

# The Effect of Covid-19 on Consumer Behavior: The Impact of Risk and Uncertainty on Purchasing Decisions

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#### **Abstract**

The end of 2019 has brought upon the world a new virus called Covid-19 that has quickly evolved into a pandemic at the start of 2020. To control the spread of the virus, countries around the world were forced to implement various strict measures that includes travel bans, lockdowns, and limited social contacts. As per pervious pandemics, this crisis had severe consequences on economy, consumer behavior, purchasing decisions and people's mental and physical wellbeing. Consumers were forced to adapt and find alternatives that would fit the "new norm". This added to the psychological distress people were experiencing and in turn increased their feeling of risk and uncertainty. Thus, this research conducts a semi-structured exploratory in-depth interview (N=16) to profoundly investigate the effect of risk and uncertainty on consumers' purchasing decisions in Germany. Findings of this study suggests that consumers with high uncertainty avoidance and high perceived risk are more likely to have a changed behavior. Their purchasing decisions are more oriented toward necessities and self-development products. On the other hand, consumers with low uncertainity avoidance and risk perception have experiences less change in terms of consumer behavior and purchasing decisions. The results of this research would help companies understand consumers' psychological needs which is often neglected in literature to provide the needed products and services. It would also benefit the academic and professional world by knowing what to expect during crisis and if changed behaviors will continue after the pandemic is over.

*Keywords:* Covid-19 pandemic, Risk, Uncertainity, Consumer Behavior, Purchasing Decisions, Phycological Factors

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## **List of Abbreviations**

MERS Middle East Respiratory Syndrome

PTSD Post-Traumatic Stress Disorder

SARS Severe Acute Respiratory Syndrome

SARS- CoV-2 Severe Acute Respiratory Syndrome Coronavirus 2

#### 1 Introduction

By the end of 2019, the world has woken up to the fact that something that happens in one country can have a ripple effect that can echo globally. This all started when a highly infectious disease called Covid-19 caused by the SARS-CoV-2, or what is more commonly known as Corona virus was first discovered in Wuhan, China in December 2019 (Kabadayi, O'Connor and Tuzovic, 2020). Covid-19 broke the nation's borders and was declared a global emergency on January 30<sup>th</sup>, 2020 by the World Health Organization (WHO) (Chen, Qian and Wen, 2020; Kabadayi, O'Connor and Tuzovic, 2020), before they announced it to be a global pandemic on March, 11<sup>th</sup>, 2020 (Cucinotta and Vanelli, 2020).

The pandemic declaration forced countries worldwide to take drastic measures such as closing the borders, canceling events, and enforcing mass quarantine to contain the spread of the virus. Events as big as the Olympics for instance, were canceled in 2020, and with that happening only twice before, due to World Wars I & II, people's psychological state was affected even further (Villi, 2021). Consequently, these restrictions had a severe impact on both individuals and businesses, which is expected to create a "new normal" out of the change in consumer behavior (Oana, 2020). This assumption is derived from past experience throughout history, like the behavioral difference that was seen in previous outbreaks such as MERS, SARS and Ebola that have caused a shift in consumer behavior, along with economic recession, unemployment and uncertainty (Mardell and Alwén, 2021).

Accordingly, this expected change was evident in the people's behavior during the pandemic. Consumers were forced to find an alternative, which turned out to be more convenient in a lot of cases (Sheth, 2020). For example, masks were done by hand when they became hard to find, and home cooking was the solution when restaurants were closed (Hamilton, 2020). Another major change in consumers' behavior is the consumers' reliability on e-commerce. For instance, with the restrictions to go out, digitalization has brought the stores home instead (Sheth, 2020). Nevertheless, these shifts in consumer behavior came as a shock to companies and forced them to adjust their strategies and business models according to the new changes which they were not prepared for. However, their ability to rapidly adjust to the fast changes in trends caused by Covid-19 was essential for their survival (Gupta et al., 2020). The most prominent

of these behavioral shifts was people's tendency to buy all that they can of durable products (Baker et al., 2020). On the other hand, expenditure on more non-essential products dropped immediately and has continued to drop during the pandemic (Mehta, Saxena and Purohit, 2020). Past years have also proved that consumers become more conscious in their purchasing behavior when there is an economic crisis (Oana, 2020). This was seen in this pandemic as well in a study done by Mehta, Saxena and Purohit (2020) during Covid-19 that showed that customers have become more aware of their purchases and are shifting towards a more spiritual consumption. Negative feelings can also have a significant role in predicting this change in favor of necessity products (Di Crosta *et al.*, 2021), which is why it is essential to understand the effect of those feelings on purchasing behavior in order to reduce the distress that it causes on both an emotional and economic level (Lins and Aquino, 2020).

Moreover, one of the most important drivers of this consumer behavior's shift has been the feeling of risk and uncertainty. This is mainly because unfamiliar situations present higher risk that consumers try to decrease by doing more research and being more cautious in their choices (Villi, 2021). The fear of the uncertain situation has drove people to seek a feeling of comfort and safety through changing their lifestyle and thus their purchasing decisions. For example, wellness had been an important topic for consumers during the pandemic, whether it is mental or physical. Hence, consumers started spending more on products that would address this need (Gupta et al., 2020). It is also important to note that both risk attitude and risk perception are known to influence consumer behavior (Mehta, Saxena and Purohit, 2020). In time of crisis, people tend to misjudge the risk by overestimating it while at the same time, they underestimate the help that they could get (Bonneux and Van Damme, 2006). This misjudgment could be a result of people's lack of trust in government's ability to control the situation and could be one of the reasons that also lead them to undergo panic buying (Apu et al., 2020), which was what happened during the first few months of the pandemic. Stockpiling and panic buying of necessity products in the beginning of the pandemic made the situation even more worrisome especially among people who were not financially able to buy in bulks (Anand et al., 2021). Rising unemployment with people losing their jobs and having to still be able to provide their daily basic needs had a negative effect on their mental health (ibid.). Thus, understanding the emotional and mental state the consumers were in is essential as it also shapes their shopping behavior. This is because people have narrative identities that puts them on the path of understanding the negative situation they are put in, then working to spin it into a positive attribute that they can befit from (Mcadams and McLean, 2016).

Additionally, purchasing motives have also been affected during the pandemic. According to Wang *et al.*, (2020), "Going out less" was the dominant motive behind the food stockpiling behavior, followed by "Avoiding shortage". This shows a difference from the normal motives behind food consumption such as "Price", "Quality", "Being familiar with a brand" and "Suitability" (Fao, 2010). Risk and uncertainty could have a direct effect on developing these new motives as they were derived from consumers' fear of being infected and their uncertainty regarding the availability of products and services. This change in motives is another factor in the change of consumption behavior which is expected to carry out after the pandemic. According to Ernst and Young's Future Consumer Index in 2020, 42% of consumers are expecting their consumption behavior to be different after the pandemic.

However, there is still a lack of scientific research in the field of the effect of the psychological factors such as risk and uncertainty on purchasing decisions. Therefore, this study aims to explore through a qualitative approach, how did consumer change during the pandemic and what effect did risk and uncertainty have on consumers' purchasing decisions during Covid-19 in Germany and if this effect would continue after the pandemic is over. It also seeks to identify how can companies in Germany use this change to their advantage.

The theoretical part of this thesis explains the fundamental concepts of risk and uncertainty along with their psychological effect in addition to Covid-19 and its global effect. Literature review of existing papers will follow with an overview of consumer behavior, risk, and uncertainty's effect on purchasing decisions and companies' approach during the pandemic. The empirical part is then explained starting with the methodology and the clarification of the semi-structured in-depth interviews, along with the data collection and analysis. Afterwards, the research questions will be answered through the relevant results, before concluding with the discussions, limitations, outlook, and conclusion.

#### 2 Research Background

This section gives an overview regarding the Covid-19 pandemic, and its effect both globally and on Germany. It also explains risk and uncertainity along with the psychological factors effect on behavior. Additionally, a literature review regarding the effect of risk and uncertainity on purchasing decisions, the consumer behavior during Covid-19 pandemic, the companies' adaptation of the changed behavior as well as an overview of the new normal is provided in this section.

#### 2.1 The Corona (Covid-19) Pandemic

#### 2.1.1 Definition, Symptoms and Vaccinations

The Covid-19 pandemic has taken the world by surprise by the end of 2019. However, to better understand why the impact of this disease was tremendous, it is important to have an overview of what it is.

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) or what is more commonly known as Covid-19 is one of six coronaviruses that can be found in human beings (Adhikari *et al.*, 2020). It is defined as: "an infectious illness caused by the novel Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), which appeared in late 2019" (Coccia, 2022).

The main identified symptoms of Covid-19 are fever and fatigue, in addition to respiratory symptoms that includes breathing difficulties, coughing, and sore throat (Adhikari *et al.*, 2020; Cossarizza *et al.*, 2020). Nevertheless, in hope of reducing those symptoms and risks of the corona virus and to limit its spread, multiple vaccinations were developed in a short period of time. The vaccines were created in three main ways. They either used viral vector like vaccines by Johnson & Johnson and AstraZeneca, or using protein subunit like Novavax's vaccine, or using the nucleic acid-RNA like vaccines from Pfizer-BioNTech and Moderna (Coccia, 2022). Most people started taking the vaccinations once they were available, making 65% of the world population, and 75.42% of Germany's population vaccinated with at least one dose as of 20<sup>th</sup> of April,2022(World in Data, 2022).

#### 2.1.2 Covid-19 Outbreak and Global Effect

Covid-19 was first detected on December, 2019 in Wuhan, China with the first cases linked to a local Huanan Seafood Market (Adhikari *et al.*, 2020). By January 30<sup>th</sup>, 2020,

the disease was declared as an international health emergency (Bontempi, Vergalli and Squazzoni, 2020). At the time, Covid-19 was confirmed in 19 countries including Germany and the United States of America with more than 213 deaths reported on a global scale (Adhikari *et al.*, 2020). Italy was the first country in Europe to show high infection number by the end of February 2020 (Bontempi, Vergalli and Squazzoni, 2020). The spread continued afterwards until Covid-19 was declared by the World Health Organization (WHO) as a global pandemic on March, 11<sup>th</sup>, 2020 (Cucinotta and Vanelli, 2020).

This situation was noticed by researchers in the past several years as they have been warning that a disease that can rapidly spread such as H1N1 and the Spanish flu might cause pandemics that the world is not prepared to face (Mehta, Saxena and Purohit, 2020). Nevertheless, in spite of these multiple researches that have been raising those concerns regarding the lack of the world's readiness to control the consequences of a spreading disease, countries and companies were still caught by surprise when Covid-19 started spreading. The spread of the coronavirus was rapid as one infected person could on average spread the disease to another two people (Fauci, Lane and Redfield, 2020) and has around ten times higher mortality rate than the common seasonal flu (Baker *et al.*, 2020).

Consequently, the pandemic's impact was larger than anyone expected. Covid-19 has caused health, economic, personal and social changes (Di Crosta *et al.*, 2021). Countries were desperate to survive this crisis that had negatively impacted them on multiple levels. Therefore, in response to the rapid spread of the virus, governments across the globe implemented strict measures including lockdowns and social distancing (Bontempi, Vergalli and Squazzoni, 2020). Moreover, countries such as China enforced mass quarantine to insure self-isolation, which was similarly imposed during the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003 in areas in both China and Canada, and during the 2014 Ebola outbreak in a lot west African countries (Brooks *et al.*, 2020). Additionally, governments applied some restrictions including closing businesses that were considered not essential or didn't require physical presence. For example, restaurants were limited to delivery and pick-up options (Zwanka and Buff, 2021). Schools, "open to public" places and shops were closed as well, which made it

hard for people to continue having a "normal life" (Mardell and Alwén, 2021). Restrictions were also applied on more essential businesses such as grocery stores which in turn caused some panic among people (Dickins and Schalz, 2020).

Nevertheless, this helped in containing the spread of the virus, especially in countries that deals with commercial trading. That's because the infection rate in those countries was higher as they had more human contact due to the business' requirements (Bontempi, Vergalli and Squazzoni, 2020). In a similar regards, the United States of America along with China and several other countries decided to enforce temporary travel restrictions in hopes to slow down the spread of Covid-19 (Fauci, Lane and Redfield, 2020).

Those multiple limitations have opened the window for new innovations to appear and has caused a global behavioral change. For example, with the increased amount of restrictions, virtual reality started to be seen of value as it helps people stay connected to each other (Zwanka and Buff, 2021). It helped educational institutions to restore online platforms and made working from home possible. It was also proven during this pandemic that working from home has the same productivity level as working from the office making a work/life balance easier to have (ibid.). That being said, people with children struggled with this aspect, as they had to balance between their own work and the education and care of their children who were staying at home with kindergartens and schools being closed (Steinmetz, Batzdorfer and Bosnjak, 2020).

Additionally, while a lot of industries struggled during the pandemic, others such as the gaming industry profited a lot from the situation (Lemenager *et al.*, 2021). Although gaming was a safe fun activity to be done during the lockdown, it might lead to an addictive behavior especially in young male adults (ibid.). Accordingly, as expected, screentime kept on increasing during the first five months of the pandemic (Mata *et al.*, 2021). This increase in screentime was also a result of the increase in social media usage along with online streaming services as well. Netflix, YouTube, and Amazon Prime are some of many streaming services that people have been using for abnormal binge watching in recent years (Lemenager *et al.*, 2021). This behavior along with the excessive Internet and social media usage such as spending time on Facebook can be a result of psychological variables such as depression (Cheng, Chang and Chen, 2019) and can lead to addiction and having problems with cognitive control (Van Den Eijnden, Lemmens and Valkenburg, 2016). Another behavioral change was seen in the snacking attitude that increased while physical activities decreased during the first two to three

months of the pandemic before going back to normal (Mata *et al.*, 2021). All of these changes were just within with the first couple of months of the pandemic where the number of Covid-19 infected cases on June 8<sup>th</sup>, 2020 was a little over 7.1 million cases including 406, 474 deaths (Worldometers.info, 2020 cited in Dickins and Schalz, 2020). While at the time of writing this thesis on April 23<sup>rd</sup>, 2022, Corona infected cases have become over 509 million cases including around 461,4 million recoveries and 6,2 million Corona deaths (Worldometers.info, 2022).

#### 2.1.3 The Corona Outbreak and Consequences in Germany

As explained in chapter 2.1.2, the global outbreak of the Corona virus had its toll on people all around the world, and Germany was no different. After the World Health Organization's declaration of Covid-19 being a global pandemic on March 11<sup>th</sup>, 2020; Germany followed the footsteps of other countries and worked to slow down and control the rapid spread of the virus in the country. That's why starting March 23<sup>rd</sup>, 2020, Germany applied extreme restrictions in the 16 German federal states that included rules to ensure social distancing, limited physical contacts, and more closure of institutions (Bruno Petzold *et al.*, 2020). Additionally, events such as concerts and festivals were canceled, along with closing the borders (Lemenager *et al.*, 2021). At that point, on March 27<sup>th</sup>, 2020, 42,288 infected cases were registered in Germany, and 253 deaths of corona were reported (Robert Koch Institut, 2020, cited in Bruno Petzold *et al.*, 2020). These high numbers made those extreme measures essential at that point. Neverthless, it is expected that those restrictions, such as keeping the social distancing of 1.5 meter would severly affect people's behavior and mentality (Steinmetz, Batzdorfer and Bosnjak, 2020).

The impact on mental health was evidenant in a study by Bruno Petzold *et al.* (2020). The study was done in the early stages of the pandemic between March, 27<sup>th</sup>, 2020 and April 6<sup>th</sup>, 2020 in Germany, with 5,721 participants being a part of it. It shows that 25.7% of people maintained a one-meter distance outside their households during a week period. Additionally, participants spent an average of 4.45 hours thinking about Covid-19 with 44.8% participants reported to be scared of being infected, 67.7% feared the consequences of the virus and 78.3% participants were concerned about their relatives' health. The study also showed that women experienced higher risk perception and anxiety then men, especially anxiety regarding general and social consequences.

Furthermore, a survey done on 3245 participants in Germany by Lemenager *et al.* (2021) between 8<sup>th</sup> of April and 11<sup>th</sup> of May 2020, showed that people in Germany had an increase of 16% in online streaming activities, followed by a 14% increase in the usage of information platforms and a 9% increase in both gaming and social media usage. This rise in online usage was found to be significantly related the stress caused by the pandemic. It was also assumed in that study that the increase in online activities was a way to reduce the feeling of loneliness created by the imposed isolation rules and a way to maintain social contacts.

Therefore, the change in the mental state of people in Germany has caused a change in their behavior. Accordingly, it is vital to further investigate how can negative feelings such as risk and uncertainty change consumers' behavior and their purchasing decisions.

#### 2.2 Risk and Uncertainity

#### 2.2.1 Overview of Risk and Uncertainty

#### **Uncertainty**

In theory, uncertainty is looked at as a cognitive phenomenon that was defined by Gudykunst (1993, cite in Yoshitake, 2002, p.179) as: "the inability to predict and explain our own and others' behavior." This phenomenon can occur when people see that their decision can cause multiple consequences (Villi, 2021). Additionally, being in an unfamiliar environment that a person is not fully aware of can cause doubtfulness that leads to uncertainty (Berger & Calabrese, 1975, cited in Mumtaz and Nadeem, 2022). Accordingly, Dholakia (2020) argues that since crisis presents people with uncertainty, they tend to attempt to control the situation. This is because a loss of control can increase people's anxiety which leaves them being uncomfortable. Thus, consumers try to reduce this feeling by finding something to control which is usually reflected in their purchases such as being able to buy an item that is going scarce due to panic buying.

Moreover, situations of financial instability and changes in what's seen as normal in one's environment can cause uncertainty to increase for different individuals. The extent of how much this uncertainty will affect individuals is determined by **uncertainty avoidance**, which is defined by Hofstede (2001) as: "the degree of comfort members of a society feel in unfamiliar or unstructured situations and the degree to which "a

society tries to control the uncontrollable."" Thus, a person with low uncertainty avoidance would have a higher tolerance of accepting change (Reisinger and Mavondo, 2005).

#### Risk

The Presidential/Congressional Commission on Risk Assessment and Risk Management (1997) has defined risk as: "the probability that a substance or a situation will produce harm under specified conditions". It has also stated that risk is a mixture of the probability of occurrence and the consequences of an unfavorable event. Similarly, Fields (2008, cited in Oana, 2020, p.88) defined as risk as: "the probability or possibility that an unfavorable consequence will occur as a result of an action." Thus, unfamiliar situations present higher risk that customers try to decrease by doing more research and being more cautious in their choices (Villi, 2021). Risk also becomes higher as the product's price increase (Oana, 2020).

Therefore, it can be noted that an adverse situation and its outcome plays a role in determining consumers' feeling of risk and can affect their decisions. According to Mehta, Saxena and Purohit (2020), both risk attitude and risk perception are known to influence consumer behavior. Risk attitude refers to the consumer's understanding of the presented and risk and his/her feeling it. While on the other hand, risk perception refers to the degree the consumer believe he/she will be subjected to that perceived risk. Consequently, Schiffman and Kanuk (2007, cited in Lee, Mustapha and Hwang, 2019, p.343) defined perceived risk as: "The uncertainty that consumers face when they cannot foresee the consequences of their purchase decisions." This definition clearly links uncertainity to perceived risk showing that they have a positive correlation, as when uncertainity increases so does the perceived risk. Therefore, one way to decrease risk perception, is by providing more information to people which would help them in decreasing their uncertainity and that would lead to a lower risk perception (Lee, Mustapha and Hwang, 2019). Additionally, people who are adventurous and take part in activities that are considered dangerous such as bungee jumping or scuba diving may have less perceived risk (Reisinger and Mavondo, 2005).

Moreover, according to Solomon (2004), the perceived risk can be categorized in 5 types:

- **1- Monetary risk:** revolves around the money and assets a person owns. It suggests that the vulnerability of a person increases as his/her wealth decreases. This means that expensive products and services will be more impacted with this type of risk.
- **2- Functional risk:** refers to the degree in a which the functionality of a product can satisfy a customer's need. Thus, making this type of risk more vital for practical consumers.
- **3- Physical risk:** includes health, physical energy, and capacity to live and develop. Therefore, people who are older of have health problems are more sensitive to this type of risk. Food and beverages, medical treatments, electronics, and cars all include physical risk.
- **4- Social risk:** contains both self-esteem and confidence and has a higher effect on people who are facing uncertainty. Visible products such as cars and clothes are subject to this type of risk.
- 5- Psychological risk: Builds on the desire to be a part of a group or achieve a certain status, making people who are trying to obtain these affiliations most sensitive to this risk. Luxury products and services that reflect a certain social class contain this type of risk.

In order to decrease these perceived risks, people resort to different methods such as buying from the same brand, purchasing products that shows the brand name, getting people's approval, getting free trials or at least a guarantee to ensure that they can return the product if they didn't like it Roselius (1971, cited in Villi, 2021).

#### 2.2.2 The Psychological Impact on Consumers During Covid-19

The purchasing choices made by the consumers can be affected by multiple factors such as income, demographics, culture and social factors (Mansoor and Jalal, 2010). However, a vital aspect that can be often neglected in literature is the psychological one. Yet it forms the underling basis for human behavior and can be affected by the changes in the environment. For instance, changes in the financial situation affects customers both psychologically and economically and leads them to change their consumption because of the change in perceived risk (Sharma and Sonwalkar, 2013). Accordingly, it is crucial to understand the affect that the Covid-19 pandemic can have on some psychological aspects like the feeling of risk and uncertainty to understand how it impacts purchasing decisions.

In a situation that represent high risk and uncertainty such as Covid-19, the primitive part of the brain usually becomes more dominant. This causes individuals to take decisions and act in a way that is perceived as necessary for survival (Dodgson L., 2020). This is because when a situation represents a threat to people, they try to reduce their fear by assessing the presented threat and adjusting their behavior accordingly (Lee, Mustapha and Hwang, 2019). For example, risk perception regarding the impact of Covid-19 on the future leads to panic buying during the days of the pandemic (Lins and Aquino, 2020). The perception of risk changes with the changes of the economic situation which in turn leads consumers to change their consumption behavior (Mansoor and Jalal, 2010). According to Dickins and Schalz (2020), two main risks were identified by people during Covid-19; first being the risk of scarcity in food and the second is the apparent risk on health and life.

Moreover, imposed restrictions and forced mass quarantine also had a negative effect on people's mental state. Brooks *et al.* (2020) argues that quarantine's duration, fear of infection (whether being someone's own infection or him/her infecting others), boredom and frustration, scarcity and lack of information can all affect consumers' psychological state. This impact can include post-traumatic stress disorder (PTSD) when quarantined for more than 10 days, along with feelings of concern, fear, frustration, helplessness, worry and loneliness.

These negative feelings, along with the financial risk caused by individuals losing their jobs or fearing a salary freeze, combined with being in an uncertain situation where information about the changing rules and the Coronavirus were limited, all played a major role in changing consumer behavior. Similar to previous crises, people become more economical in their behavior and tend to prioritize purchases that they perceive as necessary to satisfy their needs (Oana, 2020).

#### 2.3 Literature Review of Consumption During Covid-19

#### 2.3.1 Consumer Behavior During Covid-19

Consumer behavior has been a topic of interest for many researchers over the years. Numerous studies have been made to better understand the topic which in turn generated different definitions of this term. For example, Mansoor and Jalal (2010) defined consumer behavior as: "the study of the processes that individuals or groups go through in making their purchasing choices in order to satisfy their needs". On the other hand, Kardes F.R., Cline T.W., Cronley M.L. (2011, cited in Di Crosta *et al.* 2021, p.3) went

into more details by defining it as: "the study of individuals or groups who are in the process of searching to purchase, use, evaluate, and dispose of products and services to satisfy their needs". This includes in their opinion the study of consumers behavioral, mental, or emotional responses to the priorly mentioned process. Additionally, Valaskova, Kramarova and Bartosova (2015) have defined a consumer as: "a person who identifies a need or desire, makes a purchase and then disposes of the product during the three stages in the consumption process". From the previous definitions, it can be concluded that consumer behavior explains the decision-making methods of individuals or groups going through the purchasing process to acquire products and services that satisfy their needs.

However, consumer behavior is not constant. Psychological, economic, conceptual, personal, and social factors along with many others can influence consumer behavior. With that being said, in case of a major change such as a health pandemic, some factors may have a stronger influence than others (Di Crosta *et al.*, 2021). It has also been proven that consumer behavior changes after economic crises in which consumers tend to become more rational and in most cases, only purchase products and services that meet their expectations and prove to be useful to their needs at the time (Oana, 2020). This is because changes in the economy affects what consumers buy and the reason behind their purchase (Sharma and Sonwalkar, 2013). It also causes people to become more money oriented, meaning that they rather spend their money on a cheaper brand or limit their purchases to necessities even if they can afford otherwise (Mansoor and Jalal, 2010).

A good example of that is the shift in consumer behavior after the global financial crisis that started in 2007. The uncertainty during that time forced businesses to make decisions and take actions without being clear on the situation. Employees had to also face the same problem regarding their income and job security which in turn led them to become more focused on fulfilling their needs at the expense of their wants through making value-based purchases (Sharma and Sonwalkar, 2013).

In the same regards, Covid-19 has also affected consumer behavior as it has gone beyond being a health crisis to become a global economic one that influenced consumers' confidence (Kabadayi, O'Connor and Tuzovic, 2020). Several restrictions and social isolation rules were applied which caused the spending tendencies to decrease as the pandemic went on (Villi, 2021). According to a study by McKinsey & Company (2020, cited in Villi, 2021), the global overall consumer expenditure decreased by 30 –

50 % from previous years. The items that were being purchased the most in the pandemic were similar to the ones purchased during war periods. These items include pantry products such as tuna, chickpeas, and pasta (Zwanka and Buff, 2021). Therefore, it is likely that the change in consumer behavior during Covid-19 will continue after the pandemic is over as it has with the consumers of World War I and II (ibid.).

One of the main forces driving this change in consumer behavior during the pandemic is the increased stress that prompts consumers to be more cautious in their spending by buying items that they perceive as necessary (Di Crosta et al., 2021). This explains why the spending on grocery products had dramatically increased by March 2020 to reach up to three times in the states that enforced the law of staying at home in the U.S (Baker et al., 2020). On the other hand, products such as electronics, jewelry, clothing ... etc. have been labeled non-essentials and therefore the amount of money spent on them declined (Mehta, Saxena and Purohit, 2020). The change in expenditure is also evident in a study in Italy that was conducted by Di Crosta et al. (2021), where expenditure on necessity products have increased by 91%, while expenditure on non-necessity only increased by 36%. It also stated that spending levels changed with the change in consumer behavior. However, it is important to note that both cultural and consumption habits' differences played a role in determining consumers' demands in different countries during the pandemic. For example, hygiene products demands increased in some countries while durable products and supplements increased in others (Villi, 2021). Changes were partially driven from fear as well (ibid) as the consumer wanted to lower the risk of getting infected by ensuring social distancing and reducing going out (Oana, 2020). This could be shown in a study done by Grashuis, Skevas and Segovia (2020) were it confirms that the biggest change in grocery shopping habits was found in areas where Covid-19 was rapidly spreading. Fear and stress also explain the stockpiling behavior that consumers have shown. It was apparent within two weeks of the people's awareness of the Coronavirus being in their country (Zwanka and Buff, 2021).

This rise in negative feelings caused by the pandemic has changed consumers' view on what is important, thus, making them buy products that would fulfil the new prioritized needs. For example, wellness became an important topic for consumers during the pandemic, both mental and physical. Hence, consumers started spending more on products that would address this need (Gupta et al., 2020). Even with the closed gyms, consumers still found a way to satisfy this physical wellness need as they switched to outdoor activities (Zwanka and Buff, 2021). The pandemic has also caused an increased

sense of "self-dependency". This was shown in multiple things such as people making their own masks (Mardell and Alwén, 2021). The closing of restaurants and the increased health awareness also resulted in a changed self-dependent behavior. Consumers adopted home cooking and backing as a common practice that is likely to continue after the pandemic (Zwanka and Buff, 2021).

In addition to the change regarding the products that were being purchased, a change in where the consumers were shopping occurred as well. E-commerce, one-stop shop retailers and buying from local brands have become a trend during Covid-19 (Gupta et al., 2020). This was heightened in European countries where the state of emergency was implemented (Oana, 2020). The applied restrictions during Covid-19 caused a significant shift in favor of online shopping in comparison to the offline methods (Mardell and Alwén, 2021). Thus, the more the traditional physical experience is limited, the more the digitalization of the shopping experience will grow stronger (Mehta, Saxena and Purohit, 2020). This could be very beneficial for both consumers and companies as it can help reduce costs which in turn would result in a decrease in prices. Nevertheless, it is important to note that e-commerce means that the purchasing process would be digitized as well. This requires consumers to have access to internet as well as a device that allows the access to shopping websites and applications. Once that is available, the process can begin with "product searching", followed by "comparison and selection" then "confirming the order and payment" before it ends with "product delivery" (Mardell and Alwén, 2021).

# 2.3.2 The Effect of Risk and Uncertainty on Purchasing Decisions During Covid19

To keep the economy going, consumers and sellers must keep exchanging benefits like trading goods and services for money. This occurs when buyers make a purchase after going through the purchasing process. According to Sharma and Sonwalkar (2013), this purchasing process consists of five steps. It starts with **problem / need recognition**, which is identifying the need the customer wants to satisfy. The second step in the process is **information gathering** in which consumers search for information related to the identified problem or need. The third step in the process is **evaluating the alternatives** before choosing the most suitable one and making the **purchase decision**. The buying process concludes with the **post-purchase behavior** where the consumers evaluate the purchasing choice they made. However, higher risk situations

lead the customer to broaden his/her search for information in an attempt to make the right choice (Oana, 2020). Meaning that an unstable economic situation affects the purchasing process as consumers spend more time in the information gathering stage to reduce risk in their purchases (Sharma and Sonwalkar, 2013). Thus, according to Oana (2020), in the stage of evaluating substitutes in a high-risk situation, customers will more likely choose a product or a service that provides maximum benefit. As for the purchase decision stage of the purchasing process in an insecure environment, price is the determining factor for most customers, as they would focus on essentials rather than luxurious products/services.

Accordingly, as seen in the economic recession, in a situation of high-risk and uncertainty, such as the one presented by Covid-19, consumers become more rational in their spending behavior. The wide spread of the virus and the high risk of getting infected have played a role in consumers' decision making (Grashuis, Skevas and Segovia, 2020). Additionally, the uncertain situation where unemployment increases along with the products and services becoming more expensive causes consumers' purchasing behavior to change (Oana, 2020). Therefore, the increased financial risk, coming from the feeling of uncertainty and fear of losing one's job as seen in Italy during the pandemic for example, negatively influence consumer behavior (Di Crosta *et al.*, 2021), forcing the customers to essentially prioritize purchases that fulfil his/her basic needs, such as food (Oana, 2020).

Thus, self-concept, brand image, status and personality became less prominent motives during the pandemic as opposed to being some of the main buying drivers before Covid-19. On the other hand, consumer spirituality, that was defined by Peltonen (2005, cited in Mehta, Saxena and Purohit, 2020, p.298) as "interrelated practices and processes that people engage in when consuming market offerings (products, services, places) that yield 'spiritual utility'" has become a main intrinsic motive when choosing to buy product or a service (Mehta, Saxena and Purohit, 2020). Additionally, during Covid-19 health, safety and self-care were the main motives for consumers. This led to an increase in the consumption of cleaning, hygiene and relaxation products along with food and beverages (Oana, 2020). The increased level of anxiety and fear explains this shift in motives. This is because those negative feelings push customers to purchase products and services that would give them a feeling of safety and comfort regardless of their actual need for it (Di Crosta *et al.*, 2021). This drop in consumers' confidence is normal in a period of economic recession where the feeling of alert usually increases

the longer the recission is (Valaskova, Kramarova and Bartosova, 2015). In turn, this makes self-justification another main motive that caused a change in consumer behavior in this situation of high-risk and uncertainty (Di Crosta *et al.*, 2021).

Moreover, scarcity in products that quickly became unavailable in the pandemic had caused people to be in a situation of uncertainty that in turn increased their feeling of risk. This scarcity had an impact on consumers' choices and was a result of the panic buying that spread during the first couple of months of the pandemic (Eger *et al.*, 2021). Additionally, people resorted to buying products that would be give them a good value in exchange of their money (Mansoor and Jalal, 2010). Thus, two main results of risk and uncertainty when it comes to purchasing behavior were panic buying and stockpiling, along with value-based purchases.

#### **Panic Buying and Stockpiling**

Uncertainty and fear of the risk presented by the corona virus are common feelings that were reflected in consumers' shopping behavior in a form of panic buying. This response from the consumers is very common in times of crisis. According to Ding (2009, cited in Lins and Aquino, 2020), it happened before in 2003 during SARS outbreak in China. However, in order to explain this phenomenon it is important to understand what it means. Lins and Aquino (2020) has defined panic buying as: "a behavioral phenomenon influenced by negative feelings, such as fear and panic, caused by some crisis".

This definition perfectly explains the change that occurred in the shopping habits as negative feelings such as uncertainty and fear were clearly heightened in the beginning of the pandemic along with the concerns regarding the lack of supplies (ibid). In order to reduce this feeling of uncertainty caused by Covid-19, consumers increased their purchasing of essential products to prevent themselves from regretting not buying them if they become unavailable (Apu *et al.*, 2020). Essential products that people were hoarding included toilet paper, meat, water, bread, disinfecting and cleaning products (Sheth, 2020). This behavior could be perceived as people's way to cope with those negative feelings of fear and uncertainty. Therefore, it is different from impulse buying that could be a result of positive emotions (Lins and Aquino, 2020).

Nevertheless, it is important to note that several factors played a role in amplifying the negative feelings that caused panic buying and stockpiling to occur. For example, media reports on the spreading global panic and how other people are stockpiling because of the pandemic increased consumers' fears and thus increased panic buying (Apu et al., 2020). Additionally, people seeing empty shelves in the supermarkets that occurred when stockpiling took place was also another factor in spreading the panic (Wang et al., 2020). Furthermore, the limited trust people had in their governments' ability to control the situation if items became scarce was also another motive for people to start panic buying and stockpiling the items they perceived as necessary (Apu et al., 2020). Lockdown was also another factor that raised the amount of panic buying and in turn affected consumers' purchasing decisions as their money was spent on essentials instead of food services, premium products and non-essentials (Gupta et al., 2020). Additionally, restrictions presented in social distancing, closed shops, enforcing masks and making the accessibility to supermarkets harder, have also pushed people to look for alternatives and resort to stockpiling (Eger et al., 2021). This state of uncertainty presented by the spread of the corona virus intensified panic buying which in turn resulted in stockpiling necessary products that might include drugs and vaccines (Apu et al., 2020). The indicated pattern of panic buying and stocking up on necessities was primarily dominant in the beginning of the pandemic (Mardell and Alwén, 2021). However, as the crisis continued, people had to adapt to the situation which led to the emergence of the "new normal" (Oana, 2020).

#### Value-Based Purchasing

The spread of the corona virus has affected people's perspective on life and in turn their purchases. Consumers have become more cautious of their spending habits. Value-based purchasing has become more important as people are more willing to buy from an un-familiar brand if it offers value-for-money products (Gupta et al., 2020). The emphasis on buying durable product was also demonstrated in the 2007 financial crisis. At the time consumers were buying bigger sized items to reduce repeated purchases or use the internet to find the best deals they could get that would offer them value for money (Mansoor and Jalal, 2010). This behavior was intensified in developed countries where consumers are responsible and cost-aware (Sharma and Sonwalkar, 2013). Moreover, scarcity in products and the financial situation can have an effect on what is deemed as valuable to consumers. This is because consumers undergoing scarcity have to consider what is available as more valuable along with what they would be giving up when purchasing it (Zhu and Ratner, 2014). Nevertheless, consumers still prioritize

uncomplicated value-based purchases that satisfy their need for simplicity which was also considered a trend at one point during the pandemic (Mehta, Saxena and Purohit, 2020). Additionally, value-based purchases also include the perceived quality that the products offer them. For example, skin care products are perceived to be of value to consumers as they offer good quality and results in satisfying the need that they want to fulfil (Lee, Goh and Mohd Noor, 2019).

Therefore, a situation of risk and uncertainty, such as the one caused by Covid-19 further pushes people to go for what they perceive as a good value for money, which includes all the different aspects that the term value can offer for consumers.

#### 2.3.3 Companies Adaptation to the Changes in Consumer Behavior

For the past decades, companies all over the world have been offering goods and services that fulfill consumers' needs and wants for a certain amount of money. This exchange is the essence of the business world, and it is what ensures that companies survive and profit. However, economic changes have always caused a particular pressure on enterprises. This is why companies' ability adapt to the sudden economic challenges presented by Covid-19 has determined its survival in the situation (Oana, 2020). Even though business were facing both uncertainty and risk during the pandemic, their strategies must accommodate the changed situation. Food retailers for example should be able to immediately adjust their strategies to include curbside pickup and home deliveries which were more preferred by consumers during Covid-19 (Grashuis, Skevas and Segovia, 2020). This was applied by some ready-to-eat online food- delivery companies that updated their business model to include delivering groceries to address consumers' current need for essentials (Mehta, Saxena and Purohit, 2020). Other companies such as Starbucks and McDonald's adapted to the safety restrictions by limiting human contact in their delivery service and ensuring that their packages are not contaminated (Kabadayi, O'Connor and Tuzovic, 2020). This was very useful for those companies since businesses that addressed health concerns by taking safety measurements (being more hygienic for example) had a competitive advantage as it reduced the feeling of uncertainty for the customers (Villi, 2021).

Additionally, with the high shifts towards e-commerce, companies had to adjust and provide better online services for their customers (Gupta et al., 2020). Some have already began to use smart technologies such as touch screens with interactive options (Villi, 2021). This urgent change towards more innovative solutions have been essential

for businesses' survival during the pandemic. This is because companies can better realize their long term goals by understanding the consumer needs and fulfilling them (Mansoor and Jalal, 2010). Sustainability and simplicity are good examples of those demanded needs. The change in consumer behavior during the pandemic has pushed companies to adjust their business strategies regarding sustainability in order to stay relevant to their customers (Mehta, Saxena and Purohit, 2020). Marketers also could benefit from promoting the need for simplicity while encouraging necessary purchase (ibid.). Well-being, health and food have additionally became the most prominent factors to people's happiness during the pandemic (ibid.). Companies with focus on health products benefited from the ongoing marketing opportunities with the same focus (Gupta et al., 2020).

Nevertheless, not all companies were able to modify their strategies and maintain the relationship with their customers. For instance, businesses usually relies on developing a deep emotional connection with customers by utilizing the experiences they understood to create a story to use in their communication (Närvänen et al., 2020). However, with fear overpowering other emotions during Covid-19, consumers were mainly concerned about their survival. This made it hard for businesses to find the appropriate strategies to communicate with their target audience (Oana, 2020). The decreased consumption and consumer's trust forced companies to face a severe negative impact (Villi, 2021). The tourism industry is a good example of this as travel bans were applied by most countries. The negative impact can be shown through a study by STR Global where it was found that hotels' occupancy rates has dropped to 36.3% in Europe, which was last seen in World War II (ibid.). This shows that it is crucial for companies to understand the stimuli the consumer is being subjected to and how he/she is responding to it (Valaskova, Kramarova and Bartosova, 2015). Companies have to also recognize the change in consumers' experiences and value perception to be a successful competitor in the market (Valaskova, Kramarova and Bartosova, 2015). Especially since during financial crises, products that become successful are the ones that have an emotional connection to the customer and can provide him/her with a positive feeling (Mansoor and Jalal, 2010).

#### 2.3.4 The New Normal

As previously explained in chapter 2.1.2, researchers over the past years have been warning about the lack of countries' preparations in case of a pandemic emergence.

However, despite these warnings, Covid-19 was still considered a sudden situation that caused a change in consumer behavior that is likely to continue to be the "new normal" (Oana, 2020). The changes in the economy had a negative impact on consumers confidence which is expected to lead to a lower economic growth (Kabadayi, O'Connor and Tuzovic, 2020). This lack of confidence along with the increase in perceived risk and uncertainity have caused consumer behavior to change. The focus on groceries and necessities and an increase in the usual spending habits took place by the end of March when rules were being enforced all around the world (Hall *et al.*, 2021).

Simultaneously, stockpiling of basic needs started to occur as consumers were eager to find a way to survive the uncertain situation (Dodgson L., 2020). This behavior resulted in scarcity of some products which in turn forced people to start looking for alternatives that are more available and convenient (Sheth, 2020). This in some form shifted consumer behavior and spending habits which is expected to have an impact that would last after the pandemic is over (Gupta et al., 2020; Oana, 2020). This was also noted in Ernst and Young's Future Consumer Index in 2020, which stated that 42% of consumers are expecting their consumption behavior to be different after the Covid-19 crisis.

An example of this "new normal" is consumers' shift from big brands towards local ones that demonstrated a safe hygienic approach during the pandemic and was going out of their ways to ensure their customers' safety (Mehta, Saxena and Purohit, 2020). Additionally, people realization of the importance of self-care and mental and physical wellness might carry out to be the new normal. Moreover, self-dependency might also be a factor to be considered in the elevation in consumers' behavior (Mardell and Alwén, 2021). Thus, it is important to further investigate how this would carry out in consumers' spending behavior.

#### 2.4 Research Gap

Over the years, consumer behavior has been deeply studied and has multiple findings and theories that can be the foundation for companies' strategies and economy's approaches towards fulfilling humans' needs and wants. However, literature is still lacking profound research regarding the psychological aspect of consumers and the impact of sudden changes on their purchases. Studies that investigate negative feelings and their effect on purchasing behavior in an unpredictable environment is still very limited

(Lins and Aquino, 2020). However, such research is vital in crisis such as the one presented by Covid-19. This is because, negative feelings such as anxiety, stress and fear rose from the pandemic and has effected people's mental state (Brooks *et al.*, 2020). This fear had its impact on consumers as it puts them in a survival mode and accordingly, their purchases were revolving around this motive (Di Crosta *et al.*, 2021). Panic buying and stockpiling could also be a result of negative feelings (Lins and Aquino, 2020) which had increased tremendously during the first months of the Covid-19 pandemic. Therefore, companies' survival depended on understanding this sudden change in consumers priorities and adjusting their strategies to fulfill the new needs.

However, literature is still missing significant research regarding the reasoning behind those changes. Additionally, the existing studies regarding the psychological effect on consumer behavior and purchasing decisions are mainly a result of quantitative research regarding the topic. An explorative qualitative approach is unfortunately lacking from today's literature even though it is important to have as it investigates information that participants might not be fully aware of when they are answering a quantitative survey which in turn can limit the results coming from those studies. Moreover, there is not enough substantial research about the psychological effect of the pandemic and its effect on purchasing decisions in Germany. Therefore, this research regarding the effect of risk and uncertainity on purchasing decisions during the Covid-19 pandemic in Germany attempts to the fill the gap that exists in today's literature.

## 3 Methodology

This study follows an exploratory qualitative approach, using semi-structured indepth interviews to conduct the research. A qualitative approach allows a deep investigation of a complex situation that doesn't have sufficient data (Yin, 2015), which was the case in this study and the reason why this method was chosen. The interviews were administrated in English and took place between the 20<sup>th</sup> of March 2022 and the 28<sup>th</sup> of March 2022 in Germany. The semi-structured interviews followed an "interview guideline" (See Appendix 1) to strengthen the research's dependability. The flow of the interview and the follow up questions were determined by the interviewees' answers. This is common in semi-structured interviews, as the "interview guide" is set to ensure that the main areas of the research are covered but questions may be added as the interviewer further investigates participants' responses (Brynan and Bell, 2011). The "interviewer further investigates participants' responses (Brynan and Bell, 2011). The "interviewer further investigates participants' responses (Brynan and Bell, 2011).

view guideline" was divided into five main parts beginning with an introduction, demographics and general questions regarding hobbies and shopping motives. Following, participants were asked questions regarding the Covid-19 pandemic and their feeling about it in both the beginning and the moment. The third part then focused on the shopping experience and habits of the participants along with questions regarding panic buying. Afterwards, questions regarding participants' mental health, use of free time and self-care habits were asked. Finally, the in-depth interviews concluded with questions regarding participants' social life and the effect of Covid-19 on friends and family members.

In total, sixteen interviews (*N*=16) were conducted. In qualitative studies, data saturation is more crucial than the number of conducted interviews. Meaning that, the point where no new significant data is emerging would be the sufficient number of interviews needed (Glaser and Strauss, 1967, cited in Närvänen *et al.*, 2020). The interviewees were recruited from university students, social media, and personal connections.

To ensure participants' safety and comfort, interviewees who live in North Rhine-Westphalia were given the choice between a face-to-face interview or a video one using either Skype or Zoom. Participants who chose a face-to-face interview, decided on the place as well to make them feel at ease. On the other hand, interviews with participants living outside North Rhine-Westphalia were automatically conducted over a video call to reduce traveling during the pandemic.

#### 3.1 Procedure

Before conducting interviews, a brief overview was given to the participants, and they were assured to have complete anonymity and confidentiality which was also stated in the consent form the interviewees were asked to sign (see Appendix 2). The interview consent form also included a clarification that no monetary compensation will be provided and stated that interviewees had the freedom to skip questions they don't feel comfortable answering or abandon the interview at any time they want. In addition, a statement clarifying that the interview would be either or both audio and video recorded was provided. After that, all sixteen participants read and signed two copies of the "interview consent form" and were given one to keep with them. Once that was completed, audio or video recording started at the beginning of each interview. Record-

ing the interviews is essential to guarantee that the interviewees' exact words were analyzed (Yin, 2015). Five interviews were conducted in a face-to-face manner, three of which were held in the Mensa of Hochschule Rhein-Waal, one interview was conducted at the participant's garden, and one was conducted in a café of the participant's choice. All face-to-face interviews were audio taped. The remaining 11 interviews were done virtually, with three conducted and recorded via Zoom and the final eight interviews were conducted and recorded using Skype. The interviews duration ranged between 26 – 58 minutes. Interviews' total duration was 599 minutes with an average interview length of approximately 37 minutes.

The semi-structured interview followed but was not limited to an "interview guide" (see Appendix 1). Questions in the guideline were developed based on Kvale's (1996, cited in Brynan and Bell, 2011) recommendation of question types. Accordingly, the first set of questions was general introductory questions that consists of demographic questions including name, age, nationality, current location, and occupation. Followed by questions regarding hobbies and if any of them were picked up during the pandemic. The interview then moved to the next part where participants were asked how they first heard about the pandemic, to give three words that sum up the pandemic from their perspective, with a follow- up question regarding the reasons behind choosing these words. Questions regarding their feeling about the pandemic in March 2020 where Germany has just started applying restrictions (Bruno Petzold *et al.*, 2020), and their feeling about it now were also asked in this part. Additionally, questions regarding the spread of the virus and participants' feeling about it were asked. This part was then concluded with questions regarding interviewee's source of income and financial stability during Covid-19 to assess the financial risk felt at the time.

The next part then covered the shopping experience and purchasing decisions with questions such as "Share with me in details the first shopping experience you had once the pandemic hit Germany?", along with questions regarding panic buying, how they heard about it, have they done it themselves, how did they feel when seeing empty shelves and so on. Direct follow-up questions such as: "What were you buying more of?" were also asked in this section.

The fourth part of the semi-structured interviews was about participants' mental state and self-care during the pandemic with questions like: "How would you describe your mental state during the pandemic?" and "What was your self-care routine during the pandemic?". The interviews concluded with a series of questions like "Describe your social life during the pandemic." and "How did you maintain social connections?" which is meant to further investigate participants' social life to understand his/her the risk assessment and mentality during the pandemic. Finally, interviewees were asked if they have any further comments they want to add or any points they want to elaborate on before ending the interview.

It is important to note that not all sixteen conducted in-depth interviews followed this exact order of questions but was rather dependent on interviewees' answers. However, all interviews contained the information that was initially set to have in the "interview guideline". All interviewees were also asked follow-up questions on points that needed further investigation or elaboration. Moreover, questions about mental health were added after the first three interviews as it came up in all of them, therefore, the "interview guideline" was adjusted accordingly. Questions about the pandemics' emerging trends were also added after noticing it repetitiveness during the initial coding of the first 5 interviews.

#### 3.2 Data Analysis

The analysis of the qualitative data used an inductive thematic analysis approach. A thematic inductive approach means that the data was approached with an open mind and without being limited to a pre-existing code outline (Braun and Clarke, 2006). To begin the analysis, all interviews' audio and video recording were transcribed and analyzed in MAXQDA software, 2022.

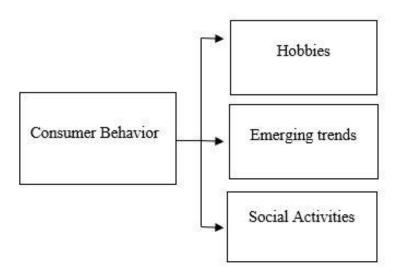
Conducting the thematic analysis followed the steps suggested by (Braun and Clarke, 2006), starting with being familiar with the data, which was done through reading the interviews after transcribing them and taking informal notes and comments about each interview (See Appendix 3). Secondly, initial codes were generated amounting in a total of 1790 coded segments distributed over 380 codes (see Appendix 4). Codes are a way to represent elements or segments of raw data that the analyst uses to profoundly evaluate a certain phenomenon (Braun and Clarke, 2006). Accordingly, codes that represent the same concept were grouped as sub-codes under one code. For example, codes such as "closed gyms", "closed restaurants" and so on were combined under a new code called "closed places". Additionally, several codes with the same meaning and used in the same context were merged together. For example, the code

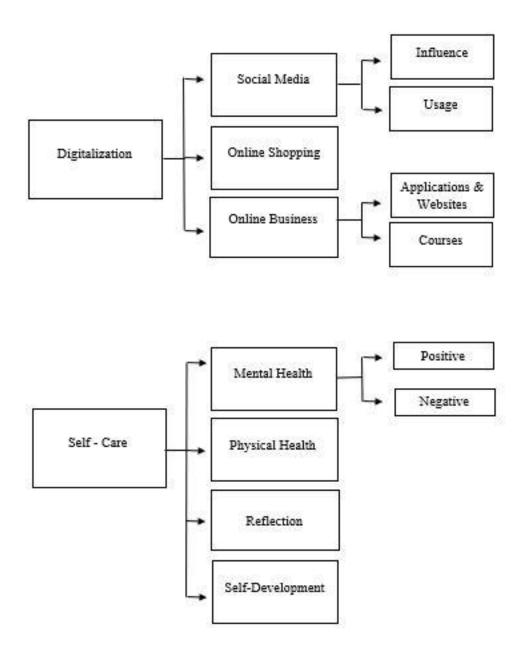
"FFP" was added to the code "medical masks" and were set as a sub-code under the code "items bought". Another example is the code "sanitizer" that was merged with "hygiene products" and set as a sub-code under the code "shopping experience" as it described the addition of the hygiene products to the supermarkets as was stated by responder 8 (R8): "maybe I was oblivious to this, but that was the first time that I saw, like, hand sanitizing things being there". Additionally, the three codes "job explanation", "difficult job environment", "not enough" were excluded from the analysis as they were irrelevant to the research and just explaining the job's nature.

In the third phase, initial themes were generated using the initial 380 codes and sub-codes (see Appendix 5). Following, a revision of the themes and codes was conducted to generate the final structure which consisted of 5 themes, 17 codes and 13 sub-codes (See Figure 1).

Physical risk Perceived Risk Monetary risk Risk Attitude Risk and Uncertainty Uncertainty Avoidance Social Factor Panic Buying Scarcity Food Masks & Necessity Products Hygiene Products Clothes Luxury Products & Purchasing Behavior Services Buying Motives

Figure 1: The Generated Themes, Codes and Sub-Codes





#### 4 Results

A total of sixteen interviews were done in this exploratory research conducted on a total of (N=16) participants. As illustrated in Table 1, 50% of the participants were male (N=8) and the other 50% were female (N=8). The participants ages ranged between 18 – 34 years old. The participants came from 10 different countries and 2 participants identified to be from a mixed cultural background. Participants came from Asian, African, European, Middle Eastern, South American, and North American cultures. During the pandemic, only 3 out of the 16 participants had received their income from their family, while the remaining 13 depended on their job for money. Additionally, participants were located all around Germany, covering 5 out of the 16 German states. Those states being, Bavaria (N=2), Baden-Württemberg (N=1), Hesse (N=1), North Rhine-Westphalia (N=11), and Rhineland-Palatinate (N=1).

Table 1. Demographic representation of the participants

Participants	Coded Segments	Age	Gender	Location	Income From	Work / Stu- dent	Nationality
1	137	26	Male	Kamp-lintfort	Work	Student	Egyptian
2	136	30	Male	Düsseldorf	Work	Working as an internal auditor	Syrian
3	90	27	Male	Duisburg	Work	Working Stu- dent	Egyptian
4	83	28	Male	Moers	Blocked Account / Work	Working	Egyptian
5	90	28	Female	Wermelskirchen	Work	Working as a recruiter Job	German
6	116	32	Female	Regensburg	Work	Working as a data scientist	Indian
7	71	26	Male	Kamp-lintfort	Family	Student	Chinese
8	141	25	Male	Kamp-lintfort	Work	Working Stu- dent	Zimbabweans
9	117	33	Male	Frankfurt	Work	Working in IT	Iranian
10	154	18	Female	Ennepetal	Family	Student	Syrian

11	98	24	Female	Kamp-lintfort	Work	Student	Lativian
12	114	27	Female	Munich	Work & Family	Working at LMU	German
13	124	23	Male	Koblenz	Work	Working stu- dent	German Pales- tinian
14	114	23	Female	Rheinberg	Scholarship / Work	Working	German, Danish & Lebanese
15	111	33	Female	Heilbronn	Work	PhD Candidate	American
16	91	34	Female	Waltrop	Work	Working in HR	Peruvian

#### 4.1 Risk and Uncertainity

The result of this study shows that feelings of *risk and uncertainity* were mainly dominant in the beginning of the pandemic. Participant (R16), a mother of two, illustrated the risk she felt by explaining how cautious she was doing her shopping in the beginning of the pandemic by saying: "I was reluctant to touch the products, like it sounds super silly, yeah, but I think I was super careful, like using this antibacterial gel, you know, in my hand". Codes such as "cautious", "limited contact", "going to the supermarket less" among others were used to generate this theme. The uncertainity of the nature of the virus was also another topic that increased participants' fear and anxiety. Most participants felt relieved after they were infected or vaccinated.

Risk attitude was different among participants in the beginning of the pandemic. Half of the participants felt that there was no apparent risk when they first heard about the virus breaking in China as they reported that it was "far away" and "surreal" in the sense that it is a laughable matter. However, when the virus hit Germany and the rules and restrictions were applied in March 2020, all participants understood the presented risk and were committed to the safety rules. Nevertheless, most of the interviewees demonstrated negative feelings towards committing to those rules in the beginning. Some of those feelings are annoying, hopelessness and frustration. Those feelings were replaced with acceptance and adaptability by 2022.

The two main *perceived risks* during Covid-19 were monetary and physical risk. Only 4 out of the 16 interviewees felt that they were financially stable, making monetary risk a major issue for the remaining 12 participants. This monetary risk was oriented around fear of uncertainity, unemployment and the rising products' prices. Being infected with Covid-19 was mainly the reason behind the feeling of physical risk. Although, some participants believed that they will be okay if they did get infected, they still were worried about infecting others as they felt responsible for the more vulnerable individuals. Physical risk was also seen with participants rushing to get disinfection products and masks, testing after meeting people, and maintain social distancing rules.

Participants varied between *high uncertainity-avoidance* as they demonstrated negative feelings towards not being familiar with the situation. Such feelings include stress, anxiety, helplessness, loneliness, and fear. Participants with *low uncertainity-avoidance* on the other hand demonstrated a calmer approach about the situation, seeing the pandemic as an adventure or an opportunity or showing feeling such as relaxed and excited.

Finally, *panic buying* was a main topic that was showcased in all interviews. All interviewees heard about panic buying happening on social media and the news with the majority of them seeing it for themselves as well in the form of panicked people and empty shelves that resulted in scarcity in necessity products. More than half of the participants also had an experience where they needed an item and did not find it or believed that it will run out when they would need it. Participants who were living with others also demonstrated a higher likelihood to buy more as they were buying for people living with them as well when an item that they needed was found after being scarce.

Table 2. Supporting statements for the risk and uncertainty theme

Risk	"I could tell something was serious and different was happening. I					
	became concerned very early about the pandemic. "(15, Pos. 19)					
Uncertainity	"Scary first came to my mind because I was talking that in the be-					
	ginning, there people like didn't know what was going to happen					
	and they were scared and umm yeah this kind of uncertainty that					
	, , , , , , , , , , , , , , , , , , ,					

	people had in the beginning, I would describe as scary." (12, Pos.		
	47)		
Risk Attitude	"I was very scared. I I thought it was the end of the world." (4, Pos. 29)		
Perceived Physical Risk	"I was very aware of keeping distance from people or putting my own ahh mask." (2, Pos. 63)		
Perceived Monetary Risk	" because I lost my job and I had to take care of my to save money I had." (9, Pos. 101)		
Panic Buying	"I just bought a little of extra stuff so that I don't have to keep going to the supermarket again and again." (6, Pos. 60)		
Scarcity	" because people went for the toilet paper went for, for tuna in, in cans went for umm pasta and stuff like that, and everything was gone." (13, Pos. 61)		
Social Factor	"I would have my friends saying, things are running outside also like you know." (8, Pos. 68)		

# 4.2 Purchasing Behavior

### 4.3

Purchasing behavior revolved around the preferences of participants' spending which was focused on *necessity products* in the beginning of the pandemic regardless of the increased prices that the majority noticed. Even interviewees who bought *luxury products* and services such a car or and spa day saw it as a necessity. Participants who showed a tendency towards buying luxury products all stated that they like adrenaline rush activities such as bungee jumping and were more financially stable.

The main reasons behind the general focus on necessity products is participants financial instability due to losing their jobs or doubting finding one. Another shown reason towards the preference to buy necessity products was that there was nothing to do to buy anything luxurious. Therefore, staying at home required nothing more than basic food purchases, and going out required disinfection products.

Buying motives remained the same if the product was available, most common ones were "price", "quality', and "packaging / appearance". However, emerging motives of "healthy", "sustainable" and "ethical" were common among participants as well, with most of them incising their interest in those motives after self-reflection during the pandemic.

Table 3. Supporting statements for Purchasing Behavior

<b>Purchasing Behavior</b> " once we really had no toilet po	
	anymore. And then I bought something
	which was like three times the price than
	normal because of like okay, we need at
	least one roll somehow, so I bought it
	even though it was pretty pretty expen-
	sive." (5, Pos. 73)

<b>Necessity Products</b>	"I was being really, really conservative	
	with my spending, only on things I	
	needed." (15, Pos. 89)	
	"I told you I didn't have a job back in this	
Food	time so I didn't buy any luxury things, I	
	was just buying my my normal daily	
	things I want to like food and sometimes	
	clothes and yeah, that's that's it basi-	
	cally." (3, Pos. 114)	
	"I went home and ordered some masks	
Masks & Hygiene Products	online. And oh, I remember I also bought	
1120010 00 113 <b>g</b> -0110 1 1 0 0 0 0 0 0	a 10-euro masks N95." (9, Pos. 72)	
	"I don't know how I managed to do this,	
Clothes	especially with like almost everything,	
	not everything closed up, but I bought	
	more sports clothes during the pandemic	
	as well." (8, Pos. 64)	
	"I invested a lot of my home during the	
Luxury Products and Services	beginning of the pandemic, because I had	
	time, so I did a lounge. (13, Pos. 79)	

<b>Buying Motive</b>	" if I read on tags that it's made in cer-	
	tain countries, where I know that exploi-	
	tation of labor happening, especially	
	during pandemic times, then I try to stay	
	away." (6, Pos. 27)	

### 4.4 Consumer Behavior

Participants' consumer behavior was immensely affected during the pandemic. Home office was a topic discussed by most of the interviewees and the things they bought for it and the activities they did in the saved commute time appeared in all interviewes. All interviewees either started *new hobbies* during the pandemic or found the time to develop old ones. For these new hobbies, the majority of the participants bought new items or developed new behaviors that they believe they will continue after the pandemic. Reading was one of the most common hobbies among participants as they started buying more books to feed into this need. Additionally, *emerging trends* such as making candles, knitting and other trends had its deep influence on the interviewees. Home cooking and baking were also considered as trends by the interviewees as it was greatly talked about on social media. Almost all participants learned new recipes to do more home cooking which they all prefer now to restaurants and believe that they would continue doing so after the pandemic.

TikTok was another common trend. Most participants downloaded it during the pandemic as it bought them joy and was considered a way to connect with the world. While some considered it to be addictive and keeps on deleting it and downloading it again; others believe that they would keep on using it as they now prefer it to other social media platforms.

Interviewees *social life and activities* was also affected because of Covid-19. Multiple restrictions were imposed by the governments that forced participants to look for alternatives. These limitations included participants not being able to meet friends in a physical manner, which forced them into the online alternative. Additionally, closed

places made consumers buy more items that would help them decrease the boredom the felt while staying in quarantine such as boardgames and online ones.

Table 4. Supporting statements for Consumer Behavior

Consumer Behavior	"I bought some electronics products. For		
	example, like really nice headphones, be-		
	cause that's working from home a lot		
	spending our time on the computer for		
	doing my PhD work." (15, Pos. 63)		
Hobbies	" started reading a lot more, because I		
Hobbies	probably read like one book a month be-		
	fore and now I started now now I do at		
	least two books a month, even small		
	books, maybe." (6, Pos. 94)		
<b>Emerging trends</b>	"It is relaxing. When I get stressed at		
Emerging trents	work, I just go make a candle." (15, Pos.		
	13)		
Social activities	"I guess as a parent, you become crea-		
Social activities	tive and then you know, like board		
	games, and we said more cooking, doing		
	some games, watching movies. Yeah, all		
	kind of activities that you can imagine."		
	(16, Pos. 106)		

# 4.5 Digitalization

Digitalization was a very popular topic among all participants as many of them believed it to be one of the most positive things about the pandemic. With participations staying home, *social media* was their way to connect with family and friends. The influence of social media was negative at times where it spread panic as illustrated here: "we have seen in the media that it's, it's a bad virus with bad symptoms, and you might I don't know die from it or something, so everyone was afraid." (4, Pos. 41). However, it was mainly perceived in a positive manner and a way of connection to the world. Influencers on social media were also a part of why some participants feel more engaged with the screens.

Online shopping was preferred by most participants. Participants who still prefer physical shops are ones who prefers to see the material and size for new things first. The majority of the participants said that they started using online shopping more during the pandemic and prefer it to physical shops. The motives for online shopping were mainly "convenient", "time saving", "better offers", "easy returns" and "seeing reviews". Participants overall believe that they would continue shopping online after the pandemic.

Online businesses also boomed during the pandemic. Participants reported that they spent a lot of time using streaming services such as Netflix and YouTube to watch movies and series during the extra free time they had. Additionally, one interviewee said that she had a virtual doctor appointment which was not common before. Moreover, dating apps, online courses and online gaming were also very popular among participants.

Table 5. Supporting statements for Digitalization

Digitalization	"Even businesses have switched over to		
	social media because if you actually work		
	with social media, that's the most suc-		
	cessful you can be, in my opinion, be-		
	cause it's going forward, it's only going		
	to be the source of everything." (10, Pos.		
	83)		
Social Media			
	"For one app that I managed to use the		
	most during the pandemic, I actually		

downloaded it during the pandemic was TikTok because it had yeah, it had entertaining memes, entertaining characters and yeah, that... that did keep a smile on my face during... during the tough times especially." (8, Pos. 90)

### **Influence**

"I was following a man who was ahh who used to be a Disney illustrator, and he was umm also selling his drawing courses and I also bought them." (11, Pos. 114)

# Usage

"... a lesson could be that umm you can also keep having contacts via social media with your friends that are not living at the same place, and it's not umm it's not that difficult or it can be fun as well." (12, Pos. 63)

### **Online Shopping**

"... when I had visitors, I was ordering online, the food." (2, Pos. 61)

### **Online Businesses**

"... before the pandemic you would never ever imagine to have a doctor appointment through video, but this actually happened." (16, Pos. 82)

Applications & Websites	
Courses	"I used to date to use dating apps during the pandemic." (3, Pos. 130)
	"I also tried out some of the courses. I tried like Udemy." (11, Pos. 114)

### 4.6 Self-Care

Self-care including self-love and self-development was a reoccurring topic among all participants. To increase their knowledge, participants were studying more about what benefits their career. Many participants started reading more about investments and finance as well. Mental health was deeply impacted with some participants and became more important to them during the pandemic. Many stated that they suffered from uncertainity, anxiety, depression, panic, fear, and a loss of control. Others looked to the pandemic as an experience that made them more mindful, grateful, and appreciative to the life they have. Physical health was very important to participants. With home office and restrictions forcing the interviewees to stay home, they learned the importance of an active lifestyle and started doing more home workouts, long walk and runs using applications that would help track their performance, and YouTube to learn new workouts.

Self- reflection was also very common among all participants especially in the beginning of the pandemic. The extra time spent in quarantine was a main motive for interviewees to do some reflection. Some participants who mentioned that they were introverts felt that they became more social during the pandemic, while extroverts felt like they became calmer and more independent.

Table 6. Supporting statements for Self-Care

Self-Care	"Umm I would, you know, I remember I
	started buying some umm more expen-
	sive, like self-care products than I nor-
	mally would. So, I like the store Lush."
	(15, Pos. 37)
Mental Health	" it definitely benefited some people
	like uh, mentally. Umm probably for oth-
	ers it was were like not that good." (1,
	Pos. 46)
Positive	"it's more about umm realizing things in
	life that you have never paid attention to
	before." (7, Pos. 66)
Negative	<i>before</i> . (7,10s.00)
	" uncertain, because you never really
	know what is going to happen and when
	it's going to end or not end and all this up
	and down." (5, Pos. 35)
Physical Health	
	"I would see myself, you know, traveling
	like 3 hours just to go and play sports just
	so that I could feel, you know, like yes it's
	a pandemic, but I could still be a bit more
	active." (8, Pos. 66)
Reflection	
Rencentin	
	" in the sense that I think that it's if the
	pandemic taught us the some of the many
	learnings, yeah, that we shouldn't take
	for granted life that is not that you can
	1

	have anything under control at all." (16,	
	Pos. 40)	
Self-Development		
	"I got to see a lot of stuff because I love umm media production, so I like movies, classics. So I enjoyed my time very much." (14, Pos.55)	

## 5 Discussion

This exploratory study was set to investigate how did Covid-19 affect consumer behavior and to deep-dive into the effect of risk and uncertainty on purchasing decisions. It additionally explored if this impact would carry on after the pandemic is over. A recommendation for companies to benefit from these changes was also discovered during the analysis process.

It was found that most participants took a very calm sarcastic approach when they first heard about the Coronavirus outbreak happening in Chine mainly in January 2020. The main source of information for them at the time was social media and news applications which spread the information in a rapid manner. Participants' sarcastic approach was because they had a very low risk perception as they felt that it was miles apart and would not reach them. This carless attitude could be attributed to the cultural background of the participants or being privileged to not witness a pandemic or a major crisis before. Participant number 6 for example who had troubles traveling between China and the United States during SARS outbreak in 2003 was extremely concerned and took precautions very early in the pandemic.

The same cannot be said for the rest however, as their chilled behavior continued with the spread of the virus, with the majority of participants choosing not to start wearing masks until it was mandatory. When Germany then imposed lockdowns, travel bans and restrictions in March 2020, interviewees' risk perception immediately increased. When asked to describe their feelings in the beginning of the pandemic, words to describe negative emotions such as "afraid", "terrified", "anxious", "stressed" and "helpless" were mainly used. That being said, when participants where directly asked if they were panicking or concerned, the majority said that they weren't reaching that extent but was mainly just annoyed and bored with the restrictions. Some participants showed high awareness of the presented risk, but they had a somewhat conscious fearless attitude towards the pandemic. Those participants mainly said that they knew the presented risk but didn't allow it to stop them from living their lives. However, it was reflected in their answers that they were indeed afraid of it and were being cautious in their behavior. This was evident as those same participants would limit their contact as much as possible and take a Corona test after having a social interaction.

According to the findings in Chapter 4.1, both physical and monetary risk explained by Solomon (2004) were extremely heightened during the pandemic. The physical risk was evident as almost all participants had a clear risk perception, believing that they will indeed get infected, or felt they have already. Participants mentioned that they were not afraid for themselves but more for their family members. All interviewees also argued that they were not so worried as they did not believe that they will not suffer from a severe consequences as they believed that they were healthy and strong enough to survive it.

In accordance with the findings of Bruno Petzold *et al.* (2020), participants main problem with getting infected was their fear of infecting someone who is more vulnerable. However, this in-depth research further investigated the participants initial answer by asking if they were infected and how did they feel about it. Follow up questions about participants' feelings regarding vaccinations were asked. This investigation resulted in discovering that the long-term symptoms were really concerning to most of the interviewees. Additionally, most participants said that they were "relieved", "felt

better" and "happy" when they found out that they tested positive or after the vaccination. The reason behind these positive feelings was that they were tired of waiting for the infection to happen. Their relief was also because they could see what Covid-19 actually feels like and how they could handle it. This shows that participants were genuinely worried about the effect of the Covid-19 disease on them even though their initial answers suggested that they were mainly worried about infecting others. It can also be concluded that the more positive feelings after the infection or vaccinations were mainly because the uncertainty factor decreased for them. The lower uncertainity would have then decreased the perceived risk (Lee, Mustapha and Hwang, 2019) that they subconsciously felt.

Additionally, the fact that participant felt better after knowing firsthand what the virus is all about indicates that more information in the beginning of the pandemic would have decreased the uncertainity, which in turn would have decreased the perceived risk and resulted in a better mental state for the people. This notion was hard to implement in this pandemic as the situation was unfamiliar to government officials as well which was noted by participants in this interview. While interviewees understood that politicians were going through this new crisis with them, some participants felt that politicians were trying out the rules on them to see what works even if they do not make sense. An example of that was the indirect implications by officials that taking the vaccine was the step towards "going back to normal". However, when people did actually get vaccinated, the rules for both vaccinated and unvaccinated people remained the same for a while. This made some participants lose trust in the government's actual control and knowledge of the situation. Thus, directly communicating with the people and explaining the situation in a clearer manner would maintain their trust and decrease the uncertainity and perceived risk as well.

Perceived monetary risk was also a main issue affecting participants' mentality. Similar to what happened during SARS and Ebola outbreaks, unemployment increased (Mardell and Alwén, 2021) and with it the uncertainty regarding finding a job or sustaining the current position at work was a concern to most participants. Those who did not demonstrate fear of unemployment were either financially stable or worked in positions where it can be done through home office. The uncertainty and monetary perceived risk caused participants to undergo a "money saving" behavior. Several interviewees mentioned that they had lost a job or were changing jobs which lead them to

focus their spending on necessity products. This also led to panic buying as participants started seeing the prices go up which drove them to buy more of what they considered essential and the further they stayed away from buying luxury products.

Seeing empty shelves and hearing about panic buying on social media or from other people increased participants' desire to buy more. The concept of panic buying, and stockpiling was mainly described by participants as "crazy", "weird" and "funny". Which could be the reason why almost all participants defensively denied that they have taken such approach. However, when they were asked in an indirect way following Kvale (1996, cited in Brynan and Bell, 2011) recommendation regarding conducting interviews, if they were not panic buying but rather just buying more than usual, almost all participants said yes. However, participants felt the need to justify that by explaining why they did it and that it technically is not buying more if they are going to the supermarket less. Participant R1 for example said: "I mean, it is more than usual, but again I mean, yeah, I'm not going shopping as frequent, so it balances somehow. Like I did not go full on crazy buying stuff that would get me for two years... Just like two months." (1, Pos. 109-111).

The reasons behind their increased purchases were found to be uncertainity regarding if the product would still be available when they need it, scarcity in existing products, seeing, and hearing about others panic buying and to decrease the perceived physical risk they felt when they went to the supermarket. The necessity products they bought included, rice, pasta, canned food, vegetables, and fruits. Items such as iPad, PlayStation, car, expensive yoga mat... etc. were seen as necessity in their opinion as it served a need the participants had at the time and are of high quality making the purchases value-based ones (Lee, Goh and Mohd Noor, 2019).

Regarding uncertainity avoidance (see chapter 2.2.1), as was suggested in theory by Reisinger and Mavondo (2005), a person that has high uncertainity avoidance will have a lower tolerance of accepting change. And as uncertainity avoidance and perceived risk have a positive correlation, it was found that when participants were asked to describe the pandemic in three words. Participants who had lower perceived risk and thus lower uncertainity avoidance mostly used more positive words such as "explore/discover", "exploration of technology", "enjoyable" and "unique" among others. This shows that those with low uncertainity avoidance did not see the pandemic as a threat

but rather an opportunity to grow. Thus, their consumer behavior change was minor as they continued buying the same things as before, with an addition of luxury products that would help them keep their positive mentality. For example, among those participants, ones who bought cars, other who bought a PlayStation, and another who completed her baking set to further work on her hobby as she had more time to do so during the pandemic.

On the other hand, participants who showed high perceived risk, mainly described the pandemic using negative words such as "alone", "longing", "uncertain", "fear", "scary" and "tough" among others, or using general associations such as "mask", "staying home" and "everywhere". Meaning that according to this research's finding, those participants had high uncertainity avoidance and were less tolerant to the changes brought by the Covid-19 pandemic. Accordingly, their consumer behavior witnessed a greater change as their purchases were revolving around necessity food, hygiene products and basic clothes to maintain a sense of normality. This is likely because in this uncertain situation, they acted in a manner that they felt was essential for their survival (Dodgson L., 2020).

Self-development was also a topic that was extremely popular among all participants. Several of them became more interested in finance and investments. Participants were also taking online courses that contributes to their career and personal development. The immense explosion of digitalization really helped them to do so and to stay connected to people around the world.

As physical and mental health were important during the pandemic. Skin-care products and services, along with products that contributes to participants' wellbeing were heavily purchased or used. Health tracking applications for examples were commonly used by interviewees who started running during the pandemic. Fitness watches and online workout classes were also mentioned by the participants. New hobbies such as cooking, reading, baking, online gaming and so on all resulted in a behavioral change. With everything being closed, people started cooking more at home which with time they started preferring to ordering from restaurants. Home workout, running and walks were also a good cheaper alternative to the gyms. YouTube was most commonly used to learn new recipes and workouts for free.

Participants also started preferring *simplicity* and *ethical buying* in their purchases. *Ability to compare* and *availability* were additionally some of the main motives for consumers in the pandemic along with *going out less* which also contributed in the huge success online shopping witnessed among interviewees. This change however was the only one interviewee mostly admitted to. A lot of the participants wanted to seem in control by repeating that purchases they made where their own choices and not a result of the pandemic. However, when asked why did they make a certain purchase, their answers would be because they wanted to try because of an influencer for example and was the perfect time to do so as they were staying at home all the time due to restrictions imposed by the pandemic.

Finally, participants overall agreed that virtual reality is the "new norm" that companies should adjust to. They also believe that they will mostly continue with their changed behavior after the pandemic is over unless they struggled with time again when they lose the very much preferred home office.

### 6 Limitations

While this research contributes to the current literature through undertaking a qualitative approach, it was still a subject to some limitations. Firstly, this study was conducted on participants who were living in Germany during the Covid-19 pandemic. This means that the findings are only taking into account the rules and restrictions imposed by the German government at the time of the pandemic. Therefore, results may differ in different countries that applied different measurements to control the spread of the coronavirus. Secondly, the cultural aspect was not fully taken into consideration

when doing the analysis. This is a limitation because participants involved in this research comes from different cultural backgrounds as clarified in Chapter 3. Given the significant difference between the Western and Asian environments (Wang and Judge, 2013) as one example, participants' cultural upbringing may have influenced their experiences, feelings and reactions towards the different stages and rules of the pandemic. Accordingly, their purchasing decisions might have been different as their risk perception and uncertainty avoidance might have not been the same. The in-depth interviews were also conducted in English which was the mother tongue for only two out of the sixteen interviewees. This might have a been a barrier for some interviewees that could have limited them from fully expressing themselves. This was seen as some interviewees struggled to find the right word and ended up saying it in their mother tongue which was then translated to English.

Another limitation is the absence of a detailed personality analysis. The analysis took participant's self-proclamations regarding their personality as one aspect to understand their behavior, without backing it up with a personality test. It is possible that different personality types would have different tolerance for accepting risk and uncertainty. Further, the responses of the participants relied on their memories and personal experience. This is a limitation because questions about their feelings from two years ago might have been remembered differently based on their current experience and adaption to the situation. This is not a major limitation as follow-up questions were asked to further ensure that the experience the participant was recalling, matched the feeling aspect of their answers.

Finally, this research looked at consumers' perspective only. Companies' strategies and methods to adapt to the sudden changes were seen in participants' answers but were not investigated from companies' perspective.

### 7 Future Recommendations

The present study contributes to the literature by providing an explorative qualitative approach that investigates the psychological aspects of the consumers which is often neglected in literature (Lins and Aquino, 2020). Specifically, this study explores the impact that the feeling of risk and uncertainty has on consumers purchasing decisions during Covid-19 in Germany.

Findings of this research show that the higher the uncertainty avoidance and risk perception are, the more likely it is for consumers purchasing decisions and behavior to be effected. However, with risk-perception and uncertainity avoidance being based only on consumers statements. It might be beneficial to make participants do a personality analysis to further enhance these findings. Consumers who self-assessed themselves as introverts reported to feel more extroverted during the pandemic and undertaking more extroverted purchasing habits like traveling with strangers. This area might be a great addition to literally if it is investigated more deeply. Additionally, the cultural aspect can also have an effect on the degree an individual's uncertainity avoidance and accordingly risk perception. This might further clarify the differences in data with participants coming from different cultural backgrounds and all living in Germany.

Companies' perspectives is also great to understand as the Covid-19 pandemic was a shock for businesses all around the world. With little information and great uncertainity, companies had to take big risk in adjusting their business plan according to the sudden situation. Investigating this area from the businesses' perspective might be a great addition to literature.

Finally, an interview guide was also used to conduct this study as it enhances its dependability (Brynan and Bell, 2011). This guide could be used to explore the risk and uncertainty's on purchasing decisions in different crisis such as the current war between Russia and Ukraine in 2022. It could be interesting to see how different would the risk and uncertainty feeling be for consumers who were just getting out of the two year pandemic.

# 8 Conclusion

The effect of the Covid-19 pandemic is undeniably vast on both induvial and businesses around the world. Just like previous crisis, this Corona virus outbreak resulted in a change in consumer behavior. This exploratory research aimed to investigate the effect of risk and uncertainity on purchasing decisions in Germany. Semi-structured indepth interviews were conducted and analyzed using an inductive thematic analysis to deeply investigate participant's risk attitude and perspective as well as their uncertainity avoidance. It was found that while participants can have a great awareness of the presented risks, they still find it hard to admit that they were undergoing any panic regard-

ing being infected. Additionally, participants with high-risk perspective and uncertainity avoidance were found to have more change in their consumer behavior. Those participants were purchasing more necessity products such as tuna, pasta, and rice. They also worked more on their self-development and became more conscious of their physical and mental wellbeing. Accordingly, their purchases also included attending online courses and buying products that fulfil their new needs such as skin-care products, fitness watches and self-development books. On the other hand, participants with low-risk perspective and avoidance showed less change in terms of consumer behavior and purchasing decisions. Those participants were more consistent with their buying behavior as they rarely demonstrated panic buying. They also bought some luxury products such a car or iPad for example which they perceived as essential.

Additionally, digitalization had a great impact on consumer behavior and purchasing decisions during Covid-19. More businesses adjusted their business model to include an online option. Many new applications and websites were developed, and even some old online platforms became more popular during the pandemic. Participants expressed that they maintained their social life mainly through social media such WhatsApp, Instagram, Facebook, TikTok and Snapchat. Products were also bought based on the recommendations of the influencers the participants followed on these platforms. Online social activities such as movie watching using streaming services like Netflix or talking with people about different topics on Clubhouse or Redditt was also a way to fill up time.

Moreover, businesses developed online applications that were not there before. In Germany, many grocery delivery applications were created and immediately fell the need consumers had as it used the pandemic's popular motive of "going to the supermarket less" to their advantage which helped to make them more essential in consumers minds. Online shopping was also increased as participants reported it to be easier and has better offers than physical shops. Participants also showed a grown interest in simplicity and ethical buying as they mostly became more mindful about their purchases after having time to reflect on what they need.

Finally, the majority of the participants believe that they would continue their changed behavior after the pandemic is over. Thus, it is essential for companies to adjust their strategies accordingly. As digitalization is becoming more important, it is vital

that companies have an online presence that goes with the current direction the world is headed in. Additionally, based on the findings of this research, companies should take into account that consumers with high-risk perspective and high uncertainty avoidance are more influenced by changed and heir purchasing decisions can be more influenced. Products and services that address their concerns and provides solutions to them could be more successful particularly during a time of crisis.

# 9 Appendix

## **Appendix 1. Interview Guide**

- 1. Can you please give me a short introduction about yourself? Where are you from, how old are you, where do you live and what do you do?
- 2. What do you like to do in your free time?

**Follow up:** How long have you been doing this?

- 3. What do you think about hobbies that gives you an adrenaline rush?
- 4. Did you start new hobbies during the Covid-19 pandemic?

**Follow-up:** Tell me more about what made you chose to try them.

5. When you go shopping, what is important you when you buy a product in the supermarket?

**Follow-up:** What are the main reasons that made you choose "the reason they choose, e.g. quality, price, durability...etc?"

6. When you go shopping, what is important you when you buy a product in the supermarket?

**Follow-up:** What makes this important to you?

- 7. How did you first hear about the pandemic?
- 8. I want you to think back to the beginning of the pandemic, when lockdowns and social distancing was just happening in Germany around March 2020, how were you feeling at that time?
- 9. Now almost two years later, how do you feel about it?
- 10. Can you give me three words that describes the pandemic in your opinion?
- 11. How did you feel about the speed that the infections were spreading?

Follow-up: Did you ever think that you would be infected?

- a. If yes  $\rightarrow$  how did you feel about it?
- b. If no  $\rightarrow$  What made you believe that you won't?
- 12. Have you ever felt that you had Covid-19?

**Follow-up:** what made you believe that and how were you feeling about it?

- 13. Where was your main source of income coming during the first couple of months of the pandemic?
- 14. How finically stable do you consider your situations was during the pandemic? / did you hear about people losing their jobs in the pandemic, and if so how did it make you feel.
- 15. What was the best thing you discovered or experienced during the pandemic?
- 16. What was the worst thing from about the pandemic in your opinion?
- 17. Share with me in details the first shopping experiences you had once the pandemic hit Germany and the restructuration were applied?

**Follow-up:** Did you notice anything different about the supermarkets?

**Follow-up:** Was any shelves empty in the supermarkets you went to?

**Follow-up:** How did this make you feel?

18. Did you see or hear that people were buying too many things?

- a. **Follow-up:** If not mentioned, where did you hear or see that?
- 19. How did you react to this?

**Follow-up:** If not mentioned, why did/didn't you do the same?

**Follow-up:** Have you considered that the items might run out? → what did you do in case they did?

- 20. What were you buying the most at the beginning of the pandemic?
  - a. Follow-up: Do you consider these items necessary products?
  - b. If not → What do you consider necessary products? And how often were you buying it?
- 21. Did you buy something you consider luxurious in the beginning of the pandemic?

**Follow-up:** If yes, what made you choose to make this purchase? If no, what made you choose not to make any luxurious purchases?

- 22. What made you decide on a certain product and the other during the pandemic? (Could give an example of a supermarket, hygiene product and a luxurious one)
- 23. How was your family and friends reacting to the panic buying going on?
- 24. Did you try any new products during the pandemic?

**Follow-up:** If yes, can you give me some examples?

**Another Follow-**up: Do you still use them now? And do you think you will keep on using them?

25. Did you try out any new technologies including apps and websites in the pandemic?

**Follow up:** Tell me about your experience with them.

**Follow-up:** Do you think you will keep using them after the pandemic is completely over?

- 26. There were a lot of trends coming up during the pandemic, is there anything that stands out for you that you have tried? If yes, please tell me more about it.
- 27. Were there any products that you bought because of the hobbies you are now doing?

**Follow-up:** Will you continue on using them after the pandemic is over?

- 28. Can you please describe your mental health during the pandemic?
- 29. How did you maintain your self-care routine during the pandemic?
- 30. Were any of your friends or family members negatively affected by Covid-19? **Follow-up:** How did this affect you?

- 31. Tell me about your social life in the pandemic.
- 32. How did you maintain your social connections?
- 33. Do you have any other comments or feedback that you like to share that I didn't as about?
- 34. Do you have any suggestions or questions about this topic?

### **Appendix 2. Interview Consent Form**

# Interview Consent Form

## Participant's Name: Interview Date:

<u>Project Title:</u> The Effect of Covid-19 on Consumer Behavior: The Impact of Risk and Uncertainty on Purchasing Decisions.

### Project Description:

Dear Participant,

Thank you for taking the time to do this interview with me and to be a part of my research.

This interview is a part of a study done by Hia Akbik master thesis in the study program "International Management and Psychology" at Rhine-Waal University of Applied Science and under the supervision of Prof. Dr. Thomas Heun and Mr. Felix Sohnrey.

This research is trying to identify the effect of Covid-19 on consumer behavior. More specifically, identifying the impact of risk and uncertainty on purchasing decisions during different stages of the pandemic.

For more information or questions about the results of the study, you can contact me "Hia Akbik" on:

Mobile: +491630379192 E-Mail: haya.akbik@hotmail.com

You can also contact my first supervisor "Prof. Dr. Thomas Heun" using any of those methods:

Telephone: 02842/90825375 E-Mail: <a href="mailto:thomas.heun@hochschule-rhein-waal.de">thomas.heun@hochschule-rhein-waal.de</a>

### Terms of the Interview:

- I confirm that my participation in this research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that I can decline to answer any question or to end the interview at any time I want.
- I understand the purpose of this interview and the topic of the study.
- I agree to use my answers in the analysis of this project and in any future publications of it as long as
  my personal information are not published.
- I understand that my information will only be available to the researcher, the supervisors and committees overseeing this project.
- I understand that my confidentiality as a participant in this study will remain secure and my answers will not be traced back to me.
- . I understand that this interview is either voice or video recorded or both.
- · I have been given a copy of this consent form.

By signing this form, I agree to all the terms indicated above.		
Participant's signature:	Researcher's signature:	
Date:	Date:	

### **Appendix 3. Examples of Initial Comments**

### R1 interview:

- His friend introduced him to a new clothing brands during the pandemic because he
  has a discount in it and he now buys mainly from it and is willing to pay full price for
  it.
- Feels like when people were having flu in December 2019, it was actually corona, but it was known when everything shut down including airports.
- Was okay at the beginning as an introvert, he didn't mind staying home but after a
  few weeks he was going crazy.
- Corona had a lot of effect on people's mentality, people around him were positively affected as he and them rediscovered themselves.
- Believes that we are heading to a new normal but he just wants restrictions to be lifted.

<u>Note:</u> he asked to stop the recording for a minute to gather his thoughts and asked is it okay to say things even if he doesn't think they are pandemic related and was assured that he should be speaking freely and not overthinking his answers.

- Started doing Psychedelics at the beginning of the pandemic with his friends which got him to reach revelations about himself and the world.
- Prefers online shopping (easy return), also would ask a friend to get him groceries because he prefers to go to the supermarket less.
- During the first wave, October 2020, self reflection in the pandemic made him feel
  like he doesn't want to be an introvert anymore. So he started going on 4 Erasmus exchange trips after his friend told him about it and he became more social and met new
  people → he would continue after the pandemic with having new experiences.
- "... After the pandemic started, you don't see those people every like from time to time. You only have yourself and that's it. So not even a small circle. I was like, no, I don't wanna be in that position again."
- "... because a crisis was happening and it's uncertain what is gonna happen afterwards. So just save your money." → when asked why he wasn't buying anything luxarious.
- He bough more food that would last him a while (went to the supermarket once in March), because he wasn't sure about the rules and people were panic buying. → his reasoning, since he is going less, it balances out.
- Was sure to say he didn't go "crazy" in buying for like two years, but instead for two
  months.
- He went through panic buying before in Egypt (his hometown), so he knows that they were trying to avoid a crisis in Germany.

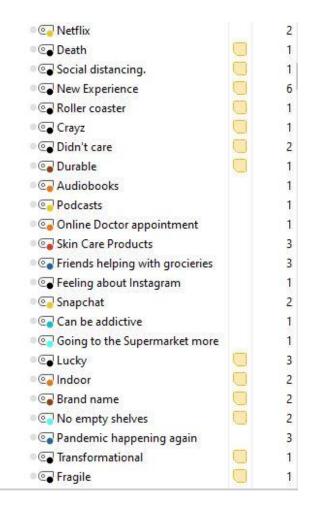
### **R2 Interview:**

- Limited food delivery options and having more time caused him to become more creative in the kitchen and wanted to feel productive in the extra time he had.
- Limited his social interactions to stick to the rules and not infect anyone or get infected.
- Tried cooking stuff he knew but learned how to cook them in the pandemic by searching for the recipes online. He will continue cooking after the pandemic because it's healthier and now he misses it when he orders from restaurants.
- Was risk aware, took the vaccine and booster immediately and was following all the rules, keeping distance, wearing mask and using sanitizer.
- Started buying clothes online during the pandemic but still calls it a risk, and like the
  digitalization that occurred in Germany especially in government papers and delivery
  apps.

- Online shopping gave him the opportunity to compare and found that same product
  can have different price on different platforms so his information search stage was extended and now goes for the product with the best offer and lowest price.
- Tried online grocery delivering for the first time during the pandemic when he had corona and will continue using it after it's over.
- was affected by uncles death and his brother having financial instability and he keeps thinking about it and wasn't in the mood to meet anyone.
- He believes that the changes that occurred in his behavior during the pandemic was eating more health by cooking more, and the online shopping.
- Home office became available when it seemed impossible before, and he is more efficient doing it but believes a mix of both would be best.
- Became more active by running and walking since the gym were closed and when they are open, you have to show CoV pass and tests.
- Panicked in the beginning, went and bought hygiene products, but now he feels like it should be treated as a normal flu and rules shouldn't be strict. Also that in Germany it's stricter than other countries like Netherlands and Czech.
- Changed his car during the first year of the pandemic because he wanted to change his
  car and there was a drop in prices and could use it to travel. Additionally, he bought a
  PlayStation which he didn't have before but really enjoys now and would continue
  using.
- He bought more of bread and hygiene products in the phase of panic buying. He also became more organized in his purchases and focused on cooking at home more than ordering because he didn't want to buy stuff online.
- Rules didn't make sense, vaccinated people were treated the same as non vaccinated ones, so why did people get vaccinated in the first place.
- Wasn't afraid of losing his job because it was always needed but was afraid to change
  jobs even though he wasn't comfortable because he wasn't sure that the new company
  would not fire him three months in so he didn't want to take the risk.
- He would continue shopping online for both groceries and clothing, because it's more
  convenient, has good deals, he can compare and he found other options beside Amazon.
- No need for panic buying, he didn't have family to worry about, he thinks that's the reason why people were panic buying.

# **Appendix 4. Initial Coding**

A sample of the transcript and how it was coded is provided below the initial codes.



<b>™</b> Code System		1790
Explosion of technology		1
		1
Previous crisi		1
Job loss feeling		1
□ □ Not enough		1
<ul> <li>Job Explination</li> </ul>		1
Difficult Job Environment		1
୍ର Instable		3
○ <b>○</b> War		3
○ 🥶 Prioritize		1
□ Revelations		1
<ul><li>Psychedelics</li></ul>		1
<ul> <li>Accepting life</li> </ul>		1
		1
<ul> <li>Financial risk</li> </ul>		1
<ul> <li>Demographics</li> </ul>		16
<b>◯</b> Income		16
o Distraction		1
<ul><li>Annoying</li></ul>		1
○ 🥶 Risk		1
<ul> <li>Friends buying online</li> </ul>		1
○ <b>Outdoo</b> r	63	1
୍ର 💽 Reading		1

● Human life	1
● SARS	1
● © Concerining	1
	1
○ Great	1
● 🥶 New Friends	4
■ Mindfullness	2
●  Stability	1
● © Endurance	1
	1
Applicatins Used	10
<ul><li>Watching Movies</li></ul>	1
■ Bought clothes	2
<ul> <li>Staying Home</li> </ul>	9
item might run out	5
<ul> <li>Feeling about Supermarkets</li> </ul>	1
◎ ☑ Time.	1
● © Fear.	1
□ Depression	2
● Grateful	3
© Sorry	1
• Gard Family life	1
● <b></b> Not easy	1
● <b>G</b> Sudden	4

		Better offers		1
■ Far away	4	<ul> <li>Limited options</li> </ul>		3
Shopping carts	1			5
• Fear of losing job	4	□ 🕝 Living alone		4
◎ A job in corona	9	More creative in the kitchen		1
• Feeling regarding having Covid	6	Less social interactions		2
● Scarcity	5	Gaining weight		1
Being forign	6	Moving during the pandemic		3
• 🕝 Terrifying	1	Buying more motive		3
© Tough □	<b>1</b>	Friends & Family don't want t		3
Crucial 🧧	1	■ Infection of friends		5
Corona News / University	1	● No severe effect of Covid		4
Favors some rules	1	Saving money		3
■ Talked about	<b>1</b>	Feeling about masks		4
Social personality	2	● o lost		3
Closed places	8	Firms hiring still		1
Corona Variants	4	© Chaotic		1
New items motive	3	8	(6)	5
■ Lower luxury product price	1	Opportunities		3
Changing jobs	3	© Eruptive		1:
Too strict rules	5	■ No luxuary products		- 7
· Panic	4	ltem's won't run out		4
■ Familiarity □	6	● 🥶 Home Office		10
● At office	1	<sup>™</sup> © MS Teams		1
· Family's financial instability	2	<ul> <li>Eess baking</li> </ul>		1

■ More Spontaneous Stuff	5
Active lifestyle	5
	1
□ Up & Down	1
	3
	3
□ Reviews / Refrence	2
□ 🥶 Easy return	5
<ul> <li>Positive personality</li> </ul>	1
□	4
■ Social Media Motive	2
■ Increased prices	6
□ 🥶 Sanitizars	.1
■ Gamily & friends panic buying	4
<ul> <li>Limited purchasing rules</li> </ul>	.1
<ul> <li>Supermarket was an outing</li> </ul>	2
<ul> <li>Parents doig groceries</li> </ul>	1
■ Hoplessness	1
<ul><li>Quarantine / Isolation</li></ul>	6
Thought she was infected	5
<ul> <li>Not working as much</li> </ul>	1
<ul> <li>People losing jobs</li> </ul>	2
Online School/ University	3
● <b>Chance</b>	1

		<ul> <li>Financial stability</li> </ul>	5
		Financial instability	7
Corona tests	12	■ Fulfilling needs	2
■ Freedom of choice	4	■ Filling the void	1
Rules didn't make sense	2	New Applications	7
■ 🥶 Digitalization	10	Dating apps	2
□ Social Media	8	• Health care products	2
■ TikTok / Social media	1	© Clubhouse	1
<ul> <li>Emotional Roller coaster</li> </ul>	1		4
□ <b>⊙</b> Mask	2	New products	7
○ Closed borders	2	Supermarket alone	1
© Economy	7	<ul> <li>Items bought because of Coro</li> </ul>	5
Adapting	11	<ul><li>Reusing masks</li></ul>	2
Corona News / Family	2	<b>◎</b> Local	1
□ <b>©</b> Fast Fashion	1	○ Organic	2
■ Negativity	5	■	1
□ 🥶 Websites	3	■ Protection	1
■ 🥶 Emotional	3	Fear from people	4
• Politicians's actions	3	■ Luxuray products & Services	10
Politicians	3	Self-love	3
□ Closed University / Library	3		1 S
Stress	5	<ul> <li>Believe that infection will occur</li> </ul>	9
■ Simplicity	4	● Longing Page 1	1
Importance of Self-Care in the	6	● ● Alone	1
<ul> <li>Limiting contact</li> </ul>	8	■ 🚭 Uncertain	4
Calling people more	3	Controling personality	1

		■ No new products	2
		■ Travel Bans & Restrictions	6
Concern about family	4	Buying more for others	2
• 💽 Anxiety	1	Considered Panic Buying	1
Corona News / Social Media	6	Avoiding public spaces	1
■ € Easily stimulated	1	Going to the supermarket less	9
Doesn't like adrenaline rush ac	7	■ The Alternative Motive	13
<ul> <li>Social media influance</li> </ul>	5	© Caution	13
■ Ingredient	4	■ ☑ Unchanged Supermarket Moti	4
■ 🥶 Closed gyms	6	No fear of losing job	6
Comments	11	Hesistant about vaccines	2
■ 💽 At ease	1		
<ul> <li>Mentality after the loss</li> </ul>	3	■ Traveling in Corona	8
<ul><li>Death in Family / Friends</li></ul>	3	Symptoms of Covid	6
■ ☑ Cooking More	10	■ 🚭 Being healthy	1
<ul> <li>Closer relationships</li> </ul>	5	□ © Unique	1
Activities with family & flatem	5	■  Shifting	1
	2	□ Enjoyable	1
Continuing behavior after the	26	◎ © Good	1
Less clothes bought	2	■ ■ Mental health	19
● 💽 No trends	3	New Normal	10
■ Finances / Investment	7		
<ul> <li>Spirituality</li> </ul>	1	■ Coss of Control	5
<ul> <li>Using new products after the</li> </ul>	1	<ul> <li>Missing old life</li> </ul>	2
Self-development products	5	● <b>©</b> Pause	4
■ 🥶 Mindvalley	1	□ © No Fear	9

○ Consciousness	1 '	
<ul> <li>Pressure to get vaccinated</li> </ul>	2	
Changed People	6	
■  Moral Buying	4	
■ Extreme Sports	1	
■ Self-reflection	18	
○ <b>© e</b> Escape	2	
Convenient	2	
■ Ability to compare	4	
□ <b>□</b> Variety	6	
<ul> <li>Physical shop preferance</li> </ul>	8	
Items bought online	11	
○ Online games	6	
□ 🥶 Knitting	1	
a necessity products	9	
Spending in corona	4	
<ul> <li>Reverting back to old spending</li> </ul>	1	
<ul> <li>Feeling regarding new items</li> </ul>	10	
• • Items for new hobbies	10	
People talking about panic bu	4	
TV & Radio role in panic buying	2	
Personally Seeing the Panic B	13	
<ul> <li>Scarcity in hygine products</li> </ul>	9	
Searching for alternatives	6 .	

■ Future panic buying	3
<ul> <li>Uncertainity causing panic bu</li> </ul>	4
	6
● GHome Baking	7
<ul> <li>Feeling regarding panic buying</li> </ul>	16
■ Panic buing	16
<ul> <li>Less touching</li> </ul>	4
■ Social distancing	5
□	11
<ul> <li>Behavior after the pandemic</li> </ul>	2
□ ☑ Zoom	4
■ Homeworkout	4
○ 🥶 Skype	1
○ 🥶 Self-development	25
Online social life	9
Cower Expenses     Compare Expenses     Co	1
<ul> <li>Doubting Finding a job</li> </ul>	5
<ul> <li>Feeling better after infection/v</li> </ul>	11
<ul> <li>Feeling responsible for others</li> </ul>	9
	5
Understanding the presented r	1
Corona's effect on the world	12
○ Corona Deaths	7
Deppression because of restric	1

■ Fear from uncertainity	10
■ GHistoric	1
□ © Sad	2
© Scary	2
□ <b>©</b> Fear	14
■ Infected Already	7
◎ 🥥 Relaxed	2
Restrictions due to rule	16
■ 💽 Normal	8
● ● Weird	8
■ Uncertainty	13
© Surreal	5
Corona News / Friends	5
Corona News / News	5
Apperance / Style / Looks	8
<ul> <li>Difficulacy in sustainability</li> </ul>	2
■ Packaging	4
■ Seasonal Food	1
Sustainability	8
<ul> <li>Adventurious</li> </ul>	1
Continuing new hobbies after	15
New hobbies of covid-19	14
■ ☑ Living with people	6
■ Lockdown	2

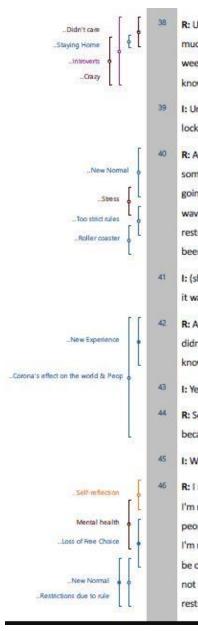
■ 🥃 Buying More	17		
Scarcity in Necessities	10		
● 🥶 Media Role in Panic	13	□ ⓒ Easier	5
● Empty Shelves	14	■ © Self-care products	5
No personal need for panic bu	17	Quality	9
●	4	□ <b>©</b> Healthy	10
● <b>©</b> Long queues	2	Calline Likes adrenaline rush activities	8
o Introverts	7	Time for old hobbies in Covid	11
■ Increasing Confidence	3	Hobbies     Vaccines	17 11
• More time in the pandemic	16	Goverment's role	3
• 🕝 Pros of the pandemic	21	Cons of the pandemic	8
■ Low monetary risk	1	Reasons for active lifestyle	4
● 💽 Working in the pandemic	1	□ <b>©</b> Self-Care	19
■ Scared for others	2	■  Importance of Active Lifestyle	5
■ 🥶 Risk Perception	1	Feeling regarding family's infe	4
■ Low Risk Perception	1	■ Family affected by Covid-19	7
• 🕝 Risk awarness	4	Groceries with family	1
Careful	1	Closed shops	2
● @ Home	2	Maintaing social life	26
• Car Limiting	1	Necessity food     Feelings regarding social life	7
● 🕝 Insightful	1	• Hard romantic life	4
• Adventure	1	Social life	18
• • Exciting	2	□ Youtube	5
Corona News / Work	2	Online courses	3

<ul> <li>Online shopping Motives</li> </ul>	10
<b>◎</b> Time	13
<ul><li></li></ul>	6
Price	23
<ul> <li>Online shopping</li> </ul>	27
◎ 🥝 Influancers	4
<b>©</b> Sports	8
• Galthing Eating Behavior	6
Sports behavior	4
• Healthy Eating Motive	5
• General Healthy eating	7
TikTok Behavior	3
■ TikTok	6
◎ Hygiene product	8
• @ Medical Masks	5
● © FFP	1
	4
• Luxury treated as necessity	7
◎ <mark>⊙</mark> iPad	2
Paniced Family & Friends	9
Calm Family & Friends	8

	1	1st Interview
	2	I: So, umm we are here today to take to do an interview. It's a part of my studies in
		"International Management and Psychology". The topic is about the effect of COVID-19 on
		consumer behavior, mainly about the effect of uncertainty and risk on purchasing decisions.
		What I'm trying to do in this interview is to take your answers and then analyze them to
		know how did the risk and uncertainty affect purchasing decisions during different stages of
		the pandemic and umm and just do this as a part of my master thesis. Umm it will be
		submitted in Hochschule Rhein-Waal and no one can trace back the info. to you personally,
		so it's gonna be completely anonymous and there's no right or wrong answers. Of course
	1	you can answer however you feel it's best for you. Umm and if you have any questions at
		any time or you wanna not answer a certain question, you can of course abandon the
		interview at anytime you want.
	3	Okay, so let's start by if you can give me just a small introduction about yourself. Your
		name, where you're from, where do you live, your age?
	4	R: My name is R1. I am a student of "Communication Information Engineering" here at
2 46	74	Hochschule Rhein-Waal. Ahh I've been in Germany for about ahh five years now and I'm 26.
Demographics 6	5	I: Yeah umm and where do you live in Germany if you may be specific?
Į.	6	R: Ahh Kamp-lintfort.
	7	I: And what do you do in your free time?
Hobbies &	8	R: Ahh, mainly chill with my friends. Play some games. Read a book. Do some sports.
	9	I: Yeah is there any specific sport that you'd like to do?
	10	R: I'd rather run.
	11	I: Yeah and since when do you did you start doing this?
	12	R: Running? almost two years.
ew hobbies of covid-19	13	I: So presumably starting with the pandemic or before that?
L	14	R: Nah nah it was definitely during the pandemic.

	15	I: Yeah! During the pandemic and what made you start this hobby?
Closed gyms	16	R: Ahh mainly because I didn't have any access to the gym because they shut that down and it was the best alternative to keep my weight in check, let's say, and keep myself fit.
	17	I: And do you think that you will continue on doing this after the pandemic is over?
. Continuing new hobbies after the pand	18	R: I mean, yeah, I do think so because I at that time, I thought I hated jogging. But two years later, it really grew on me and especially when I can see the results. Yeah, I I think I would.
	19	I: And what do you think about hobbies that give you an adrenaline rush?
		1/12

8 6	20	R: Um, I mean overall, it would be nice. Ahh but I mean, I don't have any specific hobby of
00 80 AF 80 WW		this that type, I would say.
Likes adrenaline rush activities	21	I: Yeah but would you like to try something like that?
-	22	R: I would be down, yeah definitely.
	23	I: Cool. Umm and when you go, let's say, talking about shopping a little bit. When you go into
		a supermarket, what's the first thing that you look for in a product?
Ĩ	24	R: If it matches whatever I'm looking for. Like if it's foods, for example, I am lactose
Ingredient		intolerant so that I check. Ahh expiry dates that I don't really check much, but I should I
L		guess, umml mean (short pause).
	25	I: What about like price? Does it matter to you?
Ĩ	26	R: I mean, sure it does. But I mean, if I'm used to a specific product, so I know that I chose
Familiarity		that option already before. So between all the different companies that provide the same
.Price		product, I would always go for that one. Except maybe there is a discount then yeah, I might
I		reconsider.
	27	I: Yeah and what about clothes? Does it have the same ahh description in your opinion for
		what you're looking for?



R: Umm I would say at that time, uh I was an introvert (nervous laughter), I didn't really care much. It's like, yeah, sure more time at home, I would enjoy myself. But of course, few weeks passed, few months passed and then it just started going crazy. Umm but ahh I don't know, to be honest. Ahh sorry, I.. I lost track of the thoughts... I'm just...

I: Umm it's just, how were you feeling at the moment of the pandemic? Starting with the lockdowns and the social distancing you mentioned that it was crazy.

R: At the beginning it was fine then it was just yeah. Umm I mean now that they're lifting some restrictions, it's.. it feels like a different world, let's say it like it doesn't feel like it's just going back to how it was before. Ahh, it's been a stressful couple of years of course, with waves coming in, then restrictions are getting stricter. And then ahh they removed the restriction and then they increased the restrictions again starting winters. So yeah umm it's been a rollercoaster.

I: (short laugh), that's to say the least. And you mentioned it was crazy, why did you feel like it was a crazy time at the beginning?

R: Ahh because it was a new experience for almost everybody living at this world and we didn't have any pandemics, I would say, or nothing with that scale ahh in the past I don't know, fifty years?

I: Yeah.

R: So it was definitely a new experience and lots of people were rediscovering themselves because umm there was nothing else to do.

I: Were you one of those people?

R: I mean, I definitely spent a lot of time with myself and I'm still rediscovering myself and I'm not done, that's for sure (both laughing). Ahh but yeah, it.. it definitely benefited some people like uh, mentally. Umm probably for others it was.. were like not that good. I mean, I'm not sure, but for like the people around me, I guess we benefited, but we just wanted to be over of course like we just want to get back to a freer version of the pandemic. Like it's not gonna be back to normal, at least that's what I think, so we just wanted to remove the restrictions and all, yeah, experience the world again.

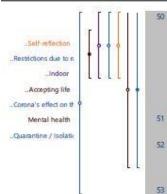


I: And you mentioned that it affected a lot of people mentally. Do you think that it had any effect on you?

R: To an extent, yeah, I would say.

I: Can you elaborate on that?

3/12



R: Ahh sure. Okay so with the quarantine, with the people not having, well not allowed to do activities outdoors. We stayed indoors a lot and at some point, ahh hours and days so just started like thinking and accepting like having acceptance to whatever it is like... however life is going. I mean, for me, maybe it was different than for other people. But uh, at the end ahh I...I was ahh what's the word... (pause) ahhh (struggling for a word).

I: You can say it in Arabic if you want, I can look it up.

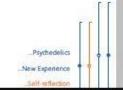
R: (Smile and pause) Okay... I (pause).. acceptance "Koboul" not acceptance, but... ahh (pause).

Can we pause for just a second?

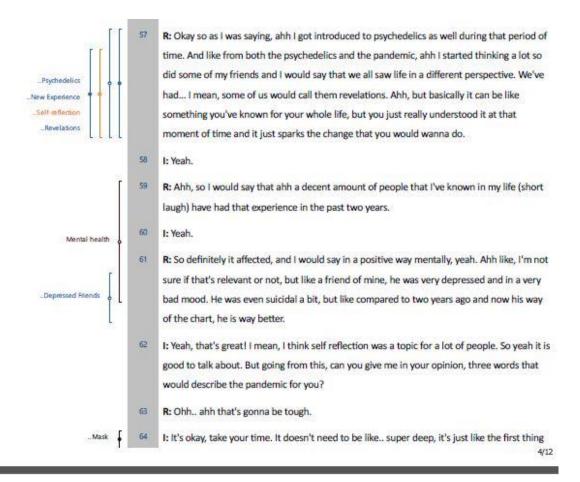
54 1: Sure.

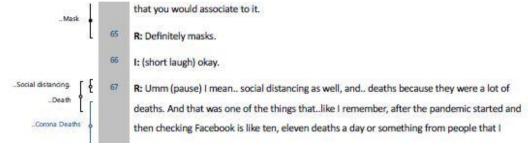
(Proceeds to explain that he is struggling because he is not sure about the word so he was assured that it is okay to say it in his mother tongue language. He was also struggling because he wasn't sure what in his previous years was related to the pandemic and what was related to psychedelics, so he was assured that he can speak openly without analyzing certain aspects and just answering the questions freely. He then agreed to continuing the recording accordingly).

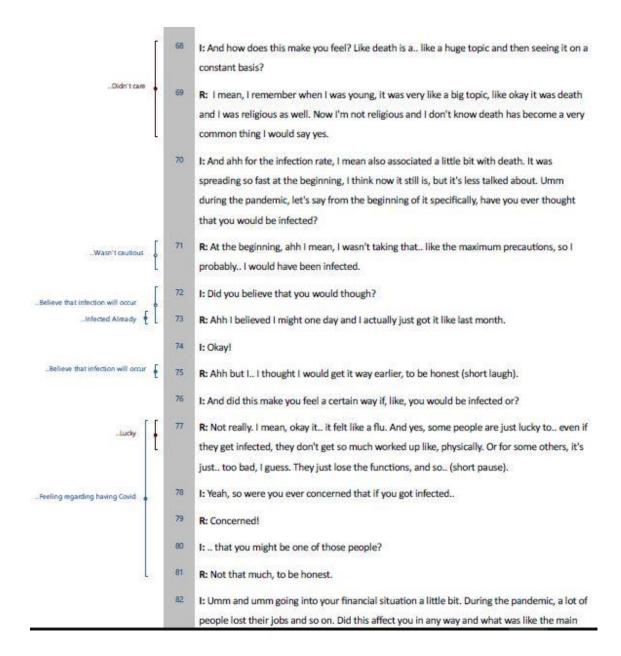
56 I: Okay.



R: Okay so as I was saying, ahh I got introduced to psychedelics as well during that period of time. And like from both the psychedelics and the pandemic, ahh I started thinking a lot so did some of my friends and I would say that we all saw life in a different perspective. We've had... I mean, some of us would call them revelations. Ahh, but basically it can be like something you've known for your whole life, but you just really understood it at that









start an internship and I was like, okay yeah I shouldn't be doing the same job if I wanna do something else. So I quit, and sure that escalated into some financial problems, but that was mainly because of my decision not because of the pandemic.

...Fear of losing job

...Being torign

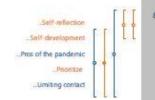
I: But did you.. were you ever afraid before you decide to quit your job during this, did you ever have the thought of, okay I might get fired and where would I, you know, have my income from?

R: I mean, yeah, of course it crossed my mind. Ahh because, I mean, especially since I'm still a student here and I don't really speak the language, so getting a job isn't that easy. Ahh but I mean, I worked around here in different jobs, so I guess once I broke the barrier of just like getting different jobs, I was like, okay if I lose this job, eventually I'll get another job... life would go on, and yeah.

I: And which was.. I think we touched on this a little bit in the beginning with you saying about, you know self-development and so on, but what would you say the main thing.. positive thing that you got out of this pandemic?

R: Umm the most positive thing...

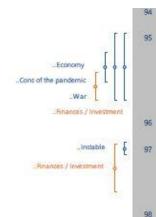
I: If there's any (short laugh).



R: Ah there is definitely, but I can't put my hand on it, that's the thing. Ahl I mean, I would say my personality developed a lot because of the self-reflection. Ahl and yeah, like when.. when you don't interact with a lot of people in a period of time, you just start prioritizing, I guess. So... having my priorities in order, I would say that was one good thing out of the pandemic.

I: And what would be the main lesson that you learned from this pandemic, let's say?

R: Ahh main lesson?



I: That's fine.

R: Ahh but it's mainly ahh economy wise, investing ahh if you're investing in something then like the pandemic affected the economy and then a war started which is affecting the economy even more. Ahh so yeah I would say, ahh before investing in something like, study it well and don't invest all in one place, that's for sure. Right. Don't go ham.

I: (short laugh) And why.. why is not investing in one.. in one place?

R: Basically, nothing is stable. Nothing is for sure. That's what I learned. So if you go on all in one and then you lose, it's gonna be hard to start back up again. But if you divide it into like, let's say three, then yeah if one goes down, one goes up, you will still balance it out.

I: That's true. Can you please, I think it's hard now, but maybe just go back in memory a little

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bit again to March 2020 when you first had your first shopping experience. Let's say you first walked into a supermarket after the pandemic hit with like..

R: When toilet papers were out.

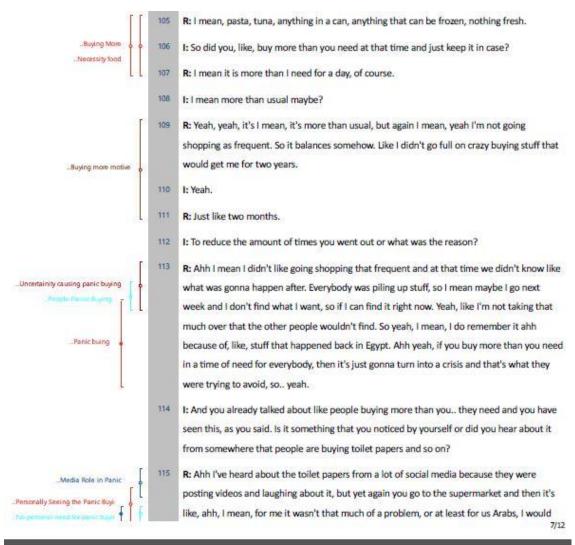
(Both laughing)

I: Yes, how.. how was it? can you share this experience with me?

R: Ahh I mean, the shelves were kinda empty. Ahh and yeah, people were just packing everything. I remember like, I didn't wanna buy, like a lot of stuff, but then again, we weren't allowed to get out that much. Ahh so I was like, okay I'll just buy whatever can be stored for a while. And yeah, I think I just went once shopping in March.

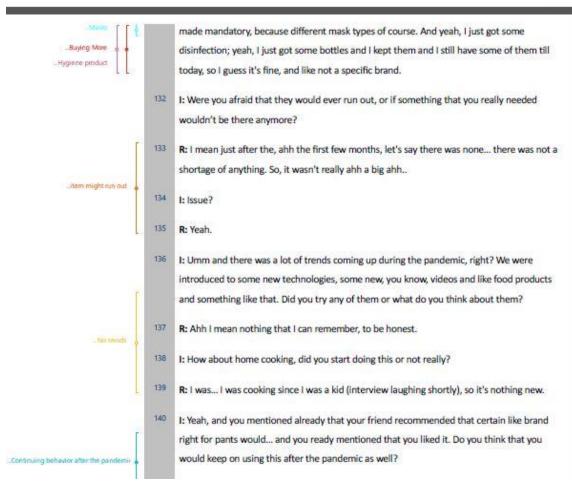
(Both laughing)

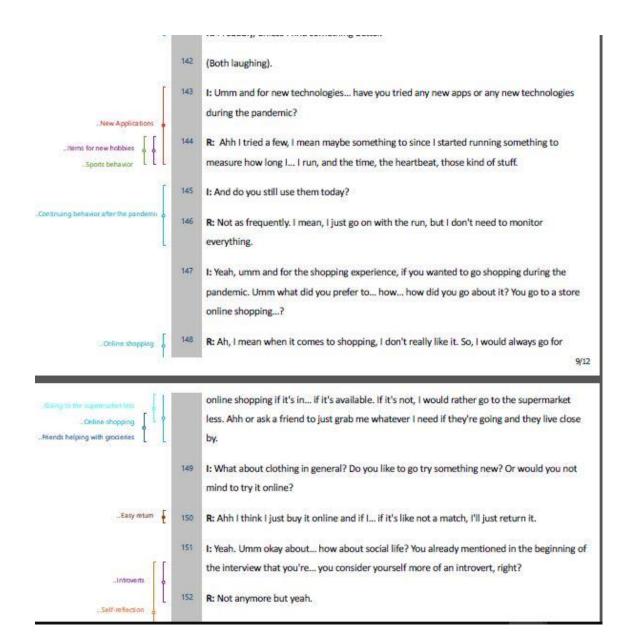
I: Can you give me an example of what can be stored once that you though it was necessary to buy?

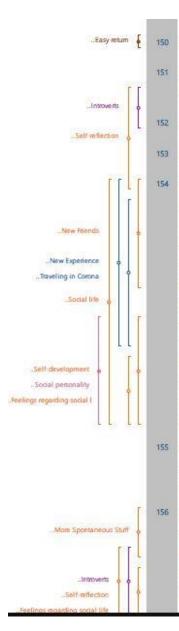


_		you don't really need, but it's just as a luxury.
	117	R: I mean, maybe some snacks, but I mean not a luxury item as a like a tech device or something.
_No luxuary products	118	I: That would like cost a lot of money, let's say?
	119	R: Yeah, exactly.
	120	I: Yeah okay, and did you want to buy something luxury? Or did you feel like it wasn't the right you didn't really need it?
No luxuary products	121	R: Ahh I mean, not at that time for sure. Ahh yeah, like overall. I I don't think it would be wise to buy it at that time.
Financial risk	122	I: Why?
_Saving money	123	R: I mean because a crisis was happening and it's uncertain what is gonna happen afterwards. So just save your money, that's for starters. Umma and yeah, let's see where it goes first. I mean it If it was an urgency, then it wouldn't be luxury.
	124	I: That's true. Yeah, umm and for the products that you were buying since, like you said, there's a lot of things that we're running out. If you found something else from the, like, you used a certain product, let's say, tuna or whatever and then you found that the thing that you are used to had run out, what would you have done?
The Alternative Motive	125	R: I would pick any alternative at that point. It doesn't have to be the same brand, as long as it serves the same purpose, then I'll just get it.
	126	I: Yeah, okay. Would the price have mattered at that time more than it did usually. Like if it's if you needed it but it's more expensive.
Fulfilling needs	127	R: I mean, if it's not that much of a difference, then I would just get it because it's needed. I mean if you need something and you don't spend the money on it, then what's the point of having the money in the first place?
Scarcity in hygine products	128	I: Yeah, what about like hygiene products and masks and I think that's very it was a global problem at that time.

	200	N. (Call.
	130	I: Umm did you look for something specific in a brand or like in a hygiene product or in a
		mask or were you just like trying to get it?
Marks -	131	R: Ahh no I just wanted to have the masks that would go along with whatever they ahh they
		8/12







R: Ahh I think I just buy it online and if I... if it's like not a match, I'll just return it.

It Yeah. Umm okay about... how about social life? You already mentioned in the beginning of the interview that you're... you consider yourself more of an introvert, right?

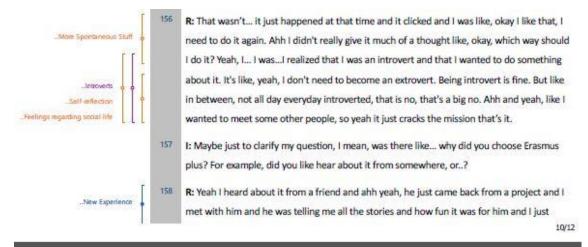
R: Not anymore but yeah.

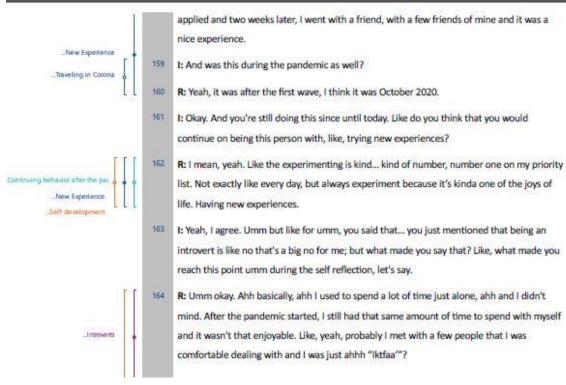
I: Yeah, not anymore, but why? Why would you say that? What changed?

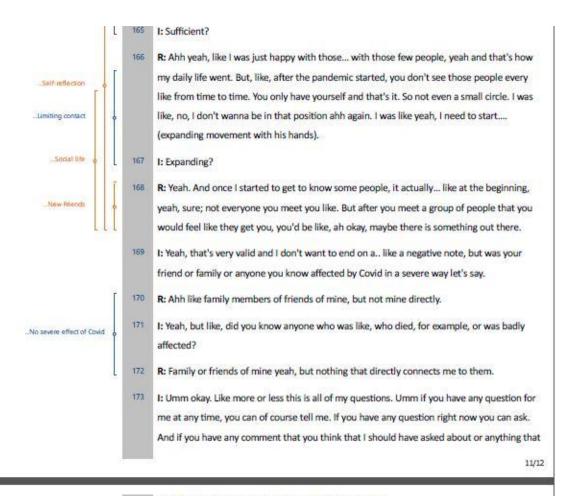
R: Okay like the self-reflection and all that. Plus, I've been to a few student exchanges, training courses, Erasmus plus. And yeah, like I've met a lot of fun people. Ahh like normally I would like... those people I've never met before and then you just go there, spend like 10 days with them and just like just through the second day, third day, sometimes even from the first day, people just connect so well, and they actually care. And we meet to discuss a specific topic and it can go from non-formal education to drama and dancing. Ahh so, I've been to four of them ahh since 2020, and yeah, like every single one of them was a totally perfect experience; I wouldn't change a thing. Ahh and yeah, like that, I would say changed my... my views it made me more social. Ahh it made me not rethink ahh everything... like it's like, not overthink ahh just going on and talking to people. I mean, what would happen? Just go talk, have fun, meet some new people. And it made me realize, like, yeah, as much as I would wanna socialize with other people, they want to socialize as well. So yeah, just go and do it.

I: And you mentioned that that was because of your self-reflection, but how... like how did you go about deciding where to start to become more extroverted and like to choose Erasmus Plus? What made you decide on that route?

R: That wasn't... it just happened at that time and it clicked and I was like, okay I like that, I need to do it again. Ahh I didn't really give it much of a thought like, okay, which way should I do it? Yeah, I... I was...I realized that I was an introvert and that I wanted to do something about it. It's like, yeah, I don't need to become an extrovert. Being introvert is fine. But like in between, not all day everyday introverted, that is no, that's a big no. Ahh and yeah, like I

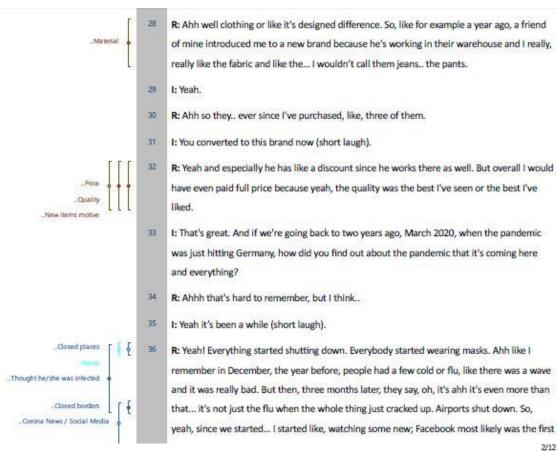


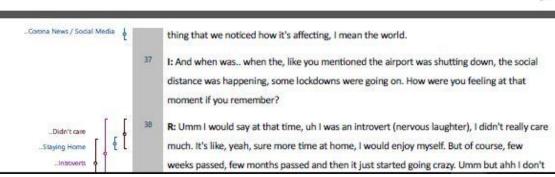




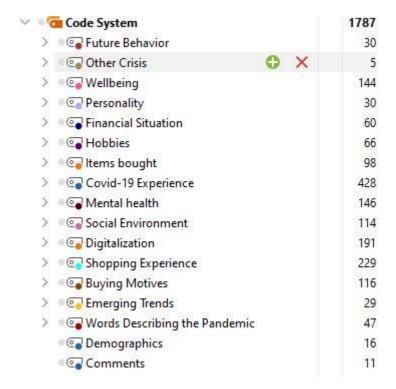
you want to elaborate in... on, please let me know now. R: Everything is good. 175 I: Yeah, thank you so much for your time. That's it for today.

174





## **Appendix 5. General Initial Themas**



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## **Statement of Originality**

I declare that I have authored this thesis independently, and that I have not used other than the declared sources, and that I have explicitly marked all material which has been quoted either literally or by content from the used sources.

Kamp-lintfort, 29.04.2022

Hia Akbik