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CONSUMER POST-COVID: Changes in consumer behavior and online purchases

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1. SUMMARY

Covid-19 is an unprecedented and extraordinary crisis that surged at the beginning of 2020 and that it was later on declared a global pandemic. Measuring the full impact Covid-19 pandemic has had on the world is still impossible but it is relevant to begin studying what its effects have been. This crisis has affected every country, every sector and every person in one way or another. Covid-19 constitutes a phenomenon that has been able to transform the way things work, that has impulse the surge of new trends, and that has had the power to accelerate the development of others. With the limitations and restrictions that citizens had to learn to live with, came a transformation of their habits and of their ways of behaving. It's for this reason that this project is intended to get a better understanding of how consumer behavior has changed as a consequence of Covid-19 while focusing on online purchases as it is the trend that has become more important and revolutionary. The study begins with a literature review of existing studies about consumer behavior and changes that have already been identified, focusing the possible influence that culture and consumer styles can have. However, as these changes are complex because Covid-19 crisis is still going, we have also made an empirical study to reinforce our findings and be able to provide answers to our research questions. With this study we have been able to confirm that consumer behavior has changed over the course of Covid-19, that culture plays a significant role in consumer behavior changes and that consumer styles does as well.

Key words: Covid-19, Novelty-Fashion Consciousness, Recreational, Hedonistic Shopping Consciousness, Hofstede's framework, E-commerce, Sprouse and Kendall, CSI, Millennials, Gen Z, Gen X, Baby Boomers, Individualism, Colectivism

Abstract

Covid-19 es una crisis sin precedentes y extraordinaria que surgió a comienzos del año 2020 y que fue posteriormente declarada una pandemia global. Medir el impacto completo del Covid-19 en el mundo sigue siendo imposible, pero es relevante comenzar a estudiar cuales

han sido sus efectos. Esta crisis ha afectado a todos los países, todos los sectores, y a todas las personas de alguna forma. Covid-19 es un fenómeno que ha tenido la capacidad de transformar como funcionan las cosas, que ha impulsado el surgimiento de nuevas tendencias, y que ha tenido el poder de acelerar el desarrollo de otras. Con las limitaciones y restricciones que los ciudadanos han tenido que aprender a vivir, ha venido una transformación de sus hábitos y de su forma de comportarse. Es por ello, que este trabajo ha sido realizado para proporcionar un mejor entendimiento de como ha cambiado el comportamiento del consumidor como consecuencia del Covid-19 mientras se centraba en las compras online ya que ha sido la tendencia que ha tenido mayor repercusión y que ha sido mas revolucionaria. El trabajo empieza con una revisión de la literatura existente sobre el comportamiento del consumidor y aquellos cambios que ya han sido identificados, centrándose en la posible influencia que la cultura y los estilos de consumidores pueden tener. Como estos cambios son complejos porque la crisis del Covid-19 continua, hemos realizado también un estudio empírico para reforzar nuestros hallazgos y proporcionar respuestas a nuestras preguntas de investigación. Con este trabajo hemos sido capaces de confirmar que el comportamiento del consumidor ha cambiado durante el transcurso del Covid-19, que la culture juega un papel importante en los cambios en el comportamiento del consumidor y que los estilos consumidores de la misma manera.

Palabras Clave: Covid-19, Novelty-Fashion Consciousness, Recreational, Hedonistic Shopping Consciousness, Hofstede’s framework, E-commerce, CSI, Sprouse y Kendall, Millennials, Gen Z, Gen X, Baby Boomers, Individualismo, Colectivismo

2. INTRODUCTION

2.1 TOPIC PRESENTATION

The aim of this project is to analyze how has consumer behavior while shopping changed as a consequence of Covid-19 and especially how have online purchases changed. Furthermore, this study tries to understand the possible influence culture and consumer style have in these changes and if people within certain cultures and consumer styles have or not a higher tendency to these changes. Identifying the behavioral changes will allow us to provide solutions to businesses as it will help them to get to know better the market trends and their consumers motivations.

2.2 CONTEXT

In late 2019 the third novel coronavirus, SARS-CoV-2 emerged in Wuhan, China. The source of transmission is still being studied although early hypotheses thought its surge may be linked with a wild animal's market in Wuhan. Investigations are still ongoing as the first reported case alleged no link to Wuhan's market. **(Sauer, 2021)**

On March 11, 2020 it was declared a global pandemic by the World Health Organization. Since then, the entire world has been facing a pandemic caused by the surge of COVID-19. It has already affected 115 million people, it has taken over 2.5 million lives, has made unemployment rates rise, and has made majority of countries be in recession. There's still a lot of uncertainty around when will it be over of how it will end. This event has divided opinions in terms of how it surged, when it surged, or what effects can be attributed to the Covid-19. But, until it is completely over total effects will not be able to be perceived.

After it was declared a global pandemic, each country decided to make their own decisions in a thrive to protect its citizens health. Some countries were put under strict lockdown for months, while others kept certain businesses open. It was an unprecedented situation where citizens had limited mobility, there were shortages of materials, medicines, and even food in some locations. These extraordinary circumstances under which citizens lived also had effects in their habits, ways of living and behaviors.

2.3 JUSTIFICATION

Covid-19 is considered to be the biggest event of the 21st century, it is an unexpected event that rose and transformed the world we were living in. Since that moment, things have not been the same and will never return to how they were. A new normality will be reach at some point, but the way citizens lives have been transformed will never change. It is for this reason that studying about how has Covid-19 shaped consumer behavior and what factors have been the most influential motivated me to begin this study.

With this study I want to find out how has consumer behavior changed as a consequence of Covid-19 while focusing in online purchases as they have experienced the greatest switches. I also want to study the influence culture plays in consumer behavior and understand the possible influence consumer styles have on these changes. Finally, I want to provide information and suggestions about how businesses and the community should act to keep up with this changing environment and help them understand what are the things that are currently motivating customers.

2.4 OBJECTIVES

The aim of this project is to elaborate a complete analysis of how the Covid-19 has transformed consumer behavior. As the current pandemic is a crisis that is affecting all sectors and all countries this study tries to get a better understanding of how this transformation has affected consumers in terms of their behavior, shopping habits and trends among others. Also, as it is a global issue it is relevant to engage into a deep study of the differences between cultures and try to find out where they come from. From this research, we hope to draw a conclusion about how marketing will evolve to adapt to this new consumer.

2.5 METHODOLOGY

This project has been done by combining an empirical study with a xx study. To be able to fulfill the objective of the project it is important to reflect on previous situations to see what the possible outcomes in consumer behavior may be. For this, literature review will be done to gather information from secondary sources (regarding other crises and their impact in consumer behavior) and quantitative methods for primary sources. As this crisis is global it is important to gather information from users of various countries. For this, as I am studying in a university where there are students from various countries, I will elaborate a survey that will allow me to collect data from various backgrounds. With the data collected in the survey I should be able to analyze the differences among cultures and elaborate a more in deep study of how consumerism is going to change. Finally, I will gather information about the role of marketing after this era and how companies are trying to adapt consumer experience.

2.6 STRUCTURE

This project is divided into two different parts. On the first part there's an introduction into the pandemic context that surrounds the study. The environment in which consumers live in is considered to be one of the crucial factors that influence the way they behave and make their decisions. Consequently, the Covid-19 crisis is studied as this project aims to understand what the impact of the pandemic has been in consumer behavior and what new trends have thrive. The complex concept of consumer behavior process is also explained as well as the different factors that influence consumers. The different types of consumer behavior are also studied to understand what the different consumer profiles are and what change, if any, has each of them experienced. Finally, there's an analysis of the differences between individualistic and collectivistic countries which aims to provide a better understanding of the influence culture plays on consumer behavior.

The second part consists of the data provided by the empirical study. A survey was created which aimed to provide information about the influence of culture and the Sprouse and Kendall factors in the consumer behavior. Both of these aspects are studied pre and post covid to see what the change, if any, has been. The Sprouse and Kendall factors in which the survey is focused are recreational shopping and novelty fashion. Finally, after analyzing the results obtained from the empirical survey, some conclusions are drawn and some recommendations for future studies are made.

3. THE COVID-19 CRISIS

3.1 ECONOMIC

As thousands of citizens were being infected daily, governments had to constantly make difficult decisions of establishing restrictions. They had to decide whether to fight for their citizens lives or for the economy of the country. Some countries like Spain decided to declare the state of emergency in the entire country which allowed them to put the entire country under strict lockdown. Under this situation only supermarkets, pharmacies and other essential services were open and none one was allowed to leave their houses. Business were not allowed to be open and in many cases the factories were closed so deliveries were delayed. All these decisions had an extreme repercussion on each country's economies but also a global impact. During the first months of the pandemic and as data about the novel coronavirus was very limited investors became very skeptical about what the future would look like. Some economies were shutting down while government were tirelessly trying to implement relief funds in a hope to alleviate the situation. There were huge falls in stock markets such as Dow Jones Industrial Average, the FTSE or the Nikkei.

The international monetary fund (IMF) estimated that during 2020 global economy shrunk by 4.4%. This decline is considered to be the worst since the Great Depression during the 1930s, and it has left the majority of countries in recession. **(IMF, 2020)**

The clothing sector has seen unprecedented falls on their sales as shoppers were not allowed to leave their houses. Even once stores began to reopen people were still anxious about going to stores. "This has made the industry reinvent themselves and it has boosted online shopping to groundbreaking revenues, reaching $3.9 trillion by the end of 2020". **(Mckinsey, 2020)**

3.2 SANITARY

Covid-19 set to the limits the health systems of all countries and they all struggled to keep up with the pace that the pandemic quickly took. The number of beds available at hospitals were insufficient and soon there were not enough respirators for all the patients that had severe symptoms. The world was "caught unprepared by the COVID-19 pandemic despite decades of warnings of the threat of global pandemics and years of international planning". (CFR, 2020)

Another issue that arose was the shortage of protecting materials. At the beginning of the pandemic manufacturers were not ready to supply the new demand and they struggled to provide the material needed for frontline workers which caused many of them to become infected. The other important issue of the sanitary crisis is how hospitals were collapsed and were not able to continue their regular activities such as surgeries as they had a big portion of their workers occupied with Covid-19 patients.

3.3 ENVIRONMENTAL

The global disruption caused by the COVID-19 has caused diverse effects on the environment and the climate. The course of the pandemic has brought some negative impacts for the environment, but it has also produced collateral positive effects. Movement restrictions were implemented in multiple countries and there was a significant slowdown in the population's regular activities. With all the implemented restrictions citizens had to reduce their social activities and limit their movements. This slowdown has prompted the reduction in the levels of pollution the world was facing in many areas.

The safety equipment used to protect from the virus is made of plastic which increases the healthcare waste, and which has been perceived by the increase of PPE use. Due to the lack of knowledge about infectious waste management most people left their face masks and gloves at open places or within their regular trash. This is harmful for the environment as it is not properly recycled and discomposed, but it also represents a health threat as the virus may get to the air and spread. There has also been an increase of biomedical waste generation due to the increased hospital activities. There is a lot of waste associated with the diagnosis and treatment material used for patients as well as for disinfection purposes. Furthermore, as disinfectants are applied into all types of surfaces to terminate with the virus it may also kill non-targeted beneficial species. This could end up creating an ecological imbalance.

Many industries were forced to close and consumption of fossil fuels lessened and consequently there was a reduction of air pollution and GHG's emissions. The European Environmental Agency (EEA) predicted that due to the COVID-19 lockdown, NO2emission dropped from 30-60% in some of the biggest European cities like Madrid, Milan or Paris (EEA, 2020). Noise pollution was also reduced as air travel was slashed, car traffic dropped and trains barely worked.

Covid-19 has proved that emissions can be reduced and that the damage we were doing to the environment can at least be reduced. Once things go back to normal some emissions will shift back to pre-pandemic levels but, there has also been a change in perception about environmental issues and it is likely that citizens will continue trying to reduce their footprint.

3.4 POLITICAL

Each country has established different restrictions and regulations to try to control the pandemic. Since the beginning, there were some countries that established stricter measures and others that decided to leave it more to each citizen's responsibility. Both governing ways have been widely criticized as there were opposers on both sides.

One of the topics that has attracted a lot of attention is what type of regime handles better unprecedented situations. This is something that for decades has been continuously discussed as the world divides up among democratic and authoritarian regimes. The debate has history behind it as each side tries to defend how their type of regime is more beneficial for the country and its citizens. This discussion covers areas such as economy, education, sanitary, well-fare, poverty or quality of life. And, the pandemic has been the perfect example to bring back the discussion.

Politicians have had to make special claims to seek more power to strengthen their position and to be able to have more control over the population. In many countries this has not been received well as they were used to plentiful liberties and they have had to get used to imposed laws without previous notice. Autocrats have been imposing measures on their countries which in some cases were considered extremely radical and which in many cases were widely judged by the international community. But, as their citizens are used to a lack of freedom and have never had the possibility of giving their opinion they have not been promoting any kind of social movement. Another characteristic of autocratic regimes is the lack of transparency and this is something which has been criticized since the pandemic began. China was the first country to report a case but was also the first one that ensured to have controlled the spread. The measures that were used to do so are still an unknown as there are multiple conspiracies and theories.

With all the struggles democratic politicians have faced the debate about which type of regime works better is widely open and stronger than ever. Deciding about which type of government handles better pandemics and crisis is something extremely complicated as there are many factors to be considered. Handling more effectively a crisis doesn't necessarily mean to be doing so better as it also depends on at what cost.

Before the pandemic conflicts already existed between countries and there were certain differences between rich and poor countries. However, the pandemic has aggravated their issues even more, especially once the vaccines began to be developed and its distribution was unequal. The producers of Pfizer, Moderna, and Astrazeneca estimated a total productivity capacity of about 5.3 billion doses for 2021. (Our World in Data, 2020). But, most of these doses, were already preordered by the member states of the European Union together with other rich countries.

4. THE CONSUMER BEHAVIOR PROCESS

4.1 INTRODUCTION TO CONSUMER BEHAVIOR

Consumer behavior is the study of consumers and the processes they use to choose, use (consume), and dispose of products and services, including consumers' emotional, mental, and behavioral responses. (Radu, 2021). Consumer behavior plays an essential role as it allows marketers to identify what factors drive consumers buying decisions. We can identify three categories of factors that influence consumers decision making: personal factors, psychological factors, and social factors.

Personal factors are those that focus on an individual's interests and opinion and may be influenced by demographics such as age, gender or culture. Psychological factors are those related to the response an individual has to a specific marketing message and this will vary depending on their perceptions or attitude. Social factors are those related to family, friends, education level, what income a person has, or others influences.

We can also identify another five factors that affect consumer behavior and that are related with external and internal things that influence their behavior. The first are marketing campaigns which can persuade consumers to cease their brand loyalty or to impulse purchases of products that are not primary needs. Good marketing campaigns are capable of changing consumers perceptions and can drive them to impulsively purchase other alternatives.

Economic conditions affect all types of products but especially those that fall in the higher end. When the economic environment is good customers tend to be more confident and purchase more expansive products regardless of their financial limitations. The decision-making process is usually faster for less expensive goods than for expensive ones.

Personal preferences are tightly related with personal factors and are more powerful than the other factors. Consumer behavior is influenced by customers priorities, morals and values. Even if an advertisement may be able to influence a consumer decision-making, the limit lies on its personal preferences. If a person is vegan and believes that eating meat is associated with animal cruelty, even if the best marketing campaign is done on the unique taste of burgers, that customer will not go against its values to try it out.

Peer pressure can also affect consumer behavior. Depending on what our surrounding people think or like may alter our decisions. Consumers tend to change their interests or willingness to purchase products depending on what their relatives' opinion on it will be. Consequently, we can observe how some products go in and out of fashion fast.

Finally, purchasing power plays a significant role in consumer decision making. Before deciding what product to purchase consumers consider what their budget is and how much are they willing to spend in each type of goods. Even if a product features are excellent, advertising campaigns are efficient and there is peer pressure; if it is not within a consumer's budget the decision will quickly be made.

There are various Consumer Behavior models that explain why and how customers make their purchasing decisions. These models intend to contextualize behavior analysis results to allow a better understanding of customers. Some of the most famous models include: Pavlovian Model, Howarth Sheth Model, Engel-Blackwell-Kolla Model and Solomon Model which will be covered next.

Although there are multiple external and internal factors that influence consumers, in this project we have decided to focus in only two of them; one internal and one external. We have focused our study in finding out whether culture and consumer style have influenced the change in consumer behavior during Covid-19.

4.2 SOLOMON MODEL

The Solomon Model of Comparison Process aims to explain some of the issues that are addressed during each stage of the consumption process. (Francis, 2014) These issues are categorized into pre-purchase issues, purchase issues and post purchase issues. There are different users involved in consumer behavior, the purchaser of the good or service and the user who may be a different actor.

One of the main duties marketing departments have is to adapt the product offering to particular circumstances like Covid-19 has been. Marketing activities also include targeting certain segments of consumers to understand what their needs and wants are. Finally, they may also be involved in stimulating consumers by improving advertising and sales promotions instead of trying to create new needs.

4.3 SPROLES AND KENDALL AND THE DIFFERENT BUYING PROFILES

George B. Sproles, a Professor and Elizabeth L.Kendall an Assistant Professor at the School of Family and Consumer Resources at the University of Arizona (Sprotles, 1986) developed in 1986 a framework named Consumer Style Inventory (CSI) that aimed to conceptualize and empirically measure the different decision-making styles. The CSI is one of the most widely used frameworks and "profiles consumer decision-making styles by categorizing them into eight basic factors, called the Eight Factor Model". (Sproles and Kendall, 1986) The Consumer Style Inventory was the pioneer approach designed to serve the interests of consumer interest professionals. The CSI constitutes also a tool to segment markets which has transformed it into a standard framework used in multiple countries and contexts.

The CSI is made of eight factors that have been identified through a selection method that follows a four factor criteria: The method should contain mental consumer characteristics that directly link to consumer choices, the method should contain independent and complete decision-making characteristics, the method should rate and measure each consumer on all characteristics in order to profile the consumer into different styles, the method should be of importance for consumer-interest professionals. (Sproles and Kendall, 1986) The eight factors that profile the consumer styles are:

1. Perfectionism and High-Quality Consciousness
2. Brand Consciousness
3. Novelty-Fashion Consciousness
4. Recreational, Hedonistic Shopping Consciousness
5. Price and "Value for Money" Shopping Consciousness
6. Impulsiveness
7. Confusion from Overchoice
8. Habitual, Brand-Loyal Orientation toward Consumption

Each of these eight factors measure unique and independent decision-making characteristics of consumers. However, Sproles and Kendall recognized that the CSI presented some limitations. The main one is the limited generality in terms of the product category as it is not a characteristic that the CSI encompasses. The second one consists of the sample that was used for the study, which consisted of high school students and which may make it difficult to generalize to all consumers. (Agnes Andersson, Erica Hallberg and Caroline Ingfors, 2016). But, Sproles and Kendall argued that the sample group was representative of the population as they have similar characteristics to other consumers in the marketplace such as consciousness of their consumption experiences and consumption eagerness. (Agnes Andersson, Erica Hallberg and Caroline Ingfors, 2016) However, Sproles and Kendall encouraged future research studies to use the framework with more diverse sample to proof the validity of the CSI.

In this project we will be focusing in the study of two factors: Novelty-Fashion Consciousness and Recreational, Hedonistic Shopping Consciousness. The first consumer style, Novelty-Fashion Consciousness concerns those consumers who want new and innovative products, these consumers are excited and obtain pleasure from shopping and from brand variety. The second consumer style we are going to focus on is Recreational, Hedonistic Shopping Consciousness which concerns those consumers who are entertained while shopping. (Sproles and Kendall, 1986)

We want to study the potential influence these factors may have had in consumer behaviors before and after Covid-19. These factors will allow us to understand if individual traits have impacted the behaviors individuals have had during these pandemic period.

4.4 INFLUENCE OF CULTURE

Culture is a belief about ethics, behaviors and values that are held by a majority of people within a society. (Gantt, 2020). Culture can be individualistic or collective and depending on where you are born a person will have different beliefs and will behave accordingly. Culture plays an essential role in the behavior of citizens and it is essential to recognize the similarities and differences between collectivist and individualist countries to understand their behavioral decisions.

The terms individualism and collectivism were first introduced by the Greek Harry Triandis in 1992. He used this terms in his research "The analysis of subjective culture". Later, in 1980 Geert Hofstede developed the first formal definition of these concepts by including them as one of the factors of his five cultural dimensions study. In 1995, Triandis reviewed

Hofstede’s work and carried another study that attributed four features of individualism and collectivism: the “self” concept; personal goals versus in-groups’ goals; the reliance of social behavior on personal attitude or norms and perceived duties and obligations; the importance of relationships (Mooij and Hofstede, 2011) (Triandis et al, 1995)

Individualistic cultures are characterized for focusing in how they behave and what they believe. This type of culture enhances the belief that a person’s life belongs to that person and should act consequently to that. People tend to value being extroverted and is more likely to find people who are open. Consequently, people seek more social interactions and we can expect them to be assertive and have an outspoken behavior. Some countries that fall under these characteristics include; the United States, Germany, Ireland, South Africa, and Australia.

Collective cultures are those in which a person’s first obligation must be society, and if necessary they should sacrifice their needs and desires to satisfy the general needs. In this cultures rules of thought and behavior tend to be stricter. People tend to have introverted personalities and usually have behaviors that fall in line with what the majority of people wants. They are also good at understanding other people’s perspectives and may not enjoy as much socializing.

Due to these characteristics the interpretations of words and situations are regarded differently depending on whether it is an individualistic culture or a collective one. An example of this is the characteristic of being “good” that carries a different meaning in both types of cultures. In individualistic cultures, a person is considered good if they are independent, assertive, self-reliant and are perceived as strong. Instead, in collectivist cultures a person will be regarded as good if is dependable, generous, self-sacrificing and help others.

Geer Hofstede developed the Hofstede’s Cultural Dimensions Theory in 1980. (Corporate Finance Institute, 2020) . This theory establishes a framework that is used to understand the differences between cultures and how they determine the way people behave across different cultures, and especially on a business setting. (Corporate Finance Institute, 2020) The study Hofstede carried aimed to determine the dimensions in which culture varies, and he identified six: Power Distance Index, Collectivism vs. Individualism, Uncertainty Avoidance Index, Femininity vs. Masculinity, Short-Term vs. Long-Term Orientation, Restraint vs. Indulgence

By using Hofstede's framework, we can conclude that individualist cultures score high in power distance, embracing hierarchy and accepting inequity and showing respect for authority. That are uncomfortable with uncertainty, that scores high on masculinity and that power plays an important role. There are distinct gender roles, concentrated in material achievements and building wealth. They also are long-term oriented and will give up short-term success or gratification to achieve long lasting success. They value persistence, perseverance and achieving growth. In Individualistic countries satisfaction is perceived as something positive and enjoying life and having fun is accepted.

Collective cultures are characterized by scoring low in power distance, encouraging decentralized organizational structures and value power distribution. They tend to be comfortable with uncertainty and the unknown is not feared. Collective cultures score high on femininity enhancing nurturing and are concerned with life quality. They also have a short-term orientation, focus in the present or short-term, and encourage current gratification and success. These countries are also very respectful with tradition and restraint individual desires and gratification of needs by following social norms.

4.5 INFLUENCE OF CULTURE IN CONSUMER BEHAVIOR

Consumer behavior is bounded in many aspects by culture. Hence, consumers' decision making will vary depending on the culture consumers were brought up in and where they currently live in. Multiple studies and books reaffirm under this idea of cultural characteristics strongly influencing consumers' purchasing choices.

In the book “Marketing Across Cultures” Julie Anne Lee and Jean Claude Usunier, the authors, conclude that the factor individualism and collectivism is the most worth-considering factor within Hofstede’s cultural dimensions. (Usunier and Lee, 2005)

In a study Valdiney V. Gouveia carried in 2000 where he studied the Hofstede and Schwartz’s models for classifying individualism at the cultural level and their relationship to macro-social and macro-economic variables he concluded that individualism/collectivism is the most relevant dimension used to compare cultures. (Gouveia, 2000)

Consequently, understanding the role played by individualism and collectivism will allow companies determine their marketing strategies for expanding their activities overseas. When a company tries to expand to international markets they have to carry extensive research and ensure they have a strong knowledge of their culture and their values. But, being an individualistic culture or collectivism is only party of a classification as not all countries share all characteristics and values and there are big differences within each group.

Numerous studies have been carried and depending on which countries were under study different conclusions have been made. Yie leng Chang and Delane Botelho wrote in 2010 an empirical article that investigated the relationship between culture and consumer decision-making styles in the purchase of cell phones. After their investigation they concluded that individualistic purchases were more novelty-oriented. Another research was made in 2005 by Cheryl Leo, Rebekah Russell-Bennett and Charmine Hartel on cross-cultural differences in consumer decision-making styles. In this article they conclude that collectivist countries are the ones which are more innovation-oriented.

We can observe that there are variations in the conclusions of these studies. The difference lies on which countries were under study. On the first study, the participants of the sample were from Brazil, the United States and Japan. Instead for the second article, the countries that were being studied were Singapore and Australia. Although Brazil, Japan and Singapore are all considered collectivist countries they have many difference in values among them. And, it happens the same with United States and Australia's values.

Culture influences greatly how a population responds to extreme situations. Taking into account Hofstede's dimensions we could expect different behavioral changes within collectivist and individualist countries due to the Covid-19 pandemic.

Collectivist countries could have suffered from having lost quality life. Also, as they are short-term oriented they may have experience frustration because they prefer short-term success and instant gratification and that is something that during the pandemic was not possible. However, collectivist countries have a high tolerance for uncertainty and this is something essential for a situation like Covid-19 has been an unprecedented situation that none one knew how to act upon.

We could expect that individualist countries will have struggled with the uncertainty around the pandemic. They don't tolerate well ambiguity and the unknown is not appreciated. In terms of success, they will not have experience any changes as long-term success and gratification is preferred over short-term. They may have had issues with all the restrictions that were implemented as they give more importance to personal goals, and the individual over the collective.

Cultural variance across countries is crucial for understanding the likelihood of a society to the Covid-19 outbreak. And, it's also essential for understanding it's spread and mitigation. Overall, these situations will have an influence in their behavioral attitudes and will be reflected upon their shopping habits and attitude towards life.

Due to their cultural values and the importance given to the individual over the society we expect individualistic countries to be more susceptible to Covid-19 outbreaks and to have more issues adhering to epidemic prevention measures. Citizens of individualistic countries will be more focused on individual interests over the common good.

5. CHANGES IN CONSUMER BEHAVIOR POST-COVID

5.1 TRENDS

5.1.1 SHIFTS TOWARDS E-COMMERCE

Before COVID-19 e-commerce was growing consistently and was acquiring a large share of retail sales. In the US online sales have been able to grow every year between 13% and 18% each year while offline sales have not grown more than 4% since 2005. **(Digital Commerce 360's, 2020)**. When the pandemic began the ecommerce was well developed and RIPE for success.

The thrive of ecommerce in 2020 is mainly explained fostered because of the fear of consumers of contracting the coronavirus while being surrounded by people and because of the store closures.

Ecommerce sales reached the highest annual sales growth of any year, hitting $791.70 billion in 2020. The Commerce Department also reported that the year-over-year jump was of 32.4% which more than double of what was achieved in 2019. **(Digital Commerce 360's, 2020)** In terms of penetration there was nearly a four percentage-point annual gain. Without the pandemic's impact that level was not expected to be reached until 2022.

Offline retail had a 2.1% year-over-year gain in 2020. Although it is surprising that it was capable to grow during a pandemic the growth is attributed to the change of budgets. Some consumers switched the amount of money they designated to travel and entertainment and began using it on other products purchases.

Ecommerce grew differently depending on categories and results show how the pandemic affected our lives. The merchandise categories that advanced the most were sales of food, toys, electronics, hardware and sporting goods.

Sales of food and grocery retailers grew 100% year over year as stay-at-home recommendations were made. 17% of consumers began using curbside pickup and delivery for the first time during the pandemic according to a survey run by Bizrate Insight in May 2020. Toys and hobbies were the second category that grew the most as they provided shoppers the possibility of purchasing products that could entertain them during the long lockdown. Gamestop's online sales, one of the world largest retail gaming and trade-in destination, grew more than 500% in 2020 and it is estimated that it crossed $1 billion sales (Gilbert, 2020)

Sporting goods is one of the categories that grew the most. As gyms shut down, consumers began purchasing exercise equipment and other items for outdoor activities. Also, in many countries' citizens were only allowed to leave their houses to practice sports and this potentiated the sporting goods sales'. There was also a shift in the citizens minds into more healthy lifestyles. This shift had been growing in the past years but boosted with the surge of the covid health crisis.

Jewelry, apparel, flowers and automotive parts growth was slower in the overall market. These categories are formed by nonessential items that are not directly correlated with the change in consumer's activities and habits during the pandemic. **(Digital Commerce 360's, 2020)**

Consumer's shift to ecommerce is expected to last even after the pandemic ends. Shoppers feel comfortable purchasing some categories of products online and it saves them money. But, in person shopping will not disappear as consumers still make some of their purchases offline and prefer to buy certain products themselves. Omnichannel features is what will be key for future years as it provides consumers with the option of choosing what best matches their preferences.

E-commerce represents the trend that has had the greatest impact and that it's expected to have the greatest permanence. Therefore, we will focus our empirical study in finding out how consumer behavior has changed in terms of online purchases while being influenced by the factors culture and consumer style.

5.1.2 CHANGES IN BUDGET

From previous crisis it was expected that the wealth gap would become wider. Both extremes of the market have experienced an increase in demand caused by the change in budget of consumers. Those consumers that have experiences mass job losses or that have experience decreases in their wages have increased their spending on cheaper products. Instead, rich consumers have found themselves with spare discretionary income which they had nowhere to spend as their spending possibilities were limited. Consequently, these consumers have had to find other ways of spending their money and they have increased their spending on top end market products such luxury articles.

5.1.3 Back-to-basics

Mistrust is one of the words that defines consumers attitude during the pandemic. During the beginning of lockdowns, they begun to see how start-ups and medium retailers were suffering from scarcity issues as they were unable to guarantee resources. Consequently, consumers decided to return to those brands which provided them the confidence they were urging during these unprecedented times. Brands that had been known and settle for years became the best allies for consumers. At the same time, well established brands began to work with multinationals that could guarantee scale productions and supply chain during the crisis. Consumers preferences have swift from the pre-covid growing start-ups to the old and trusty brands they have known for decades.

Demand has experienced huge swings as a consequence to the imposed changes in lifestyle. Consumer goods companies typically experienced incremental shits but are currently facing growth rates that range from numbers never reached before. According to Alan Jope, CEO of Unilever, “most categories in which the group operates normally see growth rates of between 2 and 5 per cent. Now we’re seeing growth rates that range from minus 40 to plus 25 over the last couple of quarters,” (Evans, 2020)

In the beginning even, renown companies experienced a drop, but how after the initial adjustments pandemic trends have favored the old trusty brands. Categories that were considered to be dead are beginning to reborn as consumers have shifted their preferences as a consequence of the established restrictions and because of the fear of what could come next. An example of this is the switch from fresh foods to frozen foods which have experience an exponential growth as families feared they could end up with not enough resources to live off.

5.2 CHANGES IN PATTERNS

The change Covid-19 has made in consumers has served many to reconsider their own consumption. There has been a rise in local shopping, a thrive to limit food waste, to shop more sustainably and to be more cost conscious.

One of the first changes we can identify is in terms of place of purchase. We can observe an increase in affluence in local stores and a decrease in big stores. Consumers have shifted their places of purchase preferences and have switched where they buy some products from. They have begun buying more in community stores as a way of showing support for small businesses and because of the convenience these stores offer. Local stores many times offer more security sensation to consumers as they have smaller capacity limitations and tend to be closely managed.

According to research made my Accenture in 2020 citizens perceived small businesses as local treasures, and the fear they won’t survive has made their efforts of support rise. Instead, big businesses are perceived as the ones that can help solve many of the major problems but that could also take advantage and make a profit out of the situation. Another reason behind this shift are the mobility limitations governments have established. As there have been partial lockdowns citizens have had to find stores that can supply them with the products they need within the distances they are allowed to move on and in many cases, malls were outside this radius.

In terms of method of purchase, we can also identify major changes. E-commerce has become prevalent in many sectors and pick-up options have also increased. During the early months of the pandemic people begun adapting to making their purchases online as it was in many cases, the only way they had to buy discretionary products. This change began before the pandemic did, but its scope was much smaller than what has been reached. The levels reached are well above the growth that was expected for the years 2020 and 2021. According to Accenture and based on an intervention at Deutsche Bank Access Global Consumer Conference, E-commerce has experienced 10 years growth in a matter of a few months.

Finally, the items purchased have experienced one of the biggest swifts. There has been a change in the pattern’s stores had previously established as consumers habits have changed. There has been a rise in those items that could be used in one’s own household and that offered entertainment, and a decline in those that were more related with beauty or with social entertainment. With the swift into more healthy and fit lifestyles sporting items have experienced a growth. There has also been a change within which grocery items were purchased, baking products such as flour have experienced an increase as more consumers begun baking more during lockdown periods.

These changes in items purchased has affected consumers, but also suppliers. They have had to adjust their supply chain to satisfy the consumers current needs which are very different from what they were pre-pandemic. This imbalance among the supply and demand curve at the beginning of the pandemic caused shortages of products. These shortages caused another behavioral change that was tightly related to the items purchased pattern, the quantity each consumer bought. As consumer were scared they will run out of food or other essential products such as toilet paper they began acquiring big amount of non-perishable good causing an even bigger imbalance. Grocery stores, such as Walmart, established limitations in the quantities purchased to ensure provisions for everyone while the imbalance was corrected.

5.3 PERMANENCE OF BEHAVIORAL CHANGES

Some of the identified changes in consumer behavior are expected to be permanent while others are expected to disappear once the pandemic ends or once normality approaches. The duration of these changes depends on their origin. Some of them anticipated and were expected to occur in the next years. However, there were others that occurred as a mere consequence of the current situation, to better adapt, or to be able to comply with regulations.

Accenture has been conducting a research that aims to study the habits formed. This research, Covid-19 Consumer Pulse Research, is conducted every two weeks since the pandemic began in March 2020 and has concluded that certain habits will endure even once the crisis is over.

E-commerce is one of the changes that is expected to last even once the pandemic is over. One of the reasons behind this expectation is that even at places where retail stores had reopened, and markets were beginning to stabilize consumers have continued shopping online. Furthermore, omnichannel services such as contactless payment and in-app ordering are likely to continue too.

5.4 CONSUMER BEHAVIOR CHANGES AND IMPACT

Covid-19 has changed consumer behavior now and forever. Countries are now beginning to slowly try to recover from a crisis that is still ongoing, and economies are starting to reopen. But, consumers have been self-isolated for months and the uncertainty they have lived has changed the way they behave. One of the most common mistakes companies are making falls in assuming that consumer behavior and interests will be similar to how it was pre-pandemic.

The new consumer behavior affects all spheres of life, from how they work to how they shop to how they interact with other people or to how they entertain. **(Sneader and Singhal, 2021)**. These shifts are crucial to identify as they have critical implications retailers must consider. Some of these changes have already been formed and identified, but there are still others which are on the process. “Companies have the opportunity of identifying them and shaping their strategies to fit the “Next Normal””. **(Sneader and Singhal, 2021)**

Consumer lives have been transformed by Covid-19 and an adoption of digital change forces has been required: economic downturn, preference shifts, and digital acceleration.
Behavior changes tend not to be linear and their stickiness of recent changes will depend on the satisfaction consumers are acquiring. However, currently the scope of changes is still undetermined as it is a crisis that is still ongoing and that is still shaping the way consumers behave.

6. EMPIRICAL STUDY

6.1 METHOD

An online survey has been created to be distributed among possible participants to gather the information we need to answer our research questions. As we wanted to reach people from various countries an online survey was the best option as it allowed us to quickly reach big pools of people and results could quickly be collected. Once data is collected it will be codified into an excel spreadsheet and afterwards it will be analyzed using the statistics program Jamovi. Then the results will be analyzed to get a better understanding and be able to answer the research questions, fulfill the objectives and draw up our conclusions.

6.2 OBJECTIVE

The general objective of the empirical study is to analyze the consumer behavior changes that have occurred as a consequence of the extraordinary event that Covid-19 has been. After studying the trends that have been arising since the pandemic began the survey is intended to focus on these behavioral changes regarding online purchases. E-commerce has proved to be one of the most relevant changes during this pandemic period and is also a trend that has quickly evolved and has more potential to continue even once the crisis ceases.

The survey also aims to study the distribution of these changes depending on the different sectors both pre-covid and post-covid. The survey also is intended to study if the factor culture plays a role in the differences in online shopping among categories and if there are any differences among consumer styles.

The survey was distributed to population of all ages. However, it was unequally distributed as the population that was especially of interest for the study were those that ranged from 18-34 years. People in this ranges are considered to be part of the Millennial Generation who are considered “digital pioneers” (The Annie E. Casey Foundation, 2021) and Generation Z who were “born into a world of peak technological innovation” (The Annie E. Casey Foundation, 2021). Both of this generations represent interesting populations to study and understand if Covid-19 has influenced online purchases as they have born in the internet era. The other two generations that were also under study were Baby Boomers and Generation X as they have both born in an analogue area and are still adapting to this new era.

The survey intends to provide insights into the consumer behavior changes that have been identified as a consequence of Covid-19 and aims to provide relevant information for solutions and strategies that companies can begin to implement to maintain their consumers. It also aims to motivate and be a source for future studies in the field.

6.3 RESEARCH TARGET: YOUNG AND MID-AGE PEOPLE

This study focuses in analyzing the behavioral changes that have surged since March 2020. Studying the entire population would have required a very broad sample and drawing conclusions would have been very complicated as each generation has different characteristics which could have been difficult to link with the identified changes. Therefore, those that were between 18-35 are the ones we have focused our study in although we have also studied the ranges until 36-55. Our study is not focused on people from a particular country, but rather from different areas of the world as one of our main objectives is to study the influence of culture.

Millennials are those consumers who were born in between the early 1980s and the mid 1990s and technology is part of their day-to-day. This generation is also known as Generation Y and has witnessed the “arrival of technological growth and development”. (Indeed Editorial Team, 2021). This generation is characterized for being intuitive and quickly acquiring knowledge of technology and for being “open and adaptive to change” (Indeed Editorial

Team, 2021) . They were born in an analogue world and had to learn to live into a digital world. (Iberdrola)

Generation Z is made of those consumers that were born after 1995 until early 2010s who are colloquially known as zoomers. (Wikipedia Contributors, 2021) This generation is characterized by being diverse both racially and ethnically, and this is one of the main things we were looking for with our study. Gen Z's are considered "digital natives" as they were born into a world "where information was immediately accessible and social media increasingly ubiquitous" (I, 2020). Gen Z consumers rely on technology to make their informed purchasing decisions and tend to evaluate all the possible options before choosing one.

Both of these generations represent an interesting population to study as they are both tightly linked with technology. Millenials have had to learn to live in a digital world and Generation Z offers the diversity required for a study like the one we are conducting. Another interesting characteristic about these two generations is that Covid-19 is the first health-related crisis they have lived as they have not lived through wars or similar catastrophic events. Baby Boomers and Generation X instead, are adapting to the constant use of internet and the Coronavirus isn't the first major crisis they live as they have face other catastrophic events such as The Cold War. (Gonzalez, 2017)

6.4 RESEARCH QUESTIONS

With the intention of completing the established objectives for the empirical study which is focused on studying the consumer behavior changes that are linked to the Covid-19 crisis, and especially considering certain factors such as; culture, consumer style, and type of sector three questions have been analyzed.

The first thing we want to study are the differences in online shopping among four different categories. We want to see if the behavior is similar between sectors of if instead there are certain sectors whose online purchases have substantially grown or shrunk.

Secondly, we want to find out whether culture influences the behavioral changes that consumers have experienced due to the Covid-19 situation. Particularly, we want to know if there are any cultural differences in terms of the evolution of online purchases depending on the different categories.

Finally, we want to study whether consuming style influences in the adoption of these behavioral changes. Particularly, we want to know if those consumers that are classified under the Sproles and Kendall (1986) CSI as Novelty-Fashion Conscious and those that are as Recreational, Hedonistic Shopping Conscious have changed their shopping habits and patterns or if they have remained the same even during a pandemic.

6.5 SURVEY

To reach the objectives mentioned before and to find answers to the investigation questions a surveyed has been created. The survey has been distributed to participants through different group chats of Whatsapp and Imessage. The groups in which the survey was shared have been chosen because they offered cultural variety which was one of the main objectives of the study. It has also been shared in group chats that offered variety of ages, although more limited. To create the survey, Google Forms has been used as it is a platform that allows to gather information and analyze it both graphically and numerically.

We have decided to use a Survey to gather information because it is the tool that allows for a quick distribution among participants even when they are at different countries, and that allows for results to be received instantly. Doing a survey also allows you to include all the types of questions that could be relevant for our study and it’s easy to analyze the findings.

The platforms that were chosen to share the survey, Whatsapp and Imessage, are the platforms that people that were the object of study use more. Whatsapp is used worldwide and in places such as Mediterranean Europe and South/Central America, areas where we are focusing, is the most used. Likewise, iMessage is the app most people in North America use which is the other area we are focusing on.

The survey was shared with people of all ages but unequally as we had our focus on people ranging 18-35. Accordingly, there was a smaller participation of the age groups 36-66 and inexistent of those over 66.

The survey is composed of 16 questions that include multiple choice questions, yes/no questions, scale questions, and likert scales. The complete survey can be found at the end of this study, in the annex.

The first two questions each include **five different affirmations that aim to determine the type of consumer style** each participant has. These affirmations had to be answered with a likert scale that rated each of them from a 1 to 5.

The next two questions are focused on **online shopping and how did participants relate to this type of shopping pre-pandemic**. These questions are tightly related with questions 11 and 12 that ask the same thing but after Covid-19. These questions aim to study if there has been an evolution in the attractiveness and adoption of online shopping.

The next question is formed by six affirmations. These affirmations cover different **aspects of shopping habits and consumer behavior** and aim to study what are some of the factors that are important for consumers such as value, price, or safety.

The following four questions are related to Covid-19. These questions provide information about **what relationship participants have had with Covid-19** as this may have influenced the behavioral changes they may have experienced. Establishing whether someone has suffered from Covid-19, whether they have had symptoms, or if they have contact with high-risk persons can determine the way they consume.

The next question is related to the **safety consumers currently feel while going shopping**. Fear is one of the things that has grew among population during the first months of the pandemic and we wanted to study whether this fear had decreased or if it was constant.

The following two questions analyzed what the **home country and residence country of each participant is**. Culture is one of the factors that is being studied and knowing the origin of participants is crucial for understanding the way they behave especially depending on whether they come from individualist or collective countries.

The last two questions are related to **age and level of studies**. These questions have as objective to be able to relate the identified behavioral changes with the different profiles of consumers.

The survey was open for 8 days and there was a participation of 150 people although only 140 completed all the questions. The information about the remaining 10 people who did not complete all the questions was deleted as there were missing answers to questions without which we could not draw out conclusions properly. Out of the 16 questions, the analysis of results has only been made on 10 of them as they were the ones that provided statistically significant information for the study.

6.6 JAMOVI STATISTICS

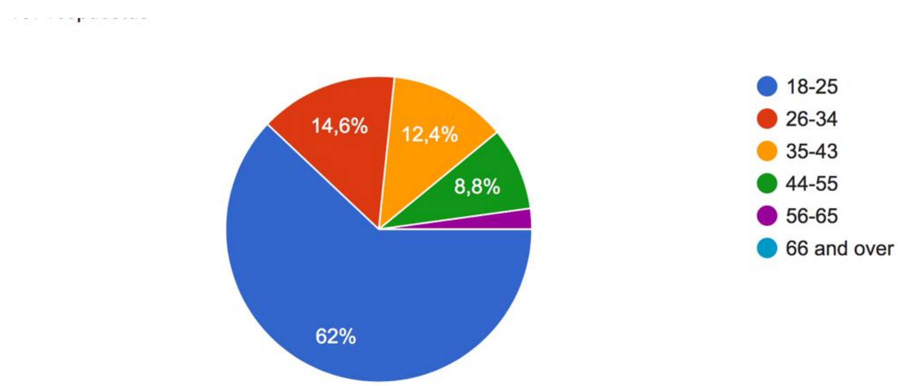
To measure the results obtained in the survey, the statistical spreadsheet Jamovi has been used. The gathered information has been added to the program, and different combinations have been made to obtain all the relevant data for the study and analysis. Correlation matrix have been created to establish the existing relationships among variables and be able to study them. Charts that include descriptive statistics have been created to analyze the survey variables, particularly the data related to the different shopping categories. The statistical test we have used is the Analysis of Variance (ANOVA) to analyze the differences between the means of groups. With Jamovi, we have also created different graphs in the form of plots that offer visual representations of the results.

The analysis made has been descriptive and univariate for calculating the means and standard deviations, and explicative of two types; correlations and ANOVA. The P-value that has been used to determine the statistically significant data is 0.05. This is, the data that had P-values below 0.05 have been categorized as statistically significant.

In the following section a detailed analysis of the results obtained by Jamovi will be made.

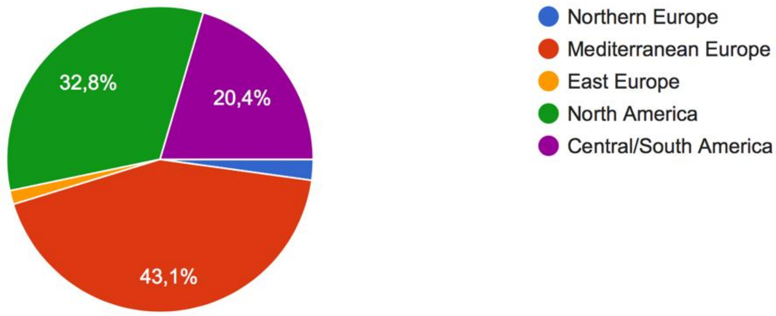
6.7 SAMPLE DESCRIPTION

The survey has been answered by 140 respondents. In this sample we have obtained the highest participation percentage in the **age range** of 18-25 reaching a 62%. The second one has been 26-34 with 14.6%, then 35-43 with 12.4%, 44-55 with 8.8%, 56-65 with 2.2% and no representation of 66 and over. The distribution of participation is in line with the people that has received the survey and that was expected to answer the question for our objectives. The average age of respondents is between 18-25 years.



Graph 1: Distribution of participants by age

In terms of **home country**, the highest representation comes from Mediterranean Europe with a 43.1%. North Americans represent the 32.8%, and Central/South America represent 20.4%. North Europeans and East Europeans have very small representations, so we have decided to not use them for the study. This data differs with the numbers acquired from **residence country**, but the big three populations remain the same. North America is the part of the world with a highest representation accounting for 40%, Mediterranean Europe has a 38.5% and Central/South America a 17%. We can observe how some of the surveyed populations have moved from their home countries and have established their residence at others, especially North America.



Graph 2: Distribution of participants by home country

Likelihood of making purchases online has been measured both **pre-covid** and **post-covid**. Pre-covid 51.9% of respondents recognized that they only did less than 25% of their purchases online, 29.6% between 26% and 50%, 11.1% between 51% and 75%, and, only 7.4% did over 75%. In contrast, post-covid these numbers have changed and a bigger proportion of respondents have increased their likelihood of making purchases online. Post-covid, only 13.3% would do less than 25% of their purchases online, 39.3% would do between 26% and 50%, 30.4% would do between 51% and 75%, 17% would do over 75%.

Another variable that is measured is the **likelihood from 1 to 5 that respondents will make their purchases online depending on different sectors**. We wanted to see if the sector influenced over the changes in behavior and the increase of e-commerce.

From the people that have been surveyed, 94.9% have college-level **education** and only 5.1% are left with a high school education. 51.5% have a graduate level, 35.3% have an undergraduate degree, and 8.1% have a Phd.

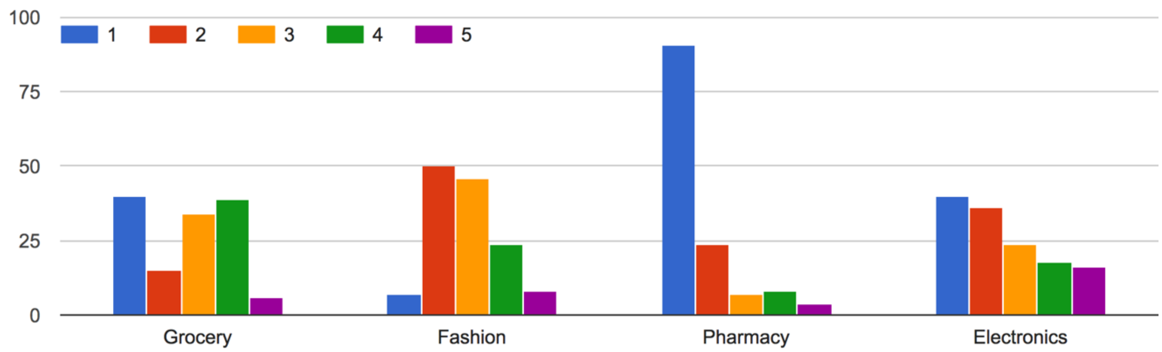
Finally, the concept of **fear of contracting Covid-19 while shopping** is analyzed. We can observe how 30.6% of participants have a fear of only 1 out of 10 and how only 26.5% have a fear of 5 or over.

6.8 RESULTS

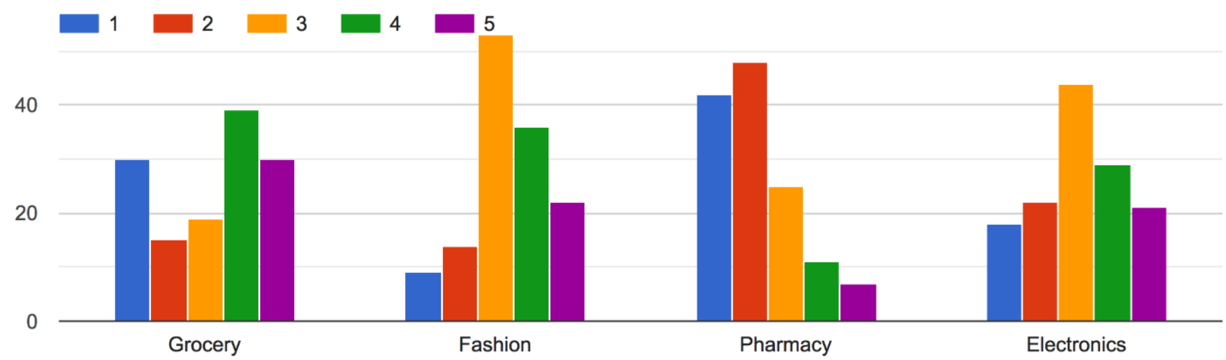
We are going to organize the results according to the research objectives.

6.8.1. Descriptive and Explicative Analysis

The first objective is related to explaining **the differences in online shopping among categories**. We have created a variable that shows the difference in each category between online purchases today and before Covid-19. We can observe how online purchases in all sectors have grown as a consequence of Covid-19. The sector that has received more punctuations of 5 is grocery, followed by fashion. In third place are electronics and finally pharmacy. The first graph represents the likelihood of using an online platform to do shopping depending on different categories before Covid-19. Likewise, the second graph represent the likelihood but after Covid-19.



Graph 3: Distribution of likelihood of using an online platform to do shopping depending on different categories before Covid-19



Graph 4: Distribution of likelihood of using an online platform to do shopping depending on different categories after Covid-19

In the table below, we can observe how means are very similar among shopping categories and how the difference among all sector is of 0.777. In terms of the standard deviation they have all gotten similar values and rank from 0.866 to 1.13. Differences are very similar between categories and we can observe a homogeneous behavior between sectors. Those that have decided to purchase online have decided to do so in all categories.

	Grocery Dif	*Fashion Dif*	*Pharmacy Dif*	*Electronics Dif*	*All Purchases Dif*
Mean	0.532	0.568	0.626	0.597	0.777
Standard Deviation	1.13	0.948	1.04	0.866	0.868

Table 1: Descriptive statistics of shopping categories

We have also created a correlation matrix to study the relationship between all shopping categories and we have discovered that differences are very similar between categories. This means that the changes have occurred in all categories. We can observe a homogeneous behavior between sectors which means that those that have decided to switch to online purchasing have decided to do so in all categories. However, we can observe the highest correlations between fashion and electronics and between pharmacy and electronics which means that they are the ones that have the strongest relationships. We can also observe in the matrix how all categories correlation is significative because their Pvalues are below the 0.05 benchmark that we had established.

		Grocery_DIf	Fashion_Dif	Pharmacy_Dif	Electronics_DIf	All purchases_Dif
Grocery_DIf	Pearson's r	—				
	p-value	—				
Fashion_Dif	Pearson's r	0.270	—			
	p-value	0.001	—			
Pharmacy_Dif	Pearson's r	0.458	0.333	—		
	p-value	< .001	< .001	—		
Electronics_DIf	Pearson's r	0.391	0.519	0.497	—	
	p-value	< .001	< .001	< .001	—	
All purchases_Dif	Pearson's r	0.336	0.410	0.275	0.313	—
	p-value	< .001	< .001	0.001	< .001	—

Table 2: Correlation matrix of shopping categories

Our second objective consists of studying **whether culture is a relevant factor and if there are any cultural differences in the online purchases' patterns**. To do so, we have conducted an analysis by countries. We have first created a one-way ANOVA and afterwards a group descriptive chart. We can observe in table 3 how there are significant differences in all categories. The P-values obtained in the four shopping categories are below the significant level of 5% which makes them statistically significant for our study. This means that there are statistically significant differences in all categories between the three countries.

	F	df1	df2	P
Grocery_DIf	3.72	2	67.1	0.029
Fashion_Dif	7.14	2	73.2	0.001
Pharmacy_Dif	10.46	2	67.0	< .001
Electronics_DIf	14.46	2	80.5	< .001

Table 3: One-Way ANOVA of countries and different shopping categories

In the group descriptives we can observe how in general Mediterranean Europe has changes less their shopping habits than the other countries. These variations are more significant or less depending on the shopping category that is being studied.

In terms of online grocery shopping, North America is the continent that has experienced the less significant change as it has the lowest standard deviation in comparison to Mediterranean Europe and Central/South America. This makes sense as in North America by 2019, 48% of grocery purchasers bought at least some of their grocery products online and it was expected that by 2022 70% of grocery purchases would be made online (Ross, 2019)

When it comes to fashion differences the results obtained by Mediterranean Europe and Central/ South America are very similar, while those obtained by North America are bigger. North America has the highest mean, of 0.957 and the lowest standard deviation of 0.788. We can relate these results to the fact the Mediterranean Europeans and Central/ South American tend to be more traditional and enjoy more the shopping process.

The pharmacy sector is one of the categories that represents more differences between countries and this may be related to the way the pandemic has been lived in different areas. Mediterranean Europe has the lowest mean, 0.190 while Central/ South America has the highest of 1.233. In terms of the standard deviation North America has the lowest, 0.826 and instead Mediterranean Europe and Central/ South America have similar ones; 1.051 and 1.223 respectively.

Finally, electronics is a sector in which we can find more differences among countries. In Mediterranean Europe and Central/ South America we can barely see any differences, with means of 0.328 and 0.457 respectively while North America has a mean of 1.109. We had previously identified this change in the literature review as sales of electronics had grown 61.5% during 2020 (Digital Commerce 360's, 2020)

	Home Country	**Mean**	**SD**
Grocery_DIf	Med. Euro	0.276	1.136
	N. America	0.761	0.766
	C-S América	0.833	1.440
Fashion_Dif	Med. Euro	0.310	0.995
	N. America	0.957	0.788
	C-S América	0.500	0.974
Pharmacy_Dif	Med. Euro	0.190	1.051
	N. America	0.826	0.643
	C-S América	1.233	1.223
Electronics_DIf	Med. Euro	0.328	0.906
	N. America	1.109	0.706
	C-S América	0.467	0.629

Table 4: Group descriptives

The third objective lies on studying **whether there are any differences among different consumer styles**. We have decided to focus in Novelty-Fashion Consciousness and Recreational, Hedonistic Shopping Consciousness. We have identified that those consumers that are more Novelty-Fashion Conscious tend to have changed less the purchasing channel used. Out of the four categories we have only identified significant changes in Fashion and Electronics and only in Novelty-Fashion Conscious consumers. These consumers want to follow fashions and have the latest products but prefer to continue going to physical stores rather than doing their purchases online.

		Fashion Conciousness	Hedonistic
Fashion_Dif	Pearson's r	-0.308	-0.099
	p-value	< .001	0.244
Electronics_DIf	Pearson's r	-0.289	0.013
	p-value	< .001	0.883

Table 5: Correlation matrix of styles of consumers and different shopping categories

7. CONCLUSIONS

This study has been carried out with the intention of finding answers to the research questions and to fulfill the objectives established. A combination of research and an empirical study has been necessary to find the required information to succeed in the study.

Our objective can be divided in two: first how does culture influence in consumer behavior pre-covid and post-covid. And, secondly how can aspects about the Sprouse and Kendall CSI influence, focusing on Recreational Shopping and Novelty Fashion styles.

The main conclusion we can draw from this investigation is that Covid-19 has a transformational role and that the world we will have after coronavirus will not be the same as the one we knew before the coronavirus. The behavioral changes that have surged as a consequence of Covid-19 will not disappear as consumers have been changed.

Another important thing is that in order to understand our long-term resilience to the on-going crisis we will have to be in a completely normal and stabilized position, and not just partially. We need to be fully recovered from the pandemic and its limitations to be able to look back and understand how population has changed and impacts are wide and very complex to understand while the crisis is still going on.

Covid-19 has accelerated the adoption of behaviors that were previously gaining traction, such as the digitalization of shopping (Puttaiah, Raverkar and Avramakis, 2021) and has driven the rise of others that were unexpected such as the back-to-basics. But, consumer behavior has remained unpredictable as changes have been constant and in many occasions complicated to identify.

We have also discovered that culture plays a more significant role than consumer style does. This falls in line with the predictions we had at after having done the literature review as culture bundles consumer behavior and influences how consumers respond to uncertain and extreme situations like Covid-19 has been.

The relationships between individualistic countries and collective countries and novel products is still uncertain. This falls in line with the conclusions Yie leng Chang and Delane Botelho, (2010) and Cheryl Leo, Rebekah Russell-Bennett and Charmine Hartel (2005)made on their studies. The difference will depend on the countries that are being studied.

Growth in online purchases has been homogeneous in all sectors. This is caused by the fact that consumers have found in online shopping the opportunity to continue doing their purchases even when there were limitations to stay at home. They have had the opportunity of discovering a method of shopping that else wise some would have decided not to use. They have been left with online shopping as the only possibility to buy certain products and they have had to adapt to it. However, even when things have improved and in person shopping is possible a big portion of the population still prefers to shop online because it has provided them commodity, its time saving, and it satisfies their needs and wants quickly.

In terms of culture, online purchases have grown at different levels depending on the shopping categories. Those continents, such as North America, that before Covid-19 had already expanded a lot in online grocery shopping have not experience as big of a change as others such as Mediterranean Europe or Central and South America. These last two areas did not have a high affluence of online grocery shopping and therefor, Covid-19 has been the accelerator that has driven their sales.

Consumer style has also proved to be relevant as those consumers that tend to go shopping for entertainment or for whom style, and fashion is important have remained loyal to in person shopping. This is the case of Mediterranean Europe and Central/South America who have a traditional consumer style and where online purchases have not grown as much as

North America's. Furthermore, consumer style has also proved to influence in terms of the type of product that is purchased. Novelty-fashion conscious consumers will stay loyal and will continue to make their purchases of fashion and electronics in person rather than online.

The Covid-19 has served us to realize that we were unprepared for a pandemic and the failure to be ready for global pandemics has cost millions of lives and has affected immensely the world economy.

7.1 IMPLICATIONS

The results obtained in this study have many implications, and especially for businesses. Identifying behavioral changes constitutes one of the best competitive advantage a company can have. If a company knows what their customers want, how they wanted and when they wanted they can quickly tackle their desires. Nowadays, customers tend to want things quickly and want brands that can satisfy their needs quickly as they tend to change rapidly. So, having the ability to pivot quickly will become the greatest advantage.

Consequently, companies should run surveys and analysis to understand what motivates their customers purchases. These analyses should aim to also capture information about what is important for them in terms of values and establish patterns. They should also try to identify the styles among their consumers as we have found that this can be important depending on the shopping category.

After completing the literature review and analyzing the data obtained, another implication that businesses should take into account is the role E-commerce plays, and more importantly will continue to play in the upcoming years. (Accenture, 2020). The switch from traditional purchasing channels to E-commerce represents the most important behavioral change that should be considered as people have gotten used to it and don't seem to be willing to go back to how it was before. Also, the increase in E-commerce was already happening pre-covid and Covid-19 was the impulse it needed to completely thrive.

Most companies established online platforms during the pandemic and should now enhance the existing tools as they should not be considered temporary tools but rather a permanent channel that will have constant high affluences. Accordingly, companies should reconsider their investing options and improve their IT equipment to ensure they can satisfy their customers desires.

Finally, culture should be considered in terms of how brands should expect purchases to be. During the analysis of the data obtained we have observed how certain shopping categories have experienced more changes than others depending on the home country of consumers. Accordingly, brands should establish individualized action plans and strategies depending on the country they are going to be operating in.

7.2 FUTURE INVESTIGATION LINES

One of the future investigation lines of investigation would be to study if there have been consumer behavior changes in other sectors such as banks, automobile stores or services stores. This could be interesting as it would introduce new sectors that are also part of our daily lives. It would also be relevant to study whether the identified trends will remain in the upcoming decade, we know that e-commerce will stand but it may not remain homogeneous in all shopping categories. Including the variable gender could be part of a future study to see if it plays a significant role or if in contrast behavioral changes affect all genres equally. Studying particular countries could be relevant to determine if culture is the real factor that affects or if it is something more particular. Finally, it would also be interesting to study behavioral changes taking into account other consumer styles as there are still another six that have not been studied.

7.3 LIMITATIONS

The main limitation this study has is the number of participants. The survey has only been completely answered by 140 people, and partially by another 10. Another limitation lies on the people that have been surveyed in terms of home country as the majority of them were from only 9 countries: Spain, United States, Panama, Mexico, Dominican Republic, Costa Rica, France, England, and Croatia. Economic level could also be considered a limitation as also surveyed people have a medium-high economic level as most of them have been able to study a degree and show in general a high usage of online purchases which requires a certain economic level. Another limitation is the way participants have been chosen as it has not been completely randomized as it was sent to saved contacts that were part of groups. Finally, the last limitation is the ability of response as people in those group chats have decided not to answer the survey and this may have been for a concrete reason related to the study. Being able to reach a broader pool of participants could have potentially vary a little bit the results obtained and may have provided even more accurate results.

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9. ANNEX

9.1 SURVEY

1) Rate the following items were on a scale of one to five, with ratings of (1) "strongly disagree" and (5) "strongly agree"

   I usually have one or more outfits of the very newest style.

   I keep my wardrobe up-to-date with the changing fashions.

   Fashionable, attractive styling is very important to me.

   To get variety, I shop different stores and choose different brands.

   It's fun to buy something new and exciting.

2) Rate the following items were on a scale of one to five, with ratings of (1) "strongly disagree" and (5) "strongly agree"

   Shopping is not a pleasant activity to me.

   Going shopping is one of the enjoyable activities of my life.

   Shopping the stores wastes my time.

   I enjoy shopping just for the fun of it. .

   I make my shopping trips fast.

3) Before Covid-19 what percentage of your purchases you did online?

<25%

26%-50%

51%-75%

>75%

4) Before Covid-19 did you ever used an online platform to do shopping

grocery	Yes/No
fashion	Yes/No
pharmacy	Yes/No
electronics	Yes/No

5) Rate the following items were on a scale of one to five, with ratings of (1) "strongly disagree" and (5) "strongly agree”

Value is more important than price

My shopping habits have changed after covid

I feel just as safe going shopping as I did pre-covid

Short-term gratification and success is more important than long-term

Uncertainty makes me uncomfortable

Innovation plays an important role in my purchasing decision-making

6) Have you had Covid-19?

Yes

No

7) Have you had any risk relatives ill with Covid-19?

Yes

No

8) Did you have symptoms?

Yes

No

9) Do you live with any high-risk person?

Yes

No

10) How scared are you of getting Covid-19 while shopping?

0 1 2 3 4 5 6 7 8 9 10

11) How likely is it that you would do your shopping online rather than going to an establishment?

Fashion 0 1 2 3 4 5 6 7 8 9 10

Grocery 0 1 2 3 4 5 6 7 8 9 10

Pharmacy 0 1 2 3 4 5 6 7 8 9 10

Electronics 0 1 2 3 4 5 6 7 8 9 10

12) After Covid-19 what percentage of your purchases you did online?

<25%

26%-50%

51%-75%

>75%

13) What is your home country?

Northern Europe

Mediterranean Europe

East Europe

North America

Central/South America

14) What is your country of residence?

Northern Europe

Mediterranean Europe

East Europe

North America

Central/South America

15) How old are you?

18-25

26-34

35-43

44-55

56-65

66 and over

16) Whats your level of education?

High School

Undergraduate

Graduate

Phd