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Master Thesis

# **How has fear of COVID-19 influenced consumers' purchase intention of green products?**

by

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## **Abstract**

On the 26th of February 2020, the first Norwegian citizen infected with COVID-19 was confirmed (Kolberg et al., 2020), and only a few days later, in March 2020, the Norwegian government introduced the most intrusive measures in peacetime. The pandemic first and foremost brought a lot of uncertainty, fear, and unanswered questions, but gradually some positive effects were discovered, especially regarding the environment (Venter et al., 2020). The purpose of this study was thus to see how Norwegian consumers have been affected by the pandemic, the impact of their environmental awareness, how important the customer experience is on their environmental behavior, and how their purchase intention of environmentally friendly, green, sustainable products has changed. With the intention to look at it from a consumer perspective, and a business perspective, the following research question was composed:

*How has fear of COVID-19 influenced consumers' purchase intention of green products during the pandemic?*

We conducted a quantitative survey, in order to collect data from the Norwegian adult population, and our findings suggest that peoples' fear of COVID has a significantly positive effect on both purchase intention of green products, and on peoples' environmental awareness. In addition, we found out that fear of COVID had a significantly negative effect on customer experience. The analysis further indicated a positive mediation effect for both environmental awareness and customer experience on their purchase intention of green products. Further, we investigated if the same effects occurred for four product categories of Green Products: *Clothes, Food, Cosmetics, and Transportation*.

Hence, this study contributes to the understanding of consumers' behavior during the pandemic and works as a guidance for the development of future strategic business decisions.

## **Table of Contents**

1	Introduction	5
2	Literature Review & Hypotheses	11
	2.1 Behavioral Reactions of Consumers to Economic Recession	11
	2.2 Fear of COVID-19	12
	2.3 Purchase Intention of Green Products	14
	2.4 Environmental Awareness	15
	2.5 Consumers' Customer Experiences	16
	2.6 Research Models & Hypotheses	19
3	Research Methodology/Design	20
	3.1 Objective of the Study	20
	3.2 Research Design	21
	3.3 Population and Sample	22
	3.4 Data Collection	22
	3.5 Pretest of the Study	23
	3.6 Survey Structure	24
	3.7 Variable Description & Scales	25
4	Data Analysis	27
	4.1 Data Cleaning	28
	4.2 Reliability & Validity	28
	4.3 Multiple Linear Regression	31
	4.4 Mediation	31
	4.5 Repeated Measures ANOVA	32
5	Results	33
	5.1 Fear of COVID-19	35

5.2 Purchase Intention of Green Products	36
5.3 Environmental Awareness	37
5.4 Mediation Analysis of Environmental Awareness	39
5.5 Customer Experience	41
5.6 Mediation Analysis of Customer Experience	42
5.7 Repeated Measures - Categories of Green Products	43
5.8 Repeated Measures - Environmental Awareness	47
5.9 Repeated Measures - Customer Experience	49
5.10 Summary	50
6 Limitations	51
7 Discussion & Conclusion	53
7.1 Findings	53
7.2 Managerial Implications	56
8 Future Research	59
9 References	61
10 Appendix	78

## **1 Introduction**

When the COVID-19 pandemic came to Norway in 2020, it led to a huge change in people's daily life and routines (Barndon, 2020; Nøkleby et al., 2021; Røde Kors, 2021). How we interacted, how we worked, how we studied, and how we did our purchases. With the introduction of COVID-19, many restrictions and rules followed in order to slow down the spread of the contagious virus. This included social distancing, home office, homeschooling, quarantine, isolation and lockdowns (Buggeland et al., 2020). Generally, it created a limitation of the life that people normally had, and it was the most intrusive measure on people's private life that had been done in peacetime (Ertesvåg, 2020).

This naturally created some fear among the population. Fear for your own health, fear for your friends and family's health, and many people have by this developed various concerns in relation to the virus (Ahorsu et al., 2020). Now, the entire population of Norway has been offered a vaccine, and most people have even been offered a third dose (Regjeringen, 2021). Most of the population is, in addition, actively engaging in reducing the infection rates. However, there are still people being infected, and some get seriously ill, which naturally causes worry and concerns (Blaker, 2021; De Rosa, 2021; Dommerud et al., 2021; Folkehelseinstituttet, 2021; Vedvik, 2022).

In addition to the health uncertainties, financial struggles were something that many people experienced. The pandemic, among other things, led to many people getting temporarily laid off or losing their jobs (Bergens Tidende, 2021). By the summer of 2021 things got better, and at the beginning of the fall of 2021 the Norwegian Government stated that they would ease the restrictions and reopen the society (Drabløs et al., 2021). However, by the end of 2021, there was again a high increase in infection rates in Norway, which continued over and into 2022 with the domination of the Omicron virus (Folkehelseinstituttet, 2022).

Early COVID-19-related studies mostly focused on panic buying (Islam et al., 2021), food hoarding (Wang & Hao, 2020), and the transition to online

shopping as the primary and preferred shopping method (Sheth, 2020). Now, as the pandemic is still affecting our lives and influencing our consumer behavior, many researchers have seen the impact the pandemic has on consumers' environmental attitudes and their willingness to engage in environmental conservation in their consumer behavior (Baqer, 2012; Braimah, 2015; Sachdeva et al., 2015).

Liobikienė & Bernatoniene (2017) state that “the promotion of green purchasing is one way to minimize the environmental impact of products and achieve sustainability” (p. 109). In this paper we will address consumers' environmental conservation behavior, or in more detail, their purchase intention of green and sustainable products. Consumers have increased their interest in natural ingredients, sustainable packaging, and other green elements in multiple categories (Lin et al., 2018). Therefore this is highly relevant in today's market and something that is of interest for both the consumer, the retailer, and the manufacturer. In the literature we can find that:

[...] over the past 20 years, marketing managers [eagerly] seek to understand the green market. However, inadequate information on how to promote consumers' green behavioral intentions is slowing the growth of green markets and becomes a barrier for firms when developing segments and communicating strategies for effective promotion of green products. (Chekima et al., 2016, p. 210).

This paper strives to investigate these challenges and offer further aspects towards implementing relevant communication and resource strategies based on consumers' environmental attitudes and their shopping experience.

Large parts of the society have become more aware of the environmental challenges during the pandemic (Gili, 2021), and researchers are convinced that there is a positive change in public awareness towards environmental attitudes because of it (Rousseau & Deschacht, 2020). The increasing environmental awareness has a positive effect on people's sustainable and environmental behavior (Kataria et al., 2013). The main aim of sustainable consumption is not to worsen the environmental quality by the



increased growth of goods and services, not to reduce the consumption, but to reduce its environmental impact. One of the main tools to achieve this is to increase the purchase of environmentally friendly products, which we in this paper will entitle to *green products* (Liobikienė & Bernatoniene (2017). There is, however, a lack of a clearly defined and generally accepted definition of “green products” in the literature (Durif et al., 2010). One definition that nevertheless captures many of the aspects everyone agrees that a definition of “green products” should include, is the following: “Product designed to minimize its environmental impacts during its entire life-cycle. In particular, non-renewable resource use is minimized, toxic materials are avoided, and renewable resource use takes place in accordance with their rate of replenishment” (Albino et al., 2009, p. 86). In addition, green implies the conservation of environmental resources, which involves sustainable production and packaging (Peattie, 2010).

During the pandemic, many stores and chains saw the benefit of having a high focus on consumers’ customer experience, which re-boosted the use of “click & collect”, “home delivery” and “live shopping” (Bugge et al., 2021). The different restrictions and measurements forced people to be more focused on keeping distance from each other, good hand sanitizing, face masks in public and tight areas, and a maximum number of customers in the stores (Regjeringen, 2022). Although the restrictions have been lifted in Norway, there are still many places where this is practiced, especially in other countries where they have struggled more to get the infections under control. These restrictions and limitations have been present for almost two and a half years and it has not been easy to practice good customer service during this time. Especially for cosmetic companies who are required to be physical when helping customers, either with skincare products or make-up tips. The same goes for sustainable food, which many may not purchase if they’re not exposed to knowledge-sharing, tips, and guidelines from employees in stores (Gundala & Singh, 2021). Studies show that learning about social and environmental problems has a positive impact on consumers’ intention to buy sustainable food (Gundala & Singh, 2021). Exercising a good customer experience is additionally often vital to succeed with your strategy (Villani, 2019), and it is a

good tool to affect customers' purchase intention. However, customers who are experiencing a high level of fear or concern because of COVID may experience the stores' customer service negatively, since this could be perceived as a potential infection risk.

We chose to look more closely at four categories within trade, namely sustainable food, green cosmetics, environmentally friendly transport, and sustainable clothing. These were chosen because they are some of the biggest categories of consumer goods and services with a high environmental impact and interest (Ritchie et al., 2020). In addition these categories were particularly affected by the pandemic, both positively and negatively (Jakobsen et al., 2020). We wanted to see if there were any changes to consumers' behavior on a more defined level during the pandemic. In addition, we investigated whether there have been any major differences in consumer behavior between these categories.

At the beginning of the pandemic, we could see clear signs that the grocery market would make a huge leap as a result of the infection restrictions, and the figures showed that grocery sales in Norway increased by 13% from March 2019 to March 2020 (Claussen & Oyier, 2020). The reason behind this was that most people ate most of their meals at home, due to home offices and closed restaurants and nightclubs. In addition to the fact that during this period there was no possibility of any cross-border trade and fewer trips abroad. The whole year of 2020 included, the turnover in Norwegian grocery stores increased from NOK 178.3 billion in 2019 to NOK 208.8 billion in 2020, according to the Grocery Report of the analysis company NielsenIQ (NTB, 2021). But did this also apply to environmentally friendly food? It may seem so. A study by the Consumer Research Institute, SIFO, at OsloMet from 2021, shows that Norwegians fully or partially agree that we must eat more locally produced food. In addition, more and more people are questioning long-distance, imported food, in terms of sustainability and preparedness. Some consumers believe that each country should largely rely on its own resources (Forbruksforskningsinstituttet SIFO, 2021a).

The cosmetic industry experienced a decrease in sales at the beginning of the pandemic (NHO, 2021), but according to The Norwegian Cosmetic Association, their half-yearly sales report showed that the total growth in wholesales to chains and retailers increased by 10,1% in the first half of 2021 compared to the first half of 2020 (KLF, 2021). By cosmetic products, we mean skincare products like basic supplies of deodorants and different moisturizers, hair products, make-up, and perfume. More specifically we wanted to look at green cosmetic products. A more technical definition states that “a cosmetic [product] can be considered “green” if its formulation contains [natural] ingredients derived from plants, such as minerals and plants, and not analogous active ingredients chemically reproduced in the laboratory” (Dini & Laneri, 2021, p. 1). This type of cosmetics showed an increasing demand before the pandemic, where 52% of consumers worldwide in 2019 answered that "green cosmetics" was their prominent choice of cosmetics (Statista Research Department, 2022). Based on this, we wanted to look at whether this trend changed during COVID, and if so, in which direction.

The third category we investigated were clothes, and more specifically sustainable clothes. Early figures from Virke (2021), the Norwegian main association for the trade and services industry, showed that Norwegian clothing companies had not since 2006 experienced such low turnover as in 2020. Many pointed out that the reasons for this were that consumers were less out among others, fewer dinner parties, less traveling, which made people purchase fewer garments than they used to. As people became more and more accustomed to the COVID- situation, more and more people returned to normal shopping patterns. This could be seen through a 26.7% growth in April 2021 compared to April 2020 (Virke, 2021). Nevertheless, clear signs were seen of the pandemic, measured against numbers from April 2019 (before COVID), where in April 2021 there was a decrease of 31.7% (Virke, 2021). Although this may have had a negative effect on the economy and the trade, it still turns out that this may indicate a more environmental awareness among the consumers. Another study by the Consumer Research Institute, SIFO, at OsloMet, shows that it seems like many consumers may have taken an extra look in their wardrobe. This can again have a positive effect on the environment with fewer

purchases of new and more use of old clothes (Forbruksforskningsinstituttet SIFO, 2021b).

Another industry that noticed major changes at the onset of the pandemic was the transportation industry, which includes public transportation and the private transportation sector. When it comes to the new-car industry in 2020, a record low of 7,425 copies was registered in April, which was as much as 34% down from the same month the year before (Skogstad, 2021). The sales of used cars on the other hand, had a rather drastic increase of 6.5% in the first quarters of 2020 compared to 2019. Christian Lagaard, an advisor at the Norwegian Automobile Industry Association, explained this increase to the fact that the car seemed like the safer alternative to public transport, during the biggest waves of infection (NBF, n.d.). Which is clearly not the most environmentally friendly choice. In fact, during the most dramatic weeks, the total passenger traffic on public transportation was down by about 80%, due to restrictions and infection risk (Thompson & Thompson, 2021). And even though most people are back to normal, public transportation still seems to be affected. Ruter (responsible for public transport in Oslo and formerly Akershus) have lost 38% of its passengers during the pandemic and are by March 2022 still only up to 85% of their pre-covid level in Oslo (Juven, 2022).

In this master thesis, we have used a quantitative research design to investigate how consumers' fear and concerns about the COVID-19 pandemic have affected their environmental awareness, their customer experiences, and their purchasing behavior of green and sustainable products in the Norwegian market. We wanted to look at the possible changes and impacts the pandemic had. To do so we investigated how environmental attributes and customers' experiences mediate the relationship between consumers' fear of COVID and their purchase intention of green and sustainable products. Hence, our research question is formulated as follows:

*How has fear of COVID-19 influenced consumers' purchase intention of green products during the pandemic?*

## 2 Literature Review & Hypotheses

There are multiple models already published regarding explanations of consumer behavior during the pandemic. Here, we will review parts of the literature, and identify some main factors that affect consumers' purchase intent of green products during the COVID-19 pandemic.

### *2.1 Behavioral Reactions of Consumers to Economic Recession*

According to Jackson (2022), many consumers experienced the COVID-19 pandemic as one of the biggest disruptions in their social and economic life they will ever have to experience. And although the pandemic now has ravaged the world for over two years, there is still some uncertainty surrounding how it will affect consumer behavior in the long run. It is difficult to compare this pandemic to any similar situation in the modern world and to try to predict how this will affect our behavior and loyalty in the future. However, researchers are arguing that although the pandemic mostly has affected the health and social life, it can also be compared to economic crises, such as the financial crisis in 2008 (Chen & Yeh, 2021). This can be seen by several similarities, including uncertainty, collapse and reactions (Strauss-Kahn, 2020), which all are aspects also affecting consumer behavior.

Two researchers that have looked at how the economic recession affects consumer behavior are Valášková and Klieštík (2015). In their research, they analyze several published surveys and identify new trends in consumer shopping behavior caused by the economic crisis, with a particular focus on European consumers. The main aim of their article is to analyze consumer behavior, post-recession. This is also very interesting in the context of the COVID-19 pandemic, which we still don't quite know when will completely end, in what way, and how it will affect the economy and the shopping patterns in the long term (McKinsey & Company, 2020).

Nistorescu and Puiu (2009) argue that if businesses are able to predict their customers' behavior, they have a greater chance of fulfilling their

customers' needs, maintaining the company's success, and reaching their long-term goals. Since a pandemic is a new situation for most companies and customers, it may be helpful to look at what has happened in previous economic crises to try to understand some of the aspects. Our research will hopefully be of help to companies to understand what affects consumer behavior during and after the pandemic.

In their paper, Voinea and Filip (2011) analyze the main changes in consumer purchasing behavior during economic crises. They conclude that the global economic crisis "led the vast majority of consumers to look for new landmarks" (Filip & Voinea, 2011, p. 16). They further concluded that during this period consumers became more responsible, economical, and demanding. Whether this has been the case during the pandemic can be said to be quite probable, due to the many similarities between the economic crisis and the way this pandemic developed when it came into our social and economic life. One can thus cautiously say that consumers would be more open to purchasing responsible products, like green products, now than before the pandemic.

## *2.2 Fear of COVID-19*

With constant updates on infection rates, deaths, layoffs, and reductions in the economy, people's fear and concerns of COVID-19 increased and spread around the world for two years. This has led to an increased economic and psychosocial strain to the consumers. (Pakpour & Griffiths, 2020). To better understand exactly what we are afraid of, there has been developed a COVID stress scale (Taylor et al., 2020) and identified potential areas of fear (Mertens et al., 2020). The COVID Stress Scale (CSS) was developed by Taylor et al. early in 2020. They used a 36-item CSS, where the participants responded using a five-point Likert scale to better understand and assess COVID-19-related distress such as danger, socio-economic consequences, xenophobia, contamination, traumatic stress, and compulsive checking. (Taylor et al., 2020).

Other approaches to the fear of COVID are Schimmenti et al.'s four domains of fear; fear for the body, fear for significant others, fear of not

knowing, and fear of inaction (Schimmenti et al., 2020). Fear for the body deals with fear for one's own health and potentially all the symptoms associated with the virus, and thus how to protect oneself against it. Most people stayed more at home, used face masks, and disinfected their hands. All of which minimized the risk of getting infected but also affected their "normal" consumer behavior.

The second area of fear is fear for significant others. For the past 2 years, we have been told that we should socially distance ourselves from others, to prevent the spread of infection. This led to people being less out among other people, less partying, isolating themselves by working from home, to make sure that they don't infect their loved ones. One might also think that the sale of products often used when going out or having dinner guests, such as more expensive food, fine clothing, make-up, and fragrances got reduced.

Thirdly is the fear of not knowing, which there has been a lot of during this pandemic. As the pandemic has been a new situation for everyone, and no one knows how to resolve it in the best possible way, there has been great uncertainty and fear of the uncertainty among the population. Tversky and Kahneman (1973) argue that a way of dealing with this is to use the availability heuristic, which generally means that we use recent information and/or experiences that have been readily available to us when making a decision. To link this to the COVID-19 situation, an example could be the constant updated infection rates and hospitalizations in the daily news picture. If you were considering taking a shopping trip, a new infection record may lead to a reduced desire to take this trip. Even though there might not be a lot of people in the store. Your risk of infection is thus small, but due to the increased fear you recently have been "exposed" to through the news, you would probably still change your planned behavior and not go.

The last area of fear is connected to action and inaction. In the context of COVID-19, it may seem that inactivity is seen as the right way to act. Or put in another way, to actively choose not to act. During the pandemic where it has been encouraged to stay at home, some people have been afraid of being seen

outside among others. This is because of how it may look, e.g., it may then seem like you don't care about the pandemic. In turn, this has led many to drop their shopping trips they would normally take, which then affects their purchasing behaviors.

### *2.3 Purchase Intention of Green Products*

Ajzen and Fishbein (1972) define intention as follow; “an individual’s intention to perform a given act is a joint function of his attitude toward performing that behavior and of his beliefs about what others expect him to do in that situation” (1972, p. 1). This means that the consumer’s intention to buy a product depends on the consumer’s attitude towards the purchase and what others may think about the purchase.

Researchers predict that consumers will think, act, and behave differently during and after the pandemic (Ing et al., 2021). One product category where sales were increasing already before the pandemic was sustainable products. In addition, figures show that sustainable products became particularly interesting for consumers during lockdown (Alexa et al., 2021). A specific group of eco-friendly products that had already before the pandemic experienced an increase in sales in the Norwegian market was organic food and drink (Landbruksdirektoratet, 2020). Additionally, numbers from the Norwegian Directorate of Agriculture (Landbruksdirektoratet, 2021) show that the sales of organic food increased by 20% in 2020. This result shows that sustainable and eco-friendly products are popular, and something that the consumer will highly value also during and after the pandemic.

When it comes to the psychological perspective of green product purchases during the pandemic, a study by Wang et al. (2021), conducted amid the pandemic, showed that the perceived severity of COVID-19 has a significant positive impact on the purchase intention of green products. Meaning that the more information there is about the virus’s negative impact on our health, the more people are on the lookout for green products. Since the intention to buy may be recognized as a reflection of real purchase behavior (Nasermoadeli et al., 2013), it could indicate that you will see increased sales



of green products when consumers fear of COVID (through increased infection rates and hospitalizations) are higher because of increased focus from e.g., the media, compared to when there is not. With regards to the purchase intention and people's fear of COVID, we posit the following hypothesis:

**Hypothesis 1 (H1):** *The fear of COVID positively influences consumers' purchase intention to buy green products.*

#### *2.4 Environmental Awareness*

Over the past years consumers have given a lot of attention to environmental issues, reflecting the rising public concern and awareness of environmental problems (Kataria et al., 2013), leading to a more demanding environmental product development, product promotion, and product choice (Kalafatis et al., 1999; Shrivastava, 1995; Tarkiainen & Sundqvist, 2005).

Consumers were, and still are constantly affected by the impact of COVID. A survey that BCG (Boston Consulting Group) conducted showed that 70% of the participants were more aware now than before the pandemic that human activity threatens the climate (Kachaner et al., 2020). Researchers are, in addition, convinced that there is a positive change in public awareness towards environmental attitudes because of the pandemic (Rousseau & Deschacht, 2020). Hence, the pandemic and the attention it has, have contributed to consumers' and residents' environmental consciousness.

Even though there is a lack of strong evidence that the virus is a direct result of the ever-increasing climate challenges, scientists and WHO highlight the link between climatic conditions and epidemic infections (McMichael & World Health Organization, 2003). A study conducted by Rousseau and Deschacht (2020) on public awareness of nature and the environment during the pandemic, shows that search-behavior related to nature and environment, which usually fluctuates between 8 and 10 points on their scale, made a jump by 6 points to 15 points around March 14th, 2020. Rousseau and Deschacht conclude that they have found evidence that there is a positive change in public awareness towards nature and the environment. Whether this change is relevant in the long-term is still uncertain, as there is a certain probability that society

will return to its old habits as soon as the pandemic is over. There is, however, little doubt that the pandemic has made consumers and residents more environmentally conscious. Hence, we posit the following hypothesis:

**Hypothesis 2 (H2):** *The fear of COVID positively influences consumers' environmental awareness.*

Consumers' interest in green products has grown tremendously in many countries (Wier & Calverly, 2002), and a huge number of respondents stated that they are concerned with environmental problems (Diekmann & Franzen, 1999; Dunlap & Mertig, 1995, cited in Kataria, 2013). "Customers have understood the significance of protecting the environment (Kalafatis et al., 1999; cited in Kataria, 2013, p. 2), which is resulting in more environmentally responsible behavior" (Kataria, 2013, p. 2), like purchase intention of green products. There are clear signs that large parts of society have become more aware of the environmental challenges during the pandemic. Whether these changes also show up in our shopping habits, and whether we have become more aware when it comes to purchasing sustainable products, is thus also interesting to look at. Here too, most researchers agree that the pandemic has led to a shift in consumer behavior. Society has put the value of environmentally conscious consumption in a much greater focus than ever before (Perkins et al., 2021). Hence, we posit the following hypothesis:

**Hypothesis 3 (H3):** *Consumers' environmental awareness mediates the relationship between consumers' fear of COVID and consumers' purchase intention of green products.*

### *2.5 Consumers' Customer Experiences*

In recent years, researchers have placed more emphasis on customer experiences in the customer journey. Among other things, low-income vulnerability, decision-making, satisfaction, repurchase, the marketplace, and especially knowledge sharing and how these affect customers' shopping experience has been studied (Kursan Milaković, 2021). However, how this is affected in the times of a global pandemic, is still uncertain and has not been studied as carefully.

Another thing that has been studied several times over the past years is consumers' experiences in online shopping. Due to the many restrictions and measures that have been introduced, customers' shopping experience has greatly been affected. Figures from Nets, one of Northern Europe's largest providers of payment cards, show that Norwegians have shopped online for 156 billion in 2020. In addition, the purchase of physical products, for example, beauty products, doubled online compared to 2019 (*Norsk e-handel 2020, 2021*). It is not only because of the restrictions that e-commerce has become more popular, many also believe that e-commerce is a great way to save time and effort (Tarhini et al., 2018), which results in a positive customer experience. But while there clearly are useful aspects to e-commerce, maybe especially during a pandemic, studies also show that 30% of products purchased online are returned and are not according to the customer's perception. In addition, the same study showed that the return and complaint rates get higher when products are bought online compared to physical stores (Rao et al., 2021). During COVID, where most people have been more concerned with infection risk and infection management, and in many cases have had no other choice but to shop online, data from the Federal Trade Commission show that this negative trend continues, and since the start of the pandemic, there have been registered a record number of complaints related to online shopping (FTC, 2020).

There are several factors in customer experience that are considered extremely important and have a positive effect on their purchase intention. A study from the US shows that close to 80% of American consumers think that knowledgeable help is one of the four most important factors affecting customer experience (Puthiyamadam, 2017). In addition, a study by Maichum et al. (2017) showed that environmental knowledge has a significant positive influence on the purchase intention of green products. This means that the more environmental knowledge the sellers possess and are able to transfer/communicate to their potential customers, the greater the possibility that the consumer will choose to purchase a green product. In fact, Accenture found that 75% of consumers are more likely to make a purchase when receiving personal recommendations (Derksen, 2016). Furthermore, marketers

can use this to “develop effective marketing strategies to green buyers by improving their knowledge and carefully work out communication plans that are able to facilitate favorable attitudinal changes towards green products.” (Azila et al., 2012, p. 55)

The problem has been that, during the pandemic, presenting/communicating environmental knowledge and recommendations from the employees has been more difficult than ever due to lockdowns and COVID restrictions. Employees and customers have walked up to closed stores, or if open, they had to maintain a safe distance from each other, making customer service more difficult to implement. In a cosmetics store, where the employee and customer at times find themselves quite close to each other in order to describe what they are looking for, inspect the customer’s unique skin, find the appropriate color, etc., makes it extra challenging. The restrictions we all have had to follow may have had a negative impact on the employee’s customer service, recommendations, and knowledge sharing, and thus a negative effect on the customer experience.

Gupta and Vajic (2000) present a more complex definition of customer experience. They argue that there are various factors in the interaction between a customer and a service provider that create the consumers’ customer experience. In the context of the COVID-19 pandemic, several services you would normally encounter at e.g., a beauty store will not be possible due to the fear of infection, and other restrictions and control measures. It can thus be argued that the customer experience has been reduced during the pandemic. Hence, we posit the following hypothesis:

**Hypothesis 4 (H4):** *The fear of COVID negatively influences consumers’ customer experience.*

As one of the core concepts in experiential marketing, customer experience has been used as a base to predict customer purchase intention, and according to the research of Nasermodeli et al. (2013), it is the emotional and social experience that has a direct significant effect on consumers purchase intention. They referred to the emotional experience as “the moods and

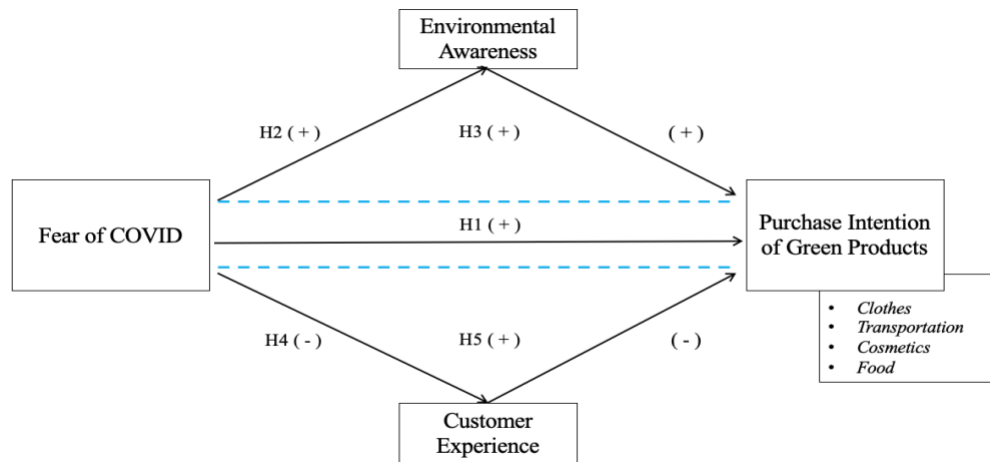
emotions generated during the shopping trip” (Schmitt, 1999, cited in Nasermodeli et al., 2013, p. 129). This was supported by Roos (1999) who argued that customers who are experiencing negative emotional responses tend to have strong brand switching behavior. Schmitt (1999, cited in Nasermodeli et al., 2013, p. 129) defined social experience as “the relationship with others and society” and that “each of these social impacts has the power to influence our thoughts, feelings, and activities” (Nasermodeli et al., 2013, p. 129). Hence, we posit the following hypothesis:

**Hypothesis 5 (H5):** *Consumers’ customer experience mediates the relationship between consumers’ fear of COVID and consumers’ purchase intention of green products.*

## *2.6 Research Models & Hypotheses*

In our research we will address the effect of *Fear of COVID* on *Purchase Intention of Green Products*, and how it is affected through two separate components: *Fear of COVID* through consumers’ *Environmental Awareness*, and *Fear of COVID* through consumers’ *Customer Experience*. We will test the two components separately and investigate the different effects. In addition, we will also compare to which extent each mediator affects the purchase intention. We suggest that the positive effect of *Fear of COVID* through their *Environmental Awareness* is greater than the negative effect of *Fear of COVID* through their *Customer Experience*, in order to produce the net effect of *Fear of COVID* on the *Purchase Intention of Green Products* through each mediator. Hence, we will not test the entire model simultaneously, but statistical comparisons of the two paths will be discussed.

The first construct forms the basis of investigating the positive mediation effect that consumers’ environmental awareness has on the relationship between people’s fear of COVID and their purchase intent. The second construct tests how the negative mediation effect that consumer experience has on the relationship between fear of COVID and purchase intention.



**Figure 1:** Research Model

**H1:** The fear of COVID positively influences consumers' purchase intention to buy green products.

**H2:** The fear of COVID positively influences consumers' environmental awareness.

**H3:** Consumers' environmental awareness mediates the relationship between consumers' fear of COVID and consumers' purchase intention of green products.

**H4:** The fear of COVID negatively influences consumers' customer experience.

**H5:** Consumers' customer experience mediates the relationship between consumers' fear of COVID and consumers' purchase intention of green products.

### 3 Research Methodology/Design

#### 3.1 Objective of the Study

The objective of this study was to investigate consumers' purchase behavior to see how the pandemic has affected consumers' intention to purchase green products. More specifically sustainable clothes, environmentally friendly transportation, green cosmetics, and sustainable food.

Certain variables play a role in mediating the relationship between the factors of consumer behavior, such as environmental awareness and consumers' customer experience during COVID.

We conducted an online survey to test our hypotheses, in addition to a pretest where we wanted to eliminate and control for potential problems (Malhotra, 2010). In this section, we will present our research design, data collection plan, and the structure of the survey.

### *3.2 Research Design*

We conducted a descriptive study in the Norwegian market, with the use of quantitative data collected from an online survey. The results from the survey are used to describe consumers' behavior during the pandemic with the impact of COVID-19 implications, customer experience, and consumers' environmental awareness. The population we wanted to reach was people between the age of 18-65 who are both regular buyers and less regular buyers. We wanted to reach these to capture the impacts on all relevant parties. From the sample group, we wanted to understand, among other things, how frequently they purchased green products, such as sustainable clothes, food, and cosmetics. But also, their perceived environmental attitudes, their interest in green products, their general shopping pattern, and how important the customer experience is on their purchase intention.

The survey was constructed in a way that the questions were easy to understand for the participants. Each variable had a unique block where we constructed the questions in similar order to create a clear and understandable questionnaire. The clearer it was, the more likely it was that the participants would complete the questionnaires. The more basic questions, like demographics, were asked at the end in order to keep the participants' focus for as long as possible. We used Malhotra's Questionnaire design checklist (Malhotra, 2021) for building the survey.

### *3.3 Population and Sample*

Our target population was people who have made purchases in Norway during the last six months of the COVID-19 pandemic, preferably purchases of green products. We wanted to capture both genders of respondents, and a wide range of ages to capture all aspects and uncover the general trends and opinions of the consumers in the market. For this study, we used a convenient sampling technique, which is a non-probability sample technique. This is a favorable technique in situations where time and costs are limited, as it is for us.

We used Qualtrics (2022) online sample size calculator, in order to see what our ideal sample size should be. We used Norway's total population over 18 years as a basis (approximately 4,350,000 people), a confidence level of 95%, and a margin of error of 5%, and found that our ideal sample size would be 385 respondents.

### *3.4 Data Collection*

By the end of 2021, there was a high increase in infection rates in Norway with a clear tendency that this would continue into 2022 with the domination of Omicron (FHI, 2022). The collection of the data was planned to be conducted in February/March, and the new restrictions and lockdowns from Christmas would possibly still be in place and most likely have an effect and impact on consumers' behavior in this period. However, the main data collection was conducted during the last two weeks of March and the first week of April. In addition to the data collection being somewhat later than originally planned, the Norwegian authorities also repealed the vast majority of corona measures in Norway on the 12th of February (Regjeringen, 2022). Which meant that we were not able to carry out the data collection at the same time as people lived with measures and restrictions, which may have had an effect and impact on consumer behavior during this period and thus our collected results.

A survey is a useful way of collecting data because it can obtain a wide variety of data and the survey data have numerous sets of user options. We used Qualtrics to create the survey and collect the data. It is flexible and with



an online setup, it is easy to reach out to the wanted target group. We distributed it through different channels, like Facebook, LinkedIn, and through direct messages. We used the Snowball effect (Malhotra, 2010), where we asked friends and family, who already had answered the survey, to share the survey on their preferred media, in order to try to reach as many respondents as possible, and a variety of age groups.

The survey was anonymous and followed the ethical standards including BI's internal guidelines for GDPR (BI Norwegian Business School, 2021), and took approximately 5-10 minutes to complete, where the respondents answered on a 5-point Likert scale on all the questions regarding our variables.

### *3.5 Pretest of the Study*

We conducted a pretest in advance of the main survey in order to eliminate and control for potential problems and misunderstandings (Malhotra, 2010) which could lead to response errors. In this exploratory stage, we had the chance to discover and fix challenges with our study, clarify the concepts used, finalize the proposed hypotheses, and optimize “the data-collection process so that the data obtained are internally consistent and can be analyzed in a uniform and coherent manner” (Malhotra, 2010, p. 302).

To control that the structure and formulations were clear and understandable we conducted a pretest with 10 respondents. These respondents were selected from the same population as our survey population (Malhotra, 2010), thus Norwegian consumers, with a good balance of age, gender, education, employment, and income. We then asked the respondents to send us feedback on any issues, improvements, or any potential misunderstandings. Hence, this gave us good and credible information to identify problems with our structure, language, and formulations, before the actual survey.

The feedback we received from our pretest was that some of our intros to our question were a bit long, which led to longer use of time than first expected, in addition to that the long text led to the respondents getting bored. We therefore changed these intros, so that they became shorter, more precise,

and more concrete. We also received feedback that the vast majority carried out the survey on their phones, where the font became very large, which again led to more scrolling than necessary. We thus changed the font size, so that it fit well with both phone and computer setups.

### 3.6 Survey Structure

The survey addressed the different hypotheses connected to our problems and collected data on the different variables. The average score from the different blocks formed the basis of the different variables. For all the questions related to our variables, we used a five-point Likert scale, ranging from strongly disagree to strongly agree, which is a non-comparative scale. This is a very intuitive and understandable way of responding to questions and statements for participants, and it is also a good technique to base an analysis on (Malhotra, 2021).

In the survey, we used multiple scaling techniques, such as a nominal scale for identification of participants and gender, interval scales for the average response on each criteria attribute, and ratio scales for mapping age, location of living, and location of the purchase.

The general structure of the survey started with an introduction that informed the participants of the objective of the survey. Then the participants were exposed to questions relevant to the theory and problems we wanted to investigate. The questions were divided into nine blocks (Table 1) in order to distinguish the different topics.

**Table 1:** Survey Structure

Block	Scale
Block 1: Introduction	
Block 2: Consumers' Fear of COVID	1-5
Block 3: Consumers' Environmental Awareness	1-5
Block 4: Consumers' Customer Experience	1-5
Block 5: Consumers' Purchase Intention of Green Products	1-5
Block 6: Consumers' Purchase Intention of Sustainable Clothes	1-5
Block 7: Consumers' Purchase Intention of Environmentally Friendly Transportation	1-5
Block 8: Consumer's Purchase Intention of Green Cosmetics	1-5
Block 9: Consumer's Purchase Intention of Sustainable Food	1-5
Block 6: Demographic questions	Gender, Age, Location, Eduaction, Marital Status, Income, Employment Status

### 3.7 Variable Description & Scales

#### *Fear of COVID-19:*

In order to collect data on people's fear of COVID, we wanted to ask about how scared people are of everything that has to do with the virus. That included, how great the perceived fear of getting infected is, the fear of infecting others, in addition to how it affects their lives both in terms of physical and mental health, socially and financially, and connected to their purchasing behavior. To measure the fear of COVID-19 we used a scale inspired by Taylor et al.'s (2020) COVID Stress Scale, consisting of 36 items to assess COVID-19-related distress, where the respondents answer using a five-point Likert scale.

**Table 2:** Construct "FearCOV"

Variable	Item	Scale
FearCOV	I am worried about getting infected.	1-5
	I am worried about infecting my family and/or friends.	1-5
	I am worried about infecting other people around me.	1-5
	I am worried that people around me will infect me with the virus.	1-5
	I am worried that if I touched something in a public space (e.g., handrail, door handle), I would catch the virus.	1-5
	I am worried that if someone coughed or sneezed near me, I would catch the virus.	1-5
	Checking yourself for infection (e.g. temperature control, COV self-test).	1-5

#### *Environmental Awareness:*

For environmental awareness, we wanted to ask how environmentally conscious the survey participants themselves think they are, and to what extent this affects whether they intend to purchase a green product or not. To measure consumers' environmental awareness, we constructed a scale inspired by Severo et al.'s (2021) questionnaire. This questionnaire consists of four constructs about consumers' behavior during COVID-19, and we took inspiration from the constructs about consumers' environmental awareness and sustainable consumption. The questionnaire by Severo et al. consists of

different statements, in which the respondent chooses an alternative answer on a five-point Likert scale, which we also used in our survey.

**Table 3:** Construct “EnvAw”

<b>Variable</b>	<b>Item</b>	<b>Scale</b>
<b>EnvAw</b>	The COVID-19 pandemic has increased my environmental awareness.	1-5
	The COVID-19 pandemic has made me more aware of environmental challenges.	1-5
	The COVID-19 pandemic made me realize, even more, the environmental impact humans cause on the planet.	1-5
	The COVID-19 pandemic caused me to change my consumption habits to be more sustainable.	1-5
	The COVID-19 pandemic has made me look for more green and sustainable products than before.	1-5

*Customer Experience:*

With regards to the customer experience, we asked about the whole set of perceptions a customer feels and experience when making a purchase. Thus, the employees’ expertise, customer service, communication, opportunities, and alternatives. The customer experience scale is inspired by Schmitt’s (1999) Experiential Marketing Framework, with four factors (sense, feel, think, act), where each factor has three items (Schmitt, 1999; Hesham et al., 2021). Customer experience is thus defined as a set of sensory, affective, cognitive, and behavioral consumer responses at all stages of the customer journey. Hence, Schmitt argues that customer experience includes everything starting from exposure to advertisement to the general customer service in stores, how service-minded the store employees are, and the ease of return of products. The respondents answered on a five-point Likert scale.

**Table 4:** Construct “CustExp”

<b>Variable</b>	<b>Item</b>	<b>Scale</b>
<b>CustExp</b>	The general customer service.	1-5
	Exposure to advertisement of green products.	1-5
	Getting help from employees when needed.	1-5
	Sharing of product knowledge/ information from staff and employees.	1-5
	Ease of return and/or change of product.	1-5

### *Purchase intention of Green Products:*

Under purchase intention, we wanted to ask if they could consider purchasing green products, mainly in terms of what they have heard about the products, their personal opinions, any previous experiences, and perceived value. The purchase intention scale is based on Maichum et al. 's (2016) questionnaire, where they ask about the attitude toward purchasing green products, environmental concerns, subjective norms, and environmental knowledge. Including covering the general aspect of green products we also investigated four sub-categories: Clothes, Food, Cosmetics and Transportation (see Appendix A). Questions regarding these subcategories were formulated from the same scale as for the block representing green products. In addition, we asked a question regarding the availability of green products and the availability of the other categories in stores.

**Table 5:** Construct “Green Products”

<b>Variable</b>	<b>Item</b>	<b>Scale</b>
<b>Green Products</b>	<i>The availability of green products in stores.</i>	1-5
	I intend to purchase green products next time because of its positive environmental contribution.	1-5
	I will consider switching to sustainable brands for environmental reasons.	1-5
	My willingness to purchase green products has increased during the COVID-19 pandemic.	1-5
	Getting substantial information about green products has a positive influence on my purchase intention.	1-5
	My family/close friends think that I should purchase more green products.	1-5

## **4 Data Analysis**

In order to test the different hypotheses, we had to prepare the data to be able to analyze the results. Thus, in this chapter, we followed Malhotra’s data preparation process (Malhotra, 2018, p. 420), in addition to checking the reliability and validity of the items and constructs, and consequently further present which analyses we conducted to test the hypotheses.

#### *4.1 Data Cleaning*

When ending the data collection in the middle of April, we were left with 244 respondents. Of the 244 respondents, 90 had unsatisfactory responses, where we lacked answers to key variables, and these were therefore discarded (Malhotra, 2010). We decided not to assign missing values to these responses because they were quite a few, and because there were several questions unanswered, which all were related to our key variables. We were then left with 154 respondents. After exporting the data into SPSS, we again discovered that there were two respondents we had overlooked in our first cleaning, where we again lacked answers to several of our key questions, these were therefore also removed. Meaning that we ended up with 152 respondents.

We also performed descriptive statistics on all our items and constructs to look at max, min, mean, and standard deviation scores. The main thing we wanted to look at here was that the standard deviation was as low as possible, which generally means that the values are narrowly scattered around the mean (Andrade, 2020).

#### *4.2 Reliability & Validity*

After having cleaned our dataset, we performed a reliability and validity test. Reliability “indicates that something can be measured consistently (e.g., get similar results each time you test). Inconsistent results undermine the strength of research findings and may lead to erroneous practice.” (Fitzner, 2007, p. 776). To test the reliability of our dataset, we checked the internal consistency reliability and Cronbach’s alpha, in that we would consider the reliability of our summed construction, which consists of several summed items (Malhotra, 2010). Several different elements can affect the coefficient alpha, such as the number of test items, item inter-relatedness, and dimensionality. Which values of Cronbach’s alpha that are acceptable in quantitative research also differ, but the acceptable values mostly range from 0.7 to 0.95, a range that includes all our alphas on all our constructs (Table 6) (Tavakol & Dennick, 2011).

*Table 6: Reliability analysis*

		Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Corrected Item-Total Correlation	N of Items
<b>Constructs</b>					
	FearCOV	.894	.895	>.40	7
	EnvAw	.913	.914	>.40	5
	CustExp	.872	.872	>.40	5
	Green Products	.876	.878	>.40	5
	Clothes	.905	.906	>.40	5
	Transportation	.742	.744	>.40	5
	Cosmetics	.930	.929	>.40	5
	Food	.888	.890	>.40	5

		N	%
<b>Cases</b>	Valid	152	100.0
	Excluded	0	0
	Total	152	100.0

When running the reliability test, we also discovered that the output from the “Inter-Item Correlation Matrix” showed negative values for all the items that included our questions about the availability of green/sustainable products. While excluding these from the variables Green Products, Clothes, Cosmetics, Transportation and Food we got positive correlations between all our inter-items. We therefore chose to exclude these “availability” items from our constructs and dealt with these as individual variables.

We also looked at the validity within each construct, which can be defined as “the extent to which differences in observed scale scores reflect true differences among objects on the characteristic being measured, rather than systematic or random error” (Malhotra, 2010, p. 288). Based on the output from SPSS, we concluded that since all our Pearson correlations were highly significant at the 5% significance level, our data was valid.

In addition to looking at the validity within each construct, we also analyzed the validity and correlation between each of our constructs. We wanted to do this in order to control for multicollinearity, which can be described as “a state of very high intercorrelations among independent variables” (Malhotra, 2010, p. 554). It is important to check for this because by not examining multicollinearity, one can draw wrong conclusions regarding relationships between predictor and outcome variables. As a rule of thumb, a correlation between constructs of .80 or higher strongly indicates

multicollinearity (Schreiber-Gregory, 2017). As seen in Table 7, we have no correlations higher than .69, which means that multicollinearity is unlikely to occur.

*Table 7: Correlation between constructs*

		<b>Correlations</b>			
		<b>FearCOV</b>	<b>EnvAw</b>	<b>CustExp</b>	<b>Green Products</b>
<b>FearCOV</b>	Pearson Correlation	1			
	Sig.				
<b>EnvAw</b>	Pearson Correlation	.441	1		
	Sig.	<.001			
<b>CustExp</b>	Pearson Correlation	-.344	-.282	1	
	Sig.	<.001	<.001		
<b>Green Products</b>	Pearson Correlation	-.407	.689	-.387	1
	Sig.	<.001	<.001	<.001	

In addition, we wanted to control the external validity which “examines whether or not an observed causal relationship should be generalized to and across different measures, persons, settings, and times” (Calder et al., 1982, p. 240). We thus wanted to explore how the composition of age and gender was distributed. The frequencies (table 8) showed that we had an almost equal share of both genders, and the age variable is highly normally distributed with an average of around 30 years, which both argue that the results can be generalized.

*Table 8: Frequencies Gender and Age*

<b>Variable</b>	<b>Measurement</b>	<b>%</b>
<b>Gender</b>	Male	52.0
	Female	47.3
	Non-binary / third gender	0.7
	Prefer not to say	
<b>Age</b>	18-29 years old	29.6
	30-45 years old	30.3
	46-65 years old	34.8
	65+	4.6
	Prefer not to say	0.7



### 4.3 Multiple Linear Regression

After having controlled for reliability and validity, and computed new constructs, we moved on and performed multiple linear regressions to test the hypothesis H1 (*The fear of COVID positively influences consumers' purchase intention to buy green products*), H2 (*The fear of COVID positively influences consumers' environmental awareness*), and H4 (*The fear of COVID negatively influences consumers' customer experience*). “In multiple linear regression analysis, an attempt is made to account for the variation of the independent variables in the dependent variable synchronically (Ünver & Gamgam, 1999, cited in Uyanık & Güler, 2013, p. 235). The general form for the multiple regression model is

$$Y_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \dots + \beta_n X_{in} + \varepsilon_i$$

where the parameters of this equation are used to relate variation in the dependent variable to the variation in specific independent variables.

To test the first hypothesis, H1, we looked at the total effect Fear of COVID had on the Purchase Intention of Green Products. Thus, *FearCOV* is our independent variable, and *Green Products* is our dependent variable. Next, we looked at the direct effect that Fear of COVID had on consumers' Environmental Awareness and consumers' Customer Experience. Thus, *FearCOV* as an independent variable, and *EnwAw* and *CustExp* as dependent variables, in order to test H2 and H4.

### 4.4 Mediation

In addition, we performed a mediation analysis (Daniel et al., 2015) in order to explore the different pathways influencing consumers' purchase intention of green and sustainable products when they are exposed to a social, financial and global crisis like the COVID-19 pandemic. Hence, we wanted to analyze whether consumers' environmental awareness and their customer experience influence their purchase intention of green and sustainable products. Thus, we tested H3 (*During the COVID-19 pandemic, consumers' environmental awareness mediates the positive relationship between*

*consumers' fear of COVID and their purchasing intention of green products*), and H6 (*The positive effect of consumers' fear of COVID on their purchase intention of green products is mediated by consumers' customer experience*).

In order to do so, we used linear regression to compute the different direct effects (Abu-Bader & Jones, 2021), and after concluding with a significant direct effect (Baron & Kenny, 1986) we looked at the mediating effect from EnvAw and CustExp on the relationship between FearCOV and Green Products. When having run the regression analysis we used a Sobel test (Sobel, 1982) to see if the results were statistically significant at a .05 significance level.

#### 4.5 Repeated Measures ANOVA

To further investigate if the results from the linear regression and the mediation analysis differ when there are different categories of green products, we computed a repeated measures regression. Previously the dependent variable, *Purchase Intention of Green Products* (Green Products), has covered the general green and sustainable products in the overall market. However, here we wanted to check for the same effects but with different categories, represented by *Clothes, Food, Cosmetics and Transportation*. It's the same DV (same scale and structure) but measured through different categories. These analyzes are not directly linked to one of our hypotheses but were performed with the intention of looking at narrower categories, rather than Green Products as one large general category. ANOVA with repeated measures is usually practiced when measuring the outcome of each study unit several times, which most often occurs over different periods of time (Zhao et al., 2019). However, this analysis design can also be used to study other factors, such as in our case where we want to see how the same individuals answer roughly similar questions regarding four different categories with the same environmental characteristics. To compute a repeated measure analysis, one of the main assumptions that must be met is the sphericity assumption. It says that no sphericity should exist in the data, and "in case sphericity assumption is violated some correction is required to be made in testing desired hypothesis" (Verma, 2015, p. 39). We start by controlling for sphericity violation before

analyzing the direct and mediation effects from the other variables.

## **5 Results**

We performed descriptive statistics of all the items in our dataset, in order to look at the mean, standard error, and standard deviation, before combining the various items into constructs. As can be seen in Table 9, all items are approximately at an average value of 3 on the Likert scale, where one half is just above average, while the other half is just below. The item with the highest mean score of 3.66 is the item “I am worried about infecting my family and/or friends”, while the item with the lowest mean score of 2.41 is the item “I am worried that if I touched something in a public space (e.g., handrail, door handle), I would catch the virus”. The descriptive statistics also showed that all our items had relatively low standard deviations, which shows that the data are clustered closely around the mean and are thus more reliable.

Further, we performed descriptive statistics for the different constructs, where we also included the category variables. We can see that most of the means are close to 3 (Table 9), however, we also computed a One-Sample t-test in order to check if they are also significantly different from 3 (Ross & Willson, 2017). The results state that the mean value of Green Products, Clothes, and Food is significantly higher than 3 (Table 10).

**Table 9: Variables and descriptive statistics**

Variable	Measurement	Mean		
		Mean	Std. Error	Std. Dev.
<b>FearCOV</b>		<b>2.99</b>	<b>.079</b>	<b>.978</b>
	I am worried about getting infected.	2.59	.100	1.236
	I am worried about infecting my family and/or friends.	3.66	.090	1.110
	I am worried about infecting other people around me.	3.40	.098	1.203
	I am worried that people around me will infect me with the virus.	2.70	.104	1.277
	I am worried that if I touched something in a public space (e.g., handrail, door handle), I would catch the virus.	2.41	.107	1.319
	I am worried that if someone coughed or sneezed near me, I would catch the virus.	2.97	.105	1.299
	Checking yourself for infection (e.g. temperature control, COV self-test).	3.16	.106	1.308
<b>EnvAw</b>		<b>3.05</b>	<b>.085</b>	<b>1.046</b>
	The COVID-19 pandemic has increased my environmental awareness.	3.22	.093	1.145
	The COVID-19 pandemic has made me more aware of environmental challenges.	3.21	.095	1.172
	The COVID-19 pandemic made me realize, even more, the environmental impact humans cause on the planet.	3.23	.101	1.247
	The COVID-19 pandemic caused me to change my consumption habits to be more sustainable.	2.89	.102	1.256
	The COVID-19 pandemic has made me look for more green and sustainable products than before.	2.71	.101	1.248
<b>CustExp</b>		<b>2.97</b>	<b>.057</b>	<b>.699</b>
	The general customer service.	2.99	.067	.830
	Exposure to advertisement of green products.	3.07	.066	.819
	Getting help from employees when needed.	2.88	.072	.891
	Sharing of product knowledge/ information from staff and employees.	2.93	.068	.839
	Ease of return and/or change of product.	2.99	.074	.917
<b>Green Products</b>		<b>3.30</b>	<b>.068</b>	<b>.840</b>
	I intend to purchase green products next time because of its positive environmental contribution.	3.35	.078	.965
	I will consider switching to sustainable brands for environmental reasons.	3.61	.080	.984
	My willingness to purchase green products has increased during the COVID-19 pandemic.	3.07	.090	1.104
	Getting substantial information about green products has a positive influence on my purchase intention.	3.62	.086	1.054
	My family/close friends think that I should purchase more green products.	2.86	.083	1.019

**Table 10: Descriptives and One-Sample t-test (test value = 3)**

	Mean	Std.Error	Std.Dev	95 CI	t (vs mean = 3)	p
FearCOV	2.99	.079	.978	2.83-3.14	-.19	.850
EnvAw	3.05	.085	1.046	2.88-3.22	.62	.536
CustExp	2.97	.057	.699	2.86-3.08	-.51	.611
Green Products	3.30	.068	.840	3.17-3.44	4.41	<.001
Clothes	3.22	.071	.877	3.07-3.36	3.02	.003
Transportation	3.03	.069	.850	2.89-3.16	.40	.689
Cosmetics	3.06	.076	.931	2.91-3.21	.73	.465
Food	3.34	.068	.842	3.21-3.48	5.01	<.001

### 5.1 Fear of COVID-19

In order to measure consumers' fear of COVID, we constructed seven statements that measured the current topic, where the mean value for the construct was 2.99 (Table 9). There is a clear tendency that people's fear of COVID is higher when they are potentially infecting their friends and family, compared to getting infected themselves. This also corresponds well with several articles and news bulletins we have seen in recent years, where there has been talk of people being ashamed for potentially infecting others. Especially health professionals, nurses (Bergsagel, 2021), parents, teachers, and other typical care professions, but also everyone else who has been afraid of infecting their loved ones (Dommerud & Stensland, 2021). Getting infected by touching points in public space is the statement that people are least afraid of, with a mean value of 2.41.

We can see through the One-Sample t-test (Table 11) that people are somewhat afraid of COVID, especially when it comes to infecting their loved ones, where they are significantly afraid of COVID due to a 95 % CI. This again supports our hypothesis. With respect to how we designed and formulated our study (see Appendix B), and with the assumptions that the respondents have answered the survey sincerely, this indicates that consumers are generally concerned about the impacts and the various aspects of the COVID-19-virus.

**Table 11:** Descriptives and One-Sample t-test, FearCOV statements (test value = 3)

	Mean	Std.Error	Std.Dev	95 CI	t (vs mean = 3)	p
I am worried about getting infected.	2.59	.100	1.236	2.39-2.79	-4.07	<.001
I am worried about infecting my family and/or friends.	3.66	.090	1.110	3.49-3.84	7.38	<.001
I am worried about infecting other people around me.	3.40	.098	1.203	3.21-3.59	4.11	<.001
I am worried that people around me will infect me with the virus.	2.70	.104	1.277	2.49-2.90	-2.92	.004
I am worried that if I touched something in a public space (e.g., handrail, door handle), I would catch the virus.	2.41	.107	1.319	2.20-2.63	-5.47	<.001
I am worried that if someone coughed or sneezed near me, I would catch the virus.	2.97	.105	1.299	2.76-3.18	-.31	.755
Checking yourself for infection (e.g. temperature control, COV self-test).	3.16	.106	1.308	2.95-3.37	1.49	.139

## 5.2 Purchase Intention of Green Products

To measure the possibility of increasing purchase intention of green products due to fear of COVID, we made five statements related to this topic (Table 9). Here we can see that almost all statements are larger than 3, and significantly higher according to the One-sample t-test (Table 12). An interesting finding is that statement number two, “I will consider switching to sustainable brands for environmental reasons”, which has the second-highest mean with a value of 3.61, indicates quite well that people are willing to change their behavior for environmental reasons. Including that the mean value of the construct is 3.30, which is significantly higher than 3 ( $p < .001$ ) due to 95 % CI [3.17, 3.44] (Table 10), supports our hypothesis and indicates that consumers have increased their willingness to purchase green and sustainable products due to COVID-19.

**Table 12:** Descriptives and One-Sample t-test, Green Products statements (test value = 3)

	Mean	Std.Error	Std.Dev	95 CI	t (vs mean = 3)	p
I intend to purchase green products next time because of its positive environmental contribution.	3.35	.078	.965	3.19-3.50	4.46	<.001
I will consider switching to sustainable brands for environmental reasons.	3.61	.080	.984	3.45-3.76	7.58	<.001
My willingness to purchase green products has increased during the COVID-19 pandemic.	3.07	.090	1.104	2.90-3.25	.81	.420
Getting substantial information about green products has a positive influence on my purchase intention.	3.62	.086	1.054	3.45-3.79	7.23	<.001
My family/close friends think that I should purchase more green products.	2.86	.083	1.019	2.69-3.02	-1.75	.082

Further, we used linear regression to analyze the correlation between fear of COVID and the purchase intention of green products, to see if there was a cause-effect relationship, in addition to determining if the effect is statistically significant (Uyanık & Güler, 2013). As we can see in Table 13 the adjusted R Squared illustrates that 16 % of the variance in Green Products can be explained by consumers' Fear of COVID. This is a relatively low R square, but it is not common to get high numbers for R square in social science statistics, as it is difficult to predict human behavior (Ringdal, 2020). In addition, as seen in Table 13, the results indicate that the model is significant ( $F(1,150) = 29.82, p < .001$ ). This means that the variable FearCOV was a

good predictor of Green Products. Further, we can see that the total effect, represented by the unstandardized beta, is positive and it is highly significant with a 95 CI ( $b = .35$ ,  $p < .001$ ). Consequently, this means that consumers' fear of COVID has a positive influence on consumers' purchase intention to buy green products. Thus, Hypothesis 1 is supported.

**Table 13: Linear Regression between FearCOV and Green Products**

<b>Model Summary</b>			
R	R Square	Adjusted R Square	Std. Error
.407	.166	.160	.76951

Predictors: (Constant), FearCOV

<b>ANOVA</b>			
	df	F	Sig.
Regression	1	29.82	<.001
Residuals	150		
Total	151		

Dependent Variable: Green Products

Predictors: FearCOV

<b>Coefficients</b>					
Model	Unstandardized B	Coefficients Std. Error	Standardized Beta	t	Sig.
(Constant)	2.26	.201		11.23	<.001
FearCOV	.35	.064	.41	5.46	<.001

Dependent Variable: Green Products

### 5.3 Environmental Awareness

To measure the possibility of increasing consumers' environmental awareness due to fear of COVID, we made five statements related to this topic (Table 9), and the mean value of the construct is 3.05 (Table 10). Three of the five statements are significantly larger than 3 (Table 14), and all these statements are about the consumers' awareness and knowledge of the environment. This indicates quite well that the COVID-19 pandemic has increased consumers' environmental awareness, and further supports our hypothesis.

**Table 14:** Descriptives and One-Sample t-test, EnvAw statements (test value = 3)

	Mean	Std.Error	Std.Dev	95 CI	t (vs mean = 3)	p
The COVID-19 pandemic has increased my environmental awareness.	3.22	.093	1.145	3.03-3.40	2.34	.021
The COVID-19 pandemic has made me more aware of environmental challenges.	3.21	.095	1.172	3.02-3.40	2.22	.028
The COVID-19 pandemic made me realize, even more, the environmental impact humans cause on the planet.	3.23	.101	1.247	3.03-3.43	2.28	.024
The COVID-19 pandemic caused me to change my consumption habits to be more sustainable.	2.89	.102	1.256	2.69-3.10	-1.03	.303
The COVID-19 pandemic has made me look for more green and sustainable products than before.	2.71	.101	1.248	2.51-2.91	-2.86	.005

We used linear regression to analyze the correlation between fear of COVID and consumers' environmental awareness, to see if there was a cause-effect relationship, in addition to determining if this effect is statistically significant (Uyanık & Güler, 2013). As we can see in Table 15, the adjusted R Squared illustrates that 18,9 % of the variance in consumers' environmental awareness can be explained by consumers' fear of COVID. In addition, the results indicate that the model is significant ( $F(1,150) = 36.15, p < .001$ ). This means that the variable FearCOV is a good predictor for EnvAw. Further, we can see that the unstandardized beta is positive, and it is highly significant with a 95 % CI ( $b = .47, p < .001$ ), which means that there is a positive relationship between consumers' fear of COVID and their environmental awareness. Consequently, this means that fear of COVID has a positive influence and impact on consumers' environmental awareness. Thus, Hypothesis 2 is supported.



**Table 15: Linear Regression between FearCOV and EnvAw**

<b>Model Summary</b>			
R	R Square	Adjusted R Square	Std. Error
.441	.194	.189	.94246

Predictors: (Constant), FearCOV

<b>ANOVA</b>			
	df	F	Sig.
Regression	1	36.15	<.001
Residuals	150		
Total	151		

Dependent Variable: EnvAw

Predictors: FearCOV

<b>Coefficients</b>					
Model	Unstandardized B	Coefficients Std. Error	Standardized Beta	t	Sig.
(Constant)	1.65	.246		6.69	<.001
FearCOV	.47	.078	.44	6.01	<.001

Dependent Variable: EnvAw

#### 5.4 Mediation Analysis of Environmental Awareness

We conducted a mediation analysis to measure the mediation effect of consumers' Environmental Awareness on the relationship between Fear of COVID and Purchase Intention of Green Products. The results are presented in Table 16. We can see that the model has an R-value of .488 and an acceptable adjusted R Square of .481, which means that 48.1% of the variance in consumers' purchase intention of green products can be explained by consumers' environmental awareness. The results indicate that the model is significant ( $F(2,149) = 70.97, p < .001$ ). The direct effect between FearCOV and the mediator variable, EnvAw, has previously been detected and concluded to be significantly positive. When including the mediator variable, EnvAw, then the direct effects between FearCOV and Green Products are no longer significant with a 95 % CI ( $b = .11, p = .051$ ). In addition, the indirect effect from the mediator is measured with the Sobel test (Sobel, 1982), which is significant ( $b = 0.239, p = <.001$ ). Thus, we can assume that the total effect between FearCOV and Green Products is significantly lower when you include the mediator EnvAw, and since the direct effect between FearCOV and Green Products is non-significant, we have complete mediation (Abu-Bader & Jones,

2021; Sidhu et al., 2021). Hence, a mediation effect from EnvAw on the relationship between FearCOV and Green Products is detected, and Hypothesis 3 is supported.

**Table 16:** Mediation analysis of EnvAw

<b>Model Summary</b>			
R	R Square	Adjusted R Square	Std. Error
.698	.488	.481	.605

Predictors: (Constant), EnvAw, FearCOV

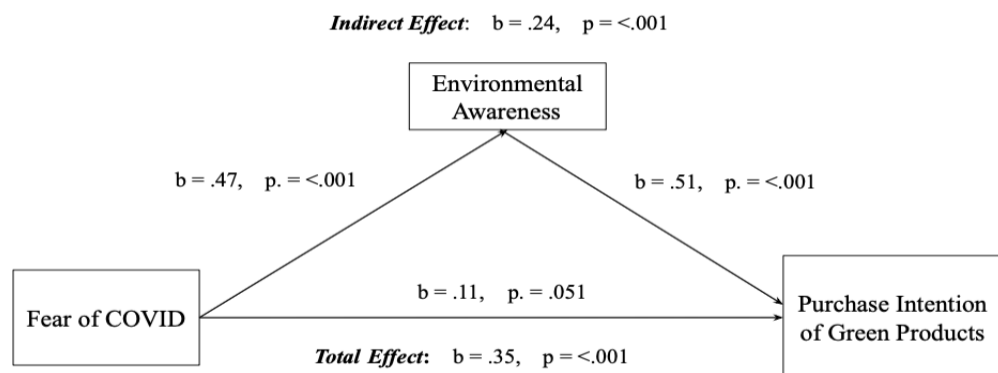
<b>ANOVA</b>			
	df	F	Sig.
Regression	2	70.97	<.001
Residuals	149		
Total	151		

Dependent Variable: Green Products  
Predictors: EnvAw, FearCOV

<b>Coefficients</b>					
Model	Unstandardized B	Coefficients Std. Error	Standardized Beta	t	Sig.
(Constant)	1.42	.180		7.90	<.001
FearCOV	.11	.056	.13	1.97	.051
EnvAw	.51	.052	.63	9.68	<.001

Dependent Variable: Green Products

	FearCOV * EnvAw	Sobel test
Indirect effect	.24	<.001



**Figure 2:** Mediation effects from EnvAw

## 5.5 Customer Experience

Next, we looked at the direct effect of fear of COVID on consumers' customer experience. To measure the possibility of a negative effect on customer experience due to fear of COVID, we made five statements related to this topic (Table 9), and the mean value of the construct is 2.97 (Table 10). None of the statements are significantly different from 3 (Table 17), which illustrates that there is no general change in consumers' customer experience during the pandemic. However, we conducted a linear regression to measure if FearCOV has any influence on CustExp (Table 18).

**Table 17: Descriptives and One-Sample t-test, CustExp statements (test value = 3)**

	Mean	Std.Error	Std.Dev	95 CI	t (vs mean = 3)	p
The general customer service.	2.99	.067	.830	2.85-3.12	-.20	.845
Exposure to advertisement of green products.	3.07	.066	.819	2.93-3.20	.99	.324
Getting help from employees when needed.	2.88	.072	.891	2.74-3.02	-1.64	.103
Sharing of product knowledge/ information from staff and employees.	2.93	.068	.839	2.79-3.06	-1.06	.289
Ease of return and/or change of product.	2.99	.074	.917	2.85-3.14	-.09	.930

**Table 18: Linear Regression between FearCOV and CustExp**

Model Summary			
R	R Square	Adjusted R Square	Std. Error
.344	.118	.112	.659

Predictors: (Constant), FearCOV

ANOVA			
	df	F	Sig.
Regression	1	20.12	<.001
Residuals	150		
Total	151		

Dependent Variable: CustExp

Predictors: FearCOV

Coefficients					
Model	Unstandardized B	Coefficients Std. Error	Standardized Beta	t	Sig.
(Constant)	3.71	.172		21.53	<.001
FearCOV	-.25	.055	-.34	-4.49	<.001

Dependent Variable: CustExp

We used linear regression to analyze the correlation between fear of COVID and consumers' customer experience, to see if there was a cause-effect relationship, in addition, to determine if this effect is statistically significant

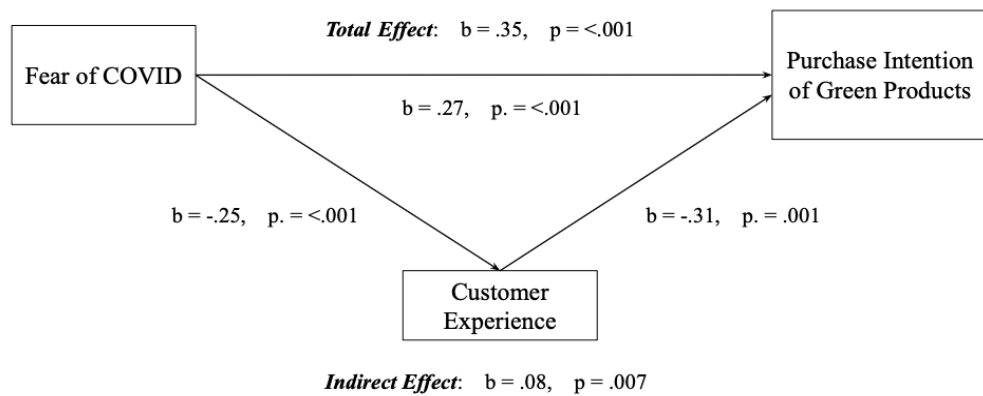
(Uyanık & Güler, 2013). As we can see in Table 18 the adjusted R Squared illustrates that 11,2 % of the variance in consumers' environmental awareness can be explained by consumers' fear of COVID. In addition, the results indicate that the model is significant ( $F(1,150) = 20,12, p < .001$ ). This means that the variable FearCOV is a good predictor for CustExp. Further, we can see that the unstandardized beta is negative, and it is highly significant with a 95 CI ( $b = -.025, p < .001$ ), which means that there is a negative relationship between consumers' fear of COVID and their perceived customer experience. Consequently, this means that fear of COVID has a negative influence and impact on consumers' customer experience. Thus, Hypothesis 4 is supported.

### *5.6 Mediation Analysis of Customer Experience*

We conducted a mediation analysis to measure the mediation effect of consumers' Customer Experience on the relationship between Fear of COVID and Purchase Intention of Green Products. The results are presented in Table 19. Here we can see that the model has an R-value of .474 and an adjusted R Square of .214. The results indicate that the model is significant ( $F(2,149) = 21.55, p < .001$ ). The direct effect between FearCOV and the mediator variable, CustExp, has previously been detected and concluded to be significantly negative. When including the mediator variable, CustExp, the direct effects between FearCOV and Green Products are still significant with a 95 CI ( $b = .27, p = < .001$ ). In addition, the indirect effect from the mediator is measured with the Sobel test (Sobel, 1982), which is significant ( $b = .08, p = .007$ ). The direct effect between FearCOV and CustExp, and the direct effect between CustExp and Green Products are both negative, thus we get a positive indirect effect. Hence, we can assume we have partial mediation (Abu-Bader & Jones, 2021; Sidhu et al., 2021). Hence, a mediation effect from CustExp on the relationship between FearCOV and Green Products is detected, and Hypothesis 5 is supported.

**Table 19: Mediation analysis of CustExp on Green Products**

<b>Model Summary</b>					
R	R Square	Adjusted R Square	Std. Error		
.474	.224	.214	.745		
Predictors: (Constant), CustExp, FearCOV					
<b>ANOVA</b>					
	df	F	Sig.		
Regression	2	21.55	<.001		
Residuals	149				
Total	151				
Dependent Variable: Green Products					
Predictors: CustExp, FearCOV					
<b>Coefficients</b>					
Model	Unstandardized B	Coefficients Std. Error	Standardized Beta	t	Sig.
(Constant)	3.40	.393		8.65	<.001
FearCOV	.27	.066	.32	4.15	<.001
CustExp	-.31	.092	-.26	-3.35	.001
Dependent Variable: Green Products					
	FearCOV * CustExp	Sobel test			
Indirect effect	.08	.007			



**Figure 3: Mediation effects from CustExp**

### 5.7 Repeated Measures - Categories of Green Products

The multiple linear regression results show us that we have a positive relationship between FearCOV and Green Products. Further, the mediation results give us a complete mediation effect when including the EnvAw variable, and a partial mediation effect when including the CustExp variable on the relationship between FearCOV and Green Products (Sidhu et al., 2021). In

order to measure if this differs when we categorize our dependent variable into four categories, we computed a repeated measures analysis (Keselman et al, 2001). Thus, the categories have the same scale as the original DV (Green Products).

**Table 20: Variables and descriptive statistics for Green Products Categories**

Variable	Measurement	Mean		
		Mean	Std. Error	Std. Dev.
<b>Clothes</b>		<b>3.22</b>	<b>.071</b>	<b>.877</b>
	I intend to purchase sustainable clothes next time because of its positive environmental contribution.	3.36	.077	.953
	I will consider switching to sustainable fashion brands for environmental reasons.	3.41	.083	1.025
	My willingness to purchase sustainable clothes has increased during the COVID-19 pandemic.	3.06	.090	1.105
	positive influence on my purchase intention of sustainable clothes.	3.49	.083	1.029
	My family/close friends think that I should purchase more sustainable clothes.	2.76	.083	1.029
<b>Transportation</b>		<b>3.03</b>	<b>.069</b>	<b>.850</b>
	I intend to purchase an electric car next time because of its positive environmental contribution.	3.72	.106	1.308
	consequences has a positive influence on my purchase intention of electric cars.	3.72	.091	1.117
	My willingness to use public transportation has increased during the COVID-19 pandemic.	2.43	.096	1.183
	I will consider switching to public transport for environmental reasons	2.66	.108	1.333
	friendly.	2.60	.089	1.099
<b>Cosmetic</b>		<b>3.06</b>	<b>.076</b>	<b>.931</b>
	I intend to purchase green cosmetic products next time because of its positive environmental contribution.	3.08	.083	1.026
	I will consider switching to green cosmetic brands for environmental reasons.	3.20	.090	1.104
	My willingness to purchase cosmetics has increased during the COVID-19 pandemic.	2.91	.087	1.067
	positive influence on my purchase intention of green cosmetics.	3.32	.088	1.088
	My family/close friends think that I should purchase more green cosmetics.	2.77	.079	.980
<b>Food</b>		<b>3.34</b>	<b>.068</b>	<b>.842</b>
	I intend to purchase sustainable food next time because of its positive environmental contribution.	3.45	.079	.969
	I will consider switching to sustainable food brands for environmental reasons.	3.55	.077	.955
	sustainable way has increased during the COVID-19 pandemic.	3.18	.089	1.098
	Getting substantial information about sustainable food has a positive influence on my purchase intention.	3.59	.083	1.019
	My family/close friends think that I should purchase more sustainable food-products.	2.94	.083	1.018

In Table 20 we can see the descriptive statistics for the different categories and the related statements. All of the mean values for the constructs are larger than 3. However, we can see that Clothes and Food stand out with higher mean values (3.22 and 3.34), and we know from Table 10 that the mean value of these two variables is significantly higher than 3.

According to Malhotra (2010), repeated measures ANOVA is a process for controlling differences between subjects, “repeated measure designs and analysis of variance (ANOVA) statistics are often used by behavioral science researchers to assess treatment effects” (Keselman et al., 1998, cited in Keselman et al, 2001, p. 2). By observing each individual during each experimental condition, in our case, asking (roughly) similar questions related to different categories. In this sense, each subject acts under his own control.

There are multiple assumptions that must be met in order to compute a repeated measurement ANOVA. The method assumes that the sample is collected from a normally distributed population, that the variables are independent and identically distributed (independent observations), and that the degree of variability conforms to a spherical pattern (Keselman et al., 2001).

Each respondent has its own unique id, each observation only appears in each treatment once, and the observations in the sample were collected using random sampling. Thus, we can assume that the variables are independent and identically distributed. Further, the normality tests show some skewness but provide support for multivariate normal distribution in the population. In Table 21, a repeated measure analysis for the categorical variable Categories is conducted in order to control for the assumption of sphericity. “The null hypothesis of no difference among the [four] variances may be tested using the Mauchly’s test of sphericity, [...] [and the] chi-squared statistics are used to test the significance of sphericity” (Verma, 2015, p. 40). In our dataset the chi-squared value ( $\chi^2$ ) is 24.15, and this value is significant ( $p = <.001$ ) with a 95% CI. Since the Mauchly’s test is significant, the sphericity assumption is violated. To compensate for this error, we therefore, have to compute a correction of the degrees of freedom for the Categories and Error terms to provide the correct p-values, before testing the significance of the F-ratio to the

model. Verma (2015, p. 41) states that you should, as a rule of thumb, use the Greenhouse-Geiser effect if epsilon ( $\epsilon$ ) is smaller than .75, or Huynh-Feldt if it is larger than .75 (Field, 2013; Howell, 2013; Keselman et al., 2001). Since the epsilon of Greenhouse-Geiser value is larger than .75 ( $\epsilon = .912$ ), we use the Huynh-Feldt correction. Thus, the critical value of F needs to be seen at (2.80, 421.74) instead of F at (3, 43), and the F-ratio for Categories is now significant ( $p = <.001$ ). Hence, after applying the correction, we are confident that we can now proceed with the analysis.

**Table 21: Mauchly's Test of Sphericity**

<b>Mauchly's Test of Sphericity</b>							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Greenhouse-Geiser	Huynh-Feldt	Lower-bound
Categories	.85	24.15	5	<.001	.912	.931	.333
Design: Intercept							
Within Subjects Design: Categories							
<b>Tests of Within-Subjects Effect</b>							
Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Categories	Sphericity Assumed	9.82	3	3.27	13.08	<.001	.08
	Greenhouse-Geiser	9.82	2.74	3.59	13.08	<.001	.08
	Huynh-Feldt	9.82	2.80	3.52	13.08	<.001	.08
	Lower-bound	9.82	1	9.82	13.08	<.001	.08
Error (Categories)	Sphericity Assumed	113.38	453	.25			
	Greenhouse-Geiser	113.38	413.36	.27			
	Huynh-Feldt	113.38	421.74	.27			
	Lower-bound	113.38	151	.75			

Table 22 measures the different effects that FearCOV has on the designated categories. The results indicate that the model is significant ( $F(1,150) = 26.94, p = <.001$ ), and that FearCOV has a significantly positive relationship with all categories with a 95 % CI. Transportation has the lowest



total effect with ( $b = .214, p = .002$ ), followed by Clothes and Food which get the same effect ( $b = .318, p = <.001$ ). The category that has the biggest effect on consumers' Purchase Intention of Green Products due to Fear of COVID is Cosmetics ( $b = .364, p = <.001$ ). The presented outcome indicates that there is a positive relationship between peoples' fear of COVID and the purchase intention of all categories. Hence, there is no deviation from the original model.

**Table 22:** Repeated measures analysis of FearCOV on Categories of Green Products

<b>Test of Between-Subjects Effect</b>						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	298.26	1	298.26	150.96	<.001	.502
FearCOV	53.22	1	53.22	26.94	<.001	.152
Error	296.36	150	1.98			

<b>Parameter Estimates</b>							
Dependent Variable	Parameter	B	Std. Error	t	Sig.	95 CI	Partial Eta Squared
Clothes	Intercept	2.27	.215	10.56	<.001	1.84-2.69	.426
	FearCOV	.318	.068	4.65	<.001	.183-.453	.126
Transportation	Intercept	2.39	.216	11.07	<.001	1.96-2.82	.449
	FearCOV	.214	.069	3.12	.002	.078-.350	.061
Cosmetics	Intercept	1.97	.225	8.74	<.001	1.52-2.42	.337
	FearCOV	.364	.072	5.07	<.001	.222-.506	.146
Food	Intercept	2.39	.205	11.69	<.001	1.99-2.79	.477
	FearCOV	.318	.065	4.87	<.001	.189-.447	.137

### 5.8 Repeated Measures - Environmental Awareness

We have previously measured the direct effect between FearCOV and EnvAw, and the results are presented in Table 15. Now, in Table 23 we are measuring the mediation effect that EnvAw has on the relationship between FearCOV and the designated categories. The direct effect between FearCOV and the mediator variable, EnvAw, has previously been detected and concluded to be significantly positive. When including the mediator variable, EnvAw, the direct effects between FearCOV and Categories are no longer significant for Clothes, Transportation, and Food with a 95% CI, but are still significant for Cosmetics with a 95% CI ( $b = .15, p = .035$ ). In addition, the indirect effect of the mediator is measured through the Sobel test (Sobel, 1982). The indirect

effect is significant for all categories, with Clothes ( $b = .21, p = <.001$ ), Transportation ( $b = .20, p = <.001$ ), Cosmetics ( $b = .22, p = <.001$ ), Food ( $b = .21, p = <.001$ ). Thus, we have a complete mediation effect for all categories except for Cosmetics which has a partial mediation (Abu-Bader & Jones, 2021). Hence, there is a slight deviation from the original model for the cosmetics category.

**Table 23:** Repeated measures, mediation analysis of EnvAw on Categories of Green Product

<b>Test of Between-Subjects Effect</b>						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	105.06	1	105.06	81.69	<.001	.354
FearCOV	4.16	1	4.16	3.23	.074	.021
EnvAw	104.73	1	104.73	81.43	<.001	.353
Error	191.63	149	1.29			

**Parameter Estimates**

Dependent Variable	Parameter	B	Std. Error	t	Sig.	95 CI	Partial Eta Squared
Clothes	Intercept	1.52	.210	7.25	<.001	1.12-1.94	.261
	FearCOV	.11	.065	1.60	.111	-.025-.023	.017
	EnvAw	.45	.061	7.39	<.001	.331-.573	.269
Transport	Intercept	1.68	.215	7.82	<.001	1.26-2.11	.291
	FearCOV	.01	.067	.18	.856	-.120-.145	.000
	EnvAw	.43	.063	6.84	<.001	.305-.552	.239
Cosmetics	Intercept	1.22	.223	5.45	<.001	.775-1.66	.166
	FearCOV	.15	.069	2.13	.035	.011-.285	.030
	EnvAw	.46	.065	7.04	<.001	.329-.586	.250
Food	Intercept	1.68	.200	8.40	<.001	1.28-2.01	.321
	FearCOV	.11	.062	1.82	.072	-.010-.236	.022
	EnvAw	.44	.058	7.48	<.001	.320-.550	.273

**Indirect effect**

Categories	Effect	Sobel test
Clothes	.21	<.001
Transport	.20	<.001
Cosmetics	.22	<.001
Food	.21	<.001

### *5.9 Repeated Measures - Customer Experience*

We have previously measured the direct effect between FearCOV and CustExp, and the results are presented in Table 19. Now, in Table 24 we measure the mediation effect that CustExp has on the relationship between FearCOV and the designated categories. The direct effect between FearCOV and the mediator variable, CustExp, has previously been detected and concluded to be significantly negative. When including the mediator variable, CustExp, the direct effects between FearCOV and Categories are still significant for all categories with a 95% CI. In addition, the indirect effect of the mediator is measured through the Sobel test (Sobel, 1982). The indirect effect is significant for all categories except for Transportation ( $b = .05$ ,  $p = .058$ ). The indirect effects for Clothes ( $b = .09$ ,  $p = .006$ ), Cosmetics ( $b = .10$ ,  $p = .002$ ), and Food ( $b = .06$ ,  $p = .034$ ) are significant for a 95% CI. Thus, we have a partial mediation effect for Clothes, Cosmetics, and Food, and no mediation effect through Transportation (Abu-Bader & Jones, 2021). A mediation effect from CustExp on the relationship between FearCOV and Clothes/Cosmetics/Food is detected. Hence, there is a clear deviation from the original model for Transportation.

**Table 24:** Repeated measures, mediation analysis of CustExp on Categories of Green Products

<b>Test of Between-Subjects Effect</b>						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	162.14	1	162.14	88.47	<.001	.373
FearCOV	26.94	1	26.94	14.70	<.001	.090
CustExp	23.29	1	23.29	12.70	<.001	.079
Error	273.07	149	1.83			

<b>Parameter Estimates</b>							
Dependent Variable	Parameter	B	Std. Error	t	Sig.	95 CI	Partial Eta Squared
Clothes	Intercept	3.53	.419	8.41	<.001	2.69-4.36	.322
	FearCOV	.23	.070	3.33	.001	.095-.373	.069
	CustExp	-.34	.098	-3.46	<.001	-.535--.146	.074
Transport	Intercept	3.18	.432	7.36	<.001	2.32-4.03	.266
	FearCOV	.16	.072	2.24	.027	.019-.305	.033
	CustExp	-.21	.101	-2.10	.038	-.412--.012	.029
Cosmetics	Intercept	3.49	.434	8.04	<.001	2.63-4.35	.302
	FearCOV	.26	.073	3.61	<.001	.119-.407	.080
	CustExp	-.41	.102	-4.03	<.001	-.612--.209	.098
Food	Intercept	3.26	.408	7.99	<.001	2.45-4.06	.300
	FearCOV	.26	.068	3.81	<.001	.125-.396	.089
	CustExp	-.23	.096	-2.43	.016	-.422--.044	.038

<b>Indirect effect</b>		
Categories	Effect	Sobel test
Clothes	.09	.006
Transport	.05	.058
Cosmetics	.10	.002
Food	.06	.034

### 5.10 Summary

For the original model (Green Products), our results show that we have support for all our hypotheses, with a complete mediation when involving the EnvAw variable, and a partial mediation when involving the CustExp variable. Hence, there is a direct positive effect between FearCOV and Green Products, and there is a mediation effect between EnvAw and CustExp. When controlling for the different categories of Green Products, we find that there is no mediation effect from CustExp on the relationship between FearCOV and Transportation. We find support for all other categories and cases, in different

degrees, for a mediation effect from EnvAw and CustExp. See our summary results in Table 25.

**Table 25: Summary results**

Effects/Paths		<b>b</b>	<b>p</b>	<b>Hypothesis</b>	
FearCOV --> GreenProd		.35	<.001	H1: Supported	
FearCOV --> EnvAw		.47	<.001	H2: Supported	
<b>Indirect Effect</b>		.24	<.001	H3: Supported	<i>Complete mediation</i>
FearCOV --> CustExp		-.25	<.001	H4: Supported	
<b>Indirect Effect</b>		.008	.007	H5: Supported	<i>Partial mediation</i>

Effects/Paths	Category	<b>b</b>	<b>p</b>		
FearCOV --> Clothes	Clothes	.32	<.001		
FearCOV --> EnvAw	Clothes	.47	<.001		
<b>Indirect Effect</b>	Clothes	.21	<.001		<i>Complete mediation</i>
FearCOV --> CustExp	Clothes	-.25	<.001		
<b>Indirect Effect</b>	Clothes	.09	.006		<i>Partial mediation</i>
FearCOV --> Transportation	Transportation	.21	.002		
FearCOV --> EnvAw	Transportation	.47	<.001		
<b>Indirect Effect</b>	Transportation	.20	<.001		<i>Complete mediation</i>
FearCOV --> CustExp	Transportation	-.25	<.001		
<b>Indirect Effect</b>	Transportation	.05	.058		<i>No mediation</i>
FearCOV --> Cosmetics	Cosmetics	.36	<.001		
FearCOV --> EnvAw	Cosmetics	.47	<.001		
<b>Indirect Effect</b>	Cosmetics	.22	<.001		<i>Partial mediation</i>
FearCOV --> CustExp	Cosmetics	-.25	<.001		
<b>Indirect Effect</b>	Cosmetics	.10	.002		<i>Partial mediation</i>
FearCOV --> Food	Food	.32	<.001		
FearCOV --> EnvAw	Food	.47	<.001		
<b>Indirect Effect</b>	Food	.21	<.001		<i>Complete mediation</i>
FearCOV --> CustExp	Food	-.25	<.001		
<b>Indirect Effect</b>	Food	.06	.034		<i>Partial mediation</i>

## 6 Limitations

There were some limitations in our research that we will now address. First, when constructing the survey and our desired variables, we struggled to find a scale from the literature to use for designing the customer experience block. For all other questions and constructs, we were able to find already established and used scales. While for the customer experience variable we took inspiration from published research and theory and constructed the scale and statements based on this. Thus, the statements in the survey are not thoroughly tested in other studies, which offers a weakness for this block (Hyman et al., 2006).

Another limitation is that according to the Qualtrics (2022) online sample size calculator we should have about 385 respondents, while only receiving 152 answers. Having a small sample size can make it more difficult to determine whether a result is a true finding or not. The sample size is also important when it comes to the validity of the study. That is, if the size of the survey sample is too small, it will not yield valid results (Kibuacha, 2021). However, since we didn't have the biggest sample size, we controlled the validity by looking at the Pearson correlations both between and within each construct, in order to reduce the risk of reporting untrue results. The limitation has also led to the fact that our presented conclusions are formulated as strong indications rather than true findings.

It could be possible that some of the questions have been exposed to social desirability bias, i.e., that some respondents may answer in a way that seems more socially acceptable, than what may be their true and honest opinion (Lavrakas, 2008). The reason behind this is that people want to present a more positive image of themselves, which is more socially acceptable, than what they may in truth think and believe. Social desirability bias often occurs when respondents are asked to answer questions about a sensitive topic. Questions about the environment, is for many a sensitive issue, with a lot of feelings and judgments. Even though it is a very current topic, there will be a risk that someone will not answer sincerely. That being said, we have tried to reduce the social desirability bias by assuring every respondent that the survey was completely anonymous and by trying to word the questions and statements very carefully (Ried et al., 2022).

Further, we used repeated measures ANOVA in order to investigate if the results from the linear regression and the mediation analysis differ when the dependent variable is categorized into four different categories of green products. The repeated measures analysis is a design that unfortunately also comes with some disadvantages. One of these disadvantages is that you with repeated measures could face an order effect, which basically “refers to the improvement or decline in performance during testing which may be due to learning effect, or fatigue by undergoing treatments in a specific order”

(Verma, 2015, p.22). However, we tried to control for these effects by implementing the different categories in a random order for our respondents. On the other hand, we were not able to control if the order of the questions was evenly distributed.

Since the survey was not conducted in a controlled environment, we were not able to follow up on potential uncertainties that our respondents could have had while they were answering the questions, which means that some questions may have gotten misunderstood. Respondents could have answered the survey with multiple time periods in their minds. Even though we tried to point out in which sections the respondent was supposed to answer the questions like they felt/experienced at the exact time they answered, and in which sections they should answer what they felt/experienced in general during the pandemic. This could still lead to mixed referred time periods in the responses. In addition, we were not able to control for impacts from other respondents or non-respondents, that respondents made unserious responses, or responded multiple times.

## **7 Discussion & Conclusion**

In our paper we have investigated and measured the effect of peoples' fear of COVID on their purchase intention of green products. This was collected from a sample group representing the adult share of the Norwegian population. Further, we have included and measured the mediation effects of people's environmental awareness, and their perceived customer experience during the COVID-19 pandemic. These effects have been measured on the general market of green products, and through four different categories of green and sustainable products, namely: Clothes, Transportation, Cosmetics, and Food.

### *7.1 Findings*

The results demonstrate that there is a positive relationship between peoples' fear of COVID and their purchase intention of green products. Where

the effect indicates that people's willingness to purchase green and sustainable products increases due to their fear of COVID. Already before the pandemic, there were clear tendencies that most people were on their way to becoming more and more environmentally conscious (Baizley, 2019). Nevertheless, our findings support the theory that consumers become more environmentally friendly during global crises and major social and economic upheavals (Kachaner et al., 2020). An explanation for this could be that many people were forced to use more of their time at home due to home office, home school, and social restrictions. The extra spare time was often used on online platforms (Pandya & Lodha, 2021), where people today are constantly exposed to different kinds of information. During the pandemic, social media became "a pivotal communication tool for governments, organizations, and universities to disseminate crucial information to the public" (Tsao et al., 2021, p. 175). Through this, many people saw the positive effects that the social restrictions had on the environment. Such as improved air quality and low degree of pollution in many different cities and countries (Venter et al., 2020), all of which could have a positive motivation and effect on consumers' willingness to act more environmentally conscious and thus purchase more green and sustainable products.

Further, we have support for a mediation effect from peoples' environmental awareness and their customer experience during the pandemic. For environmental awareness, we have a complete positive mediation effect. Hence, this indicates that peoples' fear of COVID has increased their environmental awareness, which further has increased their willingness to purchase green products. This substantiates the effect that the pandemic had on people's shopping habits, product preferences and production demands. In addition, due to low inventory levels, production challenges, and as discussed, positive information about the environmental impact of the pandemic, many people searched for new products rather than the go-to products they normally purchased (*New Consumer Survey Shows Impact of COVID-19*, 2021). This may have led many to find new, more environmentally friendly substitutes.



The second mediator variable, Customer Experience, only gave a partial mediation effect. The direct effect between peoples' fear of COVID and their customer experience indicates that peoples' fear of COVID has a negative effect on their perceived customer experience, which further has a negative direct effect on their willingness to purchase green products. Hence, there is a positive relationship between FearCOV and Green Products (as previously stated), however there is a small positive partial mediation effect from their perceived customer experience on consumers' purchase intention compared to the impact of their environmental awareness. Much of this can most likely be justified by the fact that it was difficult to perform good customer service in a safe way during the worst period of the infections. In many industries, you are dependent on having close contact with your customers, which was not possible during the pandemic. Hence, the output from the analysis which states that people's fear of COVID had a negative effect on their customer experience is reasonable. The analysis further states that the mediation effect from the variable had a significant impact on consumers' purchase intention of green products. However, there exists a directionally difference between the mediators, which explains the lower impact customer experience has compared to their environmental awareness.

The fear of COVID also had a significant impact on consumers' purchase intention of different categories of green and sustainable products. Their environmental awareness also significantly affected the outcome with a complete mediation effect for Clothes, Transportation and Food, and with a partial mediation effect for Cosmetics. Hence, this indicates that the positive relationship between peoples' fear of COVID and their willingness to purchase green and sustainable products (measured through different categories) is mediated through their environmental awareness. For the categories Clothes, Cosmetics and Food, we found a significant partial mediation from the consumers' customer experience during the pandemic. Hence, this indicates that the positive relationship between consumers' fear of COVID and their willingness to purchase green and sustainable products (measured through different categories) are mediated to some degree through their perceived customer experience. For Transportation the indirect effect through CustExp is

not significant, hence we did not find a mediation effect for this category. We believe that the reason behind this is due to the lack of differentiation between public and private transport. Both recent figures and figures from the worst period of the pandemic, clearly show that consumers were, and still are to a certain extent, skeptical about taking public transportation, as this led to a high risk of infection (Juven, 2022). In addition, random variation in our analysis could explain the non-significant results, but since we did not specify any predictions for our categories, and thus do not control for any alpha inflation, etc., we define it as noise.

## *7.2 Managerial Implications*

Today's trends and consumer preferences imply a high focus on sustainable production, distribution and consumption (Haller et al., 2020). For manufacturers, distributors and retailers this is highly important with respect to producing the right products in a sustainable way and distributing it with low environmental impact (Bhatia & Jain, 2013). Consumers are getting more and more demanding with respect to sustainable production, and to continue to be attractive to the consumers, retailers, and manufacturers have to keep up with those trends and preferences.

Our paper has indicated that consumers' fear of COVID has a positive effect on their purchase intention of sustainable clothes, green transportation, green cosmetics and sustainable food. These trends are not new due to COVID-19, however the focus and the information about environmental changes and impacts have increased during the pandemic, which further has increased peoples' awareness about human actions on nature and the general environment. According to our results, people's fear of COVID drives people to be more sustainable, and consumer preferences drive manufacturers and retailers further to produce products in a more sustainable way (Rogers & Cosgrove, 2021).

The COVID pandemic was a situation the modern part of the world had never seen before, and studies related to such situations were few. Even though we are now seeing the end of the pandemic and the corresponding restrictions,

there is still much we do not know. To what degree did the pandemic change consumer behavior, purchase intention and product choices? In respect of the sustainable trend perspective, this had clearly gained a good foothold already before the pandemic. However, it is reasonable to presume that the effects of the pandemic have increased the focus and interest in sustainable products and made consumers even more environmentally conscious in their actions and behavior.

Multiple companies and chains are investing heavily in sustainable production and distribution to meet their customer's expectations. Varner, one of Norway's largest organizations, producing and selling clothing and footwear, states in their Sustainability Report from 2021 (Varner, 2022, p. 75) that through their membership in The Textile Exchange, they are committed to reducing "45% [...] of their CO<sub>2</sub> emissions from textile fiber and material production in the pre-spinning phase by changing to preferred fibers". In addition to different environmental goals, Varner has also launched different collections in order to follow up on its commitments. Cubus, one of their main brands, launched a Woolmark collaboration on a merino premium collection made of natural fibers with attention to quality. Johan Jakobsen, Marketing Manager at Cubus, stated that one of the main purposes of the campaign was to educate their customers on why merino wool is more sustainable (Varner, 2022).

Dressmann, one of Varner's oldest brands and one of Scandinavia's largest brands, relaunched their "Man Underwear" collection in March 2022 and is now going "all-in" on organic cotton according to their Marketing Manager, Snorre Vik. "They decided that all the cotton in the Dressmann boxers will be Global Organic Textile Standard (GOTS) certified" (Varner, 2022, p. 123). These two examples illustrate that Varner does not only talk the talk, but they also walk the walk. Their environmental engagement and increased commitment prior to and during the pandemic could explain some of the increased net growth (+ 8%) they have gained compared to 2020, and against other competitors (Varner, 2022). Our paper presents support for this assumption through the mediation effect from, especially consumers'

environmental awareness, on their purchase intention of green products (e.g., Clothes).

The aspects of this paper emphasize and boost the importance of the sustainable focus that exists among the consumers. It's important to acknowledge this, and from a business point of view, it is important to take advantage of this.

However, even though many companies, businesses and industries now spend a lot of time, resources and energy on environmental commitments, it does not always have the desired effect. A study from Opinion (2020), stated that 7 out of 10 respondents could not name one company that they believed was acting environmentally or sustainable (Hovland, 2020). The study also showed that 8 out of 10 consumers wished to live more sustainably but reported that they found it difficult to know among all the products, which ones are natural and sustainable in the stores. These statements further support what our study indicates; many consumers are highly motivated to be more sustainable, and supportive of companies that strive to be sustainable and environmentally friendly. However, in order to be profitable, companies need to communicate it in an understandable way, so that the customer understands the message they want to send. As presented in the literature review, a study by Maichum et al. (2017) showed that environmental knowledge has a significant positive influence on the purchase intention of green products. This means that the more environmental knowledge the sellers possess and can transfer/communicate to their potential customers, the greater the possibility that the consumer will choose to purchase a green product.

The aforementioned findings concerning consumers' perceived customer experience emphasize the fascinating deviation from previous practice. The foundation of marketing theory suggests that customer service is fundamental in persuading the customer to complete a purchase (Anderson et al., 1994). However, our findings indicate that this did not imply in the same extent during the pandemic. Consumers' environmental awareness, which includes knowledge about environmental challenges and benefits of natural sustainable products, had a more significant impact on consumers' purchase

intention of green products than the use of customer service during the pandemic. Since many customers were more receptive to acquiring new knowledge about green products during the pandemic compared to before, industries and retailers that managed to take advantage of the opportunity that appeared may have generated an advantage over the competitors. E.g., what Varner has accomplished through their global environmental commitments and campaigns. How big this advantage is, goes beyond the scope of this paper. However, it is an interesting finding, and an important aspect that companies should consider when creating strategic business decisions post COVID. One of the questions that arise is; should you as a retailer use more resources on teaching your customers about green products and their benefits, or should you use more resources to optimize the general customer experience? It could be up to debate whether teaching your customers is also part of the general customer experience, however, this paper creates a clear guideline on which aspects that would likely give you the best return on your investments. This study focuses on customers' purchase intention of green products, and their environmental awareness and apprehension clearly have a more significant impact than the general customer experience.

What the future looks like is difficult to predict, and not even the smartest researchers in the world can tell you with 100% certainty what tomorrow or the next year will look like. "Many of the longer-term changes in consumer behavior are still in flux, giving companies an opportunity to help shape the next normal" (Mckinsey & Company, 2020, p. 18). As presented in this paper, consumers are now more receptive to environmental changes in their purchasing behavior than before the pandemic. This creates an opportunity for companies to not only follow the "next normal" but also create, form, and be the "next normal".

## **8 Future Research**

Our plan was to distribute the survey and analyze it while the pandemic was still raging, with heavy infection rates and strict restrictions. As the government reopened the society, lifting all restrictions just before we distributed our survey, it was thus conducted in a "return to normal" period.

That is, in a period where people started to gather in larger groups, came back to the work office, ate out in restaurants, and started to go out to nightclubs again. Thus, our study does not bring new insights into how consumers would have responded during the worst period of the pandemic, which would be interesting to examine and compare to our results. It would be interesting to see if consumers even during the worst period of the pandemic still were more afraid of their loved ones than themselves, as our results now show. In addition to looking at a similar type of studies during the worst infection period, it would also be interesting to see if our results persist beyond a longer time horizon than the scope of this paper. Thus, to look at whether the observed effects are short-term or long-term. Further, it would be interesting to investigate on a deeper level whether the pandemic has caused a positive shift in the trend perspective of green and sustainable products. We suggest that there has been an increased focus on it during the pandemic. However, if this is just a short-period-affect or a more significant impact on consumer trends are areas for further research.

Additionally, further research should look at differences in environmental awareness and customer experiences across multiple geographical and cultural locations. Due to time, effort, and money constraints, our data collection was limited to those we reached through our social media, friends and family, and acquaintances in Norway. In other words, neither the goal nor the point was to reach consumers in all corners of the world. It would thus be interesting if future studies looked at differences across countries, continents and cultures, which all have been affected differently by the COVID-19 pandemic.

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## 10 Appendix

### Appendix A - Constructs

*Table A1: Construct “Clothes”*

Variable	Item	Scale
Clothes	<i>The availability of sustainable clothes in stores.</i>	1-5
	I intend to purchase sustainable clothes next time because of its positive environmental contribution.	1-5
	I will consider switching to sustainable fashion brands for environmental reasons.	1-5
	My willingness to purchase sustainable clothes has increased during the COVID-19 pandemic.	1-5
	Getting substantial information about green products has a positive influence on my purchase intention of sustainable clothes.	1-5
	My family/close friends think that I should purchase more sustainable clothes.	1-5

*Table A2: Construct “Transportation”*

Variable	Item	Scale
Transportation	I intend to purchase an electric car next time because of its positive environmental contribution.	1-5
	Getting substantial information about environmental consequences has a positive influence on my purchase intention of electric cars.	1-5
	My willingness to use public transportation has increased during the COVID-19 pandemic.	1-5
	I will consider switching to public transport for environmental reasons	1-5
	My family/close friends think that I should travel more eco-friendly.	1-5

*Table A3: Construct “Cosmetics”*

Variable	Item	Scale
Cosmetic	<i>The availability of green cosmetics in stores.</i>	1-5
	I intend to purchase green cosmetic products next time because of its positive environmental contribution.	1-5
	I will consider switching to green cosmetic brands for environmental reasons.	1-5
	My willingness to purchase cosmetics has increased during the COVID-19 pandemic.	1-5
	Getting substantial information about green products has a positive influence on my purchase intention of green cosmetics.	1-5
	My family/close friends think that I should purchase more green cosmetics.	1-5



*Table A4: Construct “Food”*

<b>Variable</b>	<b>Item</b>	<b>Scale</b>
<b>Food</b>	<i>The availability of sustainable food in stores.</i>	1-5
	I intend to purchase sustainable food next time because of its positive environmental contribution.	1-5
	I will consider switching to sustainable food brands for environmental reasons.	1-5
	My willingness to purchase food that is produced in a sustainable way has increased during the COVID-19 pandemic.	1-5
	Getting substantial information about sustainable food has a positive influence on my purchase intention.	1-5
	My family/close friends think that I should purchase more sustainable food products.	1-5

## **Appendix B - Survey**

### **Start of Block: Introduction**

Hello

We are two students in our final year of the Master of Science in Business program at BI Norwegian Business School in Oslo, where we are writing our master thesis.

We kindly ask you to participate in this survey, which will take about 5-10 minutes to complete. This survey is part of our data collection of the impact from the COVID-19 pandemic on consumers' purchase intention.

All responses will remain anonymous, and no identifying data such as names or IP-addresses will be collected. The data will be deleted when the thesis is submitted this summer.

Thank you for answering, we are very grateful for your participation!

For questions regarding the survey, please contact Anniken Syvertsen (anniken.syvertsen@student.bi.no) or Gjert Christian Svendsøy (gjert.c.svendsoy@student.bi.no)

**End of Block: Introduction**

**Start of Block: Consumers' fear of COVID-19**

**Q1 COVID-19**

The COVID-19 pandemic has now been part of our daily life for over two years. In this section, we want to see the effects the pandemic has had or has on you.

Please indicate to what extent you agree with the following statements while considering the possible effects of COVID-19.

	Strongly disagree	Somewhat Disagree	Neither agree nor disagree	Somewhat Agree	Strongly agree
I am worried about getting infected.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried about infecting my friends and family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried that people around me will infect me with the virus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried that if I touched something in a public space (e.g., handrail, door handle), I would catch the virus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried that if someone coughed, sneezed near me, I would catch the virus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Checking yourself for infection (e.g. temperature control, COV self-test).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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**End of Block:** Consumers' fear of COVID-19

**Start of Block:** Consumers' environmental awareness

**Q2 Environmental awareness**

In this section we want to see how the COVID-19 pandemic has impacted your environmental awareness.

By “green products” we mean the conservation of environmental resources, which involves sustainable production, packaging, and recycling.

Please indicate to what extent you agree with the following statements.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
The COVID-19 pandemic has increased my environmental awareness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The COVID-19 pandemic has made me more aware of environmental challenges.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The COVID-19 pandemic made me realize, even more, the environmental impact humans cause on the planet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The COVID-19 pandemic caused me to change my consumption habits to be more sustainable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The COVID-19 pandemic has made me look more for green and sustainable products than before.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block:** Consumers’ environmental awareness

**Start of Block:** Consumers’ customer experience

**Q3 Customer experience**

The following questions are designed to understand how your customer experience has been during the COVID-19 pandemic.

By customer experience we mean the sum of all good and bad interactions that you as a customer have with an organization, a brand, or a store, throughout the customer journey.

Please indicate to what extent your overall customer experience has worsened or improved during the COVID-19 pandemic, regardless of product, brand, or market.

	Much worse	Worse	Neither better nor worse	Better	Much better
The general customer service.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exposure to advertisement of green products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Getting help from employees when needed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Sharing of product knowledge/information from staff and employees.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ease of return and/or change of product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block:** Consumers' customer experience

**Start of Block:** Consumers' purchase intention

**Q4 Purchase intention of green products**

These questions will address your purchase intention of green products during the COVID-19 pandemic. By green products, we mean the conservation of environmental resources, which involves sustainable production, packaging, and recycling.

Please indicate to what extent the availability of green products has worsened or improved during the COVID-19 pandemic.

	Much worse	Worse	Neither better nor worse	Better	Much better
The availability of green products in stores.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate to what extent you agree with the following statements while considering the possible effects of COVID-19.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree

I intend to purchase green products next time because of its positive environmental contribution.	0	0	0	0	0
I will consider switching to sustainable brands for environmental reasons.	0	0	0	0	0
My willingness to purchase green products has increased during the COVID-19 pandemic.	0	0	0	0	0
Getting substantial information about green products has a positive influence on my purchase intention.	0	0	0	0	0
My family/close friends think that I should purchase more green products.	0	0	0	0	0

**End of Block: Consumers' purchase intention**

**Start of Block: Purchase intention of sustainable clothes**

**Q5 Purchase intention of sustainable clothes**

These questions will address your purchase intention of sustainable clothes during the COVID-19 pandemic. Clothing that is referred to as sustainable products are clothes that are designed, manufactured, distributed, and used in ways that are environmentally friendly.

Please indicate to what extent you agree with the following statements while considering the possible effects of COVID-19.

	Much worse	Worse	Neither better nor worse	Better	Much better
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The availability of sustainable clothes in stores.	0	0	0	0	0
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Please indicate to what extent you agree with the following statements, while considering the possible effects of COVID-19.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I intend to purchase sustainable clothes next time because of its positive environmental contribution.	0	0	0	0	0
I will consider switching to sustainable fashion brands for environmental reasons.	0	0	0	0	0
My willingness to purchase clothes that are produced in a sustainable way has increased during the COVID-19 pandemic.	0	0	0	0	0
Getting substantial information about green products has a positive influence on my purchase intention of sustainable clothes.	0	0	0	0	0

My family/close friends think that I should purchase more sustainable clothes.	0	0	0	0	0
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**End of Block: Purchase intention of sustainable clothes**

**Start of Block: Purchase intention of environmentally friendly transportation**

**Q6 Purchase intention of environmentally friendly transportation**

These questions will address your purchase intention of environmentally friendly transportation during the COVID-19 pandemic.

Please indicate to what extent you agree with the following statements while considering the possible effects of COVID-19.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I intend to purchase an electric car next time because of its positive environmental contribution.	0	0	0	0	0
Getting substantial information about environmental consequences has a positive influence on my purchase intention of electric cars.	0	0	0	0	0
My willingness to use public transportation has increased during the COVID-19 pandemic.	0	0	0	0	0



I will consider switching to public transport for environmental reasons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family/close friends think that I should travel more eco-friendly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block: Purchase intention of environmentally friendly transportation**

**Start of Block: Purchase intention of green cosmetics**

**Q7 Purchase intention of green cosmetics**

These questions will address your purchase intention of green cosmetics during the COVID-19 pandemic. By green cosmetics we mean products like skincare, personal hygiene, fragrance, and make-up, which have a high focus on conservation of environmental resources, which involves sustainable production, packaging, and recycling.

Please indicate to what extent you agree with the following statements while considering the possible effects of COVID-19.

	Much worse	Worse	Neither better nor worse	Better	Much better
The availability of green cosmetics in stores.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate to what extent you agree with the following statements, while considering the possible effects of COVID-19.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I intend to purchase green cosmetic products next time because of its positive environmental contribution.	0	0	0	0	0
I will consider switching to green cosmetic brands for environmental reasons.	0	0	0	0	0
My willingness to purchase cosmetics that are produced in a sustainable way has increased during the COVID-19 pandemic.	0	0	0	0	0
Getting substantial information about green products has a positive influence on my purchase intention of green cosmetics.	0	0	0	0	0
My family/close friends think that I should purchase more green cosmetics.	0	0	0	0	0

**End of Block: Purchase intention of green cosmetics**

**Start of Block: Purchase intention of sustainable food**

### **Q8 Purchase intention of sustainable food**

These questions will address your purchase intention of sustainable food during the COVID-19 pandemic. By sustainable food we mean food that minimizes greenhouse gas emissions and uses resources as sustainably as possible, which involves sustainable production, packaging, and recycling.

Please indicate to what extent you agree with the following statements while considering the possible effects of COVID-19.

	Much worse	Worse	Neither better nor worse	Better	Much better
The availability of sustainable food in stores.	0	0	0	0	0

Please indicate to what extent you agree with the following statements, while considering the possible effects of COVID-19.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I intend to purchase sustainable food next time because of its positive environmental contribution.	0	0	0	0	0
I will consider switching to sustainable food brands for environmental reasons.	0	0	0	0	0
My willingness to purchase food that is produced in a sustainable way has increased during the COVID-19 pandemic.	0	0	0	0	0

Getting substantial information about sustainable food has a positive influence on my purchase intention.

My family/close friends think that I should purchase more sustainable food-products.

**End of Block: Purchase intention of sustainable food**

**Start of Block: Demographics**

**Q9 What gender do you identify as?**

- Male (1)
- Female (2)
- Non-binary/third gender (3)
- Prefer not to say (4)

**Q10 What is your age?**

- 18-29 years old (1)
- 30-45 years old (2)
- 46-65 years old (3)
- 65+ (4)
- Prefer not to say (5)

**Q11 In what county is your home located?**

- Agder (1)
- Innlandet (2)
- Møre og Romsdal (3)
- Nordland (4)

- o Oslo (5)
- o Rogaland (6)
- o Vestfold og Telemark (7)
- o Trøndelag (8)
- o Vestland (9)
- o Viken (10)
- o Prefer not to say (11)

**Q12 What is the highest degree or level of education you have completed?**

- o Not completed high school (1)
- o High school (2)
- o Bachelor's degree (4)
- o Master's degree or higher (5)
- o Prefer not to say (7)

**Q13 What is your marital status?**

- o Single (1)
- o Relationship (2)
- o Married (4)
- o Other (5)
- o Prefer not to say (6)

**Q14 What is your annual household income?**

- o Less than 250 000 NOK (1)
- o 250 000 - 500 000 NOK (2)
- o 500 000 - 750 000 NOK (3)
- o 750 000 - 1 000 000 NOK (4)
- o More than 1 000 000 NOK (5)
- o Prefer not to say (6)

**Q15 What is your current employment status?**

- Student (7)
- Unemployed/Seeking (3)
- Employed part-time (2)
- Employed full-time (1)
- Retired (4)
- Prefer not to say (5)

**End of Block: Demographics**