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**The impact of covid-19 on consumer behavior and the
role of influencers to ensure a path between consumers
and companies**

Dissertação para obtenção do grau de Mestre em Direção
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RESUMO

O objetivo da presente dissertação assenta no impacto da pandemia COVID19 no comportamento dos consumidores e a aproximação entre empresas e clientes através de influencers. Vários autores têm analisado o comportamento dos consumidores desde a situação pandémica atual, bem como o processo de aproximação entre empresas e clientes através de influencers. O presente estudo segue uma abordagem metodológica quantitativa e qualitativa. A base de investigação mista permitiu a obtenção de informações relevantes para os problemas em análise, tornando o confronto da literatura com a realidade mais precisa, obtendo-se resultados fiáveis e conclusivos. No capítulo 2, realizou-se um questionário online com o intuito de comparar o comportamento do consumidor em dois momentos distintos. Segundo os testes estatísticos t student e análise fatorial, foi possível concluir que os hábitos de consumo alteraram devido essencialmente ao nível de rendimento, à inovação dos produtos e às novas tendências do mercado. No capítulo 3, realizaram-se entrevistas a 7 empresas prestadoras de serviços com o intuito de perceber a relação de aproximação entre empresas e clientes através de influencers. Das entrevistas realizadas, conclui-se que as estratégias digitais baseadas em influencers têm como objetivos principais a construção de relações de confiança, divulgar novos produtos, aumentar a notoriedade das marcas e alavancar o volume de vendas. A partir das investigações desenvolvidas, contribui-se para a clarificação e desenvolvimento do conhecimento científico acerca do comportamento do consumidor, bem como a orientação para as empresas nos seus processos de comunicação digital através de influencers.

Palavras-chave: COVID19; Comportamento; Consumidores; Empresas; Clientes; Influencers

ABSTRACT

The objective of this dissertation is the analysis of the impact that COVID19 pandemic had on consumer behavior and the approach between companies and customers through influencers. Several authors already analyzed consumer's behavior since the current pandemic situation, as well as the process of rapprochement between companies and customers through influencers. The present research follows a quantitative and qualitative methodological approach. The mixed research base allows to obtain relevant information for the problems under analysis, making the confrontation of literature with reality more precise, thus, leading to reliable and conclusive results. In chapter 2, an online questionnaire was performed to compare consumer behavior in two different moments. According to the statistical tests t student and factor analysis, it was possible to conclude that consumption habits have changed due essentially to the level of income, product innovation and new market trends. In chapter 3, interviews were conducted with 7 service providing companies in order to understand the relationship between companies and customers through influencers. From the interviews carried out, it was concluded that the digital strategies based on influencers have as main objectives the building of trust relationships, to promote new products, to increase the brands awareness and to leverage the sales volume. From the research developed, it contributes to the clarification and development of scientific knowledge about consumer behavior, as well as guidance for companies in their digital communication processes through influencers.

Keywords: COVID19; Behavior; Consumers; Companies; Customers; Influencers

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ACRONYM LIST

CEO – Chief executive officer

CRM – Customer relationship management

GNU PSPP - Software for data analysis

INE - Portuguese National Statistics Institute

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1. CHAPTER 1 - INTRODUCTION

1.1. Statement of the Problem

Research on the impact of COVID19 pandemic on consumer behavior and the rapprochement between companies and customers through influencers was intensified since the pandemic emerged. The concept of consumer society emerged in recent times. It first appeared in the United States of America after World War II, at the time when the need to restructure countries after the war, led to the adoption of measures capable of rebuilding economies. As the priority at the time was the manufacturing in volume, the industrial development gave rise to mass production of durable and standardized goods, which after a certain time became difficult to sell, causing an oversupply for the needs of consumers (Schor & Holt, 2000; Fiat et al., 2013).

The trend towards consumerism took hold after the industrial revolution, at the moment when modern, capitalist societies began the massification of production. As the main objective of companies was profit and economic development, individuals were influenced daily by the media through short and direct messages. Irrational consumption brought social, economic and environmental consequences such as the manipulation of individuals' feelings, family indebtedness, environmental degradation and irrational use of resources (Kucuk, 2016; Afflerback et al., 2013).

The technological advances of the late 20th century created behavioral changes in consumers such as loss of appetite for consumption, loss of interest in brands, increased attention to prices and a reduction in impulse purchases (Hawkins & Mothersbaugh, 2016; Gomez-Corona et al., 2016). With internet access becoming increasingly easier, opportunities were created for a more direct and simpler contact between companies and customers (Malik et al., 2012; Sette et al., 2020).

At the beginning of the 21st century, digital advances allowed information to circulate without barriers. Therefore, consumers have more alternatives to satisfy their needs and have become more demanding. It has become possible to search, find and compare similar products, the various advantages and without geographical limitations (Malik et al., 2012; Sette et al., 2020). On the companies' side, there was a diversification of supply and also a readaptation of the way they communicate with their customers (Ioană & Stoica, 2014).

The digital revolution has changed the manner through which consumers approach the communication strategies implemented by companies. Digital media became an essential tool to compete within most current markets. Companies have invested in proximity to customers, thus contributing to the effectiveness of the loyalty process. The goal of organizations through the use of digital channels has become more strategic and aggregated, as customers started to play an active role in the creation of brand value and reputation (Enke & Borchers, 2019). As a result, customer loyalty has become a central element of relationship management (Bakhtieva, 2017; Felix et al., 2017).

The popularity of digital media in recent years is attributed, among others, to the rise of online shopping. With the rapid evolution of global e-commerce, companies are looking to gain competitive advantages through interaction with customers (Buechel & Berger, 2018). The growth of technological penetration coupled with the evolution of virtual shopping has boosted the e-commerce ecosystem, revolutionizing the global economy as it allows physical shops to expand their communication channels and distribute at lower costs (Wijaya, 2013; Yan et al., 2012).

With the dissemination of online commerce, social networks served as a trigger to encourage consumption. The term "word-of-mouth marketing" took a new dimension. The digital sharing culture was an innovation that allowed consumers to interact with each other. Ratings, comments and suggestions based on other people's purchases have totally changed the way consumers satisfy their consumption needs (Yan et al., 2012; Torres et al., 2019). The evolution of the content produced by the audience went from amateur entertainment to increasingly elaborate productions and, in a short period of time, became a powerful generator of product sales. The approach between companies and customers through influencers, their main objective is creating prominence for brands in the digital media (Chen et al., 2012; Coleman et al., 2011; Marques et al., 2017).

In this sense, when companies hire digital influencers their intention is that such individuals produce contents whereas detailed information about the brand's products is provided. The aim of this content creation is to focus the consumers' attention, by changing their opinions and behaviors, and provide a follow-up service. Furthermore, the search to establish a relationship of trust will have a positive effect on the image and awareness of the brand (Coleman et al., 2011; Morris, 2009).

Currently, companies have been partnering with influencers to reach certain niches of the population. Since these individuals create interesting content and act as a tool to

attract and retain customers, they end up developing a close relationship with their followers in the various social networks in which they operate, helping companies in their forms of communication (Kapitan & Silvera, 2016; Wijaya, 2013).

Due to the constant change of opinions and respective consumption habits, the study of consumer behavior and the manner to satisfy their needs is complex and difficult to understand. The behavioral analysis of individuals is related to the perception of thoughts, feelings and actions that lead them to adopt certain consumption attitudes (Mihic et al., 2013; Zhao et al., 2014).

Maslow's theory of needs, developed in the 1940s, reveals that there are five categories of human needs - physiological, safety, relationships, esteem, and self-fulfillment - arranged in a pyramid format (Koltko-Rivera, 2006; Tikkanen, 2007). At the base of the pyramid are the basic or physiological needs such as eating, drinking and breathing. Next are the security needs such as stability and protection. At the third level are the social relationship needs which correspond to the need for affection and social integration. On the penultimate level are the esteem needs, which correspond to the desire of individuals to be confident, worthy and respected. At the fifth and last level are the needs for personal fulfillment which include the development of personal characteristics such as creativity, spontaneity, problem solving and the absence of prejudice (Hagerty, 1999; Sharabati et al., 2014).

The multiplicity of needs developed by consumers have a direct impact on their consumption attitudes. In fact, current consumption patterns present significant differences when compared to previous decades, to the extent that they are conditioned by multiple economic and extra-economic variables. As consumption is one of the behaviors of individuals, several authors emphasize the constraints that directly and indirectly influence their attitudes at the time they decide to satisfy their needs (Sharabati et al., 2014; Ajzen, 2015).

On another note, the pandemic situation caused by COVID19 that has rocked the world since late 2019 has completely changed the lives of individuals. According to Donthu & Gustafsson (2020), the change in routines, the emergence of teleworking, distance learning and the situation of social isolation in a significant part of the planet have caused profound changes in consumption habits. The exponential increase in online shopping, the preference for safer and sanitized goods and services and the demand for quality were some of the consequences that the pandemic has caused in consumers, impacting

on the process of bringing companies and customers closer together (Settersten et al., 2020).

1.2. Unit of Analysis and Research Themes

The impact of the COVID19 pandemic on consumer behavior and the approach between companies and customers through influencers are the main focuses of this dissertation. Theoretical knowledge was obtained about the importance of the factors that influence consumer behavior and also the way companies approach their customers through digital influencers.

In the first chapter, it is described a statement of the problem under study. Then, the units and themes of analysis and research are presented, followed by the respective methodologies. Finally, an outline of the dissertation is prepared, which summarizes the 3 parts of the dissertation, divided into 4 chapters.

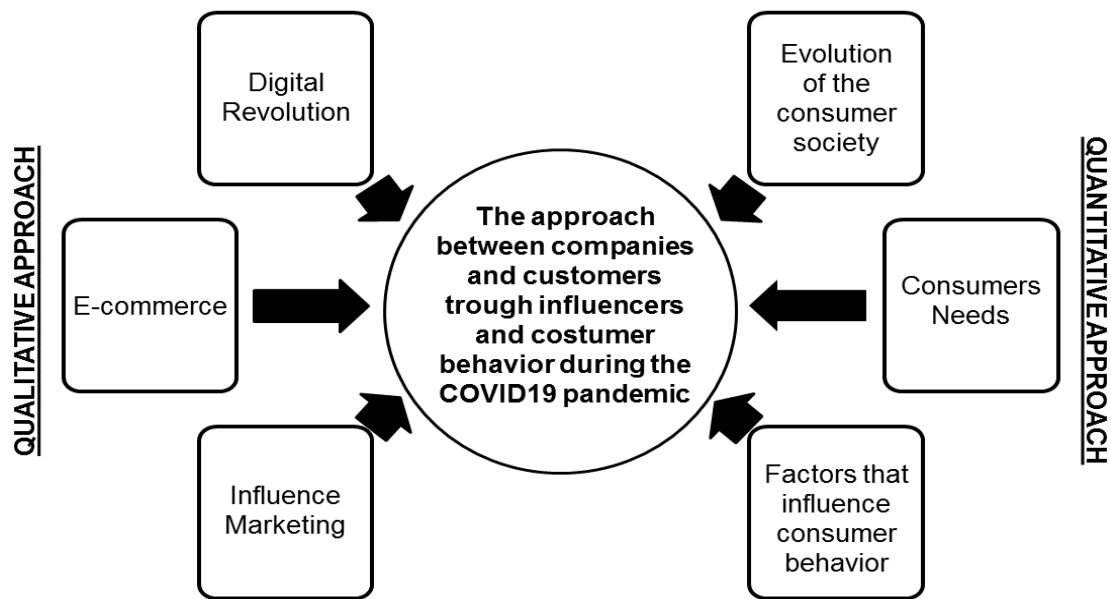
In this sense, in chapter 2, the following factors are considered: "evolution of the consumer society", "consumer needs" and "factors that influence consumer behavior". The theoretical survey under analysis allowed to follow the evolution of the consumer society since the late twentieth century to the present day. Taking into account the needs developed by individuals, the literature approach was performed in a detailed and careful manner, in order to ascertain the behavioral differences caused by the COVID19 pandemic.

In chapter 3, factors such as "digital revolution", "e-commerce" and "influencer marketing" were considered. The theoretical approach around the mentioned topics, allowed a broadened knowledge concerning the adaptation of companies to digital media. Moreover, the theoretical survey around the concept of "influencer marketing" emerges as a way to bring companies and customers closer together in the online environment.

Finally, chapter 4 presents the main research results, their practical and theoretical implications and limitations and future lines of research.

Taking into account the analysis and research themes from chapters 2 and 3, a correspondence can be established with the main objective of this dissertation, as can be identified in figure 1.1.

Figure 1.1 – Themes under analysis and dissertation objective



Source: Author

1.3. Methodology

The respective scientific methodology applied in the dissertation is presented in section 1.3.1 and the specific methodological approaches in each chapter are discussed in section 1.3.2.

1.3.1. Scientific method

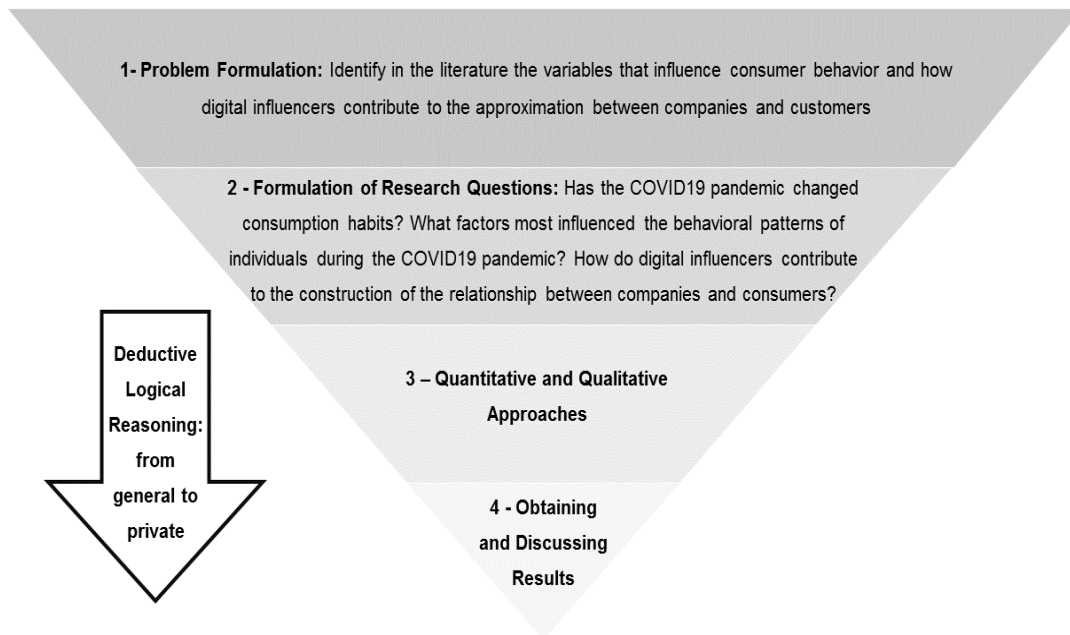
Epistemology corresponds to a discipline that examines science with the aim of determining its logical origin and value. There are several types of logic associated with inductive, abductive and deductive reasoning. Some fundamental questions in the study of epistemology are the origin of knowledge and also the relationship between scientific knowledge and factual reality (Nunes, 2008; Steup et al., 2005).

In inductive reasoning, reflection is carried out in an ascending order, starting with the specific until it reaches the general. Through induction, the aim is to validate existing knowledge. On the other hand, abductive reasoning has an intuitive and explanatory nature, insofar as it aims to conclude the best explanation of phenomena and also to produce innovation and scientific creativity. Finally, in deductive reasoning, reflection is carried out in a descending order from the general to the specific. Although deduction

does not produce new knowledge, it is a type of convergent reasoning in that it analyses past phenomena in order to achieve a single result. (Goel et al., 1997; Pélissier et al., 2002; Adler and Rips, 2008).

In this dissertation, scientific reflection is carried out in a descending order, which is an example of deductive reasoning, as shown in figure 1.2.

Figure 1.10 – Research scientific method



Source: Author

1.3.2. Approaches in individual chapters

The impact of the COVID19 pandemic on consumers behavior and the approach between companies and customers through influencers are the main themes of this dissertation. The option to diversify the scientific methods on data collection, contributed to the achievement of results of higher quality and reliability.

The research base for this dissertation, located in chapters 2 and 3, is based on a mixed approach. In this sense, and, according to Tashakkori et al. (2008) & Johnstone (2004), the ability to obtain information for the problems under analysis using mixed research makes the confrontation of literature with reality more precise and accurate, thus, obtaining more reliable and conclusive results on the issues under analysis.

Chapter 2 is based on conceptual research through qualitative analysis, according to the model suggested by the authors Crouch & McKenzie (2006). Initially, a pre-analysis of the topic under study and the respective theoretical framework was performed. Then, the methodology and the way to collect the collected data were defined. Next, a descriptive analysis was performed in order to organize and describe the data. Finally, an inferential interpretation was performed in accordance with the theoretical framework and the empirical results obtained.

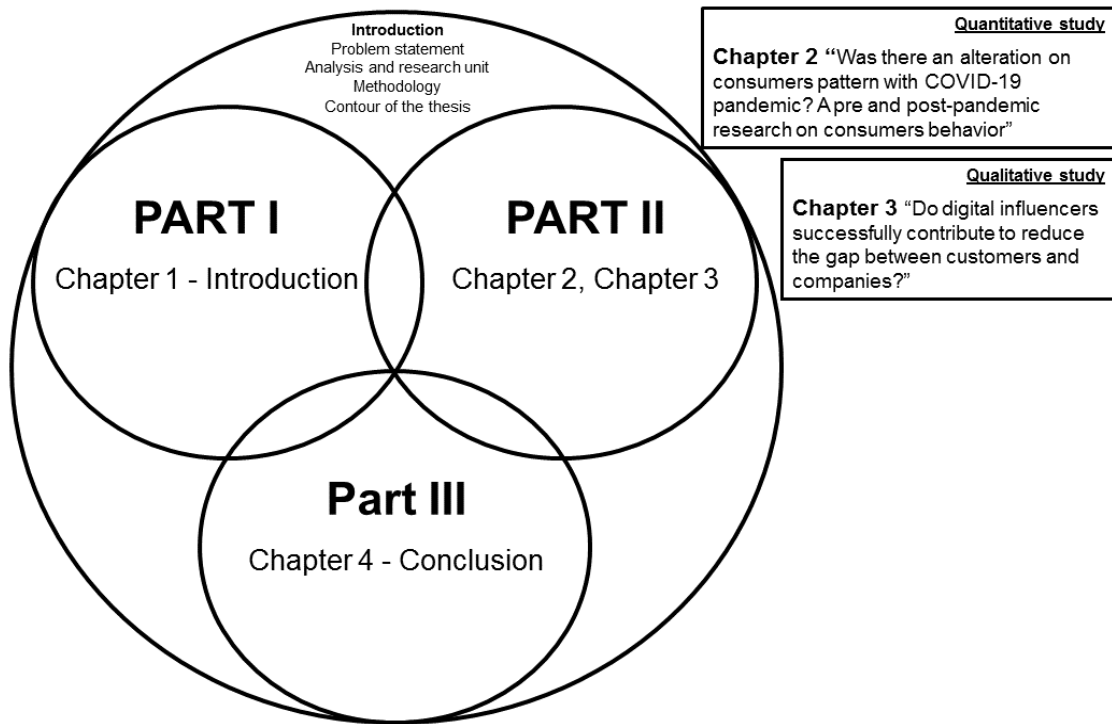
Chapter 3 follows a conceptual research quantitative empirical analysis. According to (Rahman, 2016, Queirós et al., 2017; Choy, 2014), this methodology provides more conclusive solutions to the problems under study, since it uses statistics in the collection of and analyses them according to an adjusted and reliable methodology. Furthermore, one of the advantages of the quantitative method is the possibility of generalizing the data collected, given the size of the sample.

1.4. Dissertation Outline

This dissertation is based on two papers that relate to the main research themes and are summarized in figure 1.3. The dissertation is organized in three parts.

The first part corresponds to chapter 1, which includes the introduction. In the second part, chapters 2 and 3 discuss each of the two articles, which can also be read individually. Finally, chapter 4 presents the main dissertation conclusions and discusses additional observations and insights obtained from the research.

Figure 1.18 – Dissertation design



Source: Author

2. Chapter 2 “Was there an alteration on consumers pattern with covid-19 pandemic? A pre and post-pandemic research on consumers behavior.”

Abstract

The actual pandemic crisis caused substantial changes; on the economies around the world, the routines of individuals, the methods of working and consumption needs. The present research aims to determine how consumers have changed their consumption habits and which factors most influenced their behavioral patterns during the COVID-19 pandemic. Through the use of quantitative methodology, an online questionnaire was performed, intending to collect information regarding consumers behavior. Comparatively to the phase preceding the pandemic, the results obtained show that, amongst the seven variables under analysis, the available income to satisfy consumption needs and the innovation of goods and services were the constructs that consumers consider most relevant when meeting their needs during the pandemic phase, The present research contributes to the development and clarification of scientific knowledge, and provides insights to companies and policy makers about consumer behavior during the COVID-19 pandemic. By knowing the behavior of consumption, it is possible to determine socio-economic development strategies to avoid a significant rupture in the economy.

Keywords: Consumer; Behavior; COVID-19; Pandemic; Society; Consumption

2.1. Introduction

The behavioral pattern of the consumer society presents numerous differences compared to previous decades. In the late 1990s, significant changes in consumer habits were noted, such as a loss of appetite for consumption, a loss of interest in brands, increased attention to prices and a reduction in impulse purchases. At the end of the 20th century, industrialization and technological advances brought a different consumer society, more demanding and with massive consumption patterns (Hawkins and Mothersbaugh, 2016, Gomez-Corona et al., 2016).

According to Lall et al. (2009), the progression of society towards tertiarization has created an absolute and permanent parallelism between two growing phenomena: production and consumption. Since outsourcing corresponds to the process of directing employment to the tertiary sector, the massification of production and consumption increased in such a way that the weight of the primary and secondary sectors has stagnated, creating a path to the growth of services, the weight of employment and gross added value of the tertiary sector in the most developed economies. According to statistical data collected from the Portuguese National Statistics Institute (INE), in Portugal the gross added value for activities related to services in 1995 was around 615.24 million euros. However, in 2019, this figure almost quadrupled, standing at 2,426.73 million euros. In the same strain, activities related to the primary sector, such as agriculture, forestry and fishing, had little variation from 1995 to 2019, registering a slight increase from 4,273.76 to 4,383.94 million euros.

Constant technological advances gave way to jobs mostly directed to the service sector and less directed at activities in the primary sector (Brynjolfsson & McAfee, 2011). Being so, by the beginning of the 21st century, the emergence of further jobs aimed the tertiary sector, this is also an era of information that brought greater dominance to consumers, profoundly altering the way that individuals satisfy their needs. As the access to information became increasingly easier, companies needed to diversify their offer, pushing consumers to spend more time purchasing goods or services, and search and collect information (Ioană & Stoica, 2014).

Consumer behavior is affected by several economic and extra-economic factors. Household available income, new trends, advertising and the price level of goods are examples of some variables that have been changing society's consumption patterns and interfering in the way consumers make their choices and satisfy their needs (Zhao et al., 2014; López-Fernández, 2020).

From another perspective, the pandemic situation caused by COVID-19 has shaken the world since the end of 2019 and completely changed the lives of individuals. According to Donthu and Gustafsson (2020), the change in routines, the emergence of teleworking in large scale, distance learning and social isolation in a significant part of the planet caused profound changes in consumption habits. The exponential increase in online shopping, the preference for safer and more hygienic goods and services and the demand for quality were some of the consequences that the pandemic has caused in consumers (Settersten et al., 2020).

In this context, studying consumer' behavior is complex and difficult to understand, as it relates to the perception of thoughts, feelings and actions that lead individuals to adopt certain consumption attitudes. The manners through which individuals satisfy their needs have been changing due to the continuous improvement of services, which increased the level of trust placed in companies by consumers, making their behavioral study more difficult (Mihic et al., 2013, Zhao et al., 2014).

The objective of the present research is to determine how consumers changed their consumption habits and what factors most influenced behavioral patterns during the COVID-19 pandemic. In order compare consumers behavior timely, an online questionnaire was prepared, from which 237 validated responses were collected, after which an investigation of the variants that consumers considered most important were analyzed in two different intervals: before the pandemic and during the COVID-19 pandemic. The intention was to verify if there are significant discrepancies in the two moments under analysis which may be capable of altering consumers behavior.

This research is original, as there is no information available on the changes in consumers behavior during the COVID-19 pandemic in the Portuguese environment. This paper also contributes to the development and clarification of scientific knowledge, companies and policy makers about consumer behavior during the COVID-19 pandemic. When knowing the behavior of consumption, it is possible to determine socio-economic development strategies, to avoid a complete rupture in the economy.

Regarding the findings of this research, it should be noted that income, innovation, new trends and advertising were the variables that consumers considered most important to meet their consumption needs when comparing the period before and during COVID-19 pandemic.

The present paper is organized as follows: the first part consists of an introduction to the research and its academic relevance, with a brief background on consumers behavior before and during the pandemic. In the second part, an extensive literature review is presented, which verifies the state of the art on the subject under analysis. The third part describes the methodology followed. In the fourth part, the results of the questionnaire are presented, discussed and compared with the existing literature. Finally, in part five, the conclusions of the research are presented as well as the practical implications, limitations and suggestions for future lines of investigation.

2.2. Literature Review

2.2.1. The evolution of the consumer society

The concept of consumer society appears to be allied to the contemporary era, characterized as the era of the masses. It first appeared in the United States of America after the second world war, at a time when the need to restructure countries after a major conflict, led to the adoption of measures capable to rebuild economies. As the priority was manufacturing in volume, industrial development gave rise to a series production of durable and standardized goods, which after a certain time became difficult to sell, causing an excess supply for the needs of consumers. (Schor & Holt, 2000, Firat et al., 2013).

According to Boso et al. (2019), due to the excessive offer in the market, companies have developed aggressive and seductive marketing strategies to persuade consumers, whereas the incentive to purchase was so aggressive that individuals develop constant consumption needs. The scarcity of income by part of families led financial institutions to create credit lines, thus, financing consumption quickly, easily and effectively (Gilaninia et al., 2011).

The trend towards consumerism took place after the industrial revolution, at a time when modern and capitalist societies began mass production. As the main objective of companies was profit and economic development, individuals were influenced daily by the media through short and direct messages. Irrational consumption brought social, economic and environmental consequences such as the manipulation of individuals feelings, the indebtedness of families, environmental degradation and the irrational use of resources (Kucuk, 2016, Afflerback et al., 2013).

By the end of the 20th century, the progressive advancement of technologies gave way to excessive consumption, unable to distinguish the necessary from the desirable. With the increase of purchasing power due to the easiness of financing, individuals began to consume impulsively, drastically changing their behavioral patterns. At a time when globalization and the reduction of economic barriers were substantially expanding, technological developments of the late 20th century were so significant that individuals were conditioned to accept them (Brynjolfsson & McAfee, 2011; Hall et al., 2011).

For Wang (2014), the technological progress has completely changed the flow of information to consumers. The way companies communicated has evolved considerably, due to the transfer of control to consumers. This was confirmed by the increased access to information that emerged at the beginning of the 21st century, which made individuals more demanding and informed. As such, organizations were forced to readapt the form of communication, valuing aspects such as reputation, appreciation and loyalty of customers (Ioană & Stoica, 2014).

The current behavioral pattern of individuals is very different from the previous decades. In an era dominated by quality and continuous improvement in services, new binding opportunities were developed between companies and customers. As competition between organizations is increasing, the evolution of proximity between stakeholders aims to build relationships of trust and long-term proximity (Mihic et al., 2013; Gomez-Corona et al., 2016).

Taking into account the literature review regarding the consumer society, the following research hypotheses were formulated:

Hypothesis 1: The COVID-19 pandemic changed the habits of the consumer society.

Hypothesis 2: Technological advances have enabled consumers to satisfy their needs within their own homes.

2.2.2. State of the art on consumers behavior

The study of consumers behavior is a recent discipline which consists of analysis processes to understand when individuals choose, buy or use products or services to satisfy their needs and desires. The comprehension of consumption patterns obliges companies to develop strategies to identify the true motivations and desires of

consumers, consequently, assisting organizations in the development of new products, new forms of communication and distribution (Hawkins & Mothersbaugh, 2016; Sharabati et al., 2014).

The individual's behavior is influenced by their motivations, feelings and thoughts, but it can also have external influence. Internal stimuli can be associated to personal desires, such as traveling, visiting a monument or purchasing a certain good or service, on the other hand, external stimuli are related to advertisements and advertising messages, with the purpose to influence consumers in their marketing process and buying decision (Zhao et al., 2014, Hall et al., 2011).

According to Hall et al. (2011), the development of external stimuli by part of companies, aims to create new needs that consumers did not have until then. Being so, if the stimulus causes internal changes in individuals in terms of their motivations and feelings, there is a discrepancy between the two circumstances – the desired condition and the real condition.

For Oliver (2014) & Reynoso (2010), these two circumstances overlap with two different types of needs; the needs of expression and the utilitarian needs. The needs of expression are related to the desires that consumers observe around them, whether by cultural, social or personal influence. They are associated with visual needs, interconnected to the image, which may influence individuals in the process of integration into society. In the other aspect, utilitarian needs correspond to the desires to satisfy basic daily needs, such as, purchasing food items, buying clothes, amongst others. (Zhao et al., 2014).

Maslow's theory of needs, developed in the 1940s, reveals that there are five categories of human needs: physiological, security, relationship, esteem and personal fulfillment all arranged in a pyramid shape (Koltko-Rivera, 2006; Tikkanen, 2007). The basic or physiological needs, such as eating, drinking and breathing are in the base of the pyramid. Next, are the security needs such as stability and protection. The needs for social relationships that correspond to the need for affection and social integration are located at the third level. At the penultimate level, are the needs of esteem, which correspond to the desire of individuals to be confident, dignified and respected. Finally, in the fifth level, are the needs for personal fulfillment that include the development of personal characteristics such as creativity, spontaneity, problem solving and the absence of prejudice (Hagerty, 1999; Sharabati et al., 2014).

The multiplicity of needs developed by consumers have a direct impact on their consumption attitudes. In reality, the current consumption patterns differ significantly from previous decades as they are conditioned by multiple economic and extra-economic variables. As consumption is one of the behaviors of individuals, several authors emphasize the conditions that directly and indirectly influence their attitudes when they decide to satisfy their needs (Sharabati et al., 2014; Ajzen, 2015).

According to Hall et al. (2011), economic variables correspond to all economic factors that have a direct implication on the consumption habits of individuals, either positively or negatively. As a result, the context of countries in parameters such as employment, access to credit, wages and market supply, are important an economic stimulus that condition the behavior of individuals. In this way, several authors consider three economic variables that influence and condition their consumption patterns; the income available to families, price level in the market and emergence of innovative goods and services (Ajzen, 2015).

The family's available income corresponds to the monthly monetary amount that households have for their expenses intended for consumption or savings. As consumption represents a function of income, it is possible to predict that a change in the available income will be reflected in household consumption habits. Being so, and although the needs may be unlimited, the available wages for consumption can be an obstacle to the satisfaction of the individual's desires. (Hall et al., 2011, Meyer & Mok, 2019).

In another perspective, and according to Einav et al. (2010), the variation in the price level is a constant phenomenon in economy. If, on one hand, a general increase on the price level – inflation, foresees a decrease in the purchasing power of consumers, on the other hand, a general decrease on the price level – deflation, presumes an increase in the purchasing power of consumers. As a result, the level of consumer consumption depends directly on the price level of goods and services to which the market obeys. (Sharabati et al., 2014).

The increase on demand for innovative products and services is essentially due to the new capabilities and features associated with the goods. The option to purchase innovative products is not widespread, since it is necessary to identify which consumers may be open to its use. Aspects such as price and financial adequacy are essential factors in the acquisition of innovative products and services (Kindström & Kowalkowski, 2014, Aurich et al., 2010).

In this context, the following research hypothesis was formulated:

Hypothesis 3: Consumers consider that economic variables (income, price level and innovation) affect consumption in the same manner, before and during the COVID-19 pandemic.

For Simoes et al. (2016), extra-economic variables influence consumption transversally to the economic variables. The literature reinforces four extra-economic variables that condition consumers behavior (sociocultural variable, personal variable, fashion and advertising). Therefore, the society in which individuals are included, their personal tastes, adherence to new trends and the influence of marketing, are extra-economic examples that change society's behavioral patterns. (Sharabati et al., 2014).

Sociocultural aspects have the most profound influence on the consumption patterns of individuals. Due to its inclusion in certain social groups, the standardized development of consumption behaviors affects consumers' attitudes when they satisfy their consumption needs. The distance between cultures and the creation of personal habits and routines, means that there are cultural discrepancies at various levels (Routray et al., 2015; Simoes et al., 2016).

Although individuals belong to certain social and cultural groups, behaviors as consumers are not exactly the same, and may vary from individual to individual. This variation is explained by several factors such as personal needs, age, gender, education, occupation and available income (Sharabati et al., 2014, Hall et al., 2011).

According to O'Cass & Siahtiri (2013), the new trends correspond to a sociocultural phenomenon that expresses certain habits and mores at a given moment. They can be shared in various forms and channels, such as advertising or through innumerable individuals, like digital influencers. Consequently, the new trends refer to various goods and services that, once adopted by consumers, create a generalized consumption trend (Simoes et al., 2016).

Advertising emerges as a dissemination strategy that seeks to encourage consumers to follow certain behaviors. Its main objective is to promote products and services in different types of media and platforms. Advertising is present in the daily lives of

individuals and plays an important role in society's consumption options (Hall et al., 2011; Moore & Lee, 2012). That said, we are able to formulate the last research hypothesis:

Hypothesis 4: Consumers consider that extra-economic variables (sociocultural, personal, new trends and advertising) affect consumption equally before and during the COVID-19 pandemic.

In Table 2.1 we can discern a summary of the definitions and variables under study as well as the questions developed for the questionnaire applied to consumers.

Table 2.1 - Variables under investigation and questionnaire questions

Variable	Definition	Author	Questions
Income	Household income corresponds to the monthly monetary amount that households have for their expenses related to consumption or savings. As consumption is a function of income, it is possible to predict that a change in household disposable income will be reflected in their consumption habits.	Hall <i>et al.</i> (2011); Meyer & Mok (2019)	1) The level of income directly affects the level of consumption. 2) Part of my income goes to savings and / or investment. 3) I managed to allocate my income according to the consumption needs.
Price level	The variation in the price level is a constant phenomenon in economy. A general increase in price level (inflation) foresees a decrease in the purchasing power of consumers. On the other hand, a general decline in the price level (deflation) presumes an increase in consumers' purchasing power. In short, the level of consumption of consumers depends directly on the price level of goods and services.	Einav <i>et al.</i> (2010); Sharabati <i>et al.</i> (2014)	4) The price level of a certain good or service influences my purchase decision. 5) When loyal to a particular brand, the existing price level has little, or no influence in my consumption. 6) The price level of a certain good or service could affect my income level, which sometimes led me to make choices.
Innovation	The growing demand for innovative products is mainly due to the new capacities and features associated with the goods. The option to purchase an innovative product is not widespread, since it is necessary to identify which consumers may be open to its use. Aspects such as price and financial availability are essential factors in the acquisition of innovative products and services.	Aurich <i>et al.</i> (2010); Kindström & Kowalkowski (2014)	7) Innovation is a fundamental factor in the purchase decision process. 8) The purchase of innovative goods or services stimulated a greater financial effort, which, in certain times was an obstacle to purchase. 9) As a consumer, I tried to purchase innovative goods, due to their added value.
Sociocultural	Sociocultural aspects have the most profound influence on the consumption patterns of individuals. Due to its inclusion in certain social groups, the standardized development of consumption behaviors affects consumers' attitudes when they satisfy their consumption needs.	Routray <i>et al.</i> (2015); Simoes <i>et al.</i> (2016)	10) My behavior as a consumer was influenced by socio-cultural factors. 11) In the society to which I belong, the widespread communication is equally distributed.

			12) The power of socio-cultural influence is greater when it comes to visible goods.
Personal	Although individuals belong to certain social and cultural groups, behaviors as consumers are not exactly the same, and may vary from individual to individual. This variation is explained by several factors such as personal needs, age, gender, educational qualifications, occupation and disposable income.	Hall <i>et al.</i> (2011); Sharabati <i>et al.</i> (2014)	13) My behavior as a consumer differed from another consumer belonging to the same social group. 14) Factors such as age, gender and other personal variables, created unique and specific characteristics when meeting consumption needs. 15) My personal desires were identified by the needs of society.
New trends	The new trends correspond to the characteristic behaviors of a social group, in a given period. It refers to several goods and services that, once adopted by consumers, create a generalized consumption trend. Fashion can be shared through various forms and channels such as advertising, and by innumerable individuals such as digital influencers.	O'Cass & Siahtiri (2013); Simoes <i>et al.</i> (2016)	16) The new trends have influenced my act of consumption. 17) The new trends were an asset in the process of integration in society. 18) I believe that digital influencers are individuals who followed and transmit the new trends to society.
Advertisement	Advertising emerges as a dissemination strategy that seeks to encourage consumers to follow certain behaviors. Its main objective is to promote products and services in different media and platforms. Advertising is present in the daily lives of individuals and plays an important role in society's consumption options.	Hall <i>et al.</i> (2011); Moore & Lee (2012)	19) Advertising influenced my behavior as a consumer. 20) I believe that the impact of advertising has made the process of loyalty to a certain brand difficult. 21) The way digital influencers communicated with the public is a type of non-intrusive and consumer-friendly advertising.

Source: Author

2.3. Methodology

For the present research, a quantitative methodology was used. This methodology is the most suitable for the present study as it provides more conclusive solutions to the questions developed. As the data is gathered and analyzed according to an adjusted methodology, the reliability of the collected responses is high. Moreover, the advantages of the quantitative method are the possibility to generalize the collected data, taking into account the sample size (Rahman, 2016; Queirós et al. 2017; Choy, 2014).

The questionnaire applied in the present research was mostly developed following the literature review (table 3). Since the literature on consumer behavior presented some gaps on the comparison level with other variables that affect consumer behavior, it was decided to promote a questionnaire that addresses the other variables under study and compare them in two different periods: before the pandemic and during the COVID-19 pandemic. The questionnaire consisted of 42 questions, 21 questions to assess consumer behavior before the pandemic, and another 21 questions to assess consumer behavior during the COVID-19 pandemic. For all questions we used a 7-point Likert scale, where 1 corresponded to "strongly disagree" and 7 to "strongly agree".

Following its conception, the questionnaire was applied online, and the responses were collected through the social network Facebook (convenience sampling). The questionnaire was sent to 3000 persons and 237 valid responses were received. Hence, the response rate was 7.9%. The collection of responses started on 2020/10/21 and ended on 2020/12/06.

Afterwards, the collected data was exported and organized in Microsoft Excel and a GNU PSPP software was used for data analysis. To evaluate and compare the results obtained, we used the T-Student statistical test for paired samples, Descriptive Statistics and also Factor Analysis, thus allowing to analyze the existing contrast between the averages of the 7 variables under analysis before and during the pandemic (Sto-Tomas et al., 2019; Nunes et al., 2015).

2.4. Sample Description

Table 2.2 represents the characteristics of the collected sample considering; gender, age, education qualifications, occupation, income, nationality and district. Regarding the

first item, from the 237 responses collected, 51.9% were female and 48.1% male. As for the average age, the value obtained is 28.54 years, with a standard deviation of 9.72. The youngest respondent is 16 years old and the oldest 58 years old. The third parameter under analysis, refers to education qualification, 37.13% have a master's degree, followed by 33.75% undergraduate. Regarding the occupation of respondents, the majority, 67.5% are employed and the remaining 32.5% are students. As for the level of monthly income, 43.88% of respondent's earn between 600 € and 1200 €. Finally, the collected responses are entirely from the Portuguese mainland, Porto is the district with the largest number of responses collected, 52.73%.

Table 2.2 – Sample characterization

Gender	Male (%)	114 (48,1%)
	Female (%)	123 (51,9%)
Age	Average	28,54
	Standard deviation	9,72
	Minimum-Maximum	16-58
Education	Primary level (%)	2,11%
	Professional level (%)	7,18%
	Secondary level (%)	17,30%
	Undergraduate (%)	33,75%
	Master (%)	37,13%
	PhD (%)	2,53%
Occupation	Student (%)	32,5%
	Employee (%)	67,5%
Income	Till 600€ (%)	29,12%
	600€ - 1200€ (%)	43,88%
	1200€-1800€ (%)	15,61%
	1800€-2400€ (%)	6,75%
	Above 2400€ (%)	4,64%
District	Aveiro	1,69%
	Braga (%)	17,71%
	Castelo Branco (%)	0,42%
	Coimbra (%)	0,42%

	Faro (%)	0,42%
	Leiria (%)	2,11%
	Lisboa (%)	16,45%
	Porto (%)	52,73%
	Santarém (%)	0,84%
	Setúbal (%)	2,94%
	Viana do Castelo (%)	2,11%
	Vila Real (%)	1,27%
	Viseu (%)	0,84%

Source: Author

2.4.1. Statistical Analysis T -Student and Descriptive Statistics

The T test for paired samples allows inferring on the equality of means of two independent samples, the observed values in one sample are independent from the values observed in the other sample. In this case, the hypothesis to be tested will be the equality of means between the two pairs of observations. As each case is analyzed twice - before the pandemic and during the pandemic - pairs of observations are formed, the differences are tested via GNU PSPP statistical software (Sto-Tomas et al., 2019, Nunes et al., 2015).

The statistical hypotheses to be tested are:

$$H_0: \mu_1 = \mu_2 \quad \& \quad H_1: \mu_1 \neq \mu_2$$

Assumptions: normal population or sufficiently large sample size.

As the sample size is $n = 21 < 30$, then we can only apply the T test for paired samples if the results obtained before and during the pandemic are normal.

In the same manner, an exploratory analysis of the results obtained was also performed and inserted in the descriptive statistics. The averages of the obtained classifications, the variance, the standard deviation, the maximum value and the minimum value were addressed.

In the first variable under analysis, it was verified whether the level of income of individuals affected the level of consumption during the pandemic. In addition, since the pandemic has developed new consumption needs, consumers were also asked about

savings / investment and the ability to manage their income according to their needs, as shown in Table 2.3. antes da pandemia

Table 2.3 - Descriptive Statistics and T Test - Variable Yield

	Average	Standard Deviation	Variance	T Student Test	P-value
Consumption Level (Before the pandemic)	5,19	1,55	2,39	-7,89	0,000
Consumption Level (During the pandemic)	6,03	1,37	1,87		
Savings / Investment (Before the pandemic)	5,19	1,52	2,32	-4,06	0,000
Savings / Investment (During the pandemic)	5,59	1,60	2,56		
Needs Management (Before the pandemic)	5,67	1,42	2,02	2,58	0,011
Needs Management (During the pandemic)	5,43	1,41	1,99		

Source: Author

Regarding the level of consumption, since $t = -7.89$ with a significance level of 5%, H_0 is rejected. Thus, through statistical analysis, it was concluded that, with 95% of confidence level, the impact of income on the level of consumption was not the same before and during the pandemic on the level of consumption.

In another aspect, in savings / investment, as $t = -4.06$ with a significance level of 5%, H_0 is rejected. Thus, through statistical analysis, it was concluded that, with 95% of confidence level, the available income of individuals for savings and / or investment was not the same before the pandemic and during the pandemic.

Finally, in managing income according to personal needs, such as $t = 2.58$ with a significance level of 5%, H_0 is not rejected. Consequently, through the statistical test, it was possible to verify that, with 95% of confidence level, individuals were able to manage their income according to their consumption needs in the two moments under analysis.

Throughout the second variable, individuals were asked whether the price level influenced their consumption decisions during the pandemic. In the same manner and

taking into account the other effects of the pandemic, factors such as loyalty and the influence of income were also addressed, taking into account price fluctuations, as shown in Table 2.4.

Table 2.4 - Descriptive Statistics and T-Test - Variable Price Level

	Average	Standard Deviation	Variance	T Student Test	P-value
Consumer Decision (Before the pandemic)	5,79	1,47	2,16	-1,22	0,223
Consumption Decision (During the pandemic)	5,92	1,23	1,51		
Consumer Loyalty (Before the pandemic)	4,16	1,75	3,05	1,21	0,227
Consumer Loyalty (During the pandemic)	4,01	1,73	3,01		
Income Influence (Before the pandemic)	5,39	1,49	2,23	0,41	0,685
Income Influence (During the pandemic)	5,35	1,36	1,85		

Source: Author

With regards to consumption decision, taking into account the result of the statistical test $t = -1.89$, with a significance level of 5%, H_0 is rejected. Thus, with 95% of confidence level, it was possible to observe that the impact of the market price level on consumption decisions was not the same before and during the pandemic.

When addressing to consumers loyalty, since $t = 1.21$, H_0 is not rejected with a significance level of 5%. Definitely, through statistical analysis, it was concluded that, with 95% of confidence level, consumer loyalty has not undergone major changes before and during the pandemic.

Finally, with regards to the influence of income on price fluctuation, as the result of the t-test = 2.58, with a significance level of 5%, H_0 is not rejected. Thus, it was concluded that with 95% of confidence level, the influence of income taking into account the price fluctuation did not fluctuate in the two moments under analysis.

Addressing the third variable under study, individuals were asked about the importance of this factor when meeting consumption needs before and during the COVID-19

pandemic. Therefore, through table 2.5, it was necessary to ascertain whether the acquisition of innovative goods and services stimulated a greater financial effort and whether the option of choosing products with innovative characteristics was due to their added value.

Table 2.5 - Descriptive Statistics and T Test - Innovation Variable

	Average	Standard Deviation	Variance	T Student Test	P-value
Consumer Decision (Before the pandemic)	4,88	1,52	2,30	-0,20	0,838
Consumption Decision (During the pandemic)	4,86	1,46	2,13		
Financial Effort (Before the pandemic)	4,60	1,55	2,41	-4,49	0,000
Financial Effort (During the pandemic)	5,05	1,50	2,26		
Aggregate Value (Before the pandemic)	4,35	1,69	2,85	-0,79	0,428
Aggregate Value (During the pandemic)	4,41	1,64	2,68		

Source: Author

Regarding the consumption decision, since the result of the t-test = -0.20, with a significance level of 5%, H₀ is rejected. Definitely, with 95% of confidence level, it was concluded that the decision to consume innovative goods and services was not the same before and during the pandemic.

Therefore, with regards to the financial effort for the acquisition of innovative goods, considering the t test = -4.49, H₀ is rejected with a significance level of 5%. In fact, it can be perceived through statistical analysis that the financial effort to acquire these same assets was not the same before and during the pandemic, with a confidence level of 95%.

Finally, when addressing the added value of innovative goods, the result of the t-test = -0.79, with a significance level of 5%, H₀ is rejected. Thus, with a confidence level of 95%, It was possible to confirm that the acquisition of innovative goods differed in the two moments under analysis.

With regards to the socio-cultural variable, respondents were asked whether their behavior as consumers was influenced by socio-cultural factors. In addition, they were also asked whether the communication spread equally in the two moments under analysis and whether the socio-cultural aspect had a greater influence on visible goods, as can be seen from table 2.6.

Table 2.6 - Descriptive Statistics and T Test - Sociocultural Variable

	Average	Standard Deviation	Variance	T Student Test	P-value
Consumer Behavior (Before the pandemic)	4,16	1,62	2,62	-1,68	0,094
Consumer Behavior (During the pandemic)	4,32	1,62	2,64		
Standardized Communication (Before the pandemic)	4,09	1,50	2,26	0,89	0,373
Standardized Communication (During the pandemic)	4,01	1,35	1,83		
Visible Goods (Before the pandemic)	4,79	1,54	2,38	-2,15	0,033
Visible Goods (During the pandemic)	4,99	1,40	1,95		

Source: Author

Regarding the influence of the socio-cultural aspect on consumer behavior, taking into account the result of the t-test = - 1.68, with a significance level of 5%, H₀ is rejected. Consequently, with 95% of confidence level, we can conclude that the impact of the socio-cultural aspect on consumer behavior was not the same before and during the pandemic.

For the next factor, it was investigated whether the communication disseminated by the various media remained unchanged in the two moments under analysis. Since the t test = 0.89, with a significance level of 5%, H₀ is not rejected. Thus, it was concluded through statistical analysis that the communication disseminated before and during the pandemic did not change, with 95% confidence level.

Finally, as t = -2.15 with a significance level of 5%, H₀ is rejected. Therefore, through the statistical test, it was possible to verify with 95% of confidence level that the power of

socio-cultural influence on visible goods was not the same before and during the pandemic.

Regarding the personal variable, individuals were asked about the existence of behavioral differences between individuals in the same social group before and during the COVID-19 pandemic. In addition, as can be seen from Table 2.7, we discussed how the unique characteristics may influence the satisfaction of needs and whether the personal desires of individuals are equal to the needs of society.

Table 2.7 - Descriptive Statistics and T-Test - Personal Variable

	Average	Standard Deviation	Variance	T Student Test	P-value
Behavioral Differences (Before the pandemic)	4,69	1,50	2,24	-1,97	0,050
Behavioral Differences (During the pandemic)	4,88	1,37	1,88		
Unique characteristics (Before the pandemic)	5,38	1,29	1,65	1,13	0,259
Unique characteristics (During the pandemic)	5,28	1,30	1,68		
Equal Needs (Before the pandemic)	4,10	1,44	2,08	0,05	0,957
Equal Needs (During the pandemic)	4,09	1,42	2,01		

Source: Author

Regarding behavioral differences and taking into account the result of the statistical test $t = -1.97$, with a significance level of 5%, H_0 is rejected. In this way, it was possible to verify that the behavioral differences between individuals of the same social group are not the same before and during the pandemic.

When, addressing the unique characteristics that meet personal needs, since $t = 1.13$, H_0 is not rejected with a significance level of 5%. Thus, through statistical analysis, it was concluded with 95% of confidence level, that unique characteristics at the time of meeting the needs did not undergo significant changes in the two moments under analysis.

Finally, as the result of the t-test = 0.05, with a significance level of 5%, H₀ is not rejected. Thus, with 95% of confidence level, it was confirmed that the equality of needs did not fluctuate significantly in the two moments under analysis.

In the sixth variable under analysis, it was intended to ascertain how the new trends influenced the level of consumption. In the same sense and taking into account table 2.8, individuals were asked if this variable helped in the integration process in society and if digital influencers followed and transmitted the new trends in the two analyzed moments.

Table 2.8 - Descriptive Statistics and T-Test - New Trends Variable

	Average	Standard Deviation	Variance	T Student Test	P-value
Consumption Level (Before the pandemic)	4,44	1,79	3,21	2,85	0,050
Consumption Level (During the pandemic)	4,16	1,59	2,53		
Society integration (Before the pandemic)	4,15	1,67	2,79	-0,04	0,966
Society integration (During the pandemic)	4,15	1,62	2,61		
Digital Influencers (Before the pandemic)	4,72	1,65	2,71	1,63	0,104
Digital Influencers (During the pandemic)	4,82	1,48	2,20		

Source: Author

Regarding the effect of new trends in the level of consumption, and since the result of the t test = 2.85, with a significance level of 5%, H₀ is not rejected. In this sense, with a 95% confidence level, it can be seen that the impact of new trends on the level of consumption was the same before and during the COVID-19.

Therefore, with regards to new trends as a relevant factor of integration into society and considering the t-test = -0.04, H₀ is rejected with a significance level of 5%. Actually, it can be seen through statistical analysis that the impact of new trends in the process of integration in social groups was not the same before and during the pandemic, with 95% of confidence level.

Finally, when considering the digital influencers as individuals who followed and transmitted the new trends, since the result of the t-test = -1.73, with a significance level of 5%, H₀ is rejected. Thus, with 95% of confidence level, the way digital influencers transmitted the new trends differed in the two moments under analysis.

In the last variable under analysis, advertising, the sample collected intended to determine whether advertising influenced consumer behavior. In this sense, individuals were also asked whether the impact of advertising hindered the process of loyalty to a particular brand and whether the way in which digital influencers communicated and transmitted new market trends was a type of non-intrusive and consumer-friendly advertising, as shown in table 2.9.

Table 2.9 - Descriptive Statistics and T-Test - Advertising Variable

	Average	Standard Deviation	Variance	T Student Test	P-value
Consumer Behavior (Before the pandemic)	4,32	1,64	2,69	0,35	0,724
Consumer Behavior (During the pandemic)	4,29	1,60	2,54		
Loyalty Process (Before the pandemic)	3,97	1,69	2,87	-2,06	0,041
Loyalty Process (During the pandemic)	4,17	1,59	2,54		
Digital Influencers (Before the pandemic)	4,49	1,53	2,34	-0,26	0,796
Digital Influencers (During the pandemic)	4,51	1,61	2,58		

Source: Author

When addressing to the influence of advertising on consumer behavior, and since the result of the statistical test $t = 0.35$, with a significance level of 5%, H₀ is not rejected. In this sense, with 95% of confidence level, it can be seen that the influence of advertising on consumer behavior was the same before and during the pandemic.

As a follow-up, and considering that advertising hindered the consumer loyalty process, such as $t = -2.06$, H₀ is rejected with a significance level of 5%. Thus, through statistical analysis, it was concluded with 95% of confidence level, that the way by which

advertising influenced the consumer loyalty process was not the same in the two moments under analysis.

Ultimately, the way in which digital influencers communicated with the public was analyzed and whether it was a type of non-intrusive and consumer-friendly advertising. As the result of the test $t = -0.26$, with a significance level of 5%, H_0 is rejected. In this way, it was proved with 95% of confidence level, the way digital influencers communicated with the public, considering aspects such as non-intrusive communication and inviting consumption, were not the same before and during the pandemic. Table 2.10 synthesizes the results obtained with T-Test.

Table 2.10 - Summary of the T-Test Results

Variable	Conditioning	$H_0 (\mu_1 = \mu_2)$	$H_1 (\mu_1 \neq \mu_2)$
Income	Consumption Level	Rejected	Not Rejected
	Savings / Investment	Rejected	Not Rejected
	Needs Management	Not Rejected	Rejected
Price level	Consumer Decision	Rejected	Not Rejected
	Consumer Loyalty	Not Rejected	Rejected
	Income Influence	Not Rejected	Rejected
Innovation	Consumer Decision	Rejected	Not Rejected
	Financial Effort	Rejected	Not Rejected
	Aggregate Value	Rejected	Not Rejected
Sociocultural	Consumer Behavior	Rejected	Not Rejected
	Standardized Communication	Not Rejected	Rejected
	Visible Goods	Rejected	Not Rejected
Personal	Behavioral Differences	Rejected	Not Rejected
	Unique characteristics	Not Rejected	Rejected
	Equal Needs	Not Rejected	Rejected
New trends	Consumption Level	Not Rejected	Rejected
	Society integration	Rejected	Not Rejected
	Digital Influencers	Rejected	Not Rejected
Advertisement	Consumer Behavior	Not Rejected	Rejected
	Loyalty Process	Rejected	Not Rejected
	Digital Influencers	Rejected	Not Rejected

Source: Author

2.4.2 Factor Analysis

In order to analyze consumer behavior before and during the pandemic, a factor analysis was performed using components with varimax rotation. Pre-tests were also performed, such as the determinant of the correlation matrix, Cronbach's alpha coefficient, KMO (Kaiser-Meyer-Olkin) of sample adequacy and the Bartlett sphericity test to confirm the possibility to carry out a factor analysis.

According to Yong and Pearce (2013), factor analysis varies between zero and one and can be considered more reliable as the KMO statistic approaches one. In the same manner, the factor analysis is performed on all the data collected and the data interpretation takes into account the value of the KMO statistic obtained.

Regarding the variable yield, and addressing to the Bartlett test, the null hypothesis is rejected. Since $KMO = 0.622$, it is considered an average value for statistical treatment and since Bartlett's test is 282,700 and $p\text{-value} = 0.000$, it is possible to perform factor analysis at scale. In the same sense, through the varimax rotation, it was observed that two factors were obtained resulting from the factor analysis, which explain 61.152% of the total variance from all data. The first factor explains 38.791% of the data and the second factor 22.391%.

In factor 1 "Income and Savings / Investment", the factor analysis grouped the following variants - income management according to consumption needs and savings and / or investment fulfilment, both variants at the two moments under analysis. Thus, through factor analysis, in factor 1 it was possible to group two constructs: income management and the realization of savings / investment, taking into account the disposable income for consumers, remained unchanged in both constructs.

In factor 2 "Consumption Level", it was possible to verify that the variant level of consumption remained isolated from the rest of the two moments under analysis - before the pandemic and during the pandemic. Thus, through factor analysis, it appears that in the income component, factor 1 groups income management and savings / investment and factor two isolates the variant level of consumption (table 2.11).

Table 2.11- Yield Component Matrix

	Components	
	Factor 1 Income and Savings / Investment	Factor 2 Consumpti on level
2.3) I managed to allocate my income according to the consumption needs.	0,804	
1.3) I managed to allocate my income according to the consumption needs.	0,744	
2.2) A part of my income goes to savings and / or investment.	0,711	
1.2) A part of my income goes to savings and / or investment.	0,670	
1.1) The level of income directly affected the level of consumption.		0,854
2.1) The level of income directly affected the level of consumption.		0,762
Bartlett's Test (Significance)	282,700 (0,000)	
KMO	0,622	
Percentage of Variance (%)	38,791	22,361

Source: Author

With regards to the variable price level and taking into account the Bartlett test, the null hypothesis is rejected. As $KMO = 0.493$ it is necessary to mention that it is a low value for statistical treatment. Although it is not a good construct, it can be considered as a result. Therefore, since the Bartlett test is 46.412 and $p\text{-value} = 0.000$, it is possible to perform factor analysis at scale. In the same follow-up, through the varimax rotation, it is possible to observe that two factors were obtained that result from the factor analysis, explaining 80.847% of the total variance of all data. The first factor - Loyalty - explains 47.448% and the second factor - Income affection - 33.400% of the data.

In factor 1 "Loyalty", it is possible to group the same variant before and during the pandemic, the existing price level has little or nothing influenced the consumption of individuals, when considering consumer loyalty. Consequently, for factor 1 and taking into account the variation in the price level in the two moments under analysis it is possible to conclude that customer loyalty remained stable, isolating itself from the other variants.

In factor 2 “Income”, it appears that there is only one isolated variant - price level, that affects the level of income of consumers during the pandemic. Consequently, through factor analysis, it is possible to identify that loyalty and the allocation of income according to the price level were presented in different factors (table 2.12).

Table 2.12 - Price Level Component Matrix

	Components	
	Factor 1 Loyalty	Factor 2 Income
2.5) When loyal to a particular brand, the existing price level has little, or no influence in my consumption.	0,847	
1.5) When loyal to a particular brand, the existing price level has little, or no influence in my consumption.	0,836	
2.6) The price level of a certain good or service could affect my income level, which sometimes led me to make choices.		0,994
Bartlett's Test (Significance)	46,412 (0,000)	
KMO	0,493	
Percentage of Variance (%)	47,448	33,400

Source: Author

With regards to the innovation variable, and according to the Bartlett test, the null hypothesis is rejected. Since KMO = 0.756, is considered an average value for statistical treatment and since the result of the Bartlett test = 539,628 and p-value = 0.000, innovation is considered a good construct, and it is possible to perform factor analysis at scale. Additionally, through varimax rotation, it was observed that only one factor was obtained from the factor analysis, which justified 53.727% of the total variance.

In the only factor resulting from the factor analysis “Financial Effort and Aggregate Value”, all the variants under analysis are present: acquisition of innovative goods due to their added value, innovation as a fundamental factor in consumption and the financial effort for the acquisition of innovative goods. Therefore, the contents from table 2.13, prove that the innovation variable is a good construct for factor analysis, since it groups all the variants under study in the two moments under analysis.

Table 2.11 - Innovation Component Matrix

	Component
	Factor 1 Financial Effort and Aggregate Value
2.9) As a consumer, I try to acquire innovative goods, due to their added value.	0,811
1.7) Innovation is a fundamental factor in the purchase decision process.	0,806
1.9) As a consumer, I tried to acquire innovative goods, due to their added value.	0,766
1.7) Innovation was a fundamental factor in the purchase decision process.	0,744
1.8) The purchase of innovative goods or services stimulated a greater financial effort, which at times was an obstacle to purchase.	0,626
2.8) The purchase of innovative goods or services encourages greater financial effort, which is sometimes an obstacle to purchase.	0,618
Bartlett's Test (Significance)	539,628 (0,000)
KMO	0,756
Percentage of Variance (%)	53,727

Source: Author

With regards to the socio-cultural variable, the null hypothesis is rejected taking into account the Bartlett test. Since KMO = 0.704, is considered an average value for statistical treatment and since Bartlett's test is 375,325 and p-value = 0.000, it was possible to perform factor analysis at scale. According to the varimax rotation, it was observed that two factors were obtained that result from the factor analysis, which explains 66.286% of the total variance of all data. The first factor explains 43.972% of the data and the second factor 22.314%.

In factor 1 "Visible Goods and Sociocultural Factors", through factor analysis it was possible to group two variants before and during the pandemic; the sociocultural influence on visible goods and the influence of sociocultural factors on consumer behavior. Therefore, through factor 1, it appears that the behavioral patterns of individuals and visible goods are influenced by socio-cultural factors before and during the COVID-19 pandemic.

In factor 2 "Standardized Communication", there is only one isolated variant - widespread communication. Thus, from table 2.14 data, it is possible to conclude that the

standardization of communication in the second factor was isolated from the behavioral patterns and visible goods of the first factor.

Table 2.12 - Sociocultural Component Matrix

	Components	
	Factor 1 Visible Goods and Sociocultural Factors	Factor 2 Standardized Communication
2.12) The power of socio-cultural influence is greatest when it comes to visible goods.	0,796	
2.10) My behavior as a consumer is influenced by socio-cultural factors.	0,793	
1.12) The power of socio-cultural influence was greater when it came to visible goods.	0,752	
1.10) My behavior as a consumer was influenced by socio-cultural factors.	0,735	
1.11) In the society to which it belongs, the widespread communication was equally distributed.		0,875
2.11) In the society to which it belongs, the widespread communication is distributed equally.		0,822
Bartlett's Test (Significance)	375,325 (0,000)	
KMO	0,704	
Percentage of Variance (%)	43,972	22,314

Source: Author

In the personal variable, the null hypothesis is rejected according to the Bartlett test. Bearing in mind that KMO = 0.489, it is considered a low value for statistical treatment. Although not a good construct, as the Bartlett test is 202.936 and p-value = 0.000, it was possible to perform factor analysis at scale. Approaching the varimax rotation, it was observed that two factors were obtained resulting from the factor analysis, explaining 77.905% of the total variance of all data. The first factor explains 46.663% of the data and the second factor 31.242%.

In factor 1 "Personal Desires", through factor analysis it was possible to group the same variant before and during the pandemic - the personal desires of the respondents identified with the needs of society. In this sense, through the first factor it appears that the personal desires of consumers appear united in the same factor in the two moments under analysis, isolating themselves from the other variants.

In factor 2 “Behavioral Differences”, the same situation as described above occurs. The behavioral variant appears in the same factor before and during the pandemic. In short, through factor analysis, it was possible to identify that consumers' personal desires are inserted in factor one and the behavioral differences between individuals of the same social group appear in factor two, creating an antagonism between personal desires and behavioral patterns (table 2.15).

Table 2.13 - Personal Component Matrix

	Components	
	Factor 1 Personal Desires	Factor 2 Behavioral Differences
1.15) My personal desires were identified by the needs of society.	0,907	
2.15) My personal desires are identified by the needs of society.	0,894	
2.13) My behavior as a consumer differed from another consumer belonging to the same social group.		0,868
1.13) My behavior as a consumer differed from another consumer belonging to the same social group.		0,837
Bartlett's Test (Significance)	202,936 (0,000)	
KMO	0,489	
Percentage of Variance (%)	46,663	31,242

Source: Author

With regards to the new trends variable, the null hypothesis according to the Bartlett test is rejected. Since KMO = 0.731, it is correct to say that this is an average value for statistical treatment and since Bartlett's test is 548.273 and p-value = 0.000, it was possible to perform factor analysis at scale. According to the varimax rotation, it was observed that two factors were obtained resulting from the factor analysis, which explain 71.399% of the total variance of all data. Thus, the first factor explains 53.052% of the data and the second factor 18.348%.

In factor 1 “Integration and Consumption”, through factor analysis it was possible to group two variants before and during the pandemic - new trends help the process of

integration in society and new trends influence consumption. Thus, in this factor, it appears that the new trends as a form of integration and consumption appear isolated from the other variants, creating a parallel between them.

In factor 2 “Digital Influencers”, there was only one isolated variant before and during the pandemic - digital influencers are individuals who are aware of the new trends. Therefore, through table 2.16, it was possible to conclude that the first factor includes the variants of integration in society and consumption and in the second factor, digital influencers appear as individuals who are aware of new trends.

Table 2.14 - New Trends Component Matrix

	Components	
	Factor 1 Integration and Consumption	Factor 2 Digital Influencers
2.17) New trends are an asset in the process of integration into society.	0,819	
2.16) The new trends influence my consumption.	0,806	
1.17) The new trends were an asset in the process of integration into society.	0,784	
1.16) The new trends have influenced my act of consumption.	0,754	
1.18) I believe that digital influencers were individuals who followed and transmitted the new trends in society.		0,883
2.18) I believe that digital influencers are individuals who monitor and transmit new trends in society.		0,874
Bartlett's Test (Significance)	548,273 (0,000)	
KMO	0,731	
Percentage of Variance (%)	53,052	18,348

Source: Author

Regarding the last variable, advertising, the null hypothesis according to the Bartlett test is rejected. Taking into account that $KMO = 0.715$, it is considered an average value for statistical treatment. Thus, as the Bartlett test is 527,163 and $p\text{-value} = 0.000$, it was possible to perform factor analysis at scale. Approaching the varimax rotation, it was observed that two factors were obtained that result from the factor analysis, which explain 70.304% of the total variance of all data. Thus, the first factor explains 50.608% of the data and the second factor 19.696%.

In factor 1 "Behavior and Loyalty", through factor analysis, it was possible to group two variants before and during the pandemic - advertising influences the behavior of individuals and hinders the process of loyalty. In this sense, through the first factor it was concluded that the behavior and loyalty of individuals taking into account advertising appear united in the same factor in the two moments under analysis, isolating themselves from the remaining variants.

In factor 2 "Digital Influencers", there was only one isolated variant in the two moments under analysis - the advertising spread by digital influencers is characterized as non-intrusive and inviting to consumption. Thus, in table 2.17, it was possible to conclude that behavior and loyalty fall into the first factor one and the advertising spread by influencers appears in factor two, creating an antagonism between, on the one hand, behavior and loyalty and, on the other hand, communication disseminated by digital influencers.

Table 2.15 - Advertising Component Matrix

	Components	
	Factor 1 Behavior and Loyalty	Factor 2 Digital Influencers
2.19) Advertising influences my behavior as a consumer.	0,810	
1.20) I believe that the impact of advertising has made the process of loyalty to a certain brand difficult.	0,795	
2.20) I believe that the impact of advertising makes the process of loyalty to a certain brand difficult.	0,756	
1.19) Advertising has influenced my behavior as a consumer.	0,746	
1.21) The way digital influencers communicated with the public is a type of non-intrusive and consumer-friendly advertising.		0,905

2.21) The way digital influencers communicate with the public is a type of non-intrusive and consumer-friendly advertising.		0,888
Bartlett's Test (Significance)	527,163 (0,000)	
KMO	0,715	
Percentage of Variance (%)	50,608	19,696

Source: Author

2.5. Discussion of Results

In the first variable under analysis, income, with the exception of managing consumption needs, the level of consumption and savings / investment increased during the pandemic. Effectively, the level of consumption increased from 5.19 to 6.03, savings / investment had a variation from 5.19 to 5.59 and the capacity to manage the consumption needs of individuals decreased from 5.67 to 5.43. According to Hall et al. (2011) and Meyer & Mok (2019), since consumption and savings are two functions related to income, any change on these functions will influence the way individuals manage the available income according to their needs. Consequently, during the pandemic, individuals consumed more and made more savings / investments than before the pandemic.

In identical manner, when looking to the variable price level, with the exclusion of consumption decisions, consumer loyalty and the income influence on the market, price level decreased during the pandemic. According to the results obtained, the manner by which the price level influenced consumption decisions increased from 5.79 to 5.92, proving that during the pandemic the price of goods was a factor of attention for consumers. Furthermore, individuals' loyalty dropped from 4.16 to 4.01 and the influence of income on the price level had a slight decreased from 5.39 to 5.35.

Finally, according to Einav et al. (2010), since the variation in the price level is a constant phenomenon in economy, whether in a period of inflation or deflation, the purchasing power of consumers will undergo significant changes. When looking to the current situation, price level was the most important factor when meeting consumer needs. Nonetheless, the pandemic led to a significant reduction in the loyalty of individuals, and also a slight reduction in the influence of income on price fluctuation. (Sharabati et al., 2014).

In the third variable under study, innovation, with the exception of the decision to consume innovative goods, the financial effort to acquire these goods and their aggregate value increased during the pandemic. The biggest growth was registered in the financial effort from 4.60 before the pandemic to 5.05 during the pandemic, this means that individuals consider that they need a greater financial effort to acquire innovative goods during the pandemic COVID-19. Also, the aggregate value of innovative goods increased slightly from 4.35 to 4.41 and the decision to purchase this type of goods suffered a slight decrease from 4.88 to 4.86. According to Aurich et al. (2010) and Kindström & Kowalkowski (2014), since the demand for innovative products and services is essentially due to the new capacities and features associated with the goods, it is possible to conclude that, as the financial effort associated with these features increase the purchasing power of consumers decreases.

Regarding the socio-cultural variable, with the exception of standardized communication, the influence of the socio-cultural aspect on consumer behavior and the power of the influence of this aspect on visible goods, increased during the pandemic. When approaching the results obtained, the greatest variation occurred in the power of socio-cultural influence associated with visible goods, registering an evolution from 4.79 before the pandemic to 4.99 during the pandemic. Basically, the interviewed individuals considered that during the pandemic, the influence of the socio-cultural variable on visible goods is greater than the moment before the COVID-19 pandemic. In the same logic, the influence of the socio-cultural aspect on consumer behavior also increased to a lesser extent, varying from 4.16 to 4.32. Additionally, individuals considered that the widespread communication was more standardized before the pandemic, since the results obtained proved a decrease in this parameter from 4.09 to 4.01.

Taking into account the studies from Routray et al. (2015) and Simoes et al. (2016), socio-cultural aspects significantly influence the consumption patterns of individuals. Since the pandemic emerged by the end of 2019, the influence of the socio-cultural aspect instigated the attitudes and behaviors characteristic of consumers to change, consequently, developing new habits and routines.

Concerning the personal variable, with the exclusion of behavioral differences between consumers of the same social group, the influence of unique characteristics when meeting needs, and the equality of needs decreased during the pandemic. The most pronounced decrease occurred in the influence of unique characteristics when meeting needs, from 5.38 before the pandemic to 5.28 during the pandemic. In this manner,

individuals considered that factors such as age, gender and other personal variables had a lower weight when meeting needs during the pandemic. Within the same logic, equal needs decreased slightly from 4.10 to 4.09 and behavioral differences between individuals in the same social group increased from 4.69 to 4.88, proving a distinct difference between behaviors during the pandemic. According to the studies by Sharabati et al. (2014) and Hall et al. (2011), although individuals belong to certain social and cultural groups, behaviors as consumers may vary from individual to individual, taking into account aspects such as personal needs, age, gender, literacy, occupation and available income.

In the new trend's variable, the aspect of integration into society remained unchanged in the two periods, standing at 4.15 in the two moments under analysis. In another aspect, the influence of new market trends on the level of consumption dropped considerably from 4.44 to 4.16, with regards to digital influencers as individuals who transmitted and followed new trends, respondents considered that during the pandemic there was a greater communicative effort on the part of these individuals, justifying their positive oscillation from 4.72 before the pandemic to 4.86 during the pandemic.

Studies by O'Cass & Siahtiri (2013) and Simoes et al. (2016), consider that new trends express certain habits and customs at a given time, digital influencers were in part responsible for sharing these new customs during the pandemic. Since they shared new products and services through their digital channel's, during the pandemic, they created a generalized consumption trend, assisting companies in the process of customer retention.

In the last variable under analysis, advertising, with the exception of influence of advertising on consumer behavior, the difficulty of the loyalty process and the way influencers communicated with the public increased during the pandemic. The biggest growth occurred in the difficulty on the loyalty process from 3.97 before the pandemic to 4.17 during the pandemic. Basically, as a consequence of the impact of advertising, it was more difficult for consumers to build customer loyalty during the pandemic than before the pandemic. In the same logic, the way digital influencers communicated with the public slightly increased from 4.49 to 4.51 and the impact of advertising on consumer behavior decreased from 4.32 to 4.29 in the two periods under analysis.

Taking into account that advertising goes through a dissemination strategy that seeks to encourage consumers to follow certain behaviors, it is evident that during the pandemic this was present in the daily lives of individuals, whether through digital influencers or

through other channels. Therefore, it is correct to mention that it assumes an important role in society's consumption options and hinders the process of consumer loyalty to brands Hall et al. (2011) and Moore & Lee (2012).

2.6. Conclusions

2.6.1. Main conclusions

In the present research, the factors that most influenced the behavior of individuals in the current pandemic situation were analyzed. According to Hawkins & Mothersbaugh (2016) and Sharabati et al. (2014), the study of consumers behavior is a complex field and difficult to understand due to the constant change in the way individuals satisfy their needs, hence the lack of study and constant analysis. The current research is based on the formulation of four research hypotheses:

Hypothesis 1: The COVID-19 pandemic changed the habits of the consumer society.

Hypothesis 2: Technological advances have enabled consumers to satisfy their needs within their own homes.

Hypothesis 3: Consumers consider that economic variables (income, price level and innovation) affect consumption in the same manner, before and during the COVID-19 pandemic.

Hypothesis 4: Consumers consider that extra-economic variables (sociocultural, personal, new trends and advertising) affect consumption equally before and during the COVID-19 pandemic.

With the emergence of the COVID-19 pandemic, the habits and routines of individuals significantly changed. The emergence of large scale teleworking, distance learning and isolation caused visible changes in terms of consumption. Businesses needed to reshape their business models and consumers were able to meet most consumer needs without moving (Coibion et al., 2020)

From the seven variables under analysis, only performance and innovation had different results before and during the pandemic, registering different averages in all the factors analyzed. In another perspective, and according to the factor analysis test, it is important to emphasize that the best construct was in the innovation variable, and the second-best construct was in the new trend's variable.

In summary, taking into account the hypotheses formulated through the literature review, it is important to mention that only hypothesis 1 and hypothesis 2 were not rejected. Both hypothesis 3 and hypothesis 4 were rejected, as the oscillations occurred in the two moments under analysis hinder to confirm that the variables under study affected consumption equally in the two moments under analysis.

In table 2.18, it is possible to summarize the results of the various hypothesis under study.

Table 2.18 – Summary of the hypothesis results

	Results
Hypothesis 1: The COVID-19 pandemic changed the habits of the consumer society.	Not Rejected
Hypothesis 2: Technological advances have enabled consumers to satisfy their needs within their own homes.	Not Rejected
Hypothesis 3: Consumers consider that economic variables (income, price level and innovation) affect consumption in the same manner, before and during the COVID-19 pandemic.	Rejected
Hypothesis 4: Consumers consider that extra-economic variables (sociocultural, personal, new trends and advertising) affect consumption equally before and during the COVID-19 pandemic.	Rejected

Source: Author

2.6.2. Practical and theoretical implications

The main purpose to develop a questionnaire survey aimed at consumers, was to confirm whether the theoretical implications collected through the various studies were occurred in practice. In the same sense, the use of statistical tests allowed to create a relationship between theoretical data and data observed in the real world, thus, reaching the objective conclusions based on scientific knowledge. (Heale & Twycross, 2015).

The results suggested that the pandemic has changed consumption habits. Since most individuals remained in lockdown during the beginning of the year 2020, enabling online commerce to increase exponentially. Categories such as health, food and other goods

related to housing, were the most sought after by consumers. In the same sense, and taking into account the results from the sample, amongst the 7 factors that influenced consumers in the pandemic phase, it was considered that income, innovation, new trends and advertising were the variables that suffered the most changes. Being so, the available income for consumption, demand for innovative goods and services, effect of new trends in the pandemic period and even communication directed at consumers were the variants that most influenced consumption during the COVID-19 pandemic.

With regard to the theoretical plan, this study provides new lines of investigation in a field that had not yet been explored. As this pandemic is somewhat recent and with major social and economic implications, the theoretical contribution of this investigation offers a starting point for future analyses.

The present research also aims to determine whether the pandemic changed the consumption habits of individuals and also what variables consumers considered crucial when meeting their consumption needs. Since social isolation was one of the measures implemented to combat the pandemic, the way consumers behave has changed considerably. In the same logic, the impact of COVID-19 has increased online commerce.

Approaching the practical plan, the results obtained provide essential information for companies. Thus, it is possible to adopt customer retention strategies, taking into account the changes caused by the pandemic.

The demand for health care, electronic equipment and sports equipment, were some of the most required goods and services in full social isolation. Finally, it is important to note that the pandemic has developed new consumption habits. The way people live, think and satisfy their needs has changed considerably, making companies adapt to new requirements and, in certain cases, readjust their business models.

The results from this research contributes to the development and clarification of scientific knowledge and provides insights for companies and policy makers about consumer behavior during the COVID -19 pandemic. Knowing the behavior of consumers, allows to determine socio-economic development strategies, in order to avoid a complete rupture in the economy.

2.6.3. Research limitations and future lines of investigation

The limitations of the research are essentially related to the sample size. Since the sample contains only 237 validated responses and was applied in mainland Portugal, as the pandemic is still active, makes it difficult to collect a larger number of valid responses. In addition, the sample was only collected through social network Facebook, not including other individuals who do not have social networks. As a final limitation, it was also considered that the individuals' income remained unchanged in the two periods under analysis: before and during the pandemic.

As for future lines of investigation and taking into account the geographical limitation of the study, we propose to continue this investigation and expand the sample of participants. In the same sense, it is advisable to use of other methods of data collection, as well as the execution of different questionnaires, with a different scale, addressing different variables and quoting the following questions: Will high online consumption continue after the pandemic COVID-19? In terms of value, did consumer income increase or decrease during the pandemic? What are the biggest consumer expenditures in the pandemic phase? Taking into account the current situation, what are the essential characteristics that consumers look for when meeting their needs? How did companies adapt to new consumer demands? Have companies managed to maintain partnerships with their digital influencers? How have digital influencers adapted to new consumer realities? How did digital influencers communicate during the pandemic?

3. Chapter 3 “Do digital influencers successfully contribute to reduce the gap between customers and companies?”

Abstract

The purpose of this research is to analyze the role of digital influencers in the construction of relationships between companies and consumers. A qualitative methodology was used, whereby seven Portuguese service providers were interviewed. The results obtained demonstrate that companies' hire digital influencers to publicize their products, create notoriety, build a trustworthy image and increase sales. It was also found that the most used platform in digital strategies is Instagram, due to the ease of communication and the number of active users. Furthermore, it is important to emphasize that the traceability of sales related to digital influencers is quantifiable through tools such as Google Analytics, discount coupons, number of site visits generated and also the increment of followers on digital promotions days. This research contributes to scientific knowledge as it validates the theoretical constructs developed on the role of digital influencers in the establishment of relationships between brands and consumers and confronts them with the business reality. Finally, some suggestions for future line of investigation are presented.

Keywords: Digital Influencers, Digital Marketing, E-commerce, Social Networks, Digital Strategies

3.1. Introduction

With the evolution of social networks and the growing ease to access internet, opportunities to create contact links between brands and their consumers have become increasingly larger, direct, and simpler. Nevertheless, this new globalizing digital wave also brought new challenges, since the possibility for the consumer to search and find similar products with different advantages in the most diverse brands without geographical limitations, also increased (Malik et al., 2012; Sette & Brito, 2020).

In classic marketing strategies, brands have always been ventured to identity elements, leading to the brand's personality reinforcement, as such, creating an immediate distinction on the products or services in the same category which are viewed by an equivalent audience. Once created, the relationship between the brand and its customers, is long-lasting and hardly permeable to noise, since the communication between the sender and the receiver has a single conduit (Bello-Orgaz et al., 2020; Chen & Huang, 2012).

Through the advent of social networks, the culture of digital sharing emerged, the tools to identify people and brands, and the content distributed through algorithms are all innovations that allowed consumers to interact with each other. Reviews, comments, and suggestions based on other people's purchases have changed the way customers choose products and services (Torres et al., 2019; Yan et al., 2012).

The full potential of social networks brought substantial features that have stimulated the proliferation of user-generated content. The evolution of the content produced by the public, took off from amateur entertainment to increasingly elaborate productions to convey a message (Chen et al., 2012; Coleman et al., 2011).

Since the expression, user-generated content, emerged around 2005 to the present date, thousands of ordinary people have started to compete on equal terms, for space and even business with big brands and traditional companies. Many of these people, built their own image through the contents made available to their followers, thus becoming known in digital media. These recent opinion leaders, and celebrities from different fields (actors, models or artists) have a loyal audience in their online media, and to a certain extent the ability to influence their purchasing decisions (Netzer et al., 2012; Stoldt et al., 2019; Wijaya, 2013).

The role of the digital influencer was born almost spontaneous as well as the new relationship of these people with the brands. In the same manner, a digital influencer is

seen by the public as someone closer. This new form of relationship with celebrities brought the audience closer, a type of identification that “television celebrities” do not have. The opinion of a digital influencer for his audience is seen as an indication, not as an advertisement (Chen et al., 2012; Coleman et al., 2011; Uzunoglu & Kip, 2014).

Digital marketing actions do not always follow the strategies mentioned in the literature, on the contrary, they further use intuition, being reactive, and susceptible to experiences. Nonetheless, working with a broader knowledge on how to reach audience effectively and marketing objectives, will always be an advantage for any organization. In an environment where technology makes practically all actions measurable and when it has been proven that a large number of followers does not necessarily mean a high rate of interaction, it is essential to understand which influencers generate more or less visitors, reactions, and sales (Peng, 2016; Riha et al., 2018).

Influence marketing is currently a large part of the strategies outlined by companies. However, there is little information about the factors that drive successful online brand engagement (Hughes et al., 2019). Measuring the impact of social media communication is essential and relevant for companies. That said, the marketing of social media influencers, in what is traditionally called influencer marketing, makes this effort even more complicated to measure as there are more and more platforms (Martínez-López, et al., 2020). Being so, and taking into account the studies by Peng (2016) and Ramalho et al. (2020) the following research question was formulated: How do digital influencers contribute to build a relationship between brands and consumers? Once the initial enthusiasm for the influencers' niche passed, many brands ended up failing to get the results they aspired with such actions, some even declining in a dramatic way. Our research is based on semi-structured interviews performed to Portuguese service providers, the objective is to verify which tools effectively measure the return on investment in digital influencers as well as knowing what drives companies to decide for digital influencers. With such approach, companies can analyze the return on investment in digital influencers through digital tools such as Google Analytics in a more objective and detailed manner. Additionally, it is possible to compare ratio between the investment made and the actual return that digital influencers gave to the company. The results of this research will help companies to invest in digital influencers in a more elucidated manner. It will also guide companies to compare the ratio between the investment made with the actual return that digital influencers brought to their company and brand.

3.2. Literature Review

The digital revolution has changed the manner consumers approach the communication strategies implemented by companies. The digital media became an essential tool to compete in most of the current markets. Companies invest in the proximity to customers, thus contributing to the effectiveness of the loyalty process. The objective of organizations through the use of digital channels has become more strategic and aggregated, as customers started to play an active role to create value and brand reputation (Enke & Borchers, 2019). As a result, customer loyalty became a central element of relationship management (Bakhtieva, 2017; Felix et al., 2017).

Through the evolution of digital channels and the amount of information available in these media, digital marketing has intervened in order to increase the value of goods and services available to consumers. The greater the value is recognized for a product, the greater is its value to the consumer. Being so, a consumer will seek the benefit of a product through its value. Digital marketing has a similar function - increase the value of products (Fawzy et al., 2018; Kapitan & Silvera, 2016; Malik et al., 2012).

The popularity of digital media in recent years is mainly attributed to the possibility of doing business online. With the fast evolution of global e-commerce, companies are looking to gain competitive advantages through the interaction with customers (Buechel & Berger, 2018). The growth on technology penetration combined with the evolution of virtual purchases boosted e-commerce ecosystem, revolutionizing global economy as it allows physical stores to expand their communication channels and distribute at lower costs (Wijaya, 2013; Yan et al., 2012).

Electronic commerce, also known as e-commerce, is a recent and continuously evolving trend, whereas the purchase and sale of products or services is accomplished through electronic systems such as internet and/or other computer networks, allowing consumers to do their purchases within a vast, privileged and highly secure offer (Fawzy et al., 2018; Malik et al., 2012).

The Internet became an intangible entry into any strategy to reach customers. Nowadays, customers have access to a company's website anywhere in the world and companies can reach their customers wherever its location. E-commerce opened new horizons to reach global services and has shortened the gap between companies and consumers (Borggren et al., 2011; Malik et al., 2012).

Due to the effect of technological advances, society has evolved to a new model of life characterized by the widespread acceptance of digital media. With the emergence of social networks, some of its users became content producers and began to interact with other users to promote products and lifestyles (Magno & Cassia, 2018). In the same manner, influence marketing, also known as word-of-mouth marketing, became an asset in the expansion process of electronic commerce. Such digital marketing strategy has as main objective the cooperation with digital content producers, known as digital influencers, consequently creating a bridge between the brand and the influenced public. Nowadays, with the advent of information sharing, individuals are able to meet, regardless the time or location. With the interactivity intensification, geographical distances have been eliminated, allowing companies to reach their consumers anywhere in the world. (Galeotti & Goyal, 2009; Savell et al., 2014; Yan et al., 2012).

With regards to digital marketing, influence marketing became an effective tool (Huynh et al., 2019). In an increasingly connected and interconnected society, the role of influencers is essential to companies as it brings brands closer to consumers. An approach and connection at this level hardly happens between people and brands (Jimenez-Castillo & Sanchez-Fernandez, 2019). Thus, brands need influencers to reach their public and at the same time, influencers need brands to make their business profitable since the role of digitally influencing consumers already became an ability (Fawzy et al., 2018; Fierro, Cardona Arbelaez, & Gavilanez, 2017).

Considering this, when companies hire digital influencers their intention is that these individuals produce digital contents where detailed information on the brand's products is made available. The purpose of this content creation is to grasp the attention of consumers and change their opinions and behaviors and provide a follow-up service. Furthermore, the pursue to establish a relationship of trust will cause a positive effect on image and brand awareness (Coleman et al., 2011; Morris, 2009).

Presently, companies have been associating with influencers to reach certain niches of the population. Since these individuals create interesting content and function as a tool to attract and retain customers, they end up building a close relationship with their followers on the various social networks in which they operate, helping companies in their forms of communication (Kapitan & Silvera, 2016; Wijaya, 2013).

Brand marketing managers already direct part of their marketing and communication budget towards strategies with digital influencers. This fact is justified by consumers' rejection to traditional communication. The acceptance of messages transmitted by

content producers due to the existing relationships, leads companies to readapt their communication strategies (Jimenez-Castillo & Sanchez-Fernandez, 2019; Uzunoglu & Kip, 2014).

3.3. Methodology

The present research uses an exploratory qualitative methodology. Thus, it is important to select the appropriate participants. Interview questions should be written in a clear and precise manner, avoiding duplication and sufficient in order to explore the theme under analysis. Data confidentiality should also be ensured (Brantlinger et al., 2005).

Addressing theoretical contributions, this study provides relevant and unexplored information regarding companies' investment in influencers. In the same sense, on a practical level, the results obtained allow us to assess the return on investment in influencers and how their role brings added value to the organization.

Being so, qualitative methodology is the most suitable for the present research as it allows the phenomena to be studied in its natural settings and throughout the information people transmit. Qualitative studies hold a key importance to the statements of the social actors involved, speeches and the meanings they convey. In this sense, it is important to verify the practical experiences with identical problems or explore similar examples which may stimulate analysis understanding (Denzin et al., 2006). Furthermore, the qualitative approach allows a better understanding of the interviewees' opinions and, successively allows the researcher to carry out more assertive data analysis.

The present research was prepared in accordance to the suggestion by Crouch and McKenzie (2006). First, a pre-analysis was carried out on the theme and theoretical framework, methodology was defined as well as how to collect the data. Then, a descriptive analysis was carried out to organize and describe the collected data. Finally, an inferential interpretation was performed, starting with the theoretical framework and the empirical results obtained. In such way, the authors tried to answer to the research question previously formulated and also check if there were any contradictions on the portrayal and respective conclusions.

The script for the semi-structured interviews used in the present research is composed by 12 open questions, adapted from a study by Peng (2016). Taking into account the objective of this research, questions were developed to confirm whether the influencers

really contributed to the construction of a relationship between companies and customers. The interview is divided into 2 groups of questions. The first group is focused on the companies' objectives in the digital communication strategies, the channels they use, budgets and results. The second group aims to identify which are the factors that companies consider more relevant when partnership with influencers and the metrics used for results analysis. A questionnaire based in this script was sent by e-mail to 13 service providers in the northern region of Portugal in order to check if the companies fit the research and if they had relevant information for the analysis. In this sense, the criteria of investigation location is associated with the ability to compare companies providing services in the same region, with similar turnover and using digital influencers as a way to create relationships with customers. 7 validated responses were received between November 2019 and January 2021, these responses were replied by the CEO's. Subsequent to the response validation, a meeting was scheduled through a meeting platform, in this case via zoom, with each of the companies to clarify the responses obtained. The meetings lasted an average of 75 minutes and served as a mean to know the company's digital strategies and the contribution of digital influencers in the process of approach between the company and its customers. The results obtained were further expanded through sessions via zoom, which allowed to deepen the obtained replies.

Finally, after collecting the information from the interviews, the obtained answers were transcribed and coded into Microsoft Excel Office 365. One of the results from the data collected is presented in Table 3.1 where it is possible to identify the profile of the surveyed companies.

Table 3.1 - Profile of the surveyed companies

Company	Size	Sector	Employees	Sales turnover 2019	Interview date
A	Micro Company	Tertiary	2	65 000€	22/11/2019
B	Micro Company	Tertiary	7	150 000€	25/11/2019

C	Micro Company	Tertiary	3	80 000€	26/11/2019
D	Micro Company	Tertiary	2	75 000€	27/01/2021
E	Micro Company	Tertiary	3	70 000€	25/01/2021
F	Micro Company	Tertiary	3	60 000€	27/01/2020
G	Micro Company	Tertiary	8	160 000€	28/01/2021

Source: Author

3.4. Analysis and Results Discussion

In order to synthesize the results with the main ideas obtained from the interviews, a summary table was constructed (see Table 2 in the Appendix). Primarily, the characteristics of the surveyed groups are presented: gender and professional position. The results obtained allowed to answer to the research question previously formulated: How do digital influencers contribute to building the relationship between brands and consumers?

Question 2 asked companies about the purpose of investing in digital communication strategies. From the results obtained, it is possible to observe that companies A and F seek greater interaction with customers and increased sales. The remaining companies seek to publicize their products, create awareness and strengthen the brand in consumers' mind. Despite the various objectives collected throughout this question, it is essential to mention that the digital medium is a place where the greatest forms of communication are established. Information is easily disseminated, on a global scale, and capable of modifying behaviors and relationships (Okada & Souza, 2011).

Since the objectives of digital communication strategies are different, it is important to analyze which digital channels are used by companies in their communication strategies. According to Santos & Kunz (2014) and Schwemmer & Ziewiecki (2018), digital platforms are a fundamental support for marketing strategies, as they function as a tool to attract, retain and maintain customers. Furthermore, there are relationship channels that include digital platforms, such as websites, blogs and social networks, with which the customer is able to purchase or obtain information about a product. Question number 3 focused on the digital media adopted by companies in their digital communication strategies.

According to the results obtained, Instagram and Facebook are the most active digital media in digital strategies, mainly due to the number of active users (Cotter, 2019; Silva et al., 2020). These social networks have grown around 20% a year, thus, giving an advantage to companies that use this media as online communication tools (Silva et al., 2020). Through a Business Account option, companies can sponsor their publications in order to reach more users and be able evaluate the results (Lo et al., 2016; Magno & Cassia, 2018). With the above results, it is possible to mention that the first part of the theme of this study is completed.

On question 4, companies were asked on the investment made in activities related to digital influencers and their allocation in the budget for digital marketing. According to the data collected from the 7 service providers, it is possible to conclude that companies C, D and F allocate between 50% and 60% of their digital marketing budget for activities related to influencers. However, due to internal policies, in company A there is no budget for influencers, on the other hand in company F the budget is made monthly according to the products launch. Although the results prove different perceptions and approaches, a digital influencer is an asset for a company, as it produces consistent content, seeking to maintain relationships, prestige and influencing recognition (Karhawi, 2017). From another perspective, it is important that companies strictly define the budget for marketing strategies aimed at digital media, more specifically influencers. After defining the budget, it is pertinent that companies understand that the investment made may be an opportunity to reach potential consumers and a way to retain existing ones. The choice of the right digital influencers, the detailed definition of the intended objectives and the of strategies, are some of the necessary steps for the success of digital strategies related to influencers (Kapitan & Silvera, 2016; Torres et al., 2019).

In question number 5, companies quantified the direct or indirect origin of sales related to influencers in percentages. Companies A and F are companies that heavily depend on the work of influencers, their actual results exhibit around 40% of direct origin. According to the CEO of company A, "(...) around 40% of our sales are clearly identified as being related to influencers (due to the discount code) but I would say that maybe 60% are indirectly related to these (sales without using discount code)". Following this trend, companies D and E the sales related to influencers are between 20% and 25%. Companies need to be desired by consumers, to achieve this, they need to create a bridge with all the actual digital media, so that consumers create the interest and the need of a shared communication, subsequently acquiring the product or service offered

(Dalmonte, 2015; Tronstad & Unterschultz, 2005). Taking advantage of the fact that consumers are increasingly connected to the internet, the results obtained through digital strategies from influencers prove that this investment has a positive return, if well-defined and applied. Undoubtedly, a well-designed digital plan and a proper connection with a digital media allows companies to have more possibilities to achieve a specific audience and have the opportunity to interact with them. In this regard, influencers are a key aspect of digital strategies (Ataide et al., 2018; Peng, 2016).

As for question number 6, companies indicated the essential factors when choosing their influencers. With the influence of social networks as the most used mean of communication, the main characteristics pointed out by the surveyed companies when selecting their influencers are the number of followers on social networks, the lifestyle of influencers and the quality of content produced. The choice of the ideal influencer should be based on the ideals of the company, therefore, it is essential that the influenced public review themselves in the characteristics of the promoted product or service reflected. Otherwise, communication will not be effective and may be considered aggressive to the consumer. In other words, the effectiveness of digital strategies based on influencers, depends on the correct choice of the influencer to promote of a certain product or service, being so, the timing to select the ideal influencer is extremely important. It should be aimed at the target audience intended by the organization and capable to transmit credibility and maintain a close and reliable relationship (Dalmonte, 2015; Strategic Direction, 2013).

When looking to the effectiveness of the work developed by the producers of digital content, questions 7 and 8 revealed some antagonism. On one hand companies disclosed examples of successful strategies, on the other hand, they exposed situations where the developed digital strategies were not well applied by content producers. According to company B, in question 7 there was a well applied strategy where digital influencers were essential to promote products launch related to Mother's Day. Following this taught, both company D and G bet on giveaways through social networks. The success of digital strategies based on influencers depends on the flexibility of companies in their relationship with the influencers they hire. Although the digital strategy is defined by the company, an opportunity should be given to the content producer to create its own content aiming their followers. Sometimes, when the strategy defined by the company is too restricted, the influencer ends up without enough margin of communication and is not able to reach his audience. If not flexible and adaptable to the selected content

producer, the success of the strategy may be compromised (Chaffey & Ellis-Chadwick, 2019; Matthews, 2019).

Question 8 is essentially focused on failed digital strategies. Company A considered that the reason for failure of one of its digital strategies was: “Not choosing influencers well, is the only factor that leads an experiment to be unsuccessful. It is necessary to analyze the target audience of the influencer very well”. In the same manner, companies C, D, E, F and G considered that the main factor that leads to the failure of a planned strategy is the erroneous choice of the content producer, this is observable when there is no prior analysis to the influencer’ profile, and evaluation of the target audience to check if it is the adequate, according to the new product launch. The right choice of the content producer depends on several factors such as extent, interaction, clicks on publications, number of followers and even country and gender. A very common mistake by brands when selecting their influencers is choosing a content producer without checking the gender of their followers. If a brand wants to advertise a female product with a female content producer whose followers are mostly male, then, this digital strategy is not aimed at the intended target audience. In such way, the effectiveness of the digital strategy will be compromised (Breves et al., 2019; Magno & Cassia, 2018; Torres et al., 2019).

Taking into account the replies collected, digital marketing strategies applied to influencers are not always effective and aligned with the previously defined objectives. Influential marketing actions are generally carried out in social platforms, such as Twitter, Facebook or Instagram (Arora et al., 2019; Martínez-López et al., 2020).

Question 9 disclosed which metrics and results analyzing tools are capable to establish the return on investment in digital strategies. According to the replies collected, the most used analysis tool was Google Analytics. This free software generates traffic statistics on the internet, being able to identify the geographic location of the visitor, the operating system used and search tools, amongst other aspects. Thus, through the dissemination of a java script code, included on the analyzed website's homepage, data captured from visitors are transmitted to Google, consequently, allowing companies to analyze the obtained data and check if the results meet the objectives portrayed in their digital strategies. This software also allows the configuration of goals such as measuring the number of conversions, monitoring the path that the consumer takes to the sale or conversion page, seasonality, amongst other information of visits made by consumers (Pinochet et al., 2020).

The collected results are focused on the quantification of the return on investment in digital influencers. When replying to question 10, company A considers that “The most reliable way of quantifying the return on investment in influencers is through the use of discount codes by customers”. In addition to company A, companies D, E and F also use discount codes to quantify the return on sales related to influencers. The use of discount codes is a tool with a high potential to attract consumers and to quantify the return on investment made by companies as it stimulates the purchase, keeps customers loyal and causes consumers the feeling of exclusivity at the moment the purchase is made. A promotional code that reduces the final amount that the customer has to pay is a strong incentive to consumption (Gilfoil & Jobs, 2012; Sette & Brito, 2020).

Question 11 examines the reliability and usefulness of the tools for analyzing results related to influencers. In this regard, companies A, B, D, E, F and G consider that the results traceability tools are useful and reliable as they identify the direct or indirect source of sales related to digital influencers. Still in this question, company C emphasizes that “... it is essential to measure and understand the results to define the next step of the digital strategy...”. In this sense, the adoption of results analysis tools by companies is considered a key factor in measuring the effectiveness of digital strategies. The need to achieve the desired results gives traceability tools an important role in performance communication (Kapitan & Silvera, 2016; Wijaya, 2013).

Finally, in question 12, companies were asked about possible improvements in the current results analysis tools. According to the results obtained, companies A, C and F argue that the current tools are very comprehensive, nonetheless they should be more targeted to digital influencers. Companies B, D, E and G already mentioned that the current tools are useful in data analysis, however, they point out the need of specific tools to analyze each social network, since the influencers are distributed over several social networks. According to Santos & Kunz (2014) and Schwemmer & Ziewiecki (2018) although the results analysis tools help companies to measure the effectiveness of digital strategies, it is important that the tools transmit the reach and visibility that the investment in influencers produces and if it meets the previously defined digital strategy.

3.5. Conclusions

Nowadays, companies have to work more with digital media. On the other hand, consumers interact even more in social networks, expressing their opinions and

experiences about brands and products. In this context, we have often seen anonymous people becoming digital influencers where they express their opinions. As a rule, digital influencers produce and share content in innovative and creative ways, gaining loyal audiences, therefore establishing a relation of trust. This faithful and loyal audience reaches thousands of people depending on the influencer (Sette & Brito, 2020). This research was initiated by started with the research question: How do digital influencers contribute to build a relationship between brands and consumers?

The results obtained from the interviews with the seven service provider companies located in the north of Portugal, lead us to conclude that the motives for companies to adopt digital strategies based on influencers are essentially the construction / enhancement of the brand, the dissemination of products / services, creating awareness and increasing sales. It should also be noted that the digital channels most used in digital communication strategies are Instagram and Facebook due essentially to the number of active users and the ease of communication on the part of influencers. Adjusting the research objective to the results obtained, it is possible to verify that digital influencers appear as a communication tool between brands and consumers. In this phase, it is necessary to reflect and respond to the main themes underlined in this research: How do digital influencers contribute to build a relationship between brands and consumers? As digital influencers are opinion leaders with an enhanced capacity to influence society, companies increasingly choose to invest in this type of communication as a way to get closer to their customers by creating partnerships with content producers on other social networks. Being so, it is correct to say that the way influencers share experiences and opinions regarding new products and services is a factor of added value for brands and beneficial for credibility on the part of customers (Torres et al., 2019).

With this research, companies are able to anticipate why they should use digital influencers, as well as, how to measure the returns of the investment made. This way, companies can make investments in a more informed way, thus, reducing investment risks. When hiring digital influencers, companies can, for example, introduce tools such as Google Analytics and promotional codes in their models for evaluating digital influencers. Consequently, it is possible to compare the investment made with the return that digital influencers bring to the company. On the other hand, this research clarifies the existing literature on the subject under analysis, as well as leaving some suggestions for future lines of investigation or new knowledge can emerge.

The limitations of the present research are related to the minor sample size, only companies based in the north of Portugal were analyzed. In this sense, the results cannot be generalized. Respondents may not be aware of some technical terms covered in the interview which may have limited the collection of more robust responses.

As for future lines of investigation and due to the geographic limitation of the research, it is necessary to carry out studies in other geographical contexts. Quantitative studies should also be carried out to complement the results of the present investigation. We also suggest researchers to investigate the following questions: Is there any relationship between market segments and the adoption of influencers? Does the return on digital influencers increase company sales? Are digital influencers compensated depending on the results? In terms of value, how much does an influencer-based digital strategy cost? Should companies use digital influencers or not? If so, what are the criteria that companies should take into account when selecting digital influencers? Can digital influencers change a company's brand value?

ANNEXE

	Company A	Company B	Company C	Company D	Company E	Company F	Company G
1) Name and position in the company	Founder and CEO	Marketing & brand activation manager	Founder and CEO	Founder and CEO	Co-founder	Founder and CEO	Financial Director and CEO
2) What are your company's goals within digital communication strategies?	Engagement and sales	Brand building, product launch and promotion	Promote the product and create notoriety.	Product disclosure and sales increase	Build a strong brand image, increase our visibility and promote / our products	Reach the target audience and increase sales	Increase brand expression and notoriety, captivate a younger audience and continue to communicate with the brand's current audience.
3) Which digital channels are used in digital communication strategies?	Instagram	Brand platforms (Website, CRM), Various platforms according to each project (Google, Gmail, Remarketing).	Instagram, Facebook e Youtube.	Instagram and Facebook	Instagram.	Instagram and Facebook	Facebook, Instagram, sms, newsletter and website

<p>4) What percentage of the total digital marketing budget is intended for influencers?</p>	<p>The budget is made monthly and is related to the products and the shipping of the products. We never pay influencers</p>	<p>It is not within the digital investment and I depend on the challenges that we are having throughout the year.</p>	<p>60%</p>	<p>50%</p>	<p>It is not planned in our investment. We have the initiative to launch the products and later a study is done around the influencers</p>	<p>The budget is made monthly and is related to the number of hits and consequent sales, but we never pay influencers.</p>	<p>50% of the digital marketing budget</p>
<p>5) Of the results obtained through digital strategies, what percentage has its origin in the influencers?</p>	<p>About 40% of our sales come from influencers (due to the discount code) and 60% are indirectly related to them (sales without discount code).</p>	<p>For brand building about 15% for conversion about 5%</p>	<p>Sales have no identified origin.</p>	<p>Circa 20%</p>	<p>25%.</p>	<p>40%</p>	<p>We were unable to directly control the results obtained. We were able to measure the notoriety gained by the brand when working with influencers.</p>
<p>6) What are the factors that your company takes into account when hiring influencers?</p>	<p>The choice of influencers is divided into 2 different types: those who have a substantial engagement and will bring us sales or those who may not have much engagement, but we want them to produce content</p>	<p>Type of profile and type of content generated, data in addition to followers (average impressions, reach, engagement) when it is not the first time that we work with the profile, we take into account the</p>	<p>Number of followers and geographic location.</p>	<p>Reach the type of audience we want, more targeted to age groups and lifestyle</p>	<p>The influencer's lifestyle, how he communicates with his followers, the appearance of his social network, and lastly and most importantly "what he can bring the brand".</p>	<p>The choice of the influencer is related to the number of followers and the target audience that we want to reach.</p>	<p>Type of audience, charisma and way of working.</p>

		results of previous initiatives.					
7) Are there examples of successful strategies in your company's experience with digital influencers?	On Valentine's Day we sent our digital influencers the new creamy glitter with 2 cards: One has a caricature of them and in another card, we had a kind of rules about the influencing taste / personality in question.	Licensing t-shirts launch, Mother's Day and Father's Day, Women's Day.	Couples influencers in the week of Valentine's Day	Giveaways through social networks	Women's Day, being that the product that was being communicated were bodies and the influencer made a communication directed to the dinners and gatherings that normally exist on that day.	Partnership with a beach bar where we offer some of our services. The experience was a success and most of the winners are currently our customers.	Partnership with a television program presenter.
8) Are there examples of unsuccessful strategies in your company's experience with digital influencers?	Not choosing influencers well is the only factor that makes an experiment not successful. It is necessary to analyze the target audience of an influencer very well.	Do not exist.	Attempted promotion through male influencers	Yes. The choice of the influencer has to be considered. At the beginning of the brand, the choice of digital influencers was not properly analyzed, and the results were not as intended.	Wrong choice of the influencer. It is necessary to analyze your target audience and see if the type of communication is identified with the brand communication. If not, the results will not come.	A bad choice of the influencer is what can lead to unsuccessful experiences, hence the importance of carefully analyzing the public following the influencer	Influencers of small expression that do not yet have a well-defined working method.
9) What are the digital marketing	We have a table with the details of each	Analytics, data from their RSS platforms and	Sales volume and website	Visitors to the site regarding sales reach	Google Analytics, through our	We have a table with the details of the influencer, that	Metrics made available on Facebook and

<p>metrics and the results analysis tools used by your company?</p>	<p>influencer, amongst other information when we made a publication, how many sales were made that day, how many views, etc.</p>	<p>data provided by partners (agencies and / or their influencers). In addition, there is a manual research that has to be done to evaluate some qualitative points.</p>	<p>visitors. Google Analytics.</p>	<p>through it. Balance of sales in physical stores by area / district.</p>	<p>website and our digital platforms</p>	<p>is, how many posts you made in a week, how many views those same posts had and how many sales you managed to generate</p>	<p>Instagram, analysis of comments to publications.</p>
<p>10) How does your company quantify the return on investment in influencers?</p>	<p>The most reliable way is through the use of discount codes by customers, otherwise it is extremely difficult to measure since we do not ask for statistics and it is all organic.</p>	<p>Valorization of the generated content (what value would we have to invest to reach that result), number of visits generated to the site, number of views to the site and growth of followers in the days of actions.</p>	<p>Does not quantify.</p>	<p>Website visits and discount codes.</p>	<p>Through visits to the website and discount codes.</p>	<p>The most reliable way is through the promotional codes used by customers.</p>	<p>The way we do the metric is measured by the notoriety that influencers transmit to the brand. An analysis of the demand generated when the product is released is made.</p>
<p>11) In your opinion, what is the utility and reliability of results analysis tools to measure the return obtained through influencers?</p>	<p>It depends on how the company chooses to deal with influencers, in our case how the only credible way is to use a discount code, the rest that we</p>	<p>Very useful and important. Working with influencers has a part that always have to be test and intuition, but it is essential to measure and perceive results in</p>		<p>Digital tools are useful and reliable. They help us to analyze results and make decisions, taking into account the</p>	<p>Quite useful and important. Investment in influencers is one of the strategies of the brands, and it is necessary to understand whether we are betting on the</p>	<p>In our particular case, our analysis tool even goes through promotional codes, as it helps us to track the origin of the sale.</p>	<p>I find the results analysis tools reliable and useful for companies.</p>

	managed to obtain as an increase in followers, an increase in views on the site, is very subjective.	order to define the next step of the strategy and on whom we should bet for the future.		feedback of influencers.	best strategy or not. Since it is an expensive bet that has to generate profit		
12) What should be improved in the current tools in order to make the traceability of results from influencers more effective?	Maybe go deeper with more data in the tables that we have about the specific influencers.	It will not be so much to improve on the current tools, but rather to be able to obtain more tools and often some that help to minimize the research and manual work that still has to be done and that is difficult to measure (especially on Instagram).	There must be a specific tool or, if there is, it should be better known.	I think the current tools are very useful and help brands in making decisions. However, there should be more specific tools for each social network.	There should be a tool solely aimed at Instagram. A tool that brought together all the influencers (relevant in terms of content) and that through the knowledge of the brands managed to make the ideal match. Therefore, the brand would not have all the manual research work for the perfect influencer.	Perhaps some tool aimed at investing in influencers, so that when choosing to invest in an influencer it is something positive and productive both for the company and for the influencer himself	It depends on the means of communication that each influencer works on and the objectives that the company has with the partnerships made. I think the current tools are useful for companies.

Source: Author

4. CHAPTER 4 - CONCLUSIONS

In the introduction of this dissertation, the main research problem of this study was formulated: "the impact of the COVID19 pandemic on consumer behavior and the rapprochement between companies and customers through influencers" Thus, three research questions were formulated: 1) In what way did the COVID19 pandemic change their consumption habits?; 2) What factors most influenced the behavioral patterns of individuals during the COVID19 pandemic?; 3) In what way do digital influencers contribute to building the relationship between companies and customers?

The three research objectives have been addressed in chapters 2 and 3 of this dissertation. The chapters in question consist of 2 research articles: "Was there an alteration on consumers pattern with COVID-19 pandemic? A pre and post-pandemic research on consumers behavior" "Do digital influencers successfully contribute to reduce the gap between customers and companies?"

This chapter brings together the main conclusions drawn from Chapters 2 and 3, as well as some additional reflections resulting from the analysis of the results obtained.

The main constraints that occurred during the development of the chapters and possible avenues for future research are also identified.

4.1 Main Research Findings

As mentioned in the methodology, this dissertation follows a mixed research model, taking into account quantitative and qualitative approaches. According to Tashakkori et al., 2008 and Johnstone, 2004, the mixed approach makes it possible to obtain more relevant information for the problems under analysis, making the confrontation of literature with reality more precise and capable of obtaining reliable and conclusive results.

Like any scientific work, the investigation in question contributes to knowledge and to the academy. In this sense, this study is unique in that it addresses a recent topic that has been generating interest in the scientific community. Thus, two themes that have been little explored so far are related, offering important contributions and lines of investigation for future studies.

Through the adoption of the quantitative methodology, in chapter 2, a questionnaire was developed in order to compare behavioral differences occurring at two different times - before the pandemic and during the COVID19 pandemic. The questionnaire is composed of 42 questions, 21 questions to assess consumer behavior before the pandemic, and another 21 to assess consumer behavior during the COVID19 pandemic, obtaining a total of 237 validated responses between November 2020 and December 2020. The present quantitative analysis was divided into two statistical stages: initially a survey of descriptive statistics was carried out, followed by a statistical t-student test for paired samples and then a factor analysis was carried out in order to analyze the existing contrast between the two moments under analysis. Seven variables were defined according to the literature - income, price level, innovation, sociocultural, personal, new trends and advertising.

In the first variable under analysis, income, it is found that the level of consumption and savings/investment increased during the pandemic. As a follow-up, according to the price level variable, consumer loyalty and the influence of income on the price level decreased during the pandemic. Focusing on the innovation variable, with the exception of the decision to consume innovative goods, the financial effort to purchase these goods and their value added increased during the pandemic. The greatest increase was registered in the financial effort, that is, consumers consider they need a greater financial effort to purchase innovative goods during the pandemic COVID19. In the socio-cultural variable, with the exception of standardized communication, the influence of the socio-cultural aspect on consumer behavior and the power of the influence of this aspect on visible goods increased during the pandemic COVID19. In the personal variable, with the exception of behavioral differences between individuals from the same social group, the influence of unique characteristics in the satisfaction of needs and the equality of needs among consumers decreased during the pandemic. In the penultimate variable under analysis, new trends, the aspect of integration into society remained without oscillations in the two moments under analysis, the influence of new market trends on the level of consumption decreased considerably and with regard to digital influencers as individuals who transmitted and followed new trends, respondents considered that during the pandemic there was a greater communicative effort on the part of these individuals. Finally, in the last variable under analysis, advertising, with the exception of the influence of advertising on consumer behavior, the difficulty of the loyalty process and the way

influencers communicated with the public increased during the pandemic (Donthu & Gustafsson, 2020; López-Fernández, 2020; Settersten et al. 2020).

According to the first statistical test, of the seven variables under analysis, only income and innovation were totally different in the two moments under analysis, registering different averages in all the factors analyzed. On the other hand, according to the second statistical test, it should be noted that the best construct was the innovation variable, resulting in the factor "financial effort and added value" and the second best construct was the new trends variable, resulting in two factors: "integration and consumption" and "digital influencers" (Settersten et al. 2020; Sto-Tomas et al. 2019).

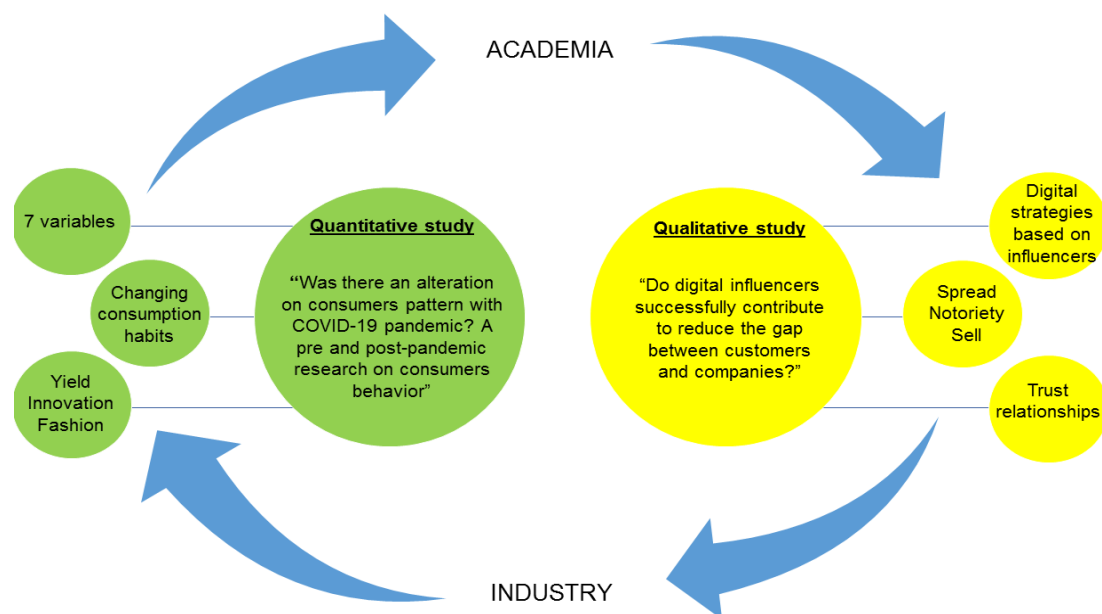
Through the adoption of the qualitative methodology, in chapter 3, interviews were conducted with micro and small service providing companies in the northern region of Portugal, obtaining a total of 7 validated responses between November 2019 and December 2020. The interview script, adapted from a study by Peng (2016), contains a total of 12 questions and was divided into two major groups. The first group analyzed the objectives of the digital communication strategies through influencers on the various digital platforms, as well as the respective budgets and results. The second group identified the factors that companies consider most relevant when partnering with influencers, the metrics they use to analyze results and also how they quantify the return on investment in content producers.

Regarding the first group of questions, the goals of companies in digital strategies based on influencers are essentially to build and enhance the brand, promote products and services, create awareness and increase sales. It should also be noted that the most commonly used digital channels in digital communication strategies are Instagram and Facebook due essentially to the number of active users and the ease of communication by influencers. Taking into account the digital marketing budget allocated to influencers, three of the seven companies surveyed allocate between 50% and 60% to promotions related to content producers. The remaining companies do not quantify the percentage, since the budget is variable with the launch of new products and services. Finally, ending the first group of questions, we address the results obtained taking into account the work performed by content producers. It is possible to identify that two of the seven companies are highly dependent on influencers, to the extent that 40% of their results come from these individuals. In the same sense, three of the surveyed companies present results between 15% and 25% and the remaining two do not quantify the origin of sales related to influencers (Breves et al. 2019; Kapitan & Silvera, 2016; Hughes et al. 2019). Thus,

the way in which influencers share experiences and opinions about new products and services is an added value factor for brands and beneficial for customer credibility, leading to positive results for both brand awareness and the content producer's reputation (Torres et al. 2019; Riha et al. 2018),

Regarding the second group of questions, the factors that companies consider most important when partnering with content producers are the number of followers on social networks and consequent reputation, the reach of certain population niches, the quality of the content produced and the ability to influence their followers which, to some extent, may be converted into favorable results for organizations. In the same vein, focusing essentially on the tools for analyzing results, three of the companies surveyed use Google Analytics as their main tool for tracking results. In addition to this tool, two of the companies surveyed use their websites in order to verify new leads with direct or indirect origin from influencers and the remaining companies use analysis metrics provided by Facebook and Instagram. Finally, regarding the quantification of return on investment in digital influencers, most of the companies surveyed considered that the discount codes applied by customers when making a purchase is the most reliable way to quantify the return on investment in content producers (Schwemmer & Ziewiecki, 2018; Kapitan & Silvera, 2016). In conclusion, figure 4.1 summarizes the main findings of the research conducted in chapters 2 and 3.

Figure 25.1 – Main research findings



Source: Author

4.2. Practical and theoretical implications

The main purpose of the consumer survey in chapter 2 and of the interviews conducted with service providers in chapter 3 was to confront the theoretical implications gathered through the various studies with their respective reality. In the same vein, the use of statistical tests made it possible to create a relationship between the theoretical data and the data observed in the real world, arriving at objective conclusions based on scientific knowledge (Heale & Twycross, 2015).

In chapter 2, the study aimed to determine whether the pandemic changed the consumption habits of individuals and also which variables consumers considered crucial when satisfying their consumption needs. The results suggest that the pandemic changed consumption habits. Since most of the individuals remained in confinement during the early 2020s, among the 7 factors that influenced consumers during the pandemic phase, disposable income for consumption, demand for innovative goods and services, affectation of new trends in pandemic period and also targeted communication to consumers are considered as the variables that most influenced consumption during the COVID19 pandemic. The study in chapter 2 thus contributes to the development and clarification of scientific, business and policy makers' knowledge about consumer behavior during the COVID19 pandemic. By addressing consumer behavior, it is possible to determine socio-economic development strategies that can prevent a total disruption of the economy.

In chapter 3, the study aimed at building the relationship between companies and customers through partnerships with digital influencers. Through the research developed, it is found that companies are able to anticipate objectives to be achieved with digital influencers, as well as, how to measure the return on the investment made. In this sense, it is concluded that companies can carry out partnerships in a more informed way, reducing the risk of failed partnerships. When hiring content products, companies can introduce tools such as Google Analytics and promotional codes into their evaluation models. With this, it is possible to compare the investment made with the return that digital influencers bring to the company. On the other hand, this research clarifies the existing literature on the subject under analysis, as well as leaves some suggestions for future lines of research or new knowledge may arise.

4.3. Limitations and future research

The conduct of any scientific research has its own limitations. In order for the analysis of the results to be adequately prepared, it is imperative that the limitations detected be made explicit. The limitations vary from study to study, and this section of the dissertation identifies the limitations and future lines of research for each specific chapter.

In the context of chapter 2, the limitations of the study relate to the sample size and the geographical limitation. Only 237 valid answers were collected through the social networks, thus not including other individuals. In addition, it was applied in Mainland Portugal, not including individuals from other countries, where the pandemic reality is different from that of Portugal. In the same vein, as future lines of research and taking into account the geographical limitation of the study, we propose the development of future research on the same topic, extending the sample of participants. We also emphasize the use of other data collection methods, as well as the use of different questionnaires.

Finally, in relation to chapter 3, the limitations of the study are related to the number of interviews conducted. Only seven service providers based in the North of Portugal were interviewed. In this sense, the capacity to generalize the results is reduced. As for future lines of research and due to the geographical limitation of the research, it is suggested that studies be carried out in other geographical contexts. Quantitative research should also be carried out to complement the qualitative results obtained.

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ANNEXES

Quantitative Study Questionnaire

- 1) The level of income directly affects the level of consumption.
- 2) Part of my income goes to savings and / or investment.
- 3) I managed to allocate my income according to the consumption needs.
- 4) The price level of a certain good or service influences my purchase decision.
- 5) When loyal to a particular brand, the existing price level has little, or no influence in my consumption.
- 6) The price level of a certain good or service could affect my income level, which sometimes led me to make choices.
- 7) Innovation is a fundamental factor in the purchase decision process.
- 8) The purchase of innovative goods or services stimulated a greater financial effort, which, in certain times was an obstacle to purchase.
- 9) As a consumer, I tried to purchase innovative goods, due to their added value.
- 10) My behavior as a consumer was influenced by socio-cultural factors.
- 11) In the society to which I belong, the widespread communication is equally distributed.
- 12) The power of socio-cultural influence is greater when it comes to visible goods
- 13) My behavior as a consumer differed from another consumer belonging to the same social group.
- 14) Factors such as age, gender and other personal variables, created unique and specific characteristics when meeting consumption needs.
- 15) My personal desires were identified by the needs of society.
- 16) The new trends have influenced my act of consumption.
- 17) The new trends were an asset in the process of integration in society.
- 18) I believe that digital influencers are individuals who followed and transmit the new trends to society.
- 19) Advertising influenced my behavior as a consumer.
- 20) I believe that the impact of advertising has made the process of loyalty to a certain brand difficult.

21) The way digital influencers communicated with the public is a type of non-intrusive and consumer-friendly advertising.

Qualitative Study Questionnaire

- 1) Name and position in the company
- 2) What are your company's goals within digital communication strategies?
- 3) Which digital channels are used in digital communication strategies?
- 4) What percentage of the total digital marketing budget is intended for influencers?
- 5) Of the results obtained through digital strategies, what percentage has its origin in the influencers?
- 6) What are the factors that your company takes into account when hiring influencers?
- 7) Are there examples of successful strategies in your company's experience with digital influencers?
- 8) Are there examples of unsuccessful strategies in your company's experience with digital influencers?
- 9) What are the digital marketing metrics and the results analysis tools used by your company?
- 10) How does your company quantify the return on investment in influencers?
- 11) In your opinion, what is the utility and reliability of results analysis tools to measure the return obtained through influencers?
- 12) What should be improved in the current tools in order to make the traceability of results from influencers more effective?