and E.S.; formal analysis K.V.; investigation, A.K.; resources, D.V.; data curation, D.V.; writing—original draft preparation, D.V. and A.K.; writing—review and editing, D.V. and K.V.; visualization, D.V.; supervision, A.K.; project administration, A.K.; funding acquisition, A.K. All authors have read and agreed to the published version of the manuscript.

**Conflicts of Interest:** The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

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*Article*

# The Effect of Natural Celebrity–Brand Association and Para-Social Interaction in Advertising Endorsement for Sustainable Marketing

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**Abstract:** Celebrity endorsement has been regarded as an effective strategy for enterprises to implement sustainable marketing strategies. However, frequent use of celebrity ads renders consumers skeptical of the ads' and celebrity's profit-making intent, which may adversely affect the sustainable marketing of the brand. This has given rise to "natural celebrity-brand association" that features celebrities using the brand in real-life settings, which is usually presented on social media rather than mass media. Using a boot-strapping approach, the study contrasts the effects of natural and commercial endorsements (i.e., natural vs. advertising, natural vs. product placement) on consumer brand responses. Results showed that natural celebrity–brand association exerts superior effects. Further, the mediating variables, para-social interaction (PSI) and its drivers (celebrity attractiveness, consumers' perceived homophily with the celebrity), which reflect consumer's emotional connection with a celebrity, also exert significantly stronger effects in the natural (vs. commercial) endorsement context. This research provides insights for advertisers and marketers in exploring new patterns of brand presentation forms in advertisements and gaining competitive advantage in sustainable marketing.

**Keywords:** celebrity–brand association; real-life setting on social media; para-social interaction; sustainable marketing; self–brand connection; brand quality

## 1. Introduction

Celebrity endorsement is a popular sustainable marketing strategy that can increase brand awareness, brand image, consumer attitude, and purchase intention. Nevertheless, frequent exposure to celebrity ads may heighten the consumer's awareness of their underlying commercial purposes, leading to a higher level of skepticism [1] or even disgust [2]. To counter the potential negative effects of celebrity ads, marketers have devised alternative strategies such as product placement to provide a more neutral context to disguise the underlying commercial purposes of celebrity endorsement.

Recently, the need to conceal the purpose of celebrity advertising has given rise to a new format dubbed "natural celebrity endorsement". Rather than featuring the celebrities in studio poses that feature the celebrity and advertised product in their best light, natural celebrity endorsement features celebrities in real-life settings as they hold, use, or otherwise engage with the advertised brand. While some of these settings may be planned, many others are consumers' real encounters with the celebrity eating/wearing/using the brand. These activities are facilitated by fans, who follow closely the celebrity's whereabouts and then spread the photos across social media [3]. Regardless of the planned/unplanned nature of the encounter that consumers may have difficulties telling apart, natural endorsement is perceived as more authentic, thus increasing the endorsement's acceptability [4]. Recently, the brands Everlane, Christian Louboutin, Cartier, and Alexander McQueen have seen markedly increased internet

searches and sales traceable to natural celebrity endorsement [5]. While scholars [6] are beginning to test the impact of this style of celebrity endorsement, studies in this area remain lacking.

In China, celebrity endorsement is a highly popular strategy, with over 50% of ads featuring one or more celebrities. This is well above the 25% in the U.S [7]. On the one hand, the popularity of this strategy speaks to the sustainable marketing strength of celebrity endorsement in the Chinese market. On the other hand, the extensive use of celebrity advertising could lead to over-exposure and consumer fatigue. In the worst-case scenario, celebrities with limited knowledge of the endorsement (e.g., a non-user of a product) may end up endorsing under-qualified products and services, causing damages to both the endorser and consumers [8]. Related past events have led to a social call for more truthfulness and transparency in celebrity endorsement. Regulators have now mandated the amended advertising law that a celebrity needs to have experience with a product or service before he/she can endorse it [8]. As celebrity endorsement as a genre is rebuilding its credibility and relationship with consumers in China, natural celebrity endorsement provides one such means.

This study aims to assess the impact and drivers of natural celebrity endorsement. To clarify these issues, the study will compare natural celebrity endorsement with paid advertising and product placement, both of which carry salient commercial purposes. We posit para-social interaction (PSI) as a major explanatory factor of natural endorsement effects. PSI refers to the one-way interaction between consumer and media figures. When a consumer engages in PSI with a celebrity, he/she extends emotional energy, interest, financial, and time investment to the celebrity and in return, he/she receives a sense of intimacy and friendship as well as psychological satisfaction [9,10]. Not surprisingly, PSI has been shown to be a crucial factor in traditional celebrity advertising [11,12]. The effect of the celebrity's perceived attractiveness, a known driver in traditional celebrity ads, will also be examined in a natural endorsement context.

This paper examines the following issues: (1) Compare the levels of consumer–celebrity PSI and the degrees of its drivers, when consumers are exposed to different endorsement contexts; (2) compare the level of positive brand responses when consumers are exposed to different endorsement contexts; and (3) test the role of PSI and its drivers in mediating the effects of endorsement contexts on brand responses. Results of the study will enhance our understanding of the impact of diverse endorsement contexts and their underlying processes. This, in turn, would facilitate marketers to delineate the salient drivers, when they engage in advertising planning involving different endorsement contexts.

## 2. Theoretical Framework and Proposed Hypotheses

### 2.1. Contexts of Celebrity–Brand Association and Consumer Brand Attitudes

Consumers and advertisers have been quite familiar with the endorsement process within traditional advertising contexts, including formal and explicit endorsement in formal advertisements where the celebrity endorses the brand/product through verbal endorsement, and implicit endorsement where the celebrity uses or just appears with the brand/product [13–15]. Endorsement effects in traditional contexts with profit tendencies have been paid much attention by academia [7,16–18]. In addition to commercial contexts, which have always been the mainstream form of conveying persuasive messages, the unpaid celebrity endorsement, wherein associations between celebrity endorsers and brands are displayed in real life scenes, have started to gain some attention [19,20].

Advertisers have noticed that paid endorsement with explicit commercial purposes in normal advertising may cause consumers to dislike the selling behaviors thus enhancing consumers' negative attitudes towards a brand [2]. Even product placement in reality shows or TV series, which seemed more natural and fluent in conveying the symbolic meaning of a brand to an audience, might still irk audiences. For example, Homer [21] found that consumers had negative impressions of placement advertisements. Such an evaluation might be because placement advertisements were usually repetitive and in obvious places [22]. This might interfere with audiences in fluently viewing normal media

content, which in turn contributes to consumers' negative attitudes towards the brand in the placement advertisements [23].

Celebrity–brand association with no obvious profit orientation may help increase consumers' favorable impression of a brand/product as consumers are increasingly regarded as beacons guiding sustainable marketing means [24]. For example, the endorsement would be more effective if the audience felt that the celebrity endorser had really used the brand prior to endorsing the brand [20]. Consumers would have more positive attitudes towards the brand if they felt that the celebrity endorsed the product because of recognition of a brand rather than for commercial profit [16].

In the social media era, consumers can readily gain access to aspects of the celebrity's private life [25]. Many consumers have smartphones and are connected on social media. They can take a photograph of a celebrity on the street, and then upload and viral it on social media. This practice allows consumers to learn firsthand what a celebrity actually eats, wears, and uses in the course of his/her daily life. It thus blurs the line between a celebrity-user and a celebrity-endorser [26].

Information related to products appearing together with celebrities spreads quickly through social media enabling natural celebritybrand associations to gain attention of potential users [27,28]. The consumer-generated brand messages disseminated through ways of electronic word-of-mouth (eWoM) communication is considered as a more convincing source of brand information than market-generated advertising. Escalas [29] studied the difference between the narrative produced by participants involved in the brand story of the real world against the narrative in commercial advertising, and found that the former had a more positive influence on consumers' SBC than the latter. Marwick and Boyd [30] found that natural celebrity–brand practice has begun to become popular on social media. Jin and Phua [28] pointed out that there should be more positive relationships between consumers and brands in the context of natural celebrity–brand associations than through commercial endorsement as the former seemed more credible. Van Laer et al. [31] indicated that consumers with relatively high degrees of emotional attachment to a celebrity tended to hold higher expectations of the celebrity to use the brand in the real world. Russell and Rasolofoarison [6] tested the effect of natural celebrity–brand association on consumer's perceived credibility of the celebrity and draw the conclusion that celebrity was regarded more credible when appearing together with a brand/product in real-life scene compared with commercial endorsement situations.

Taken together, these studies suggest that the different endorsement contexts may yield different consumer responses, with natural celebrity endorsement having an advantage over commercial celebrity endorsement on its persuasive brand effects. This study proposes the following hypotheses, extending the investigation into the impact of endorsement contexts on brand-related responses (e.g., purchase intention) salient to marketers:

**Hypothesis 1 (H1).** *Compared to consumers exposed to advertising or product placement, consumers exposed to a natural endorsement context will hold significantly more positive brand responses, including self–brand connection (H1a), brand quality (H1b), brand attitude (H1c) and purchase intention (H1d).*

*2.2. Contexts of Celebrity–Brand Association and Consumer Perceived Relations with Celebrity*

Para-social interaction (PSI) is a one-way, non-reciprocal relationship that consumers form with publicly renowned persons. In the advertising context, this imaginary interpersonal relationship refers to the consumers' felt emotional intimacy with the celebrity and it is real in the consumers' mind. Studies on the effects of word-of-mouth communication have shown that consumers are more prone to adopt brands or products recommended by individuals they know. Thus, PSI enhances celebrity endorsement effects [3,12,32], especially in accordance with the growing choice initiatives of consumers in deciding their consumption behavior.

Studies on PSI have not only examined its consequences, but also its antecedents. It has been proved that the closer the media content was to reality in audiences' perceptions, the more frequent audiences expose to the media, which led to stronger audience perception of PSI with media figures [33,34].

Social media platforms such as WeChat and micro-blogs in China and Facebook and Twitter globally have relaxed people's safeguard for privacy and many would disclose their ideas and feelings to people they do not know well, and even strangers, on these platforms. Celebrities in particular are using social media platforms to actively interact with stranger-fans. They provide content that is not only entertaining, but that discuss their daily life, political views, personal thoughts, and feelings. Through these enhanced interactions and self-disclosure, consumers are getting the celebrity's true voice rather than a media depiction of the celebrity [35]. This allows consumers to perceive a closer PSI with the celebrity.

Scholars [36–39] pointed out that the similarity between audiences and media figures, especially similarity in terms of attitudes and appearance, all had a positive effect on the strength of PSI. As celebrities were often regarded as a reference group aiding the construction of the self [29], once consumers found that their own personality characteristics were similar to the brand traits used by some celebrity, they would feel that their self is confirmed by the reference group [40]. The perceived similarity or homophily of consumers on the celebrity reflected through using certain brand/product might arouse consumer's willingness to get close to the celebrity to gain the self-perception and self-identity [41]. It has been shown that people tended to get along with "like-minded" people, and the sense of group identity with such people drove individuals to form positive attitudes and a willingness to communicate with group members [42].

A situation in which a celebrity uses a brand/product in real life, with no obvious profit motive, may be more effective at building consumer trust on the brand/product [6,7]. To some extent, this function of increasing trust of natural celebrity–brand association is similar to the function of PSI in reducing audiences' sense of uncertainty [43,44]. In the context of PSI—the longer the awareness of, and the deeper degree of familiarity an audience has with a media figure, uncertainty is reduced and the audience would perceive higher degrees of intimacy with the media figure, increasing the intensity of PSI [43,44]. People may trust the persuasion messages of celebrities with whom they have PSI in the same way as trusting the suggestion of a friend. What is more, consumers' trust on brand/product in real-life situation may also arouse consumer's closeness and resonance with the brand, helping form a kind of brand association, which is the basis of SBC [40]. Consuming certain brands/products used by celebrity in normal life, especially the brands/products with strong sign-value, helps consumers to express their personality and distinguish themselves from others [29,45,46]. That is how the PSI facilitated consumer–celebrity relation to be converted to consumer–brand connection in endorsement process.

A quantitative review of the celebrity endorsement literature identified the celebrity's perceived attractiveness as one of the most salient celebrity traits that exerts endorsement effects [7]. An attractive/likeable celebrity draws viewer attention, lowers the viewer's defensive barriers, reduces his/her likelihood to counter-argue an ad message [47], and allows the endorsed brand to take on positive emotions [15]. Indeed, most studies have found that there is a positive correlation between celebrity attraction and brand evaluations [17], thereby providing evidence that this affective trait complements the celebrity's cognitive traits (e.g., source credibility) to enhance endorsement effectiveness.

Although the literature has not specifically examined the relationship between endorsement context and perceived attractiveness, it has noted that some consumers do not like celebrity advertising when they feel the celebrity is doing it for the money [12]. Thus, showcasing a celebrity in a natural context without obvious profit orientation may bring about more favorable consumer impressions.

Taken together, consumers may have good impressions and sense of similarity/homophily with a celebrity if they are exposed to the celebrity–brand association in a real-life context. Hence, we propose the following hypotheses:

**Hypothesis 2 (H2).** *Celebrity attractiveness (H2a) and consumer perceived homophily with celebrity (H2b) are drivers for consumer–celebrity PSI.*

**Hypothesis 3 (H3).** *Consumer's PSI with celebrity (H3a) as well as its influencing factors, namely celebrity attractiveness (H3b) and consumers' perceived homophily with celebrity (H3c), are at higher levels when consumers are exposed to the celebrity–brand association in real-life context than in commercial endorsement contexts (advertisement or product placement).*

As discussed earlier in the theoretical framework, the endorsement literature has provided evidence that consumer–celebrity PSI can exert persuasive brand responses [32]. The current study builds on past studies and hypothesized that compared to commercial endorsement contexts, a natural context can exert direct effects and enhance brand responses (H1), PSI, and its drivers (H2 and H3). Putting these strands of research together, we further posit that PSI and its drivers can mediate the relationship between endorsement contexts and brand responses. Thus,

**Hypothesis 4 (H4).** *Consumer's PSI with celebrity (H4a) and its drivers, including celebrity attractiveness (H4b) and consumers' perceived homophily (H4c) with celebrity, mediate the relationship between contexts of celebrity–brand association and consumer's brand-related responses.*

According to the hypotheses, the theoretical model of this paper is designed as Figure 1.
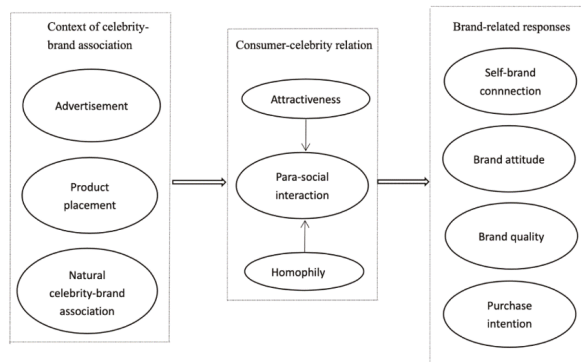


**Figure 1.** Effect of contexts of celebrity–brand association on brand attitudes.

## 3. Materials and Methods

An empirical study realized through an online questionnaire was designed to examine the hypotheses. We created three different celebrity–brand associations to compare the effects of commercial endorsements and natural celebrity–brand association on consumer's responses to the celebrity and the brand.

### 3.1. Product Selection

The pretest aims to select a product that carried both high utilitarian and high symbolic values in consideration of reflecting the celebrity appearance, self–brand connection, and brand quality. Fifty respondents (29 females, 21 males; age 16 to 69) joined the pretest. They were given a list of four products (mobile phone, bottled mineral water, facial cleanser, and facecloth). Using a sentence completion task adapted from Mittal and Lee [48], the respondents were instructed to select one (or more) products from the list to complete the sentences, thus indicating the respective products' utilitarian and symbolic values. Multiple responses were allowed. Results in Table 1 showed that bottled mineral water had the highest utilitarian (133 out of 150 possible mentions) and symbolic (97 out of 150 possible mentions) values, followed by mobile phone (utilitarian: 127; symbolic: 81). Thus, bottled mineral water was selected as the stimulus. Please refer to Appendix A for details of the pretest results.

<p align="center">**Table 1.** Measurement items and reliability and validity assessment.</p>

| Items | SFL |
|---|---|
| **Para-Social Interaction: Cronbach's α = 0. 884** | |
| (1) I am happy to see LT on media. | 0.581 |
| (2) If LT appeared on a (different) TV series or program, I would watch it. | 0.608 |
| (3) I think LT is an unaffected person. | 0.599 |
| (4) When LT joins an interview, she seems to understand what I want to know. | 0.658 |
| (5) When LT shows me how she feels about something, it helps me make up my own mind about the issue. | 0.600 |
| (6) I like to compare what LT says in the media with my own thoughts. | 0.617 |
| (7) LT makes me feel comfortable, as if I am with a friend. | 0.629 |
| (8) If there is no news about LT in the media for a period, I will look forward to seeing her. | 0.680 |
| (9) I would like to meet LT in person. | 0.574 |
| (10) If there are news or stories about LT on the media, I will read them. | 0.648 |
| (11) I like to make comments on the roles LT play. | 0.531 |
| (12) If I hear other people's comments against LT, I will be dissatisfied. | 0.653 |
| (13) I feel sorry for LT when she makes a mistake. | 0.540 |
| **Attractiveness: Cronbach's α = 0.771** | |
| (14) I think LT is charming. | 0.745 |
| (15) I think LT is good-looking. | 0.617 |
| (16) I think LT is a lady with real class. | 0.639 |
| (17) I think LT is elegant. | 0.655 |
| **Homophily: Cronbach's α = 0.780** | |
| (18) I think LT is similar to me in ideas and concepts. | 0.623 |
| (19) I think I have something in common with LT. | 0.637 |
| (20) I think LT is similar to me in character. | 0.626 |
| (21) I think LT is similar to me in way of speaking. | 0.669 |
| (22) I think LT is similar to me in treating others. | 0.671 |
| **Self-brand connection: Cronbach's α = 0.869** | |
| (23) Whistler seems suits me well. | 0.691 |
| (24) Whistler seems like a brand I can see myself drinking. | 0.701 |
| (25) Whistler could be a brand representing me. | 0.699 |
| (26) Whistler seems to convey some of my personal information. | 0.786 |
| (27) Whistler seems reflect the way that I want to present myself to others. | 0.737 |
| (28) I think Whistler could help me become the type of person I want to be. | 0.739 |
| **Brand quality: Cronbach's α = 0.608** | |
| (29) I think Whistler is in high quality. | 0.657 |
| (30) I think Whistler can bring me positive energy. | 0.673 |
| **Brand attitude: Cronbach's α = 0.756** | |
| (31) I think Whistler is favorable. | 0.606 |
| (32) I think Whistler is good. | 0.640 |
| (33) I like Whistler. | 0.687 |
| (34) I would like to recommend others to try Whistler. | 0.710 |
| **Purchase intention: Cronbach's α = 0.767** | |
| (35) I would like to try Whistler. | 0.718 |
| (36) I look forward of the selling of Whistler in China. | 0.765 |
| (37) I will give priority to Whistler when purchasing mineral water. | 0.703 |

<p align="center">Note: Alpha refers to Cronbach's alpha reliability estimate; SFL refers to standardized factor loading.</p>

Whistler was a brand of bottled mineral water produced in Canada that was not available in China at the time of the study. Using a real brand provided an externally valid context but its unavailability in the Chinese market minimized prior consumer–brand association.

*3.2. Celebrity Selection*

Then, the pretest aimed to select a celebrity that satisfied the characteristics of both good looks and reputation. We began with the top 30 celebrities listed in the 2017 Chinese Celebrity Income Rank [49]. The income ranking allowed us to include celebrities highly involved in endorsement, as endorsement often makes up a significant part of a celebrity's income. All but one (athlete) of the celebrities on the list worked in the entertainment industry. We sent the list to 40 respondents (20 males, 20 females; age 22 to 51) and asked them to select one celebrity among the 30 perceived to be both attractive and with good reputation. The respondents worked independently. The results showed that Liu Tao (LT) had the highest votes (11 votes), followed by Jacky Cheung (9 votes). The other votes were quite diverse. Thus, LT, who had the seventh highest income according to the list, was selected for study 1.

LT's popularity and constant presence on TV advertisements, magazines, and social media [50] make her a good candidate for the research. At the beginning of the data collection, the selected celebrity LT' popular TV series Ode To Joy 2 had just finished broadcasting during prime-time on Zhejiang Satellite TV, and the new series Ode To Joy 3 will begin its production in 2020. LT's image is easily and readily recognizable among consumers.

*3.3. Empirical Manipulations*

The study was carried out online. We chose the platform WJX to recruit respondents and distribute the questionnaires. WJX is the largest non-proprietary online survey platform in China, with more than 2.6 million people on its panel. Its client list includes international corporations such as Walmart, Starbucks, BMW, and McKinsey & Company that have used this platform to conduct surveys. All WJX panel members can access the link containing the questionnaire of this study. To avoid repeats, members with the same IP address or same computer/mobile phone equipment could access the questionnaire once only.

At the beginning of the study, the respondents were informed that their participation in the academic research would be voluntary and anonymous, and that they would be exposed to a photo and some questions (for questionnaire details, please refer to the Appendix B). Then, the respondents were asked to choose randomly a letter, A, B, or C, without knowing that the letters correspond to the three conditions. To ensure a balance among the three conditions, the maximum number of respondents in each condition is set at 200.

In the proper study, each respondent was exposed to one picture only. In condition A, the respondents were exposed to a picture that appeared that LT was endorsing Whistler water in an advertisement. In condition B, the respondents were exposed to a picture that appeared that Whistler water was placed in a TV series with LT as the actress. In condition C, the respondents were exposed to a picture showing LT holding a bottle of Whistler water on the street. This picture had been digitally modified and it looked like that LT was unconsciously captured by passers-by in her daily life. The pictures in the three conditions were presented as either "taken from a forthcoming advertisement for a new bottled mineral water" (ad endorsement condition), "taken from LT's Ode To Joy 3: The TV series to be shown next year" (product placement condition), or "taken by passers-by who saw LT on the street" (real-life condition). The respondents were asked to spend a few minutes observing the pictures.

Afterwards, the respondents performed an unrelated task to clear their short-term memory. Following this task, they were asked to choose from several options the brand they saw in the previous pictures. The options included Whistler and some other brands. They were also asked to identify the context they saw in the previous pictures (i.e., ad, placement, real-life). The respondents (1) who were not regular users of bottled mineral water, (2) who were aware of the Whistler brand, (3) who failed to identify the brand name (i.e., Whistler) correctly, and (4) who could not correctly identify the context they were exposed to were thanked and dismissed.

The remaining respondents continued to the next session. First, before they answered the brand response questions, they were told that "Whistler, originated from a foreign country, is water that is

natural and free of pollutants. It also provides people with rich beneficial minerals. Whistler will soon be available in China. We would like to know your perceptions concerning this brand." Second, before they answered questions related to their perceptions of the selected celebrity, the respondents were told that "Liu Tao (LT) is an actress in China and has starred in many films and television shows. Please answer the following questions."

### 3.4. Respondents

A total of 345 respondents, including 149 females and 196 males, passed the four screening criteria/manipulation checks and completed the questionnaire successfully. They were quite evenly distributed across the three conditions (110 in A, 119 in B, 116 in C). Two-thirds of them ($n = 230$) were young people between 18–30 and three-quarters of them ($n = 259$) were well educated, with a bachelor's degree. This younger, well-educated respondent pool is consistent with the segment of bottled mineral water users in China that according to ASKCI Consulting (Retrieved from https://www.askci.com/news/chanye/20190528/1045131146931_2.shtml) consists of upscale consumers looking for healthier consumption choices. We ran a series of chi-square tests and the results showed no significant differences across the three conditions in terms of the respondents' gender ($x^2 = 12.66$, $p > 0.05$), age ($x^2 = 11.23$, $p > 0.05$), and educational level ($x^2 = 6.05$, $p > 0.05$).

The respondents were debriefed at the end of the study. There was a disclaimer in the debriefing reminding the respondents that the study was a piece of academic research. The depiction of LT and Whistler in the study was unrelated to either party. Each respondent received 5 RMB (about USD 80 cents) through the WJX system as incentive for participation.

### 3.5. Measures

The measures were adapted from existing scales. PSI was adapted from Rubin et al. [34]. The factors influencing PSI, namely attractiveness and homophily, were separately adapted from Ohanian [51] and McCroskey, McCroskey, and Richmond [52]. Consumer's brand attitude and brand quality were separately adapted from Torres, Sierra, and Heiser [53] and Grier and Deshpandé [54]. Consumers' SBC and purchase were separately adapted from Escalas [29] and Sirgy [55]. The detailed measurement items and reliability are shown in Table 1.

### 3.6. Mediation Analysis Approach

The mediation analysis was carried out using bootstrapping, a method that has become popular in testing indirect effects, given its high statistical power [56]. Bootstrapping is a non-parametric test based on resampling with replacement that is done many times (e.g., 5000). If the analysis shows that the confidence level does not contain zero (i.e., the indirect effect is different from zero), the researcher can determine that the mediation between independent and dependent variables exists [57]. The current analysis was conducted on SPSS using the PROCESS procedure. We followed the recommendations of Cheung and Lau [58] and set the number of samples for bias correction at 5000 and the confidence interval at 95%.

## 4. Results and Analysis

### 4.1. Consumer Attitudes in Different Endorsement Contexts (H1)

A MANOVA (multivariate analysis of variance) was utilized to test whether there are significant differences in the mean scores for all variables by three contexts of celebrity–brand association. The results in Table 2 revealed significant differences on consumer brand-related responses (self–brand connection F(2, 342) = 10.4, $p = 0.000$; brand quality F(2, 342) = 8.94, $p = 0.000$; brand attitude F(2, 342) = 7.60, $p = 0.001$; purchase intention F(2, 342) = 7.33, $p = 0.001$) across the three contexts of celebrity–brand association. The Tukey post-hoc comparisons revealed significant differences between the advertisement vs. real-life context and product placement vs. real-life context in terms of all the four

brand responses. Consumers who were exposed to the celebrity–brand association in real life context had the highest level of brand-related responses, namely self–brand connection, perceived brand quality, brand attitude, as well as purchase intention. The results supported H1.

**Table 2.** Means (standard deviations) for variables in three contexts.

| Variable | Advertisement | Product Placement | Real Life | Manova | Post-Hoc (Tukey) | |
|---|---|---|---|---|---|---|
| | | | | | Ad vs. Real | Pp vs. Real |
| Relations measures | | | | | | |
| Attractiveness | 4.06 (0.66) | 3.97 (0.75) | 4.23 (0.50) | 0.007 ** | 0.047 * | 0.006 ** |
| Homophily | 3.52 (0.72) | 3.39 (0.82) | 3.77 (0.73) | 0.001 ** | 0.034 * | 0.001 ** |
| Para-social interaction | 3.61 (0.66) | 3.57 (0.73) | 3.94 (0.64) | 0.000 *** | 0.001 ** | 0.000 *** |
| Brand measures | | | | | | |
| Self-brand connection | 3.28 (0.86) | 3.29 (0.91) | 3.73 (0.80) | 0.000 *** | 0.000 *** | 0.000 *** |
| Brand quality | 3.65 (0.86) | 3.68 (0.81) | 4.05 (0.72) | 0.000 *** | 0.001 ** | 0.001 ** |
| Brand attitude | 3.70 (0.76) | 3.76 (0.68) | 4.02 (0.58) | 0.001 ** | 0.001 ** | 0.008 ** |
| Purchase intention | 3.92 (0.84) | 3.93 (0.78) | 4.26 (0.66) | 0.001 ** | 0.003 ** | 0.003 ** |

Note. Ad = advertisement; Pp = product placement; Real = Real-life context; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

### 4.2. Drivers for Consumer–Celebrity PSI (H2)

Linear regression analysis of SPSS is used to test the effects of attractiveness and homophily between on PSI. There is no presence of collinearity (Tolerance = 0.832 > 0.10, VIF = 1.202 < 10) of the two variables of attractiveness and homophily. Accordingly, there are significant effects of both attractiveness ($\beta = 0.361$, $p < 0.001$, $R^2 = 0.614$) and homophily ($\beta = 0.518$, $p < 0.001$, $R^2 = 0.614$) on PSI. Thus, H2 is supported. Someone who perceived a celebrity to be more attractive would attribute more perceived PSI with the celebrity. Meanwhile, someone who perceived more homophily with a celebrity would attribute more perceived PSI with the celebrity.

### 4.3. Consumer Perceived Relations with Celebrity in Different Endorsement Contexts (H3)

The results in Table 2 showed significant differences on consumers' perceived celebrity attributes (attractiveness $F_{(2, 342)} = 5.01$, $p = 0.007$, consumers' perceived homophily with celebrity $F_{(2, 342)} = 7.40$, $p = 0.001$, and para-social interaction $F_{(2, 342)} = 10.3$, $p = 0.000$) across the three contexts of celebrity–brand association. The Tukey post-hoc comparisons showed significant differences between the advertisement vs. real-life context and product placement vs. real-life context. Consumers who were exposed to the celebrity–brand association in a real-life context perceived the highest level of celebrity attractiveness, homophily, and para-social interaction with the celebrity, in support of H3.

### 4.4. Mediating Effects of PSI and Its Drivers (H4)

The mediation analyses were performed using SPSS Process Macro Model 4 [57] to identify consumer's PSI as well as its drivers (attractiveness and homophily) in mediating the relationships between celebrity–brand association contexts and brand responses. Three dummies were created to represent the contrasting between contexts. The results are listed in Table 3.

Results show that attractiveness exerts a significant mediating effect in the contrast between advertising and real-life context on all of the brand response measures: Brand attitude ($\beta = 0.05$, $P_M = 0.31$, SE = 0.02, 95% CI (0.01, 0.11)), self–brand connection ($\beta = 0.04$, $P_M = 0.19$, SE = 0.02, 95% CI (0.01, 0.10)), purchase intention ($\beta = 0.05$, $P_M = 0.27$, SE = 0.02, 95% CI (0.01, 0.11)), and perceived brand quality ($\beta = 0.04$, $P_M = 0.21$, SE = 0.02, 95% CI (0.01, 0.10)). Attractiveness also exerts a significant mediating effect on the contrast between product placement and real-life context on these variables: Brand attitude ($\beta = 0.12$, $P_M = 0.44$, SE = 0.04, 95% CI (0.05, 0.22)), self–brand connection ($\beta = 0.10$, $P_M = 0.22$, SE = 0.04, 95% CI (0.04, 0.20)), purchase intention ($\beta = 0.09$, $P_M = 0.28$, SE = 0.04, 95% CI (0.03, 0.19]), and perceived brand quality ($\beta = 0.13$, $P_M = 0.35$, SE = 0.05, 95% CI (0.05, 0.24)).

**Table 3.** Mediation analysis results.

| Independent Variable | Indirect Effect (95% CI) | | | |
|---|---|---|---|---|
| | **BA** | **SBC** | **PI** | **BQ** |
| Mediator: Attractiveness | | | | |
| D1 (Ad vs. Pp) | β = −0.04<br>L = −0.13; U = 0.05 | β = −0.03<br>L = −0.11; U = 0.03 | β = −0.04<br>L = −0.13; U = 0.04 | β = −0.05<br>L = −0.16; U = 0.05 |
| D2 (Ad vs. Real) | **β = 0.05, P$_M$ = 0.31**<br>L = 0.01; U = 0.11 | **β = 0.04, P$_M$ = 0.19**<br>L = 0.01; U = 0.10 | **β = 0.05, P$_M$ = 0.27**<br>L = 0.01 U = 0.11 | **β = 0.04, P$_M$ = 0.21**<br>L = 0.01; U = 0.10 |
| D3 (Pp vs. Real) | **β = 0.12, P$_M$ = 0.44**<br>L = 0.05; U = 0.22 | **β = 0.10, P$_M$ = 0.22**<br>L = 0.04; U = 0.20 | **β = 0.09, P$_M$ = 0.28**<br>L = 0.03; U = 0.19 | **β = 0.13, P$_M$ = 0.35**<br>L = 0.05; U = 0.24 |
| Mediator: Homophily | | | | |
| D1 (Ad vs. Pp) | β = −0.05<br>L = −0.14; U = 0.02 | β = −0.06<br>L = −0.18; U = 0.04 | β = −0.04<br>L = −0.12; U = 0.02 | β = −0.05<br>L = −0.14; U = 0.03 |
| D2 (Ad vs. Real) | **β = 0.05, P$_M$ = 0.31**<br>L = 0.01; U = 0.09 | **β = 0.08, P$_M$ = 0.35**<br>L = 0.02; U = 0.14 | **β = 0.04, P$_M$ = 0.24**<br>L = 0.01; U = 0.08 | **β = 0.05, P$_M$ = 0.26**<br>L = 0.01; U = 0.10 |
| D3 (Pp vs. Real) | **β = 0.13, P$_M$ = 0.47**<br>L = 0.05; U = 0.22 | **β = 0.21, P$_M$ = 0.47**<br>L = 0.09; U = 0.35 | **β = 0.13, P$_M$ = 0.40**<br>L = 0.06; U = 0.23 | **β = 0.13, P$_M$ = 0.34**<br>L = 0.06; U = 0.23 |
| Mediator: Para-social interaction | | | | |
| D1 (Ad vs. Pp) | β = −0.02<br>L = −0.14; U = 0.09 | β = −0.03<br>L = −0.15; U = 0.10 | β = −0.02<br>L = −0.12; U = 0.08 | β = −0.02<br>L = −0.13; U = 0.09 |
| D2 (Ad vs. Real) | **β = 0.09, P$_M$ = 0.57**<br>L = 0.04; U = 0.16 | **β = 0.12, P$_M$ = 0.54**<br>L = 0.06; U = 0.19 | **β = 0.08, P$_M$ = 0.46**<br>L = 0.04; U = 0.14 | **β = 0.08, P$_M$ = 0.72**<br>L = 0.04; U = 0.15 |
| D3 (Pp vs. Real) | **β = 0.17, P$_M$ = 0.65**<br>L = 0.09; U = 0.29 | **β = 0.24, P$_M$ = 0.54**<br>L = 0.12; U = 0.39 | **β = 0.17, P$_M$ = 0.54**<br>L = 0.08; U = 0.29 | **β = 0.18, P$_M$ = 0.48**<br>L = 0.08; U = 0.30 |

Note. Ad = advertisement; Pp = product placement; Real = Real-life context; BA = brand attitude; SBC = self-brand connection; PI = purchase intention; BQ = brand quality; β = Coefficient of mediation effect; PM = ratio of indirect to total effect (effect size); L = BootLLCI; U = BootULCI; The significant indirect effects are highlighted in bold (the 95% bootstrap confidence interval does not contain 0).

Regarding the mediating effect of homophily, results show that in the contrast between advertising and real-life context, it exerts significant effects on all of the brand response measures (brand attitude: $\beta = 0.05$, $P_M = 0.31$, SE = 0.02, 95% CI (0.01, 0.09), self–brand connection: $\beta = 0.08$, $P_M = 0.35$, SE = 0.03, 95% CI [0.02, 0.14], purchase intention: $\beta = 0.04$, $P_M = 0.24$, SE = 0.02, 95% CI (0.01, 0.08), and perceived brand quality: $\beta = 0.05$, $P_M = 0.26$, SE = 0.02, 95% CI (0.01, 0.10)). Homophily also exerts significant mediating effect in the contrast between product placement and real-life context on these variables: Brand attitude ($\beta = 0.13$, $P_M = 0.47$, SE = 0.04, 95% CI (0.05, 0.22)), self–brand connection: ($\beta = 0.21$, $P_M = 0.47$, SE = 0.07, 95% CI (0.09, 0.35)), purchase intention: ($\beta = 0.13$, $P_M = 0.40$, SE = 0.05, 95% CI (0.06, 0.23)), and perceived brand quality: ($\beta = 0.13$, $P_M = 0.34$, SE = 0.04, 95% CI (0.06, 0.23)).

Turning to consumer–celebrity PSI, results show that in the contrast between advertising and real-life context, PSI exerts significant mediating effect on brand attitude ($\beta = 0.09$, $P_M = 0.57$, SE = 0.03, 95% CI (0.04, 0.16)), self–brand connection ($\beta = 0.12$, $P_M = 0.54$, SE = 0.03, 95% CI (0.06, 0.19)), purchase intention ($\beta = 0.08$, $P_M = 0.46$, SE = 0.03, 95% CI (0.04, 0.14)), and perceived brand quality ($\beta = 0.08$, $P_M = 0.72$, SE = 0.03, 95% CI (0.04, 0.15)). In the contrast between product placement and real-life context, PSI also exerts significant mediating effect on these variables: Brand attitude ($\beta = 0.17$, $P_M = 0.65$, SE = 0.05, 95% CI [0.09, 0.29]), self–brand connection ($\beta = 0.24$, $P_M = 0.54$, SE = 0.07, 95% CI (0.12, 0.39)), purchase intention ($\beta = 0.17$, $P_M = 0.54$, SE = 0.05, 95% CI (0.08, 0.29)), and perceived brand quality ($\beta = 0.18$, $P_M = 0.48$, SE = 0.06, 95% CI (0.08, 0.30)).

Together, the results revealed significant mediating effect (95% confidence intervals did not include zero) in two contrasts; namely, advertising vs. real-life, and product placement vs. real-life. The remaining context (i.e., advertising vs. product placement) showed no significant mediating effect. Accordingly, the mediating process only worked when comparing real-life context and commercial endorsement contexts. The results provided partial support for H4. Figure 2a–c graphically illustrates the mediation effects identified in Table 3.



(a)



(b)



(c)
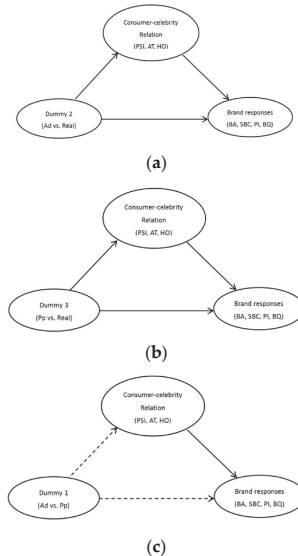
**Figure 2.** (**a**) Comparison between Advertisement and Real-life Context (**b**) Comparison between Product Placement and Real-life Context (**c**) Comparison between Advertisement and Product Placement (Note. Solid line indicates significant effects, dashed line indicates no significant effect. Ad = advertisement; Pp = product placement; Real = Real-life context; AT = attractiveness; HO = homophily; PSI = para-social interaction; BA = brand attitude; SBC = self-brand connection; PI = purchase intention; BQ = brand quality).

For the mediating effects that are statistically significant, Table 3 also reported the effect size, as indicated by percent mediation ($P_M$) (Preacher and Kelly 2011). As shown, it is widespread ($P_M$ = 0.19 to 0.72), with para-social interaction being the strongest mediator, accounting for about half of the total effect and more ($P_M$ = 0.46 to 0.72). The effect size for attractiveness ($P_M$ = 0.19 to 0.44) and homophily ($P_M$ = 0.24 to 0.47) is considerably smaller, accounting for less than half of the effect. These findings provide support for our postulate that para-social interaction is a major explanator for natural endorsement effects.

## 5. Discussion and Conclusions

This study conceptualized and examined empirically the effect of three celebrity–brand association contexts (i.e., advertising, product placement, and real-life) on the consumer's brand responses. Results revealed that, compared to commercial endorsement contexts (i.e., advertising and product placement), a natural endorsement context (i.e., real-life) produced better brand responses, including perceived brand quality, self–brand connection, brand attitude, and purchase intention. Further, the results showed that the effect induced by the various contexts was mediated by the consumer's para-social interaction with the celebrity. Thus, a "real" context that can enhance the consumer's para-social interaction with the celebrity can improve the consumer's brand-related responses.

Consumers in the digital age have diverse platforms to learn about a celebrity beyond the official channels. The information and images they are able to access via unofficial channels, including fans pages and consumer blogs, may alert them of differences between the celebrity's media-constructed image and the "real" person, including his/her brand usage and consumption choices in everyday life. The "real" everyday context that generated superior effect in this study may alert consumers to the "real" person in the celebrity, thus closing the gap between the celebrity and consumer and improving the consumer's brand responses.

### 5.1. Natural Celebrity–Brand Association in Closing Consumer–Brand Relationship

Building on the previous point, where consumers are able to hold stronger relationships with the celebrity in the real-life context indicate that this context could give a sense of reality to consumers. When consumers saw the celebrity using a brand/product without any persuasive purpose, people would feel that the celebrity was down-to-earth. The results correspond to the argument of Biel and Bridgwater [33] and Rubin, Perse, and Powell [34] that the sense of reality shortens the psychological distance between consumers and celebrity, which in turn improves consumer's PSI with celebrity. According to Van Laer et al. [31], if the celebrity meets the expectation of consumer of using a brand/product in real world, consumers' willingness of interacting with the celebrity was bound to be affected.

Celebrity was often reference group for normal people as mentioned by Escalas [29]. Imitating the celebrity and trying to look similar to the celebrity was a common way for consumers to construct and confirm the self through consumption as Litter and Melanthiou [41] and Swann, Stein-Seroussi, and Giesler [40] have proved in their studies. When consumers saw the brand/product they would consume was also accepted and used by the celebrity in real life, consumers might have thought that their taste of the brand/product or even way of life were similar and consistent with the celebrity, which made consumers feel that the celebrity was a like-minded person. According to the arguments of Cohen [37], Gooch [38], and Himelboim, McCreery, and Smith [39], the more the audiences recognize that the media figure is similar to them, the more communication attempts the audiences have with the media figure. Natural celebrity–brand association, which helped created sense of homophily between consumer and celebrity, enhanced consumer–celebrity PSI.

With the feeling of ease and similarity in exposing to the natural celebrity–brand association, consumers are less defensive and resentful of the brand/product that is displayed and indirectly promoted by a celebrity. The decrease in disgust may help build consumer trust on the celebrity's motivation in using a brand/product, wherein the results of the study correspond to the findings

of Click et al. [27], Marwick [30], and Silvera and Benedikte [20]. The trust reduces consumer's stranger-ness of the celebrity according to the viewpoint of Yin [44] and reduces uncertainty of the brand according to the argument of Swann, Stein-Seroussi, and Geisler [40], helping form consumer–celebrity PSI and consumer-brand SBC. The inherent logical consistency of the function of reducing uncertainty between natural celebrity–brand association and consumer–celebrity PSI caused the former to have the effect of increasing the closeness of the consumer–celebrity relationship.

In addition, the result that consumers perceived the celebrity more attractive when exposed to the natural celebrity-brand rather than the other two commercial endorsement forms corresponded to the assumption that the change in forms of celebrity–brand association might affect consumer's perceived attractiveness and overall liking of the celebrity, which the result supports the assumptions of Russel and Rasolofoarison [6].

*5.2. Natural Celebrity–Brand Association in Enhancing Persuasion Effects*

Commonly, celebrity endorsements occur in advertisements, with the obvious intent of promoting a product. Whether explicit endorsement such as traditional advertisements in mass media, or implicit endorsement such as product placement in TV shows and entertainment programs, according to Avery and Ferraro [13], Hackley and Tiwsakul [14], these are commercial activities with profit-oriented nature. Audiences are smart enough to distinguish between selling behavior and real-life scenarios, and they know that the products and settings they have seen in advertisements, TV shows, and films have been elaborately set up by marketers and advertisers in order to attract their attention and convince them to spend money.

The result of this study shows that consumers hold better attitudes towards the brand used by celebrity in real-life settings rather than in commercial advertisements contexts. It corresponds to the findings of Seno and Luka [15] and Homer [21] that the normal endorsement activities may be considered merely as money-making behaviors of celebrities and bring unsatisfactory endorsement effect. If consumers are unfamiliar with a celebrity endorser and happen to see a brand endorsed by the celebrity, they will regard the celebrity as a figure living in another world with a large gap in financial and social status between them, according to Bressoud, Lehu, and Russell [22]. The result also indicates that if consumers see a picture showing a celebrity using a brand/product in his/her real-life scene, especially when the picture looks like a snap of the celebrity who is unaware of the camera, consumers' disgust on profit-orientation may not be easily aroused; this result corresponds to the assumptions of Russell and Rasolofoarison [6] that natural celebrity–brand association more easily causes consumers to have a good impression of the brand. As celebrities are usually reference groups for normal people, according to Escalas [29], consumers will increase their trust in brand/product usability if they think their idols indeed use a brand/product in daily life rather than merely applauding for the brand/product in advertisements.

Celebrity–brand associations in real-life context significantly helped strengthen consumer-brand SBC and increased consumers' positive evaluation of the concerned brands, as shown in the data analysis portion of this research. The result supported the finding of Escalas [29], that consumers who are involved in a brand story in the real world have stronger SBC. They also support the assumptions of Jin and Phua [28] and Russell and Rasolofoarison [6] that a natural celebrity–brand association has a more positive effect on consumers' brand-related responses and perceived celebrity credibility than a market-oriented endorsement.

## 6. Theoretical Contributions

Whereas the overall positive findings of this study yielded useful information, this study provides only a starting point in advertisers' understating of the effects of natural endorsement. Aside from PSI, attractiveness and homophily, there are other factors effective in traditional advertising but their effectiveness in a natural context remains to be tested. Alternatively, since natural endorsement comprises a new communication platform, there may be new variables effective in this context that

have not been studied. Further, the growing popularity of natural endorsement signals changes in an information-rich consumption environment. The consumer's changing views towards celebrity advertising in particular and their skepticism towards paid advertising in general present important research topics. Meanwhile, this study examined the effects of natural endorsement in the context of a particular celebrity and product in China. The authors welcome replication and extension of this study to further specify the effectiveness of natural celebrity endorsement.

In addition, this study emphasizes the consumer–celebrity relation perspective in endorsement advertising research. In most studies in the field of endorsement, celebrity endorsers were regarded as having the lead role in deciding the success of the endorsement, while consumers were seen as merely waiting for the persuasion and suggestion of the celebrity endorser. Although the consumer perspective has received more academic attention in recent years, especially with the boom of social media, which offers greater possibilities of interaction between consumer and celebrity, there remains a lack of research that integrates the consumer–celebrity relation factor into the field of celebrity endorsement. The verified high level of consumer-celebrity PSI in the natural endorsement context in this study provides insights for exploring the factors that may influence the relationship between consumer and celebrity, which emphasizes the consumer–celebrity relation perspective in endorsement field.

## 7. Implications for Practice

A major question for advertisers is how to make consumers less likely to develop antipathy towards the obvious commercialism of an endorsement. A common practice is to let the celebrity really use the product before endorsing it. With the increasing numbers of reality shows and other similar entertainment programs on television, audiences were becoming aware of the fact that the use of a product by a celebrity in a seemingly real-life situation in front of the camera was often a deliberate set-up by marketers or advertisers with a commercial purpose. To create a more natural celebrity-brand association and win the favor of consumers, market practitioners have now begun to try a variety of techniques to arrange for celebrities to appear with their brands inadvertently. For example, the "candid" airport photograph was quite a popular way of promoting brands, and it continues to gain consumer trust based on the perceived real-life usage of the brand by a celebrity. The "street snap" was a culture that has been derived from western countries [59], where "street" referred to almost any ordinary public place that normal people are familiar with, and "snap" meant a snapshot that was taken quickly, flexibly, and suddenly. Street snaps could be photographs of both celebrities and normal people, because the character of the street "offers causal encounters, the possibilities of engagement, the adoption or relinquishing of a personality" [60] (p. 12). As a culture that was based on taking and publishing casual photographs, street snaps indicate infatuation of audiences with visual images in the age of the consumption economy. Audience infatuation and desire to imitate celebrities drive marketers to look for opportunities to use street snaps as a means of promoting brands and products. For example, on Taobao (the largest online retail business district in China), there are many goods on sale in the style of products used by celebrities in airport snaps, which help enterprises to profit indirectly from these natural celebrity-brand connections.

## 8. Limitations

For the purpose of enhancing internal validity, this study tested the proposed model on a general range of consumers without distinguishing between the different levels of celebrity involvement that existed among segmented consumer groups. For example, some consumers are fanatical fans, and some are mild enthusiasts of the same celebrity. Thus, the level of PSI with the celebrity is only a little higher than the scale midpoint. Consumer segmentation in terms of their levels of involvement with a celebrity should ideally be taken into consideration in any follow-up studies.

In addition, the current study was conducted in the Chinese market, using Chinese consumer responses to a local celebrity, which limits the scope of external validity of this study. Future comparative studies that examine the proposed variable relationships in cross-cultural context are required to

deliver new academic and managerial insights for global markets. Also, diverse samples in larger size should be employed in future replicate studies to ensure the reliability and validity of the study.

## Appendix A

*Respondents' Choice in Terms of Utilitarian and Symbolic Value of Product*

**Table A1.** Pretest results of product selection.

| Questions | | Respondents Selection | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Mobile Phone | | Bottled Mineral Water | | Facial Cleanser | | Facecloth | |
| | | % | Raw No. | % | Raw No. | % | Raw No. | % | Raw No. |
| Product utilitarian value | _____ is important to me. | 86% | 43 | 86% | 43 | 60% | 30 | 70% | 35 |
| | _____ is a useful thing. | 88% | 44 | 92% | 46 | 66% | 33 | 72% | 36 |
| | _____ makes everyday life easier. | 80% | 40 | 88% | 44 | 64% | 32 | 68% | 34 |
| Product symbolic value | Using _____ helps me express my personality | 72% | 36 | 60% | 30 | 50% | 25 | 42% | 21 |
| | I like the way I see myself when I am using. _____ | 26% | 13 | 68% | 34 | 46% | 23 | 38% | 19 |
| | Knowing whether or not someone uses _____ tells a lot about that person. | 64% | 32 | 66% | 33 | 54% | 27 | 38% | 19 |

Note. % refers to the percentage of respondents who chose the product among the 50 people. Raw No. refers to the real number of respondents who chose the product.

## Appendix B

Questionnaire

Please spend a few minutes to complete this questionnaire. There is no right or wrong answer. Your participation is voluntary. The resources generated by this questionnaire will only be used in my research papers. There will be no content that shows your personal information in the dissertation. Everything will be kept confidential. Thank you very much for your participation.

Please choose one option to do the following questions. (Options: 1. A; 2. B; 3. C)

**Condition A: Ad Commercial Endorsement**

"As you know, celebrities such as LT often endorse products in advertising. The following photo is from a forthcoming commercial. Please take a while to observe it." (Readers who are interested in the pictures please approach me for them)

Picture: Liu Tao's poster holding a bottle of water with Whistler brand logo
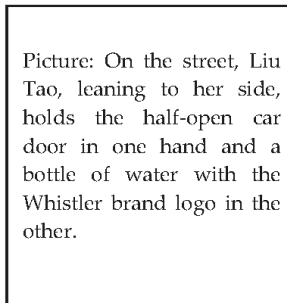
**Condition B: Product Placement**

"As you know, celebrities such as LT are often seen with product placements in TV series. The following photo is of LT's new TV series 'Ode To Joy 3' which will begin to be produced in 2019. Please take a while to observe it."

> Picture: Liu Tao stands sideways in the kitchen drinking a bottle of water with the Whistler brand logo
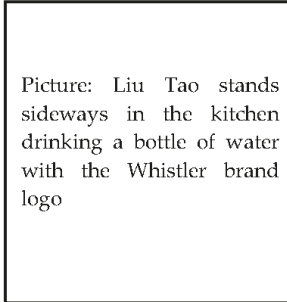
**Condition C: Real-Life Condition**

"As you know, celebrities such LT are often caught on camera during their daily life. The following photo of LT was taken by passers-by who spotted her on the street. Please take a while to observe it."

> Picture: On the street, Liu Tao, leaning to her side, holds the half-open car door in one hand and a bottle of water with the Whistler brand logo in the other.

(1) You may have noticed that, there is a bottle of water in the photo of last question. What is the brand name of the bottled water in the photo in the previous question? (Options: 1. Sirma; 2. Volvic; 3. Whistler; 4. Lurisia; 5. Zajecicka)

(2) How the bottle of water is promoted in the photo you have observed in previous questions (Options: 1. photo of a forthcoming commercial ad; 2. shot of forthcoming TV series; 3. photo of LT in real life/others)

(3) Have you heard of the Whistler before?

(4) Whistler, originated from a foreign country, is natural and non-polluting water, which provides people with rich beneficial minerals. Whistler will be soon be available in China and we would like to know your options about it.

(5) Whistler seems suits me well.

(6) Whistler seems like a brand I can see myself drinking.

(7) Whistler could be a brand representing me.

(8) Whistler seems to convey some of my personal information.

(9) Whistler seems reflect the way that I want to present myself to others.

(10) I think Whistler could help me become the type of person I want to be.

(11) I think Whistler is in high quality.

(12) I think Whistler can bring me positive energy.

(13)   I think Whistler is favorable.

(14)   I think Whistler is good.

(15)   I like Whistler.

(16)   I would like to recommend others to try Whistler.

(17)   I would like to try Whistler.

(18)   I look forward of the selling of Whistler in China.

(19)   I will give priority to Whistler when purchasing mineral water.

(20)   Liu Tao (LT) is an actress in China and has starred in many films and television works. Please answer the following questions based on your actual situation.

(21)   I think LT is charming.

(22)   I think LT is good-looking.

(23)   I think LT is a lady with real class.

(24)   I think LT is elegant.

(25)   I think LT is sexy.

(26)   I think LT is similar to me in ideas and concepts.

(27)   I think I have something in common with LT.

(28)   I think LT is similar to me in character.

(29)   I think LT is similar to me in way of speaking.

(30)   I think LT is similar to me in treating others.

(31)   I am happy to see LT on media.

(32)   If LT appeared on a (different) TV series or program, I would watch it.

(33)   I think LT is an unaffected person.

(34)   When LT joins an interview, she seems to understand what I want to know.

(35)   When LT shows me how she feels about something, it helps me make up my own mind about the issue.

(36)   I like to compare what LT says in the media with my own thoughts.

(37)   LT makes me feel comfortable, as if I am with a friend.

(38)   If there is no news about LT in the media for a period, I will look forward to seeing her.

(39)   I would like to meet LT in person.

(40)   If there are news or stories about LT on the media, I will read them.

(41)   I like to make comments on the roles LT play.

(42)   If I hear other people's comments against LT, I will be dissatisfied.

(43)   I feel sorry for LT when she makes a mistake.

(44)   Your age (Below 18/18–30/31–43/44–56/57 and above)

(45)   Your gender (Female/Male)

(46)   Your education (Under bachelor/Bachelor/Master and above)

Statement: This questionnaire is for academic research only and is nothing to do with LT. Please do not download or disseminate images of this questionnaire or use it for other commercial purposes.

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*Article*

# The Influence of Corporate Social Responsibility (CSR) and Social Media on the Strategy Formulation Process

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**Abstract:** The current theory on strategy formulation is based significantly on environmental analysis and leveraging strategic capability. There is limited understanding of how corporate social responsibility (CSR) and social media strategies could develop the strategy formulation to improve strategic outcomes. The input into the strategic formulation process does not tend to take account of customers' inclination for CSR practices and policies. This is particularly important for consumers who can spurn organisations that do not incorporate ethical practices in their core values. The paper aims to show that social media is an inclusive tool, because of the duplex communication techniques that enhance it, and CSR is complementary to building a robust strategic planning process. The methodology is a qualitative case study using a reflective perspective based on a complete participant role. The results demonstrate that there are challenges in operating a strategic planning process that is situated in an uncertain, volatile and dynamic business environment; it requires an integrated partnership between the inter-organisational actors and other stakeholders. Social media is the integrator of resources and CSR helps to build relationships, acting as a reinforcer of trust.

**Keywords:** business analytics; social media; CSR; strategy formulation; strategic planning; governance

## 1. Introduction

Strategy formulation should be translated into strategy into action. The process of strategic planning tends to focus on environmental analysis or competences analysis, or a combination of both [1,2]. Environmental conditions brought about by the global pandemic may suggest that businesses need to align their thoughts on finding and refining opportunities to rescue businesses. However, using familiar strategic planning and formulation techniques may not be sufficient for the "new normal". Pressure is already building, emphasising that, in the new normal, environmental and ethical behaviour should become the norm. Importantly, how businesses do business must change, and this must start with how strategic decisions are formulated and how consensus is achieved by way of a dialogue with stakeholders to build an agreed inter-relationship [3,4]. The 2019/2020 pandemic is not a short-term environmental change but is likely to impact business for many years to come, thus, the old way of looking at businesses, through only the environmental and competence lenses, is likely to be less efficient. This paper contends that the new lenses should include corporate social responsibility (CSR) and ethical leadership. One is not abandoning the "old normal" (i.e., the formulation of strategy based on environmental and competence analysis) but refining it so that stakeholders play a fundamental role in the development of the firm's strategy. Stakeholder theory reveals that expectations and tensions exist between stakeholders, which means building a consensus will require a dialogue that will inevitably lead to dilemmas and trade-offs [5]. Dialogue will engage all the stakeholders; however, leading

stakeholders will eventually have to "manage" the decision-making process to resolve the dilemmas and tensions, which will be achieved in the context of accountability, governance and transparency.

The current theory on strategy formulation is significantly based on environmental analysis and leveraging strategic capability. There is limited understanding on the areas of strategy formulation that CSR and social media strategies in combination could develop. The aim of this paper is to develop a new way of thinking about the strategic planning process in the new normal. The new normal will possibly involve high levels of unemployment, businesses failing in large numbers, vulnerable parts of the population having much lower living standards and a higher prevalence of government intervention. The objective of the paper is to reflect on how the current situation (i.e., the pandemic) requires businesses to practice a new way of working, including strategic planning, to improve the robustness of the strategic planning processes. A case study of a firm was undertaken. The approach to strategic planning in the firm is orthodox (environmental analysis and leverage of resources), and the paper suggests that it needs updating using CSR and social media practices.

The paper includes sections on social media and decision making, CSR mediating strategic planning, governance and strategic planning, business analytics and strategic planning, methodology, results, implications, conclusion, research limitations and future research.

## 2. Theoretical Framework

### 2.1. Social Media and Decision Making

The use of "exchange" is prevalent in the marketing literature [6,7]. Proponents of the exchange paradigm suggest that exchange is not an end in itself, but a means to an end, which is value creation [8]. Value creation from an interaction perspective is recognised [9,10]. Social media platforms are recognised as technology-based engagement platforms that allow other actors in the network (customers and firms) to interact leading to synergic combinations [11]. A social media platform is a technological engagement platform [12]. According to Singaraiu et al. [8], social media platform functions are devoid of value until they acquire information. Through their interaction on social media platforms customers and firms contribute "information". Social media platforms synthesise the information and organise it through algorithms that allocate the information to functional categories of identity, presence, group, relationship, reputation, sharing and conversation; they convert these functional categories into resources. In consequence, this processing increases the resource density of knowledge captured on social media platforms, raising the importance of the generative nature [13] of the resources available to digital technological engagement platforms in value creation and outcomes.

Social media is a resource integrator, and this has implications for practitioners (e.g., strategic planning). By carefully organising the design of the value co-created through the interactions of customers and firms, managers of firms are more likely to experience successful value co-creation outcomes in an increasingly complex digital environment [12]. Social media cannot just be perceived as a context as it was in the past [14]. The context perspective of social media meant that the concept of social media as an integrator or as a mediating actor was missed [8]. The more that stakeholders supply information to social media platforms, the more that functional generative categories can be identified, and the level of co-creation increased significantly. To obtain information from stakeholders requires stakeholder engagement, which is discussed in the next section.

### 2.2. CSR Mediating Strategic Planning

CSR has many guises that are diverse, including the study of voluntary work [15], corporate citizens [16], corporation and community interactions [17], philanthropy [18,19], social and environmental management [20], embedding CSR in the organisation [21] and the dissemination of information on CSR policies and practices [22,23].

Andrews [24] stated that strategic management is a decision-making tool in corporations that is applied to determine objectives, policies and planning to achieve goals. Furthermore, corporate

strategy is more complex than just economic choices, because the decisions by businesspeople will influence and impact stakeholders, who are directly or indirectly linked to the firm. The strategic decisions by large businesses have economic and social consequences [25]. Mintzberg [26] made the point that CSR has become indispensable. Porter and Kramer [27] divided social issues into three categories: generic social issues (these are important to society but they do not have a major impact on the firm or its competitiveness), value chain social issues (these are activities that affect the firm's operations and normal business activities) and the social dimension of competitive context (this refers to the external environment dynamics that majorly impact the firm's competitiveness and direction). CSR not only mediates the firm's competitive advantage, but it improves financial performance [28,29].

CSR can be considered an internal resource of the firm [30,31]. Corporate social strategy is the alignment of business strategy, social responsibility action and core business activities, and it mediates efficient business social strategies [25]. Improvement in alignment could be achieved by engaged learning, which is the understanding and analysis of the relationship between strategy, leadership and excellence [32]. According to Husted and Salazar [33], firms that adhere to social investment can maximise both profits and social performance. They categorised these firms into three types: altruistic, selfish and strategic. The best results were for firms of the strategic social investment, maximise profit and social investment type.

A case study of Carrefour suggested some benefits from CSR actions, including employee motivation, image and reputational enhancements, and awards [25]. One specific CSR action, volunteering, did have an impact on employee motivation but did not make a significant difference to employee retention to give a competitive advantage. The major advantage for Carrefour was its reputation and environmental credentials. There was also a number of awards for CSR projects and for being a responsible corporate citizen [25]. Significantly, the major competitive advantage for Carrefour was through reputation and image, which are important attributes [25,34,35]. Reputation and image are internal resources, which makes them challenging for competitors to copy [24].

Sousa et al. [25] proposed a framework that enables the comprehension of social responsibility as a strategic asset of competitive advantage. The framework for corporate social strategy is formulated based on an understanding of the value of stakeholders, analysis of resources and internal competences, opportunities in the external environment and industry structures. These variables underpin social corporate strategy and are important. Market opportunities that cause unemployment or harm the environment should be reconsidered and alternatives sought. The variables specified by Sousa et al. [25] directly affect the core business [32]. An expected outcome from the mediation of the variables on the core business is the development of strategies with social dimensions of competitive advantage. Once formulation of the social strategy is finalised, then competitive advantage can be acquired. The competitive advantage is derived from reputation, image, personal motivation, value added, economic performance, environmental performance, social performance and people retention. The resources are intangible resources of competitive advantage and are able to create a competitive advantage. These intangible resources can be classified as giving a competitive advantage if the firm makes them rare, irreplaceable, inimitable and valuable. Society needs to legitimise these elements of competitive advantage. For this to be achieved, CSR actions should be synchronised with societal expectations. The framework of Sousa et al. [25] demonstrates that a firm can gain a competitive advantage by taking social responsibility into account in its strategic planning process. Thus, integrating strategic management and social responsibility can lead to a competitive advantage for firms [25].

The implementation of CSR practices and the expectations of what it will bring need to be managed. The implementation of CSR is a double-edged sword because it could lead to an inflation of CSR claims beyond what is practically implemented. Morsing [36] (p. 282) stated that the situation recognised above leads to "CSR communication dilemma". Companies that have suffered from CSR communication dilemma are BP and Nestlé [36]. Organisations need to steer a middle course in CSR communications between too much and too little communication [37]. The balance between CSR

action and the communications of CSR is an ethical consideration [36]. The theoretical understanding of CSR is caught in a dilemma between an instrumental or an ethical approach. CSR in a strategic context needs to consider another framework, which is the hypocrisy avoidance approach, which stresses CSR communication versus CSR action. There needs to be a balance between CSR talk and CSR action. The importance of CSR communication has received less publicity in articles compared to CSR action [37].

Fundamental to implementing a CSR-centric strategic planning process is stakeholder engagement. The Johnston's [38] process model of stakeholder engagement is a first step in understanding and operationalising stakeholder engagement. However, stakeholder engagement using collaboration is a more sustainable approach to decision making and the stakeholder relationship than Johnson's [38] process model. The incorporation of "collaboration" in the Johnston's [38] model would make the model inclusive of the CSR approach of hypocrisy avoidance [39].

## 2.3. Governance and Strategic Planning

Governance is the formal mechanism and process for directing, regulating and controlling the allocation and distribution of resources in a firm. The Organisation for Economic Co-operation and Development (OECD) reviews governance in the broadest sense in that it is the combination of the many ways in which institutions and individuals, public or private, manage their business [40]. According to Bovaird [40], governance requires collective responsibility to improve the future for the better.

Strategic governance has dimensions beyond the core dimensions (multi-level, regulators, actors and networking): anticipation, choice of society and emergent strategies [41]. Anticipation is the ability to foresee long-term future potential developments and react in an appropriate way towards them [42]. El Hassan bin Talal [43] suggested anticipation is about changing ignorance and the lack of responsibility into global responsibility and awareness. The second dimension of strategic governance is choice of society. This refers to the ability to induce important changes compared to how society operated in the past. This is referred to by some authors [44] as the "choice of society" [45] (p. 2). The final dimension of strategic governance is emergent strategies, which are the negotiated outcomes of many interacting policy actors and processes. Emergent strategies in the context of governance are connected to real-time processes, but strategic processes are generally not connected to real-time processes [42]. Strategic governance is a starting point to analyse if organisational strategy is aligned with its tools of implementation and concepts. Tools and concepts that are contradictory will lead to strategic uncertainty in the organisation [46].

When situations are volatile or uncertain it is challenging to rely on a trust-based mechanism. Business uncertainty can be characterised in terms of behavioural uncertainty (i.e., unpredictable behaviour of stakeholders) and environmental uncertainty (i.e., unpredictable future markets and technological conditions) [47,48]. Governance structures refer to the coordination and control mechanisms between interactions. Transaction costs economics (TCE) principles suggest that inter-organisational governance structures should control perverse behaviour, facilitate role adaptation and distribute rewards and responsibility such that interaction objectives are accomplished with minimum transaction costs and uncertainty [49]. In inter-organisational interactions, governance structure is often cemented with contracts that differ in terms of duration, enforceability and trust characteristics [50]. In uncertain and competitive markets, it is difficult to define the different parties' responsibilities, thus limiting the scope for a complete contract [48]. Contract readjustment is crucial, but difficult to achieve when asymmetric exposure to risk and asymmetry of information make readjustment inefficient. The efficacy of relational contracts is low when risks of non-cooperation are low and social sanctions are insignificant to one of the interactive partners and are ineffectual due to the existence of ambiguity [51]. Firms in technological industries are likely to experience significant risks, which may be asymmetric when dealing with stakeholders and inter-organisational interactions. The TCE and resource-based views (RBV) help assess governance structures from the dominant party's perspective. Integration of the relational and transactional in governance structures will overcome the

dominant party syndrome [51]. Boards and senior management require attributes in strategic thinking, strategic decision making, strategic planning and strategic execution; governance structures need to facilitate these attributes [52].

*2.4. Business Analytics and Strategic Planning*

Big data analytics capability draws upon the RBV to allow organisations to leverage a competitive advantage in the big data environment [53]. The deployment of big data analytics capability enhances decision making by enabling the right decisions to be made at the right time, improving risk management, determining and identifying market segmentation, such as niche markets, monitoring product development, detecting and identifying fraud and making production processes more efficient [54,55]. Kates and Galbraith [56] demonstrated that the purpose of organisational design is to create superior organisational capabilities to gain a competitive advantage.

A positive relationship exists between big data analytics on real-time data and competitive advantage and differentiation [57]. Mazzei and Noble's [58] three-tier model for corporate strategy suggested that big data analytics reaches beyond the improvement of the traditional capability of firms. They consider the model to be an evolutionary strategy development tool, which has been embraced by a growing number of successful firms [58]. Furthermore, Davenport [53] stated that management in these companies use data as central to their organisational strategy, with an emphasis on data flow. Other studies also focused on the use and importance of big data analytics to enable organisational strategy alignment [55,59]. Constantiou and Kallinikos [60] made the point that big data analytics contributes to the competitive strategy of an organisation through the development of innovative services. Raguseo [61] identified several strategic benefits of big data analytics, such as creating a competitive advantage, aligning IT with business strategy, improving customer relationships, enabling and facilitating a rapid response to change, providing better products and services and establishing helpful links with other firms. Big data provides new insights and new data and new action to improve strategy [62]. Chang et al. [63] stated that big data analytics enhances the competitive advantage of products and services. Although big data analytics is a potent weapon to improve a firm's differentiation strategy, other aspects of organisational design need consideration, such as organisational structure, process, organisational culture and human resources (HR) on big data analytics. Consequently, a broader study, which includes these variables, will improve strategy alignment with big data analytics [64]. Joni et al. [65] suggested that analytical-oriented culture tools and techniques for big data analytics may well be of interest, leading to new ways to aggregate, manipulate, analyse and visualise large volumes of data, in a flexible and multidisciplinary approach. Furthermore, researchers at IBM and MIT have suggested a roadmap to the use of big data analytics in an organisation. The first stage is aspirational (to use analytics to justify action), the middle stage is experienced (to use analytics to guide actions) and the final stage is transformed (to use analytics to prescribe actions), which implies that organisations do not have to apply big data analytics using a big bang organisational approach [66].

## 3. Methodology

The aim of the research is to review a strategic planning process and critique it through the lenses of big data analytics, online brand communities, CSR and governance. A case study approach is adopted which gives the researcher considerable insight and understanding of the strategic planning process; the researcher's role is that of a complete participant. It is unlikely that an organisation will allow outsiders to analyse their strategic planning process and a participant observer approach is the only meaningful approach. Philosophy paradigms are contradictory when they are not commensurable [67]; this is not the case for this research because it is based on interpretivism and is a participative inquiry. The participative inquiry is based on a complete participant role, over a duration of two years. The case study approach is based on normative theory because the assumption is that judgement on values is best done in case studies by combining facts with ethical judgement [67].

The case study is a telecommunications company based in North America that employs staff throughout five regions: North America, Latin America and the Caribbean, Asia Pacific, Europe Middle East and Africa (EMEA) and Australasia. The case focuses on the strategic planning process in one strategic business unit responsible for central office switches for the EMEA markets. Three employees work in the unit, but engagement with other parts of the business would swell the numbers considerably when the strategic plan is in the development mode. Interaction with the USA central office switching unit is an important part of the strategic planning process and extends the overall reach of the EMEA case. The firm underwent several changes after the researcher left, and the research is a reflective case study. My role as Head of Strategic Planning (complete participant observer) for the strategic business unit situated me in a complete participant observation role. To execute a complete participant role, the researcher requires observable data that relates to existing theory. There were careful interactions (in this case, over a two-year period) and recorded actions that would not have been noticed without immersion in a focal and intentional observation. The participant observer moves between insider-outsider sensibilities and monitors observations that include personal bias or prejudices [68].

Reflexivity is a value that runs throughout qualitative research. This paper uses reflexivity in a focus engagement mode, which is termed structured reflexivity [68]. Consequently, the qualitative data for this research include PowerPoint charts, emails, notes and notes on conversations with senior management. The actual data and information are confidential; hence, the publication of the original sources is not possible. Ethically, it is not appropriate to add more information on the organisation, because it would not want to be identified, which should be respected. The raw data (i.e., PowerPoint charts, emails and notes on conversations) are secondary sources and need interpreting to extract meaning, which is the purpose of the field notes, which are used to develop the results [67]. Thus, the results are based on the field notes of the complete participant observer. Reflexivity collects formal and informal data and allows you to reflect and refine thinking and interpretation over time [68,69]. The objective of the study links with the method of participant observation, and reflexivity is central to participant observation [68]. Generalisability comes from the participant's own personal experience [67].

## 4. Results

The results reflect the strategic planning process based on the author's role in the company as Head of Strategic Planning. Hence, the results are based on case field notes. The use of a diary format is acceptable in qualitative research that is based on reflection and a participant observation role [68]. The results are split into three categories: the strategic planning process, strengths of the strategic planning process and the limitations and criticisms of the process. The categories were deliberately presented in this format to help in the critiquing of the strategic planning process.

### 4.1. Strategic Planning Process

The strategic planning is instigated twice a year, thus over cycles of six months. However, the second cycle is to refine and update the previous cycle. Environmental scanning is started in September of each year and is based on telecommunication and technology reports, analysis reports, and sales and marketing staff. Infrequently, sales staff may have access to customer internal information, which the customer considers relevant. Running in parallel is the financial budget over three years, which is the responsibility of the finance department. Essentially, the strategic planning is in two strands: business and financial. The focus of this paper is on the business plan.

The draft plan is sent to the CEOs of all the strategic business units and departmental vice presidents. They will review the draft plan before the CEO for the overall business, and his cabinet review the business strategic plan. The output from the agreed plan will be business targets and financial targets for the organisation. Before the business strategic plan is embedded and signed off, a conference call with the USA central office is required to get its agreement and commitment to the

plan. It is not unusual that the plan could go through more than one iteration before agreement with the USA central office. Management of the strategic process with a stronger emphasis on decentralisation of the strategic planning process and more de-coupling from the US offices would have strengthened the process.

*4.2. Strengths of Strategic Planning Process*

There was a strong commitment to the strategic planning process by the senior management of the organisation. The strategic planning team, although small, were permanent and demonstrated a commitment to strategic planning by the organisation. Furthermore, the strategic planning process did not use an incremental approach, but instead environmental scanning was initiated from inception every year, which meant the analysis took account of changes comprehensively.

Input to the strategic planning process included many stakeholders from sales and marketing, product marketing, customer input (when available) and HR. Not typical of most organisations at the time, HR played a strategic role in workforce analysis, compensation and market conditions (such as likely skill shortage areas). Based on the input from the various stakeholders, the planning process could be deemed comprehensive. Positively, the strategic plan was shared widely by senior management and other strategic planners in the organisation. Different strategic planning groups shared information, but cooperation did not come naturally.

Management required that all strategic plans produced were vigorously stress tested with the European and US organisations. Consequently, as mentioned above, several iterations of the strategic plan were not uncommon. However, the US organisation was the final arbiter. Once the strategic plan was approved an abbreviated version was shared with the whole organisation, along with other information about the organisation. Senior management used the strategic plan as a motivator and as a communication tool. In common with the strategic planning process, the initial strategic plan was refreshed incrementally so that the end of year strategic plan took account of any significant changes (financial or environmental). This meant that the strategic planning cycle happened twice a year, but that the incremental adjustments were less hectic.

*4.3. Limitations and Criticism of the Strategic Planning Process*

Although the organisation sponsored art and theatre organisations, and, thus, used an embryonic CSR practice, it did not link these to the strategic planning process. Gaining face time with stakeholders was challenging because they still had their normal employment to complete. The ability to engage with stakeholders using employees (sales, marketing and operations) engaged in the strategic planning process was not always timely. Furthermore, there was a lack of triangulation of the data, so that stakeholders' input was mainly taken at face value. Margins of error were not looked for and this had an impact on the reliability of the data and information, which contributed to the many iterations in the strategic plan.

From my perspective as a complete participant observer, it was doubtful whether the content of the strategic plan was applied and deployed. Although the strategic plan was used as a starting point, changes in the company's objectives were driven by opportunities, which were not always clearly evaluated. Operational meetings that I attended rarely compared outputs to the strategic plan. Another challenge experienced in the strategic planning process was that it was not documented and could be considered ad hoc. This had implications for the organisation when the strategic planning group moved on. The immediate senior manager (Vice President Product) for strategic planning had a product focus and lacked a strategic initiative perspective.

Because the firm was a technology firm, there was an over-emphasis on products and services in the strategic planning process. Hence, there was an obsession with calculating the market share of existing and potential new products, which gave rise to features and functionality. There was insufficient focus in the strategic planning process on customer metrics (e.g., customer satisfaction measurements, which were done at the business unit and departmental levels) and building them into

the strategic plan beyond sales and profitability of the major customers. A significant input that was missing was an in-depth competitor analysis, which was a feature of the USA operation but was not present in the UK. I found that there was a reluctance by stakeholders to project their thinking beyond one to two years. This was attributed to the volatility and dynamism of the business environment. Therefore, scenario planning was difficult to implement. The organisation was relatively slow in understanding the benefits of the internet as a strategic tool, although it sold products that required and supported the internet. The firm was also somewhat reluctant to trial new products and features on in-house systems. However, major customers, such as telecommunication operators, were expected to trial new software and products on their networks, which I considered a contradictory position taken by the firm.

## 5. Implications and Conclusions

The focus is on how overlaying CSR and social media practices influence the strategic planning process and decision-making process to improve the overall robustness and ownership of the process.

Although the strategic planning process was considered important, it is not clear that it was respected. The strategic planning process was treated as a milestone, and not integrated fully into other business processes via business process engineering. Consequently, it was viewed as a standalone process that had a somewhat marginal impact on business performance. In reality, strategic planning was more driven by opportunistic ventures than a rigorous evaluation of business opportunities. The reason for this is that the process was time consuming and opportunities needed rapid evaluation so that resources could be put in place in a timely manner to maximise the benefits. Essentially, the strategic planning process is too slow and cumbersome. How could one speed up the process so that it is streamlined and executes opportunities rapidly? This was exemplified by the challenges faced in accessing stakeholders in a timely manner, and the lack of triangulation contributed to the opportunistic mentality of the stakeholders in the firm. Consequently, opportunities were not necessarily qualified.

The decision-making processes within the strategic planning process have too many stakeholders and, normally, strategic decisions required input from the senior management for EMEA and typically agreement from the USA. There is a governance process and structure for strategic decisions, but this impacts the pursuit of opportunistic deals. Typically, to buy a telecommunication switch will require construction in the USA, but customers do not normally want to fund the building of the switches until they are sure that the product will be operationally sound in their network. Manufacturers that are European-centric (i.e., headquartered in Europe) have a much faster response time, which facilitates the closing of deals because the process is much quicker and proactive. Decentralisation and streamlining of the governance process would enable the firm to be more responsive to EMEA markets. Governance in the strategic planning process could be built on the social contracts model. Gray et al. [70] stated that society and members of society are linked by a series of social contracts. Applying this to the strategic process requires a business to act in a responsible manner, because it is in their commercial interest, and thus the strategic process is contextualised within a CSR construct. Consequently, in the CSR context, stakeholders in EMEA would be expected to behave ethically to enhance the economic wellbeing of the firm and the various stakeholders, which, in this scenario, include employees and customers in EMEA and, crucially, the stakeholders in the USA [71]. The enlightened self-interest that proponents of CSR voice could improve the strategic decision-making process and build a stronger relationship between the USA and EMEA. The decision-making process could be more relaxed due to the ethical leadership that underpins a CSR approach to decision making. Decentralisation of the decision-making process would require the EMEA business to take "full" responsibility for its actions, which requires that ethical and moral leadership become the glue for decision making. EMEA executives must be accountable for their actions, but in the context of ethical and moral leadership. The paper contends that in the "new context" of strategic planning decision making, when actions misfire there is increased accountability and ownership by the stakeholders. The overlaying of a CSR process on the strategic planning process could help to build trust and openness among all the

stakeholders. The CSR hypocrisy avoidance approach is an appropriate model of CSR to engage stakeholders in the strategic planning process and not over-hype the challenges of embedding it in the process.

Improved decision making will build the confidence of the stakeholders and strengthen the accountability construct. Data and information collected by the strategic planning process are essentially based on trust from sales and marketing staff and customers (if they divulge any information). Although plenty of time and energy is put in market segments and segmentation, including triangulation of data from different sources, it is not a technique that is used in the data collection process in the strategic planning process. The technique of triangulation will add another level of complexity to the strategic planning process and elongate the process. However, the data and information used to build the strategic plan will have a stronger level of reliability, credibility and legitimacy, with a context of ethical leadership to reinforce efficacy in the decision-making process. Triangulation is not a panacea, but it shows a willingness to reflect on data and information, which the current strategic process does not allow or support. The success of triangulation will be judged on the improved "accuracy" of the predictive results. However, this may not be a valid yardstick; more important is the quality of the input data and information. This may lead to better predictive results, but there are no guarantees. One could take the perspective that triangulation improves the social contracts model, which improves transparency and accountability for the inputs to the decision-making process. Consequently, it underpins the new context of ethical and moral leadership. Triangulation requires engaging stakeholders, and one approach is to apply the Johnston [38] model and modify it to include collaboration to ensure communications are more sustainable.

Another technique to improve decision making in the strategic planning process is the application of social media digital marketing techniques. Social media platforms are broad platforms of communications and dialogue to setup conversations with stakeholders, which are more suited to solving a crisis or broadcasting [72]. Strategic planning processes require data and information, from unique sources, which are unique, manageable, and deliver insightful and reliable information and data. According to this paper, online brand communities are more suited to developing meaningful data and information than the strategic planning processes. The data and information should come from several online brand communities that are strategically placed on different social media platforms, which could improve the integrity of the data and information. One of the limitations of the decision making is the that the time horizon is limited to a maximum of two years, which was stated in the results. This could be due to a lack of confidence and trust in the data, which triangulation could help resolve. Dialogue facilitates corporate aims and organisational context. Within an organisation, dialogue is learning and knowledge management, organisational development and change, strategy development or a consensus-building tool. Dialogue is a core process to overcome barriers to learning [73]. Dialogue plays a key role in strategy development and decision making by facilitating group interactions during the decision-making process [74]. Consensus building-based dialogue aims to create agreement among stakeholders on subjects and to develop relationships based on a shared mission, organisational values and an awareness of the interdependence of the stakeholders involved in the decision-making process [3]. The strategic planning process will create dialogue within the firm, but using online brand communities in strategic positions on social media platforms is another technique to capture information and data from the dialogues; the information and data from the dialogues can be fed into the strategic planning process to create an opportunity to triangulate internal data and information with external information and data from online brand communities. The collection of data from the usual sources and complementing it with online brand community sources now enable techniques, such as business analytics and machine learning, to spot and predict trends in the data and information. The operationalisation of the strategic planning data and information is an area noted in the limitations of the strategic planning process. This could be resolved by collecting data from wider sources in real time and encouraging engagement with operations staff in the strategic planning process as one of the prime stakeholders. Positively, many stakeholders are involved in the strategic planning

process, but the level of engagement is a real issue because their role is essentially part-time. CSR is a process that could help to achieve operationalisation of the strategic planning data when successfully embedded in the strategic planning process, because CSR practices are wide ranging and champion customer-centric relationships.

Successful strategic planning in business requires relational and transaction interactions, which is the case with interactions between EMEA and the USA in this case study. Inter-organisational interactions based on trust and enforceability are challenging to maintain because of the dynamic, volatile and uncertain business environment, which is beyond the control of all parties. This paper contends that the use of social media improves the information and, indirectly, the information flow, which should improve strategic outcomes. Involvement of multiple stakeholders (internal and external) and a strategic planning process that is engineered on CSR will be more responsive to the new normal. The pandemic will heighten the level of uncertainty in the business environment, which will affect the organisation; to overcome the uncertainty will require the engagement of all stakeholders. The adoption of CSR practices and embedding them in the strategic planning process is important because it signals a new way of doing business in a positive and all-embracing manner. After all, organisations whose core values are based on ethics and morality will achieve a competitive advantage that links to their core values and reputation. Using triangulation, the integrity of the data and information applied in the strategic planning process will further underpin the core values of the organisation, which will build trust and increase stakeholder engagement. Embracing a wider range of stakeholders will require recognition of suitable governance structures in managing stakeholder interactions and big data analytics.

## 6. Research Limitations and Future Research

The research is based on a single case, but the strategic business unit is a significant contributor to revenue. However, although the case study approach gives insight and understanding, it is challenging to generalise the findings or the implications. This is a reflective perspective and another data collection method, such as semi-structured interviews, would supplement the perspective.

A similar study of strategic planning processes in related industries or technology is one approach to develop the study further. The organisation is USA-centric and one suspects that European cultures would have significant influence on the way the strategic planning process is managed and implemented (e.g., long-term strategic planning process versus shorter horizon strategic planning process), which would have an impact on strategy formulation.

**Conflicts of Interest:** There are no conflict of interest.

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*Article*

# Discovering the Role of Emotional and Rational Appeals and Hidden Heterogeneity of Consumers in Advertising Copies for Sustainable Marketing

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**Abstract:** Advertising copies have been considered as a fundamental strategy for firms to continue sustainable marketing strategies. In order to provide the advancement of previous research and practical implication to marketers in the field for sustainable marketing strategy, this research tried to reveal the role of emotional and rational appeals as well as hidden heterogeneity of consumers in the appeal–value–trust–satisfaction–WOM framework. By applying the PLS-SEM and PLS-POS approach to 230 valid questionnaire samples, we could discover the role of appeals in the framework as well as three types of unobserved heterogeneity among the respondents. Both emotional and rational appeals had significant influences on the value–satisfaction–trust–WOM context. In addition, for hidden consumer traits in advertising copies, we revealed three types of consumer groups: Type 1, the consumer group with a rational orientation ($n = 68$); Type 2, the group with an emotional orientation ($n = 74$) and Type 3, the group with a utilitarian orientation. This research provided contributions by offering some insight into ways to establish sustainable marketing strategies in advertisements and to address unobserved heterogeneity consumers in advertising copy appeals.

## 1. Introduction

When ancient Egyptians were creating advertisements of gold reward for fugitive slaves on papyrus [1], they would not have reckoned that their descendants, after three thousand years later, are using similar techniques for other purposes. Because advertising is the act of an explicit advertiser unilaterally communicating through the media to change the recipient's attitude toward the advertisement, advertisements are broadly used for purposes in both public and private interests [2–6]. Advertising has been considered one of the most effective and influential activities for corporates to maximize its sales today [7–10]. Building adequate advertising strategies would be one of the fundamental movements of corporations as a sustainable marketing tactic.

The visualization of advertisements has become very imperative due to the influence of various forms of online advertising following the rapid development of the Internet and telecommunications technology as well as television and printed material. However, advertising copies are still inevitable to appeal to the unique selling points of specific products or services implicitly. We could argue that advertising copies are a fundamental element of the marketing mix that may significantly impact on

the success of products or services, which would directly influence the sustainable marketing activities of firms.

According to Fuller [11], sustainable marketing could be identified as the procedure of scheduling, adopting and managing in the several aspects of products and services, including pricing, promotion and distribution, in a manner that meets the following three requirements: fulfillment of consumer needs, attainment of firms' goal and securing the process competitiveness in the ecosystem. From the perspective of sustainable marketing, advertising copy could also be one of the critical components for achieving these above requirements because it should reflect the abilities products and services that would satisfy consumers' needs, it should be able to meet the goal of the firm by successfully inducing consumers to purchase products or services, and it should express that products or services are superior to competitors' in the market as well. The overarching philosophy of launching advertising copies in the media channels would not be meaningful at all otherwise.

Meanwhile, worldwide smartphone sales are expected to grow 3% to reach nearly 1.57 billion units in 2020 [12]. This steady popularity has made smartphones as one of the essential items in modern daily lives. Consumers are exposed universally to countless advertisements on their smartphone devices, and these are delivered through such small devices as smartphones that have more abundant modes of presentation, including text, icons, graphic features, pictures and even video clips [13]. Most types of advertisements for information about products and services that are delivered in smartphone devices contain only a few words due to the limitation of display size. However, these advertisements made of a few words lack graphics, dynamic processes and an attractive design, which limits the effective delivery of denotations [14]. To convey advertising copies' information and connotation that were intended by products and services providers to consumers effactually, it is necessary to understand not only what attracts consumers' attention, but also what are the differences in consumers' hidden traits.

The effectiveness of advertising transmitted to consumers varies depending on their thoughts and feelings, and this idea suggests that both emotional and rational appeals contribute to the efficiency of advertisements [15]. Understanding of behavioral and psychological reactions of consumers to those appeals from advertising copies is a fundamental basis of sustainable marketing because it would not derive adequate results without it just like the failure case with marketing myopia of Woolworth's mousetrap [16]. In previous literature in the field of marketing, it was believed that advertising should be rational and measurable [17–19]. However, researchers also have argued that emotion acts as a significant antecedent that affects consumers' responses, such as attitudes toward the advertisement, brand, purchase intention and positive word of mouth [20–23]. Rational (cognitive) advertising messages provide information to persuade through logical appeals to recipients. Alternatively, emotional (affective) ad messages attempt to influence through psychological urges. However, the effects of emotional and rational appeals would be inconsistent in determining advertising effectiveness [15]. In other words, if firms only emphasize a specific aspect of advertising, such as emotional or rational impact, they may face big failure in their marketing activities that could severely harm sustainable marketing strategies. From the perspective of sustainable marketing, it is necessary to tackle both emotional and rational messages in advertising copies to more effectively induce consumers to make positive decisions on purchasing products and services.

However, would it be sufficient just to discover the roles of emotional and rational appeals toward consumers in advertising copies? Unlikely the past, consumers nowadays are exposed to various sources of information due to the dramatic evolution of ICT that help consumers make appropriate decisions for purchasing products and services [24,25]. Consumers could easily digest information that firms produce and release online according to the analysis of consumers' needs and make decisions about purchasing products and services based on their acquisition. However, information about the products and services offered by firms may likely be produced based on consumer preferences that are generally readily apparent. In other words, the hidden heterogeneity of consumers may have a substantial impact on their decision-making.

In order to advance the previous research as well as provide the sustainable marketing strategy to the practitioners in the field, this study emphasized the additional concepts of emotional and rational appeals as well as trust in advertising copies that were applied to unobserved heterogeneity in the research framework of the value, satisfaction and WOM in the context of smartphone markets. Smartphone advertisements are highly suitable for observations of advertising's emotional and rational appeals' effects because smartphones are convergent media that influence making both rational and emotional decisions, and they appeal both to users' task- and affect-oriented needs and motivations [26]. In addition, identifying consumer typology by exploring unobserved heterogeneity in consumer groups could help establish an evolving sustainable marketing strategy using advertising copies. The purpose of this study was to reveal the role of emotional and rational appeals of smartphone advertising copies that consumers could see on their mobile phone devices and the unobserved heterogeneous consumer traits in the research framework of appeal–value–satisfaction–trust-positive WOM from the perspectives of smartphone consumers. This research has a contribution in the advancement of prior research with value, satisfaction and WOM (word-of-mouth) framework by adding additional constructs, such as emotional and rational advertising copy appeals and affective and cognitive trust, and the revealing hidden heterogeneous traits of consumers from the perspective of the smartphone market, which were rarely tried in other research, as well as providing practical applications for helping marketing practitioners in the filed establish sustainable marketing strategies.

The remainder of this research is ordered as follows. The next part scrutinizes the relevant previous literature and establishes the hypotheses for this study. The third part suggests the methodological approach with the data sample, and the next part provides the test results. Finally, the last section includes implications, limitations and future study suggestions.

## 2. Theoretical Background and Hypotheses

### 2.1. Appeals and Value in Advertising Copies

Advertising appeals reflect a product's attributes, benefits and even its brand image that corporations would like to express within them. These appeals can be classified into such discrete categories as rational and emotional [27]. Emotional appeals represent a psychological, social or symbolic desire that motivates consumers to purchase the product because of the feelings it elicits [28–30]. On the other hand, rational (informational) appeals refer to the consumer's logical beliefs and attitudes about the product's benefit or function [28–30].

Meanwhile, value motivates people to engage in a specific behavior [31]. It is the most general concept that represents consumer's behavior based on acquisition, transaction, in-use or redemption [32]. First of all, value was conceptualized as a tradeoff between quality and price [33,34]. In many studies, consumers' perceived value has been studied universally according to two dimensions, utilitarian value hedonic value [35,36]. Hedonic value refers to consumers' evaluation of experiential benefits and costs overall, such as adventure, social, gratification, idea and role [36–38].

Adaval [39] argued that consumers' affective confirmation in the information of advertisement that would be derived from the emotional appeal of advertising copies were more significantly related to hedonic criteria than utilitarian criteria. In addition, Geuens et al. [40] discovered that emotional advertising was effective for hedonic products and low involvement using TV commercials. With respect to consumer attitudes toward advertising, emotional advertising stimulates their perception of hedonic value and we propose the following hypothesis:

**Hypothesis 1 (H1).** *Emotional ad appeal will positively influence hedonic value.*

On the other hand, utilitarian value refers to consumers' assessment of the functional benefits and costs overall associated with achieving their specific purpose, such as product offerings, product information, convenience, monetary savings [36,37,41–44]. Johar and Sirgy [45] suggested that functional congruity that could be derivative from rational advertising copies had a strong

relationship with those utilitarian products. Emotional advertising could have a more significant effect on hedonic products, while rational advertising's effectiveness could be significant in utilitarian products [39,45]. Geuens et al. [40] used TV commercials to reveal that non-emotional advertising had an influence on utilitarian products and high involvement using. With respect to consumer attitudes toward advertising, rational advertising appeals encourage consumers' perceptions of utilitarian value. Based on the discussion, we proposed the following hypotheses:

**Hypothesis 2 (H2).** *Rational ad appeal will positively influence utilitarian value.*

## 2.2. Value, Trust and Satisfaction in Advertising Copies

Value and trust have similar effects with respect to the relation between satisfaction and loyalty [46]. Trust is a psychological state that comprises the intention to accept vulnerability based upon positive expectations of others' intentions or behaviors [47]. In addition, trust in advertising could be defined as confidence that advertising is a reliable source of product and service information and a willingness to act based on that information [48]. Although trust has been regarded as an essential antecedent of value in the literature, authors also have proposed a significant converse relation that assumes that perceived value is a prerequisite for trust [32,35]. Chai et al. [49] used the two-dimensional model to discover the interrelationship of trust and value and revealed that building cognitive trust strong impact on delivering utilitarian value to increase consumers' repeat purchase intention while affective trust had a significant influence on hedonic value delivery.

When conceptualized as having multidimensional components (affective vs. cognitive), hedonic elements that were derived by emotional appeal could impact on the affective trust. This concept was based on the way one feels about such trust attributes as warmth and openness while interacting with the object. In comparison, knowledge, such as utilitarian elements, inspires cognitive trust and is based on a rational approach to evaluating an object's reliability, credibility and related trust attributes based on specific examples [50]. Value also is a crucial determinant of preference, satisfaction, loyalty and other vital outcomes [51]. Based on the discussion in value, trust and satisfaction, we propose the following hypothesis:

**Hypothesis 3 (H3).** *Hedonic value will positively influence affective trust (H3a) and satisfaction (H3b).*

**Hypothesis 4 (H4).** *Utilitarian value will positively influence cognitive trust (H4a) and satisfaction (H4b).*

In addition to trust, satisfaction in advertising copied could be considered as the degree to which consumers' assessment of the product information advertising copy provides reflects their needs and expectations [52]. Satisfaction has been recognized as one of the fundamental causes of trust [53–56]. In advertising, satisfaction for advertising copies about brands, products, and services could be either major antecedents or descendants [57,58]. These arguments imply that the relationship between satisfaction and trust of consumers could be remarkably imperative, and the impression from the satisfaction that impacts trust in advertising copies would be substantial for firms to carry on sustainable marketing. Based on the theoretical background in satisfaction, we propose the following hypothesis:

**Hypothesis 5 (H5).** *Satisfaction will positively influence affective trust (H5a) and cognitive trust (H5b).*

## 2.3. Positive Word-of-Mouth

Positive WOM is regarded as a sustainable marketing tool that could strongly influence consumers' loyalty to the brand and the intention of purchase [59–62]. Positive WOM also refers to a consumer's positive statement about a product in advertising [63]. In this regard, we presumed that positive WOM needs to be pointed out in this study of discovering appropriate strategies in advertising copies based on consumer traits for sustainable marketing. Furthermore, consumers' attention to advertisements [48]

and advertising appeals [64,65] are related significantly to their trust of advertising, which implies that trust affects their loyalty, such as WOM recommendations [66,67]. Researchers argued that satisfaction was strongly related to WOM; for example, enhancement of consumer satisfaction could be a key driver to bring positive WOM [68–70]. Maxham III [71] argued that positive WOM was significantly influenced by consumers' satisfaction in the context of high-level service recovery. Ranaweera and Prabhu [72] also suggested that satisfaction was the determinant of customer retention and positive WOM. Accordingly, based on the discussion above, we propose the following hypothesis:

**Hypothesis 6 (H6).** *Satisfaction will positively influence positive WOM.*

As a driver that induce consumers' to have positive WOM toward products and services, Ranaweera and Prabhu [72] proposed consumers' trust in firms. Agag and El-Masry [73] proved that consumer intention to purchase travel online and making positive WOM was effected by trust, based on an integrated analysis of innovation diffusion theory and TAM with trust. To be more specific about affective trust, Wang and Chen [74] suggested that affective trust was one of the most crucial determinants of consumers' behavior of positive WOM with interactional justice dominates. Xu [75] also discovered affective trust that could be found in the reviewers' profile strongly influenced eWOM credibility. Meanwhile, Alfina et al. [76] argued that consumers' cognitive trust in C2C e-commerce sites had a significant impact on e-WOM that would bring higher purchase intention. Xu [75] also revealed that cognitive trust in the reviewers' profile had an impact on eWOM credibility along with affective trust. Based on the theoretical background in trust and positive WOM, we suggest the following hypotheses:

**Hypothesis 7 (H7).** *Affective trust will positively influence positive WOM.*

**Hypothesis 8 (H8).** *Cognitive trust will positively influence positive WOM.*

*2.4. Consumers' Hidden Heterogeneity*

In empirical studies of social and behavioral sciences, such as marketing, erroneous data homogeneity cause long have been pointed out as problems [77,78]. Heterogeneity studies have been conducted steadily but have been confined mainly to the observed features and focused on variables' moderating effects, a priori groupings and contextual factors in the research models. Emphasizing that unobserved heterogeneity threatens empirical results and interpretations, researchers in several fields have underscored the need for studies of such heterogeneity [77,79–82]. For example, researchers may make errors that ignore the significant differences in heterogeneous subgroups by overgeneralizing the results of the sample overall (Type I error). Further, they also may make errors that accept nonsignificant effects from the sample overall that occur because of significant reversal effects in the subgroups (Type II error). Researchers will draw invalid conclusions by ignoring the considerable heterogeneity in the unobserved groups that can bias the parameter estimates that result in Type I and II errors [77]. Other previous research argued that unobserved heterogeneity influences WOM (word-of-mouth) [83–86]. Notably, Fuentes-Blasco, Moliner-Velázquez and Gil-Saura [83] articulated that unobserved heterogeneity had a substantial impact on the framework of value, satisfaction and WOM (word-of-mouth) relationship [83]. We proposed the last hypothesis:

**Hypothesis 9 (H9).** *There exists unobserved heterogeneity in the model that underlies the advertising appeal, perceived value, satisfaction and trust of individuals that influence positive WOM from the perspective of smartphone consumers.*

## 2.5. Research Model

The following conceptual research was formed based on the hypotheses that we derivative from the literature review. From the perspective of a sustainable marketing strategy establishment for practitioners in the field of smartphone markets, we suggest the research model of this study, as illustrated in Figure 1.
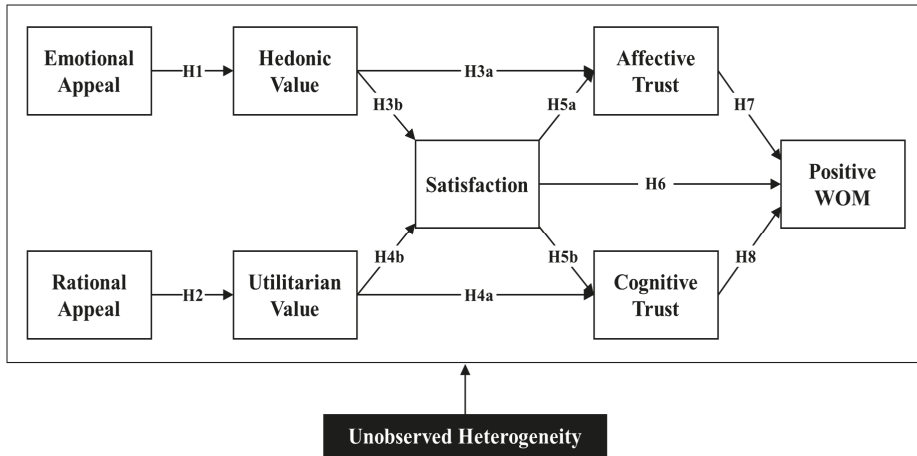


**Figure 1.** Research model.

## 3. Methods

### 3.1. Participants

We recruited college students as participants in our experiments. A total of 230 offline questionnaires were collected from students of Sungkyunkwan University in the Republic of Korea for the analysis (51.7 percent female; Mean age = 23.4). University students are good survey respondents, as they are prominent consumers who use smartphones actively [87,88], and have a higher intention to repurchase them in the near future [89]. Participants were undergraduate (98.7%) and graduate (1.3%) students with various majors at a large university in Seoul, Korea who used such Smartphones as the Samsung Smartphone (45.7%), Apple iPhone (30.4%), LG Smartphone (18.3) and others (5.6%). Data were collected at two times. The first experiment was conducted from 1 November to 7 December 2018 and the second was operated from 4 to 13 December 2018. The demographic features of the survey participants are provided in Table 1.

**Table 1.** Demographic properties.

| Features | | Frequency | % |
|---|---|---|---|
| Gender | Female | 119 | 51.7% |
| | Male | 111 | 48.3% |
| Education | Undergraduate | 227 | 98.7% |
| | Graduate | 3 | 1.3% |
| Smartphone Brand | Samsung | 105 | 45.7% |
| | Apple | 70 | 30.4% |
| | LG | 42 | 18.3% |
| | Others | 13 | 5.6% |

*3.2. Measures*

All questionnaire items were adopted from relevant previous studies, as shown in Table 2. Each survey questions were measured on seven-point Likert scales that ranged from 1 (strongly disagree) to 7 (strongly agree). To ensure content validity, we refined and modified the original version of the questionnaire by conducting pilot tests before the experiment and confirmed that the items were unambiguous.

**Table 2.** Questionnaire.

| Construct | Avg; (SD) | Question | Source |
|---|---|---|---|
| Emotional Appeal | 4.84 (1.811) | This advertising copy conveys more emotional features than the functional features of the product. | Albers-Miller and Stafford [29] |
| Rational Appeal | 4.77 (1.662) | This advertising copy conveys more functional features than the emotional features of the product. | |
| Hedonic Value | 3.97 (1.754) | It is fun to read product information through advertising copy. | Lin and Lu [36] |
| | 3.52 (1.677) | Advertising copy gives me an enjoyable expectation for the product. | |
| | 3.48 (1.684) | I enjoy reading advertising copy. | |
| | 3.77 (1.673) | I do not get bored by reading the advertising copy. | |
| Utilitarian Value | 3.74 (1.736) | Advertising copy enables me to acquire a large amount of information about a product. | |
| | 3.55 (1.649) | Advertising copy enhances my efficiency in identifying information. | |
| | 3.62 (1.656) | Advertising copy is a useful medium for obtaining product information. | |
| | 3.62 (1.622) | Advertising copy is a useful medium for identifying a product. | |
| Satisfaction | 3.42 (1.621) | I feel satisfied with the information provided in the advertising copy. | Gao, Wechter and Bai [52] |
| | 2.80 (1.729) | I feel content with the information provided in the advertising copy. | |
| | 3.10 (1.573) | I feel pleased with the information provided in the advertising copy. | |
| Affective Trust | 3.97 (1.495) | This advertising copy is likable. | Soh, Reid and King [48] |
| | 3.31 (1.492) | This advertising copy is enjoyable. | |
| | 4.99 (1.345) | This advertising copy is positive. | |
| Cognitive Trust | 4.25 (1.306) | This advertising copy is truthful. | |
| | 4.23 (1.293) | This advertising copy is credible. | |
| | 4.23 (1.327) | This advertising copy is reliable. | |
| | 3.91 (1.371) | This advertising copy is dependable. | |
| | 3.88 (1.381) | This advertising copy is accurate. | |
| | 4.08 (1.455) | This advertising copy is useful. | |
| Positive WOM | 3.52 (1.435) | I am willing to recommend the product in advertising to others. | Choi and Choi [63] |
| | 3.89 (1.510) | I usually say positive things about the product in advertising to others. | |
| | 3.47 (1.506) | I will tell my friends and relatives to use the product in advertising to others. | |

*3.3. Procedure and Statistical Analysis*

Before conducting our survey, we presented the participants with two types of stimuli for thirty seconds using modified advertising copies, excluding brand and product names, adopted from smartphone manufacture in the Republic of Korea that consisted of five emotional and rational phrases, respectively. The stimuli developed measured the degree of advertising appeal using the scale of Rosselli, et al. [90]. By providing these stimuli, participants' perceptions and attitudes could be shaped

based on judgments drawn from external stimuli immediately without investing significant cognitive effort, while participants adopt a rational and systematic approach to collect evidence that confirms the reliability, credibility, and competence of the information that they process [13]. The emotional copies included advertising copies such as "The friend who shares my life beside me" (see Figure 2).
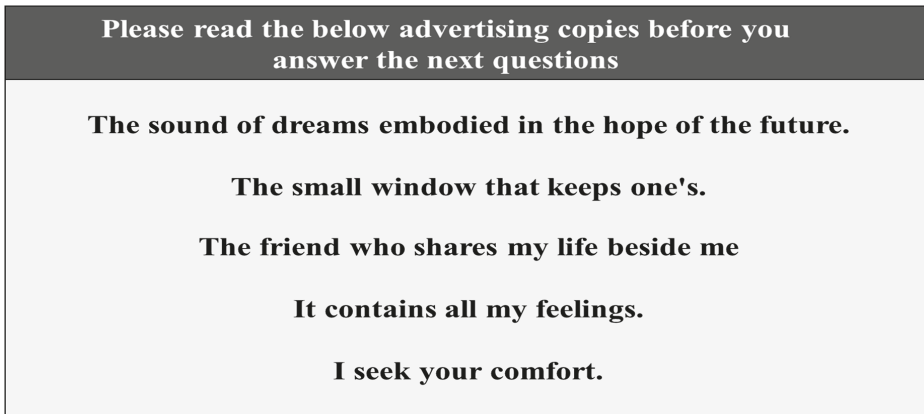


Figure 2. Stimuli using advertising copy for emotional appeal.

The rational copies included advertising copies such as "The combination of cutting-edge technology and practicality" (see Figure 3). We confirmed their statistical difference's significance by performing two-sample *t*-tests ($p < 0.01$). Next, we conducted PLS-SEM [91] to test the hypotheses proposed and performed the PLS-POS analysis to explore the unobserved heterogeneity in the sample data using SmartPLS 3.0 (SmartPLS GmbH, Boenningstedt, Germany, https://www.smartpls.com). SmartPLS 3.0 provides PLS prediction-oriented segmentation (PLS-POS), a distance-based approach, that provides an explicit PLS-specific criterion to discover unobserved heterogeneity from the PLS-SEM [77,92,93]. Then, we conducted additional hypothesis tests for the heterogeneous data groups according to the PLS-POS analysis results.
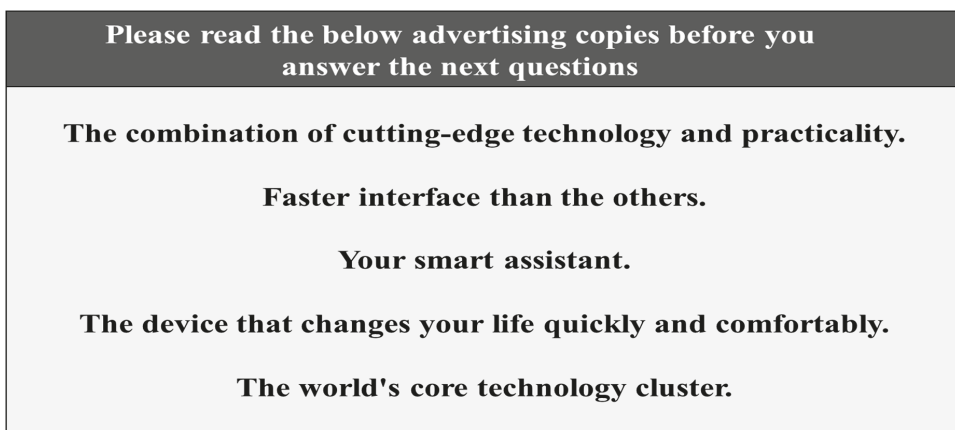


Figure 3. Stimuli using advertising copy for rational appeal.

## 4. Results

Before we conduct the evaluation of our structural equation model, we first, verified the fundamental criteria, such as the common method bias. In order to confirm a common-method bias on the data sample of this research that may be possible to occur due to the self-reported survey, we have conducted the single-factor test [94]. The test result presented that only one factor explained 23.4% of the variance. Since the result of the one-factor test is less than 50%, we could presume that there was no significant impact of common-method bias in the data sample [94–96].

Next, the reliability and validity were assessed. As shown in Table 3, Cronbach's α scores varied from 0.833 to 0.950, apart from the emotional appeal and rational appeal that had only one survey item, presented the inner consistency of the model, [97]. Furthermore, composite reliability scores and the average variance extracted (AVE) [97] ranged from 0.900 to 0.964 and from 0.752 to 0.879, excluding emotional appeal and rational appeal constructs, respectively, were as well assessed to verify the convergent validity. The variance is all larger than 0.5, as Table 3 indicates with the findings [98]. Note that the statistical results of reliability and validity for two experiment-based constructs, emotional appeal and rational appeal, showed all 1.000 because there was only one item with one stimulus for each construct.

**Table 3.** Reliability and Validity of the First-order Constructs.

| Construct | Cronbach's α | Composite Reliability | AVE |
|---|---|---|---|
| Emotional Appeal | 1.000 | 1.000 | 1.000 |
| Rational Appeal | 1.000 | 1.000 | 1.000 |
| Hedonic Value | 0.937 | 0.955 | 0.841 |
| Utilitarian Value | 0.950 | 0.964 | 0.869 |
| Satisfaction | 0.882 | 0.927 | 0.808 |
| Affective Trust | 0.833 | 0.900 | 0.752 |
| Cognitive Trust | 0.935 | 0.950 | 0.761 |
| Positive WOM | 0.931 | 0.956 | 0.879 |

Then, we conducted the Fornell–Larcker criterion to appraise discriminant validity for the research model. The evaluation results provided, as presented in Table 4, the AVE scores of the constructs were more significant than the other constructs under the diagonal line, confirmed discriminant validity [97].

**Table 4.** Discriminant validity.

| Construct | EA | RA | HV | UV | SA | AT | CT | PW |
|---|---|---|---|---|---|---|---|---|
| EA | 1.000 | | | | | | | |
| RA | −0.146 | 1.000 | | | | | | |
| HV | 0.412 | 0.219 | 0.917 | | | | | |
| UV | 0.194 | 0.514 | 0.720 | 0.932 | | | | |
| SA | 0.280 | 0.373 | 0.761 | 0.789 | 0.899 | | | |
| AT | 0.392 | 0.150 | 0.746 | 0.588 | 0.708 | 0.867 | | |
| CT | 0.163 | 0.429 | 0.607 | 0.659 | 0.644 | 0.624 | 0.872 | |
| PW | 0.147 | 0.349 | 0.633 | 0.620 | 0.654 | 0.627 | 0.665 | 0.938 |

Note: EA is emotional appeal; RA is rational appeal; HV is hedonic value; UV is utilitarian value; SA is satisfaction; AT is affective trust; CT is cognitive trust; PW is positive WOM.

In addition, we assessed the heterotrait–monotrait (HTMT) ratio in order to validate the research model rigorously. Table 5 demonstrated that the HTMT ratio evaluation results were less significant than 1.00, as recommended by Henseler, et al. [99].

**Table 5.** HTMT ratio for discriminant validity.

| Construct | EA | RA | HV | UV | SA | AT | CT | PW |
|-----------|------|------|------|------|------|------|------|------|
| EA | | | | | | | | |
| RA | 0.146 | | | | | | | |
| HV | 0.426 | 0.226 | | | | | | |
| UV | 0.199 | 0.527 | 0.763 | | | | | |
| SA | 0.301 | 0.402 | 0.835 | 0.864 | | | | |
| AT | 0.432 | 0.163 | 0.840 | 0.656 | 0.812 | | | |
| CT | 0.169 | 0.446 | 0.649 | 0.700 | 0.708 | 0.705 | | |
| PW | 0.151 | 0.363 | 0.677 | 0.660 | 0.718 | 0.712 | 0.712 | |

Note: EA is emotional appeal; RA is rational appeal; HV is hedonic value; UV is utilitarian value; SA is satisfaction; AT is affective trust; CT is cognitive trust; PW is positive WOM.

*4.1. Assessing the Global Model*

In connection with Consumers' psychological traits advertising appeals for sustainable marketing, Hypothesis 1 and 2 found that emotional appeal and rational appeal had significant positive influences on hedonic value ($\beta = 0.412$, $p < 0.000$, t-value = 6.960) and utilitarian value ($\beta = 0.514$, $p < 0.000$, t-value = 10.588), respectively. Next, the test results of Hypotheses 3a and 3b both presented that hedonic value positively influenced affective trust ($\beta = 0.402$, $p < 0.000$, t-value = 7.326) and satisfaction ($\beta = 0.494$, $p < 0.000$, t-value = 7.290), respectively. Likewise, utilitarian value, Hypotheses 4a and 4b also showed significant positive impacts on both satisfaction ($\beta = 0.500$, $p < 0.000$, t-value = 8.975) and cognitive trust ($\beta = 0.401$, $p < 0.000$, t-value = 5.228). Furthermore, aligned with Hypotheses 5a and 5b, satisfaction showed positive influences on both affective trust ($\beta = 0.332$, $p < 0.000$, t-value = 4.879) and cognitive trust ($\beta = 0.328$, $p < 0.000$, t-value = 4.331), respectively. Lastly, satisfaction (Hypothesis 6, $\beta = 0.277$, $p < 0.000$, t-value = 3.138), affective trust (Hypothesis 7, $\beta = 0.208$, $p < 0.000$, t-value = 3.307) and cognitive trust (Hypothesis 8, $\beta = 0.357$, $p < 0.000$, t-value = 4.752) all significantly positively influenced positive WOM. Figure 4 and Table 6 below recapitulate the overall results of the global structural equation model assessment for the Hypotheses of this research. Note that the standardized root mean square residual (SRMR) value of the model showed a good fit with 0.056, which is less than 0.08 [100].
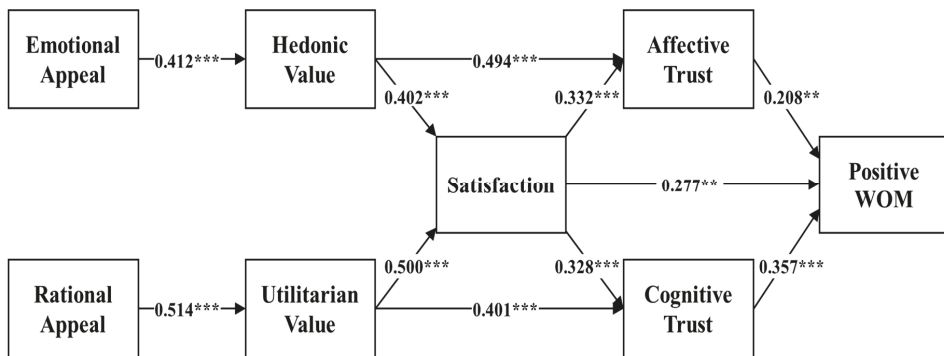


**Figure 4.** Results of PLS-SEM hypothesis testing on the global model (** $p < 0.01$, *** $p < 0.001$).

**Table 6.** Overall, Results of Hypotheses Tests.

| | Hypothesis | Results |
|---|---|---|
| H1 | Emotional ad appeal will positively influence hedonic value. | Accepted |
| H2 | Rational ad appeal will positively influence utilitarian value. | Accepted |
| H3 | Hedonic value will positively influence affective trust (H3a) and satisfaction (H3b). | Accepted |
| H4 | Utilitarian value will positively influence cognitive trust (H4a) and satisfaction (H4b). | Accepted |
| H5 | Satisfaction will positively influence affective trust (H5a) and cognitive trust (H5b). | Accepted |
| H6 | Satisfaction will positively influence positive WOM. | Accepted |
| H7 | Affective trust will positively influence positive WOM. | Accepted |
| H8 | Cognitive trust will positively influence positive WOM. | Accepted |

### 4.2. Discovering the Hidden Consumers' Traits

After the global model analysis, we steered a PLS-POS method to examine the hidden heterogeneity in the data sample. PLS-POS is an approach known well to measure heterogeneity not observed in PLS models by segmenting the sample data without the need for an a priori variable (i.e., gender, age, etc.) and is deemed a suitable method for predictive-oriented segmentation analysis [77,101].

We followed the guidelines of Becker, Rai, Ringle and Völckner [77] to calculate the result for the numbers ($K$) of segmented groups. The original sample data segmented from two groups ($K = 2$), which is the first number of predefined groups. The iterative segmenting process was performed by increasing the number until the data separated into the groups that meet the minimum sample size requirement (10%) of PLS-POS segmentation. In this study, when subdivided into four groups ($K = 4$), the smallest group (6.1%) did not meet the requirement of 10%. The criterion for selecting the optimal number ($K$) of segmented groups is the average of the constructs' variance explained ($R^2$). As a result, we obtained three-segmented groups ($K = 3$), because the average $R^2$ was highest in the groups (see Table 7).

**Table 7.** PLS-POS results for segment retention criteria.

| Construct | Original $R^2$ | K = 2 | | K = 3 | | | K = 4 | | |
|---|---|---|---|---|---|---|---|---|---|
| HV | 0.170 | 0.329 | 0.101 | 0.247 | 0.345 | 0.019 | 0.136 | 0.531 | 0.038 | 0.500 |
| UV | 0.264 | 0.455 | 0.165 | 0.272 | 0.157 | 0.359 | 0.345 | 0.173 | 0.066 | 0.619 |
| AT | 0.603 | 0.768 | 0.521 | 0.567 | 0.735 | 0.550 | 0.746 | 0.860 | 0.425 | 0.766 |
| CT | 0.475 | 0.893 | 0.231 | 0.635 | 0.546 | 0.334 | 0.715 | 0.686 | 0.161 | 0.708 |
| SA | 0.700 | 0.719 | 0.694 | 0.673 | 0.696 | 0.752 | 0.821 | 0.854 | 0.589 | 0.731 |
| PW | 0.516 | 0.780 | 0.336 | 0.766 | 0.809 | 0.793 | 0.844 | 0.957 | 0.422 | 0.653 |
| $\sum R^2$ | 2.728 | 2.996 | | 3.086 | | | 3.337 | | |
| Segment Size | 230 | 74 | 156 | 68 | 74 | 88 | 60 | 14 | 97 | 59 |
| Relative Size | 100% | 32.2% | 67.8% | 29.6% | 32.2% | 38.3% | 26.1% | 6.1% * | 42.2% | 25.7% |

Note: EA is emotional appeal; RA is rational appeal; HV is hedonic value; UV is utilitarian value; SA is satisfaction; AT is affective trust; CT is cognitive trust; PW is positive WOM; K = number of predefined segmented group; * 6.1% does not meet the minimum sample size requirement of the PLS-POS segmentation; therefore, 'K = 3' segmentation was finally adopted.

### 4.3. Identifying Different Types of Smartphone Consumers

Table 8 provides the descriptive statistics and Pearson correlations for all variables and shows that all were related to each other significantly. The hypothesis tests for the global model performed with the entire dataset showed further that all of the hypotheses proposed were supported statistically.

**Table 8.** Descriptive statistics and correlations for the variables.

| Construct | M | SD | AVE | CR | EA | RA | HV | UV | SA | AT | CT | PW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EA | 4.839 | 1.811 | 1.000 | 1.000 | 1.000 | | | | | | | |
| RA | 4.770 | 1.662 | 1.000 | 1.000 | −0.146 * | 1.000 | | | | | | |
| HV | 3.692 | 1.555 | 0.955 | 0.841 | 0.419 ** | 0.226 ** | 1.000 | | | | | |
| UV | 3.630 | 1.553 | 0.964 | 0.869 | 0.194 ** | 0.515 ** | 0.719 ** | 1.000 | | | | |
| SA | 3.107 | 1.476 | 0.927 | 0.808 | 0.284 ** | 0.380 ** | 0.755 ** | 0.792 ** | 1.000 | | | |
| AT | 4.093 | 1.253 | 0.900 | 0.752 | 0.393 ** | 0.149 * | 0.743 ** | 0.585 ** | 0.695 ** | 1.000 | | |
| CT | 4.102 | 1.173 | 0.950 | 0.761 | 0.166 * | 0.436 ** | 0.607 ** | 0.661 ** | 0.645 ** | 0.624 ** | 1.000 | |
| PW | 3.628 | 1.391 | 0.956 | 0.879 | 0.145 * | 0.351 ** | 0.629 ** | 0.619 ** | 0.648 ** | 0.626 ** | 0.664 ** | 1.000 |

Note: * $p < 0.05$, ** $p < 0.01$; M is mean; SD is standard deviation; AVE is average variance extracted; CR is composite reliabilities; to ensure discriminant validity, diagonal values should be greater than the off-diagonal elements.

Next, we conducted additional hypothesis tests on the three-segmented groups, including the comparison with the global model. The significant statistical differences between the segmented groups are displayed visually in Figures 5–7. Based on these results, we classified the three consumers typologies that the results helped reveal in the unobserved consumer segments as Type 1 ($n = 68$), Type 2 ($n = 74$) and Type 3 ($n = 88$).
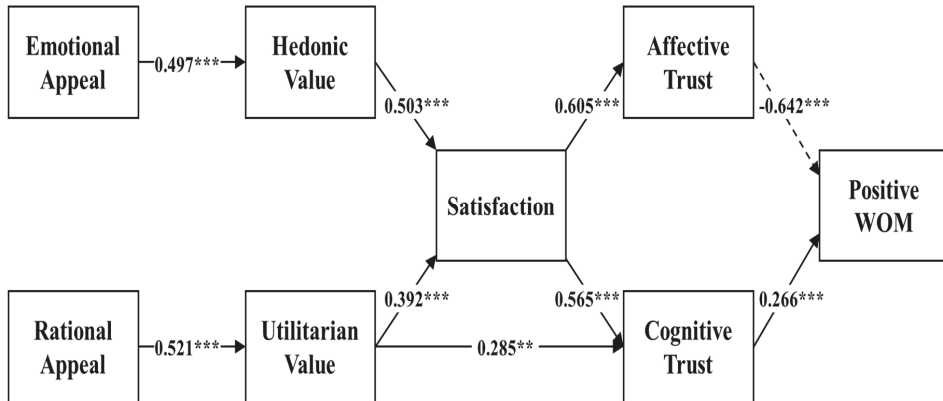


**Figure 5.** PLS-POS Type 1 model ($n = 68$; ** $p < 0.01$, *** $p < 0.001$; the solid line indicates positive statistical significance; the dotted line indicates negative statistical significance; no link indicates statistical insignificance).

First, in the Type 1 model ($n = 68$), Hypotheses H1 (emotional appeal → hedonic value), H2 (rational appeal → utilitarian value), H3b (hedonic value → satisfaction), H5a (satisfaction → affective trust), H5b (satisfaction → cognitive trust), H6 (satisfaction → positive WOM), H8 (cognitive trust → positive WOM) were accepted similarly to the global model. However, H3a (hedonic value → affective trust) was rejected, while H7 (affective trust → positive WOM) showed a significant negative influence that was the opposite result to the global models (See Figure 5).

Next, in the Type 2 model ($n = 74$), Hypotheses H1, H2, H3b, H4a, H4b, H5a, H6 were accepted as the global model and the Type 1 model presented. However, H3a (hedonic value → affective trust) and H7 (affective trust → positive WOM) were also accepted that were rejected with the Type 1 model, while H5b was rejected that was accepted by the global model and the Type 1 model. In addition, H8 (affective trust → positive WOM) showed a reverse result, the significant negative impact, comparing to the global model and the Type 1 model (See Figure 6).
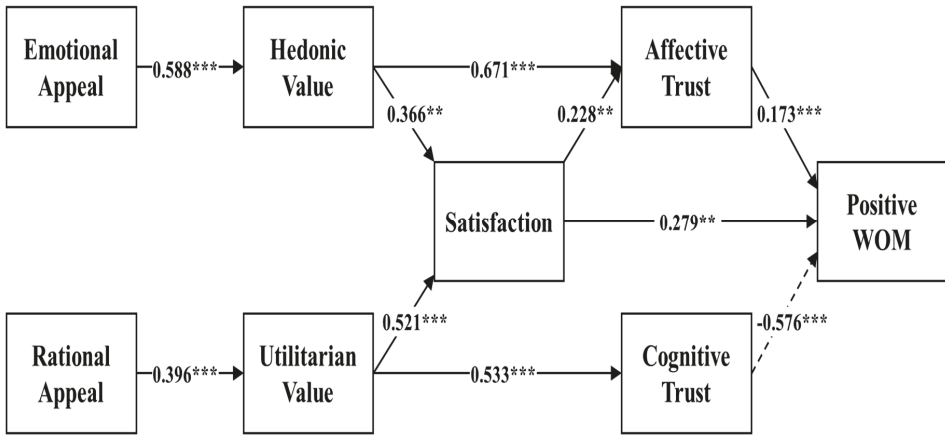
**Figure 6.** PLS-POS Type 2 model (*n* = 74; ** *p* < 0.01, *** *p* < 0.001; the solid line indicates positive statistical significance; the dotted line indicates negative statistical significance; no link indicates statistical insignificance).
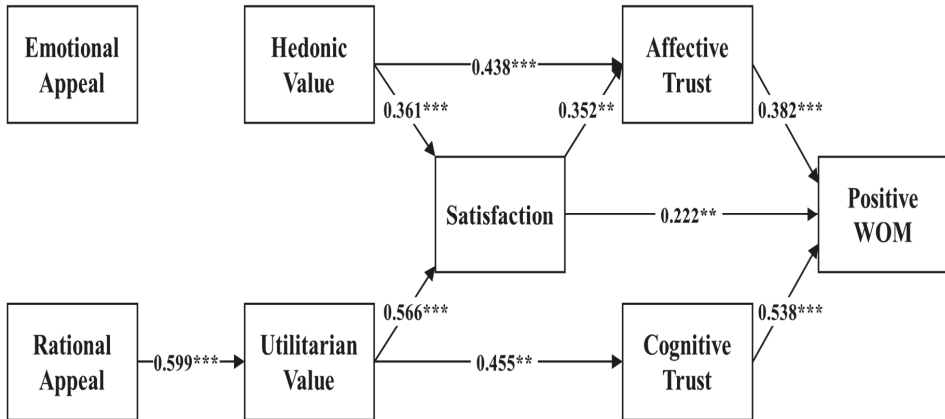


**Figure 7.** PLS-POS Type 3 model (*n* = 88; ** *p* < 0.01, *** *p* < 0.001; the solid line indicates positive statistical significance; the dotted line indicates negative statistical significance; no link indicates statistical insignificance).

Lastly, the Type 3 model (*n* = 8) presented fairly dissimilar results than the other models. In this model, Hypotheses H2, H3a, H3b, H4a, H4b, H5a, H6, H7 and H8 were accepted. Nevertheless, H1 (emotional appeal → hedonic value) and H5b (satisfaction → cognitive trust) were rejected (See Figure 7).

The overall results showed that there were statistically significant differences between the groups, including the entire sample (see Table 9).

**Table 9.** Overall, Results of Hypothesis Tests for All Groups.

| Hypothesis | Global Model (N = 230) | Type 1 Model (N = 68) | Type 2 Model (N = 74) | Type 3 Model (N = 88) |
|---|---|---|---|---|
| H1. EA → HV | 0.412 *** | 0.497 *** | 0.588 *** | 0.138 |
| H2. RA → UV | 0.514 *** | 0.521 *** | 0.396 *** | 0.599 *** |
| H3a. HV → AT | 0.494 *** | 0.181 | 0.671 *** | 0.438 *** |
| H3b. HV → SA | 0.402 *** | 0.503 *** | 0.366 ** | 0.361 *** |
| H4a. UV → CT | 0.401 *** | 0.285 ** | 0.533 *** | 0.455 ** |
| H3b. UV → SA | 0.500 *** | 0.392 *** | 0.521 *** | 0.566 *** |
| H5a. SA → AT | 0.332 *** | 0.605 *** | 0.228 ** | 0.352 ** |
| H5b. SA →CT | 0.328 *** | 0.565 *** | 0.240 | 0.063 |
| H6. SA → PW | 0.277 ** | 0.044 | 0.279 ** | 0.222 ** |
| H7. AT → PW | 0.208 ** | −0.642 *** | 0.173 *** | 0.382 *** |
| H8. CT → PW | 0.357 *** | 0.266 *** | −0.576 *** | 0.538 *** |
| H9. UH | Accepted | | | |

Note: ** $p < 0.01$, *** $p < 0.001$; EA is emotional appeal; RA is rational appeal; HV is hedonic value; UV is utilitarian value; SA is satisfaction; AT is affective trust; CT is cognitive trust; PW is positive WOM; UH is unobserved heterogeneity.

## 5. Discussion

In this study, we explored in detail the role of emotional and rational appeals and hidden heterogeneity of consumers in advertising copies for sustainable marketing based on the framework of advertising appeal–value–satisfaction–trust–positive WOM. Based on the global model analysis with PLS-SEM, we found support for the positive impacts of all the relationships between constructs that we have proposed. Emotional appeal and rational appeal positively influenced on hedonic value (t-value = 6.960) and utilitarian value (t-value = 10.588), respectively, as Adaval [39] and Geuens, De Pelsmacker and Faseur [40] argued. These results proved that consumers' emotional confirmation in the advertisement copies had a significant impact on hedonic criteria, while rational evidence in the advertising copies could significantly influence utilitarian value.

Hedonic value had strong influence to both affective trust (t-value = 7.326) and satisfaction (t-value = 7.290) and utilitarian value also significantly affected both satisfaction (t-value = 8.975) and cognitive trust (t-value = 5.228) as Chai, Malhotra and Alpert [49] suggested. These outcomes showed that the interrelationship of value, trust and satisfaction and disclosed that developing providing hedonic value to consumers would increase affective trust and satisfaction. In contrast, utilitarian value delivery would enhance consumers' cognitive trust and satisfaction. Meanwhile, satisfaction also had substantially positive influences on affective trust (t-value = 4.879), cognitive trust (t-value = 4.331) and positive WOM (t-value = 3.138), as Sanchez-Franco [53], Kampen, De Walle and Bouckaert [55] and Maxham III [71] proposed. We could argue that consumers' retention of satisfaction from advertising copies were the determinants of trust and positive WOM derived from the results.

As Alfina, Ero, Hidayanto and Shihab [76] and Xu [75] suggested, positive WOM was affected by both (t-value = 3.307) and cognitive trust (t-value = 4.752). Based on the results, we could imply that the greater cognitive trust of consumers in advertising copies would bring a more significant impact on positive WOM, while a higher degree of consumers' cognitive trust in advertising copies would bring more positive WOM credibility.

When we utilized an unobserved heterogeneity assessment, we uncovered unique discoveries within the data sample. For instance, in the Type 1 model (*n* = 68), the influences of hedonic value on affective trust and satisfaction on positive WOM were no more profound. In addition, the positive impact of affective trust on positive WOM in the global model changed to a negative influence (β = −0.642, *p* < 0.000) prevailing in the Type 1 model. In addition, the initially positive influences of cognitive trust on positive WOM was reversed into a negative influence (β = −0.576, *p* < 0.000), while there was no influence of satisfaction on cognitive trust in the Type 2 model, suggesting that cognitive trust and satisfaction in advertising copies are diverse. In the Type 3 model, we discovered that

positive effects of emotional appeal on hedonic value and satisfaction on cognitive trust were no longer meaningful, suggesting that there were specific unobserved heterogeneous traits of consumers toward advertising copies. The results of our study on unobserved heterogeneity hint that there are hidden traits of consumers that cannot be found with a conventional statistical approach; thus, firms should consider more holistically, including potential elements in advertising copies that could satisfy consumers' hidden insights to achieve sustainable marketing with the fulfillment of consumer needs, attainment of firms' goal and securing the process competitiveness in the market, as Fuller [11] argued.

## 6. Conclusions

From the test results of the proposed hypotheses, we revealed that there were significant relationships between appeal, value, trust, satisfaction and positive WOM in the global model for advertising copies. More specifically, emotional and rational advertising appeals positively influenced hedonic and utilitarian values, and these two values had impacts on trust and satisfaction of smartphone consumers. Also, similar to Koh and Sundar [50] suggested, utilitarian features (i.e., product information) could generate cognitive trust, while hedonic features (i.e., enjoyment) could engender affective trust. Furthermore, the affective and cognitive trust and satisfaction of consumers in advertising copies could be critical rationales for positive WOM in the context of smartphone sales.

In addition to the global model analysis, in three consumer typology models, the Type 1 model had the characteristics of consumers with a rational orientation. This group's affective trust affected positive WOM negatively, which implies they were less likely to make positive comments about products or services in advertising copies. This phenomenon could be interpreted that even if they indicated strong trust in a product advertised, emotional terms, such as "likable," "enjoyable," and "positive" were construed damagingly due to their rational oriented characteristics. In contrast, we found that another participant group negatively perceived rational terms in advertising copy, such as "truthful," "credible," "reliable," "dependable," "accurate," and "useful," that would make them be unlikely to offer positive WOM. These were classified as Type 2 consumers, for example, those with an emotionally oriented. Lastly, some participants failed to perceive any hedonic value in the advertising's emotional appeal. In addition, they may not have developed cognitive trust even though they were satisfied with the advertising copies for products or services. Because their decisions on making positive WOM were related weakly to emotional stimuli and cognitive beliefs, they were categorized as Type 3 consumers, i.e., those with the utilitarian value orientation.

According to our results, marketers need to more minutely understand the effect of emotional and rational appeals that the advertising copies provide to the three different types of smartphone consumers for preparing a more sustainable marketing strategy. Moreover, advertising strategies that ignore such hidden heterogeneous characteristics would not only be ineffective, but also will lead to severe failure to implement marketing sustainability due to waste of resources such as time, cost and human resources. Instead, using the consumer behavioral strategical methods, such as target marketing that expose specific smartphone consumers with similar decision patterns, could provide a keystone for sustainable marketing as well as more increased marketing ROI.

For the field practitioners of smartphone manufacturers in the current competitive market, this research has the following implications. First, it sheds light on the prospective implementation of emotional and rational appeals within advertising copies, which would finally derive positive WOM through perceived value, trust and satisfaction that could help firms meet the requirements of sustainable marketing. Practitioners engaged in the smartphone market, the findings from this research also delivered vital information for pushing forward with the impending adoption of the appeal–value–trust–satisfaction–WOM framework for their sustainable marketing strategy. It implies that adequate elements, such as hedonic value, utilitarian value, satisfaction, affective trust and cognitive trust, on each stage should be presented to induce consumers to establish loyalty for the products and services with positive WOM.

The unobserved heterogeneous characteristics of consumers indicated that the diversity of consumers should be carefully considered. Some consumers were in favor of rational confirmation, and some were emotional confirmation. As a sustainable marketing strategy, including the creation stage of advertising copies, these consumer characteristics need to be applied in order to provide adequate information to consumers, for example, if the products possess rational benefits, such as everyday goods, advertising copies should not emphasize on emotional appeal for consumers those in Type 1 model. On the other hand, forcing consumers, such as those in Type 3 model, who show high utilitarian orientation traits and prefer more hedonic value than utilitarian value to engage in advertising copies may cause them to refuse to have positive WOM. We recommend that the foundation of these ideas should be performed in earlier stages of formulating advertising copies to target the appropriate consumer segment for sustainable marketing.

This study provided contributions including in-depth considerations for managers of advertising and marketing companies and understanding to fill the gaps in smartphone consumer typology research as well for sustainable marketing. However, despite the implications as stated above, there still are limits in this research as follows. First, this study only used a cross-sectional self-reported dataset with a relatively small sample size of the survey participant. These data sample could be putatively susceptible to general method variance [96]. In order to alleviate the bias, adopting a longitudinal data sample with a larger sample size should be considered. Likewise, the implication of this research would have theoretically more philosophical generalizability with longitudinal datasets that could be implemented to not only smartphone consumers in Korea, but also various products or services in several countries. For more robust sustainable marketing strategies, future research needs to adopt non-cross-sectional datasets and broaden the range of topics compatible with advertising copies from the perspective of various types of consumers. If future research considers these suggestions, more fruitful contributions would be established that was not made in this research.

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