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Can Protection Motivation Theory and Moral Licensing
Explain Consumer Behaviour During the Covid-19 Pandemic?

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Abstract

This thesis addresses how protection motivation theory and moral licensing can explain consumer behaviour in times of crisis, using the Covid-19 pandemic as a context for the research. The results of 53 in-depth interviews illustrate that the perceived threat of Covid-19 influences both threat and coping appraisal, and consequently also licensing effects due to the sacrifices associated with protective behaviours. The research provided interesting discoveries regarding the significance of perceived Covid-19 threat and response costs on consumers' motivation to engage in protective behaviours. Specifically, the findings uncovered a great perceived threat manifested in spreading the virus. In fact, it appeared that a common motivation for engaging in protective behaviours was to protect vulnerable groups from infection. Further, it also appeared that consumers willingly complied with the restrictions and recommendations despite the great response costs. The research also investigated whether sacrifices associated with protective behaviours triggered licensing effects among consumers. The results uncovered situations where such sacrifices may provide consumers with a moral license to engage in self-destructive behaviours. Similarly, the findings also revealed that some of the respondents who sacrificed travel might gain a moral license to engage in environmentally damaging behaviours. Consequently, the findings from this research make an important contribution to understanding how consumers react to threat and restrictions caused by responses to the Covid-19 pandemic, and may also be relevant in case of future hazards.

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1. Introduction

The World Health Organization officially declared the Covid-19 virus a global pandemic on March 11th, 2020 (World Health Organization, 2020). As a response, multiple countries enforced restrictions to limit the spread of the virus (Oni et al., 2020, p. 1), such as quarantine, social distancing, mandatory use of face masks, isolation, remote working, and in some cases, national or regional lockdowns (He & Harris, 2020, p. 178). On March 12th, 2020, the Norwegian government enforced the first restrictions, which later have been adjusted in accordance with the spread of the Covid-19 virus (Helsedirektoratet, 2020; the Norwegian Government, 2020). In countries and regions where restrictions are enforced, consumers' freedom of movement has been limited (Donthu & Gustafsson, 2020, p. 284-285). Interestingly, the last time many democratic countries experienced such severe restrictions on the individual's freedom was during the Second World War (Pantano et al., 2020, p. 210). Crises such as the Covid-19 pandemic are believed to negatively impact consumers and lead to irrational decision-making (He & Harris, 2020, p. 178). During the time of the restrictions, some consumers have developed a tendency to generally eat more unhealthy foods, which has led to an increase in the demand for snacks, alcohol, and takeout orders from restaurants. However, social distancing may also have caused positive behaviours for some consumers, such as the development of more frequent exercise habits, learning new skills, and recycling (Donthu & Gustafsson, 2020, p. 285).

There is a lack of research on the psychological and social impacts of a pandemic on the scale of the Covid-19 virus, as it has not occurred this past century. However, previous pandemics such as the Spanish flu led to significant social changes, which causes researchers to believe that this will also be the case for the Covid-19 pandemic (Kirk & Rifkin, 2020, p. 124). Thus, our thesis aims to further investigate the psychological impacts of threats and restrictions caused by responses to the Covid-19 pandemic by using two central theories in consumer psychology. First, applying the protection motivation theory may disclose whether the threat of the virus has contributed to consumer fear, and provides an essential understanding of the drivers of protective behaviours (Milne et al., 2000, p. 106). Second, applying the moral licensing theory may lead to important discoveries as to whether following the Government's restrictions and recommendations may

give individuals a moral license to engage in immoral or self-destructive behaviours (Merritt et al., 2010, p. 344). Specifically, the response costs associated with the official restrictions and recommendations during the Covid-19 pandemic may trigger licensing effects among consumers (Neuwirth et al., 2000, p. 723). Thus, this thesis aims to answer the following overall research question:

“How can protection motivation theory and moral licensing explain consumer behaviour caused by responses to the Covid-19 pandemic?”

By addressing this particular research question, our thesis will contribute to a better understanding of the impacts of a global crisis on consumer behaviour. This is particularly relevant as scientists predict that new pandemics also pose a definite future risk (Global Preparedness Monitoring Board, 2019). That is, the risk of new viruses increases as the growing global population forces humans to live closer to animals, which makes humans more exposed to transferring new viruses (Donthu & Gustafsson, 2020, p. 284). In order to elaborate on the overall research question, five additional research questions have been developed to further investigate response costs, sacrifices, perceived threat, and licensing effects during the Covid-19 pandemic. As this is a recent area of study, applying an exploratory research design was found to be the most suitable approach (Gripsrud et al., 2016, p. 47). Thus, 53 in-depth interviews were conducted to gain a broader insight into the drivers behind consumer behaviours during the pandemic. Interestingly, the findings reveal that the perceived threat of the Covid-19 virus appears to be significant. The threat is primarily related to spreading the virus to people in high-risk groups, which also seems to motivate engaging in protective behaviours despite great response costs. Moreover, the results suggest that sacrifices associated with restrictions and recommendations trigger licensing effects among consumers.

2. Literature Review

2.1 Protection Motivation Theory

Protection motivation theory discusses the effects of providing individuals with information about a threat on their behavioural responses (Rippetoe & Rogers, 1987, p. 596). Specifically, the intention to engage in protective behaviours relies on two sequential processes; threat- and coping appraisal. The threat appraisal process refers to the perceived severity of the threat and the extent to which individuals believe it applies to them (Neuwirth et al., 2000, p. 722). After being exposed to the threats of the Covid-19 virus, individuals first base the evaluation of the threat on their beliefs about perceived vulnerability, which refers to how susceptible they feel to contracting the virus. Second, they consider the perceived severity, which discloses whether Covid-19 is perceived as a health risk. Lastly, fear arousal assesses to what extent they fear the virus (Milne et al., 2000, p. 108-109). Factors that may motivate maladaptive behaviours are intrinsic rewards, which may be described as the rewards of not following the restrictions, and extrinsic rewards, referring to the social approval of violating them (Neuwirth et al., 2000, p. 722). For instance, some may perceive the social rewards of attending an event as more important than social distancing (Floyd et al., 2000, p. 420).

Table 1: Covid-19 cases in Norway, June 2021 (Norwegian Institute of Public Health, 2021).

Confirmed cases	Hospital admissions	Patients on ventilation	Deaths
128,898	4,588	876	790

During the Covid-19 pandemic, individuals have been frequently exposed to information about the health risks of the virus through environmental sources such as the media and public bodies, including updates on the number of confirmed cases, hospital admissions, respiratory treatments and deaths (see table 1). In addition, some may have acquired information through intrapersonal sources, such as their own or others' personal experiences with the virus (Floyd et al., 2000, p. 409). One may assume that individuals who perceive themselves as being more at risk of contracting the Covid-19 virus may experience a greater level of fear, which motivates them to comply with the restrictions (Milne et al., 2000, p. 109). Additionally, individuals may also be concerned about friends and family members in high-risk groups. According to the World Health Organization

(2020), Covid-19 poses a greater risk for people over the age of 60 or who have underlying health conditions, such as lung diseases, diabetes, weak immune systems, or heart disease. For those in the vulnerable and high-risk groups for whom the consequences of being infected are believed to be more severe, the motivation to engage in risk-reducing behaviours may be more significant. To further investigate the significance of the consumers' perceived health risk on threat appraisal, the following research question is raised:

Research Question 1: Does the consumers' perceived health risk of Covid-19 influence threat appraisal?

Complying with the restrictions and recommendations depends on a person's coping appraisal process, which assesses whether a person considers taking risk-reducing measures by adopting protective behaviours (Neuwirth et al., 2000, p. 722-723). In the case of the Covid-19 pandemic, protective behaviours are primarily related to protecting ourselves and others from contracting the virus and limiting the spread in society. According to the World Health Organization (2020), recommended actions include keeping a 1-meter distance from others, avoiding crowds, using hand sanitiser, frequent handwashing, and wearing a mask. In addition, governments have implemented local restrictions and recommendations. An essential condition for adopting protective behaviours is that individuals find the recommendations and restrictions to be effective, which is referred to as response efficacy (Neuwirth et al., 2000, p. 723). For instance, a person who questions the efficiency of wearing a mask may not be motivated to comply with such regulations. Self-efficacy is another necessary condition for adopting protective behaviours, and refers to whether a person is able to follow the restrictions and recommendations (Milne et al., 2000, p. 109). For instance, a person may be prevented from fully engaging in the protective behaviours if they are unable to work from home. Lastly, individuals must perceive the response costs of compliance to be lower than the risks and severity of the Covid-19 virus (Neuwirth et al., 2000, p. 723).

As the Covid-19 restrictions and recommendations have a significantly limiting impact on an individuals' freedom, the response costs of compliance are exceptionally high. First, restrictions such as social distancing, quarantine and

involuntary isolation may limit the individuals' social lives. Second, closing certain services, as well as remote working and education, can have an intrusive impact on the individuals' freedom of movement (Donthu & Gustafsson, 2020, p. 284-285). Lastly, mandatory usage of hand sanitiser and face masks requires additional purchasing expenses and intrudes on the individuals' regular habits (Pantano et al., 2020, p. 210). Consequently, the response cost of complying with the restrictions and recommendations are significant. The latter is particularly interesting considering how response costs typically decrease individuals' willingness to engage in protective behaviours (Rippetoe & Rogers, 1987, p. 597). Thus, one may question whether the response costs affect individuals' motivation to engage in protective behaviours. Based on the aforementioned information, the following research question is raised:

Research Question 2: To what extent do the response costs of complying with the Covid-19 restrictions and recommendations influence coping appraisal?

Specifically, the second research question aims to assess the significance of the response costs of recommended and legally enforced protective behaviours on the coping appraisal process. That is, whether the response costs decrease the individuals' willingness to comply with the Covid-19 restrictions and recommendations.

2.2 Moral Licensing

According to a study conducted by Monin and Miller (2001), individuals' past behaviour may provide them with moral credentials that liberate them to engage in immoral behaviours. Their findings can also be applied to other scenarios, such as the moral credentials obtained from following the official Covid-19 restriction and recommendations. That is, compliance may be considered a moral action or an act of solidarity, which can potentially trigger licensing effects (Merritt et al., 2010, p. 344). Moreover, previous moral actions may also boost the individual's self-concept and result in choices that contradict the previous behaviour, such as a selfless act justifying a self-indulgent choice (Khan & Dhar, 2006, p. 259). In the case of Covid-19, a selfless act may be considered to be sacrificing aspects of a person's social life in order to limit the spread of the virus. Interestingly, a moral license can also be obtained for expected future actions, which is referred to as

prospective moral licensing. That is, when individuals are planning to engage in future moral behaviours, it licenses them to act in a morally biased and questionable way in the present (Cascio & Plant, 2015, p. 116). As previously stated, individuals are asked to sacrifice aspects of their regular lifestyles to limit the spread of the virus. That is, restrictions and recommendations may interfere with their careers, education, travels, and social lives. Thus, one may question whether compliance is perceived to be synonymous with making sacrifices, which may enhance consumers' licensing effects. To further investigate the significance of sacrifices on licensing effects, the following research question is raised:

Research Question 3: To what extent do consumers perceive the Covid-19 restrictions to be sacrifices?

Further, there has reportedly been an increase in online shopping as well as a growing demand for unhealthy foods and alcohol during the Covid-19 pandemic (Donthu & Gustafsson, 2020, p. 285). Due to the potentially damaging consequences of excessive spending on an individual's financial situation (Warren, 2004, p. 1490), one may also argue that overconsumption contributes to a self-destructive lifestyle pattern. These findings indicate that an increasing number of consumers are engaging in behaviours that may be considered to be self-destructive, such as maintaining unhealthy dietary habits or engaging in overconsumption. Thus, one may question whether consumers justify participation in the aforementioned behaviours by referring to sacrifices they have made during the pandemic (Effron & Monin, 2010). That is, obtaining a moral license from complying with the Covid-19 restrictions may free consumers from any hesitation to consume unhealthy foods and alcohol, or increase their shopping frequency (Merritt et al., 2010). Based on the aforementioned information, the following research question is raised:

Research Question 4: Do sacrifices associated with the Covid-19 restrictions and recommendations give consumers a moral license to engage in self-destructive behaviours?

Several countries have also responded to the Covid-19 pandemic by enforcing travel restrictions where international travel is discouraged. For instance, the

Norwegian Ministry of Foreign Affairs strongly discourages any international travel that is not considered essential. Although there has not been an immediate ban against international travel, violating the recommendation may have consequences for insurance (Ministry of Foreign Affairs, 2021). Moreover, travellers are required to comply with strict regulations when returning to Norway, such as a mandatory travel quarantine (Helsenorge, 2021). The effects of travel restrictions indicate that several consumers have sacrificed travel. In fact, it was reported that air passenger volumes in Asia, North America and Europe had decreased by 70-80% from June 2019 to June 2020 (IATA Economics, 2020). Thus, international travel restrictions have undoubtedly reduced air travel significantly.

Considering the high engine emissions from aircrafts (Lu, 2009, p. 158), a decrease in international travel may have positive environmental impacts. Additionally, restrictions that force individuals to stay at home have reportedly reduced air pollution significantly (Zambrano-Monserrate et al., 2020, p. 2). However, the Covid-19 restrictions and recommendations have also led to environmentally damaging behaviours, such increased demand for online shopping and food delivery services (Donthu & Gustafsson, 2020, p. 285). That is, greater demand for home delivery services and online shopping leads to an increase in organic and inorganic waste due to packaging and shipping (Zambrano-Monserrate et al., 2020, p. 3). Consequently, official responses to the Covid-19 pandemic have had both positive and negative environmental impacts on consumer behaviour. The fifth research question therefore aims to disclose the long-lasting environmental impacts of sacrificing travel, and to what extent obtaining from travel triggers licensing effects among consumers:

Research Question 5: Does sacrificing travel give consumers a moral license to engage in environmentally damaging behaviours?

Specifically, the fifth research question focuses on two possible outcomes of sacrificing travel. First, it questions whether consumers who have sacrificed travel may gain a moral license to engage in environmentally damaging behaviours after the travel restrictions have been lifted. For instance, consumers may increase their travelling frequency or express a desire to travel to more distant locations.

Second, it aims to disclose whether sacrificing travel may provide consumers with a moral license to engage in environmentally damaging behaviours during the Covid-19 pandemic, such as overconsumption.

3. Methodology

As the Covid-19 pandemic is a relatively new and currently ongoing situation, the research is primarily based on an explanatory research design (Gripsrud et al., 2016, p. 47), using a qualitative research approach as some elements of the study may evolve in accordance with new findings (Taylor et al., 2015, p. 37). Further, 53 in-depth interviews were conducted to gain a broad insight into the psychological drivers of consumer behaviours during the Covid-19 pandemic. The study was conducted in Norway and therefore used the Norwegian government's restrictions and recommendations as references throughout the study. It is important to note that the results from the in-depth interviews are not statistically representative and can therefore not be used for segmentation purposes.

3.1 Interview Guide

The interview guide (see appendix 1) was developed to answer the five underlying research questions, where the questions aimed to investigate how the respondents have reacted to the threats and restrictions caused by responses to the Covid-19 pandemic. Specifically, the questions investigated the perceived threats of the Covid-19 virus, coping appraisal, response costs, sacrifices, and licensing effects. Further, the interview guide consists of 27 questions, 17 of which are open-ended questions related to the research questions. The remaining 10 questions are either demographic or aim to uncover relevant background information. Specifically, the demographic questions were developed to identify factors that may have impacted the respondents' overall experience, perceived threat, and actions during the pandemic. Such factors may include geographic location, personal experience with the Covid-19 virus, employment status, and perceived health risk.

Further, the interview guide opens with the following question: "*How has the Covid-19 pandemic affected you personally?*" In addition to setting the tone for the interview, the opening question allowed the respondents to introduce challenges and experiences that may be elaborated on in later questions. Some of

the questions in the interview guide may be considered to be sensitive, which could have caused biased or unreliable answers if the respondents were hesitant to answer truthfully. Thus, some of the questions were formulated in a way where the respondents were asked to answer indirectly (Haire, 1950, p. 650-651), using projective techniques such as the third-person technique (Donoghue, 2000, p. 47). Further, suggested follow-up questions are listed under some of the questions to elaborate on interesting responses.

3.2 Conducting the Interviews

The interviews were mostly conducted online via digital video call platforms. However, some of the respondents preferred not to use video call platforms, which required in-person interviews that were conducted in accordance with the Government's Covid-19 regulations. The purpose of the interview guide was merely to ensure that all relevant topics were discussed in the interview. In order to allow for new and interesting findings to emerge, the interviews were conducted to resemble an open discussion. Thus, the order of the questions aligned with the natural flow of the conversation. Additional questions or follow-up questions were also asked to elaborate on interesting responses (Taylor et al., 2015, p. 120-121), and some of the questions were skipped if they previously had been answered or felt redundant. The interviews were conducted in Norwegian to prevent any communication errors and language barriers that may alter the responses. The transcripts and interview guide were later translated into English.

3.3 Test Interviews

In order to ensure the quality of the interview guide, three test interviews were conducted prior to the interview process. The test interviews aimed to uncover whether some of the questions would encourage honest and elaborative answers, or if they required modifications. Moreover, testing and reviewing the interview guide beforehand would improve the quality of the data by disclosing any potential issues, such as biases, misinterpretations, negative reactions, or unwillingness to respond to some of the questions. This was prevented by evaluating how the interview guide performed in terms of several factors, such as length of the interviews, reactions to the questions, as well as quality and relevance of the responses. After the test interviews, the respondents were asked to share their experience with the interview, if they had any feedback or concerns,

and whether any questions were unclear or made them feel uncomfortable. All of the respondents provided elaborative answers and seemed happy to discuss their experience during the Covid-19 pandemic. According to their feedback, there was no need to make any changes or modifications to the interview guide.

3.4 Sample

The sampling process occurred through personal networks and social media channels, where ideal respondents were provided sufficient information about the research. However, details about findings or research questions were not discussed prior to the interviews to avoid any potential biases. The sample consisted of 53 respondents, of which 20 were male and 33 were female. As one of the essential recruitment criteria, all of the respondents lived in Norway at the time of the Covid-19 pandemic. This was to ensure that the results were based on similar experiences in regards to restrictions and recommendations. Although there would be some variation in local restrictions and threats, public bodies' reaction to the Covid-19 pandemic would still be the same for all respondents. Further, all of the respondents were males and females over the age of 18, as this is the legal age in Norway. This criteria was based on an assumption that individuals above this age control their own financial situation, are legally independent, and have a greater chance of being employed or enrolled in higher education.

Table 2: Respondents' age range

18-23	24-29	30-39	40-49	50-59	60+
16,98%	52,83%	9,43%	7,55%	11,32%	1,89%

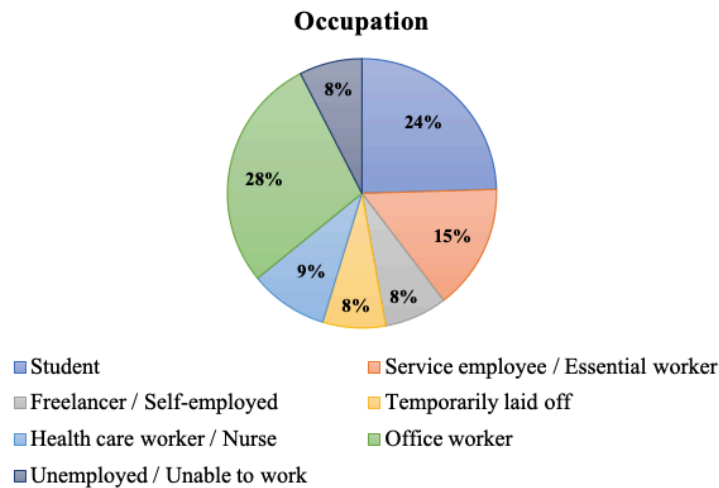
Although the results of the study would not be used for segmentation purposes, ensuring diversity among respondents would still provide a more representative and nuanced understanding of the situation across segments. Thus, the importance of collecting data from different perspectives was also emphasized in the recruitment process. To gain a broader perspective, it was found necessary to conduct interviews with individuals varying in age (see table 2), geographical location (see table 3), and employment status (see figure 1). Including individuals who had been affected by the pandemic in various ways was also found essential to ensure interesting results. For instance, the respondents' Covid-19 history revealed that 3,77% had been infected, 50,95% had been tested, and 45,28% had

been in mandatory quarantine. Further, there was a variation in the respondents' geographical location. Still, the majority were from the areas surrounding Oslo, which have suffered the highest infection rates and thus been the most affected by both restrictions and recommendations (Norwegian Institute of Public Health, 2021).

Table 3: Geographical distribution

County	Representation among respondents	Reported cases of Covid-19 (04.06.21)
Trøndelag	26,41%	4718
Oslo	20,75%	35 821
Vestfold and Telemark	18,87%	8176
Viken	15,1%	42 492
Innlandet	9,43%	5569
Troms and Finnmark	3,77%	2004
Møre and Romsdal	1,89%	2052
Agder	1,89%	4510
Vestland	1,89%	9755

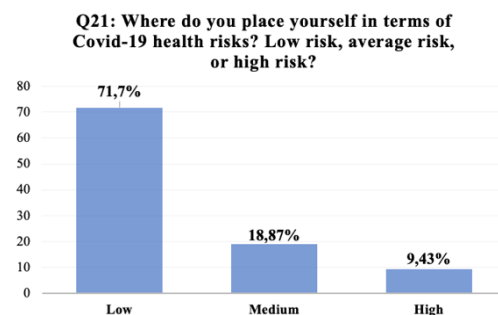
Figure 1: Occupational distribution



4. Results

4.1 Research Question 1

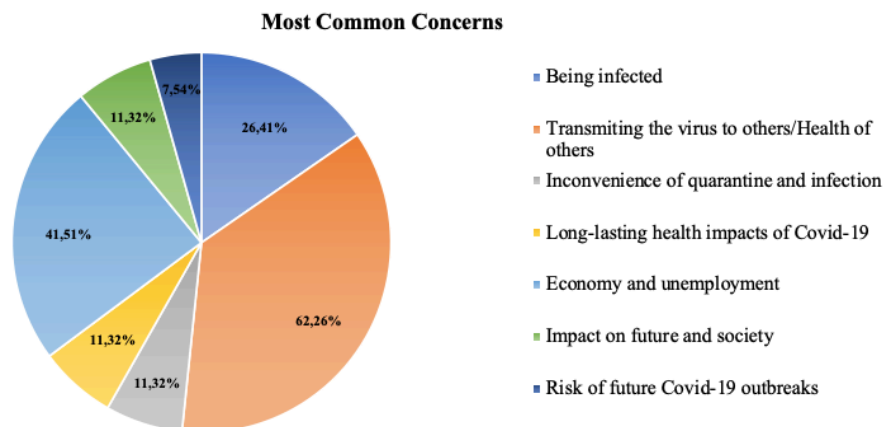
Figure 2: Perceived Covid-19 Health Risk



Interestingly, the results from the in-depth interviews suggest that most of the respondents did not consider Covid-19 to pose a threat to their own health. In fact, 71,7% would place themselves in the low-risk group, 18,87% in the medium-risk group, whereas 9,43% would place

themselves in the high-risk group (see figure 2). Not surprisingly, the perceived threat among those who considered themselves to be in the high-risk group was severe: *“I have been really anxious about being infected due to chronic illnesses. My partner and I have been very concerned about our illnesses” (Male, 31).* Further, when asked for whom the health threats of contracting the Covid-19 virus are most severe, 75,5% listed the elderly. Additionally, 47,2% listed people with underlying health conditions, such as heart disease, lung disease/asthma, cancer and diabetes, followed by 33,9% who listed other underlying health conditions that were not specified. Despite the seemingly low health risks the virus posed in regards to their own health, the results indicated that they still perceived the health risk of contracting the Covid-19 virus to be severe for the aforementioned groups. Additionally, some of the respondents who placed themselves in the low-risk group were concerned about the long-lasting health impacts of the virus, such as losing the ability to taste, decreased lung capability, or fatigue.

Figure 3: Most common concerns during the Covid-19 pandemic



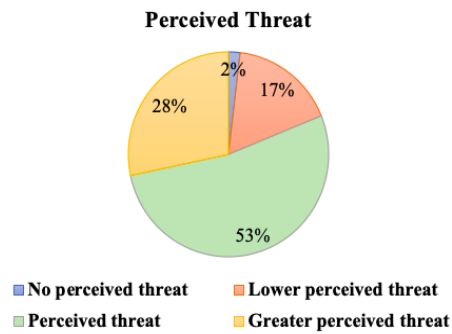
When asked about their concerns during the Covid-19 pandemic, 62,26% of the respondents were concerned about transmitting the virus to others, whereas 26,41% also listed being infected as one of their concerns (see figure 3). The results suggest that the respondents were more concerned about transmitting the virus to friends, family members, or people in high-risk groups than being infected themselves. For instance, one of the respondents had taken several measures to protect vulnerable groups from infection, such as avoiding crowded areas, events, and travels to his hometown: *“I have been worried about the health of people I know, and if they can’t handle the virus well. It’s scary. The thought of having the virus without knowing and then transmitting it onto others is a scary*

thought” (Male, 28). Another respondent is concerned about his mother, who has cancer, and has therefore taken a Covid-19 test for each of the times he travelled to visit her. In total, the respondent had taken 19 tests.

Despite the lack of concern in regards to their own health, it appeared that respondents in the low-risk group were still anxious about being infected, as they could unknowingly transmit the virus to others. Consequently, 79,2% had felt some degree of discomfort when shopping at physical stores, taking public transportation, or attending social events during the Covid-19 pandemic and had taken measures to avoid such places. For instance, one respondent expressed great concern about the health of her grandmother and was therefore particularly careful: *“I did not take any public transportation from March last year until the summer. I would walk to work because I work right down the street, and I refused my boyfriend to take the bus if he had been at a friend’s house. I would rather pick him up”* (Female, 22). Another respondent shared similar concerns regarding public transportation: *“I get scared when people stand too close to me. I’m not concerned about my own health, but I’m afraid that I might spread the virus and transmit it to others. I’m mostly anxious about public transportation, so I’m trying to avoid it. I would feel safer with security guards on the bus. The bus I’m taking is often full, and not everyone wears a mask”* (Female, 21).

Some of the respondents also experienced an increase in perceived threat after personal encounters with the Covid-19 virus: *“I’m worried about people close to me being infected, mostly my parents. Their neighbours got infected with Covid-19 at the beginning of the pandemic. One of them became severely ill and was in the hospital for weeks. She said that it was the worst thing she had experienced, and she is the same age as them, so it may have something to do with that”* (Male, 28). Further, a nurse working at an infection post found it provocative when people would violate the restrictions, as she interacts with Covid-19 patients on a daily basis and has been infected herself: *“I have had patients who have been walking around spreading the virus. You never know who might get ill. You never know who you can risk transmitting the virus to at the grocery store. It’s provocative when people travel abroad while some are relying on respiratory support”* (Female, 25).

Figure 4: Perceived threat



Although most respondents would not place themselves in the high-risk group, the results still indicated that Covid-19 was considered to be a threat. However, there were some differences in terms of the perceived severity of the threat (see figure 4).

Respondents who experienced a greater threat typically felt uncomfortable in public places and had adapted protective behaviours beyond what was legally required of them by public bodies. Interestingly, a more significant perceived threat was not attributed to concern regarding their personal health, as some would place themselves in the low-risk group.

Moreover, 17% of the respondents appeared to be slightly less concerned than the other respondents. This group typically consisted of respondents who lived in areas with few Covid-19 cases, had occasionally violated some of the restrictions or recommendations, or did not feel uncomfortable in public places. Further, one of the respondents did not perceive the Covid-19 to pose any threat and felt that the responses to the pandemic had been overexaggerated. The respondent proceeded to compare the Covid-19 restrictions and recommendations to the Second World War and the German occupation of Norway, stating that it had been a lot stricter during the pandemic: *“At least the nightclubs were open during the war”* (Male, 55). Interestingly, this respondent was among the few respondents who had been infected with the virus.

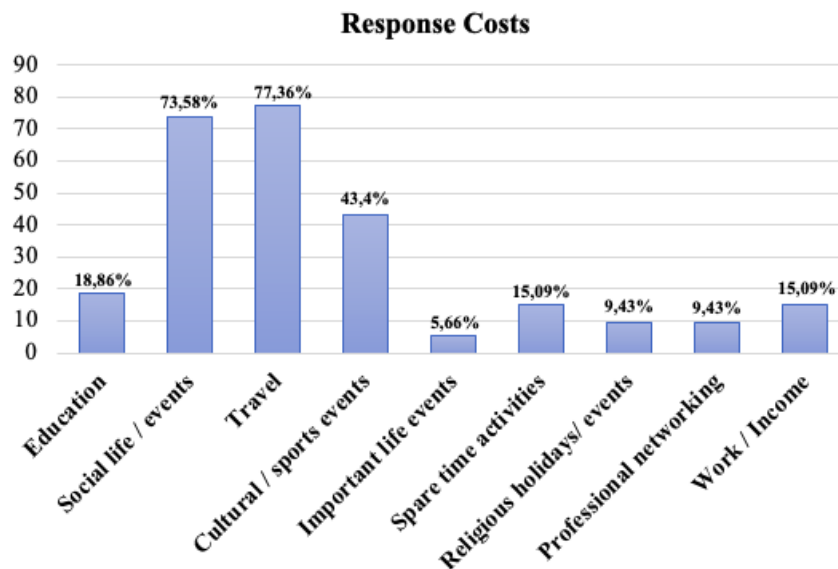
The first research question, *“Does the consumers’ perceived health risk of Covid-19 influence threat appraisal?”* aims to assess the impact of perceived Covid-19 health risk on threat appraisal. According to the findings, it appeared that the majority of the respondents would place themselves in the low-risk group in regards to Covid-19 health risks and did not perceive the virus to pose a severe threat to their own health. However, most respondents were still anxious about being infected in case they would unknowingly transmit the virus to more vulnerable groups. Specifically, the respondents mentioned grandparents, parents, friends and other family members for whom the health threats were more severe.

Thus, the perceived severity of contracting the Covid-19 virus was therefore manifested in the risk of spreading the virus rather than becoming ill themselves. Lastly, the results disclosed a significant level of fear arousal, as the majority of respondents expressed that they had felt uncomfortable in crowded places during the pandemic. Conclusively, it appeared that for most of the respondents, the threat appraisal process was influenced by a significant fear of spreading the virus, as well as the perceived severity and health risks it poses for vulnerable groups.

4.2 Research Questions 2-3

The findings from the in-depth interviews suggest that all respondents had experienced challenges and response costs in regards to the Covid-19 restrictions and recommendations. However, there was some variation in terms of the severity of the response costs. Some respondents felt that the restrictions and recommendations did not interfere with their way of life to the same extent as others, which may be attributed to their line of work, geographic location, or other external factors. For instance, essential workers who were unable to work from home had maintained a relatively normal lifestyle compared to respondents who practised remote working, attended education programs digitally, or were temporarily laid off. The most common response costs appeared to be travel, remote working, or education, as well as social and cultural events (see figure 5). Additionally, some respondents had experienced losing their job or apprenticeship due to the way restrictions and Covid-19 threats impacted various industries.

Figure 5: Response costs



According to the results, 18,86% of the respondents had experienced response costs related to their education. For instance, one student was forced to sacrifice an exchange year that was essential to her degree: *“Exchange was supposed to be a big and important part of my education, and I missed that opportunity. The goal was to go on exchange to Argentina and learn Spanish and later be placed at an embassy in Latin America. That did not happen”* (Female, 22). Further, another student sacrificed a school trip: *“We were, amongst other things, supposed to go on a very popular trip to China, which was a very exciting possibility as we were going to visit factories. It was a part of the degree, but it was cancelled”* (Female, 23). In addition to education opportunities abroad, some students also experienced response costs related to the quality of their education. For instance, one student suffered from learning difficulties and therefore relied on her teachers closely monitoring her progress: *“I need to physically attend classes to get help from a teacher due to learning difficulties, but now I can’t get that help because we can’t get too close, so everything has to be done in writing. That is a little difficult”* (Female, 22).

Social events appeared to be a common response cost, and 5,66% of the respondents had also sacrificed important life events, such as christenings and weddings: *“I have had to postpone my wedding twice, in addition to two honeymoons”* (Male, 31). Furthermore, 73,58% had sacrificed significant aspects of their social lives, which some found to be particularly challenging: *“I don’t get an outlet for my social needs, so I have had to invent a new hobby in order to be social. If I’m not social, I may get depressed”* (Male, 31). Other respondents seemed to share similar challenges: *“You really feel a little lonelier. Maybe a little more depressed because nothing happens, and you cannot do anything; you’re just at home”* (Female, 29).

Moreover, 15,09% experienced financial response costs due to lack of income or being temporarily laid off: *“I have been laid off; a retired workaholic. It’s been pretty tough going from working full-time for many years to suddenly not working at all. (...) I felt a little useless in a way (...) I want to work. I just want to work. I do not want to just be at home, clean the house and fold laundry. I want to do what I’m supposed to do; drive a bus”* (Female, 37). The respondents who worked in the cultural industries also suffered great financial losses due to the

restrictions on cultural events. For instance, one of the respondents is an established musician and manages four event bureaus. Due to the cancellation of events and restrictions that negatively impact ticket sales, his monthly income had decreased by approximately 60 000 NOK. To some, the sacrifices were more abstract. For instance, one of the respondents believed that she had sacrificed potential events that would have been essential to her personal growth: *“Now that I have a stable job and a secure income I wanted to finally live my life and experience things, and then this virus comes and puts my personal growth on hold” (Female, 25).*

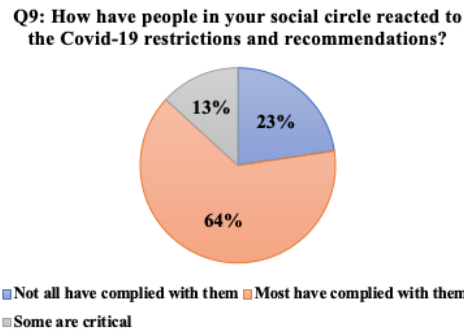
Further, the results reveal a tendency where several respondents willingly engaged in protective behaviours that resembled good deeds. For instance, one of the respondents has taken extra measures to ensure that those who are unable to avoid public transportation can feel safe: *“I have stopped purchasing monthly passes for public transportation because I would rather walk. It’s not because I am afraid of the virus, but because I have the opportunity to walk as I work from home and live on campus. I’m avoiding public transportation so those who depend on it can use it” (Female, 22).* Interestingly, it appears that engaging in protective behaviours is perceived as an act of solidarity. All respondents followed the mandatory restrictions, with some variations in the extent to which they have adapted additional protective behaviours. According to one respondent who would place himself in the high-risk group due to cancer, the pandemic has made him regain faith in humanity: *“Everyone is careful, and that’s not because of the Government’s efforts, but because we all take care of each other” (Male, 52).* Interestingly, protective behaviours during the Covid-19 pandemic seem to have become a social norm. In fact, it appeared that 9,43% of the respondents were motivated to engage in protective behaviours due to the social consequences of violating them.

Some respondents discussed encounters with what they refer to as the *“Covid police”*. Specifically, the term *“Covid police”* refers to people who confront others about behaviours or actions they find to be inappropriate in regards to the pandemic and restrictions. For instance, one of the respondents talked about two incidents in her neighbourhood that would strongly impact relationships with some of her close friends. The first incident occurred when their daughter (8) was

playing with someone outside of her cohort. This resulted in what the respondent refers to as an overexaggerated and negative reaction from the other parents. Moreover, the other parents reacted by spreading rumours that the respondent did not care about the restrictions when she was hosting a small social gathering in her garden: *“This ruined a friendship of 40 years” (Female, 46)*. Another respondent also had similar experiences that led to uncomfortable confrontations. She works as a hairstylist and relies on taking public transportation to work. Some of her friends expressed concerns about this prior to a trip they were taking together: *“They were concerned about inviting me because I interact with many customers at work and travel by bus. It made me feel like a big, bad wolf. I have to go to work, but they kept asking me why I didn't ask my father, who is retired, to drive me to work every day rather than taking the bus” (Female, 49)*. It is important to note that the term *“Covid police”* is an unofficial term. However, it still illustrates that engaging in protective behaviours during the Covid-19 pandemic may be perceived as an act of solidarity, or has even become a social norm.

Further, the results suggest that those who have felt uncomfortable in public places often took measures to avoid shopping or taking public transportation during rush hours. Some had also turned down invitations to social events and limited social encounters to a bare minimum. Several respondents have reportedly taken Covid-19 tests or put themselves in a voluntary quarantine before travelling to other parts of the country to visit friends or family. Thus, taking extra precautions appeared to be common among most of the respondents. Moreover, the findings also reveal some additional protective behaviours, such as daily temperature measurements or taking notes of their whereabouts to stay informed in case of a local outbreak. The respondents who were unable to practice social distancing or remote working due to the nature of their work appeared to engage in alternative protective behaviours such as wearing a medical mask or using hand sanitiser. It also appears that some protective behaviours changed in accordance with new information and insecurities: *“I remember cleaning all of my groceries at the beginning of the pandemic because I didn't know what I was dealing with. After learning more about it, I realized that I didn't have to clean my groceries after all” (Female, 26)*.

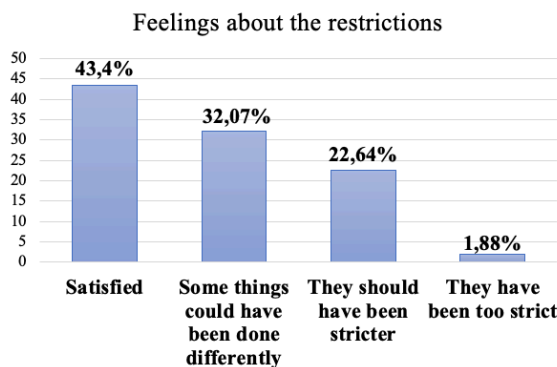
Figure 6: Social circle’s reactions to the restrictions



Despite complying with the mandatory restrictions, not all respondents were as eager to participate in additional protective behaviours. Moreover, 18,87% of the respondents also admitted to having cheated on the restrictions

and recommendations on at least one occasion. For instance, one of the respondents felt anxious in crowded places at the beginning of the pandemic, but her perceived threat of the virus decreased as she grew tired of the restrictions. Further, another respondent has never been particularly anxious about infection. After he got infected with the Covid-19 virus, he claims to be even less worried as he considers himself to be immune. Although he complies with mandatory restrictions on quarantine, isolation and travel, he appears to be relaxed about social distancing. Unlike the respondents who were concerned about the “Covid police,” he claims that others do not react negatively to the fact that he chooses to “live differently” in regards to the restrictions and recommendations. When asked how people in his social circle react to the restrictions, he gave the following response: *“My kids don’t care. They have had parties here with about 15 guests.”* The respondent continues to describe parties that violate restrictions and social distancing recommendations and states that he does not want to stop them from being “free”. Similarly, when the respondents were asked how people in their social circle had reacted to the restrictions, 22,64% stated that not all had complied with them and 13,21% even stated that some had been critical. However, it still appeared that the majority had complied with them (see figure 6).

Figure 7: Feelings about the restrictions



In terms of response efficiency, the results show that 43,4% of the respondents were satisfied with the restrictions and the Government’s effort to limit the spread of the virus in society. Further, 32,07% stated that they were somewhat satisfied

or felt that some things could have been done differently in regards to national or local restrictions, such as closing the borders completely or avoiding prematurely lifting restrictions. Moreover, 22,64% stated that they were dissatisfied, of which several felt that the restrictions should have been stricter to ensure efficiency. Lastly, 1,88% were dissatisfied and felt that the restrictions have been too strict (see figure 7).

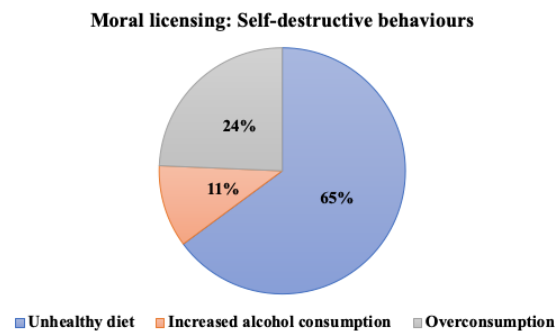
The second research question, “*To what extent do the response costs of complying with the Covid-19 restrictions and recommendations influence coping appraisal?*” aims to assess the significance of the response costs on the respondents’ motivation to engage in protective behaviours. The findings suggest that all respondents willingly complied with the mandatory Covid-19 restrictions. However, there was a slight variation in terms of the willingness to engage in additional protective behaviours, and some even admitted to occasionally violating them. Furthermore, there was some disagreement about whether the restrictions and recommendations enforced by public bodies should be different or even stricter. However, the results indicate that most of the respondents found protective behaviours to be effective and necessary in limiting the spread of the Covid-19 virus. Thus, responses to the Covid-19 pandemic are perceived to be efficient both in terms of effectiveness and feasibility. Based on the aforementioned findings, one may assume that the respondents appeared to willingly engage in protective behaviours despite significant response costs (Neuwirth et al., 2000).

The third research question: “*To what extent do consumers perceive the Covid-19 restrictions to be sacrifices?*” aims to assess whether respondents feel that they are making sacrifices when complying with the Covid-19 restrictions and recommendations. In order to gain insight into the perception of sacrifice, the respondents were asked the following question: “*What are some of the things you have had to give up or missed out on during the Covid-19 pandemic?*” It appeared that all of the respondents managed to list several events or aspects of their lives that they have had to give up on, which indicates that they have been aware of the sacrifices they have made to comply with the Covid-19 restrictions and recommendations. Interestingly, the sacrifices appeared to be the direct costs of engaging in protective behaviours. That is, the respondents found the response

costs to be synonymous with sacrifices. Due to the significant impact of the response costs on the respondents' lives, one may assume that the sacrifices appear to be substantial. Thus, the aforementioned findings suggest that the respondents perceived complying with the Covid-19 restrictions and recommendations to be sacrifices.

4.3 Research Question 4

Figure 8: Self-destructive behaviours



The results from the in-depth interviews reveal that 58% of the respondents have shown tendencies of moral licensing as a result of the Covid-19 regulations. Interestingly, unhealthy dietary choices

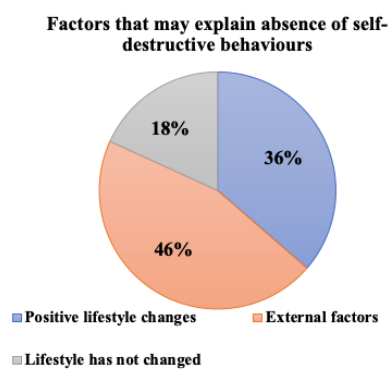
appeared to be the most common self-destructive behaviour, followed by overconsumption and increased alcohol consumption (see figure 8). Some of the respondents also engaged in several self-destructive behaviours at once, such as making poor lifestyle choices while also engaging in overconsumption. Although the level of physical activity had significantly decreased for some of the respondents, it was mainly attributed to closed gyms or not feeling comfortable using the gym. Thus, the results suggest that the lack of physical exercise was attributed to protective behaviours rather than moral licensing. Interestingly, the results also uncover changes in behaviours during the pandemic. For instance, some of the respondents admitted to engaging in self-destructive behaviours at the beginning of the pandemic, but had eventually returned to a normal lifestyle: *“I didn't know how long it would last at first (...) I treated it as a vacation (...) I would drink soda and eat crisps on a Tuesday. In a way, your everyday life lacks structure, so every day becomes a weekend” (Male, 28).*

After a few weeks, some of the respondents' lifestyle habits normalized, either because some of the restrictions were lifted, which allowed them to start working again, or because they became aware of their behaviour: *“At the beginning, there was perhaps a little unnecessary spending of money on things I didn't really need. (...) In retrospect, I have become more aware of it and will rather invest in shares*

and finds” (Male, 28). There are several explanations as to why the respondents showed tendencies of moral licensing. For starters, some justified their behaviour as a means to treat themselves, or even because they felt like they deserved it: “I tell myself that I deserve some sweets and chocolate on a weekday. It is a good combination of wanting to feel good and feeling a little stressed” (Female, 22). Interestingly, another respondent used unhealthy foods as a reward when he was frustrated with remote working: “It can be because it is challenging to work from home. When you’re at home, you are used to doing other things, and now that I have managed to actually work from home, I deserve something good” (Male, 27).

Moreover, it appears that many respondents also used unhealthy foods as a source of comfort or a coping mechanism to handle the situation: “It’s easy to think that, ‘okay, things are pretty bad right now because there are many corona cases and we have to stay home without being able to do anything, so why not eat three bowls of ice cream for lunch?’” (Female, 25). In addition, some justified their behaviours by referring to them as substitutes for activities they would have missed out on due to the pandemic, or as a reward for saving money they would otherwise spend on activities. Other common explanations for self-destructive behaviours appeared to be using shopping, alcohol, or foods to cope with boredom: “I can be working on a school assignment at home and suddenly think that ‘a bag would be nice’, so I go to a website and purchase it. It makes up for not being able to do anything” (Female, 23).

Figure 9: Absence of self-destructive behaviours



Even the respondents who showed no tendencies of moral licensing had made some sacrifices to comply with the restrictions and recommendations. It appears that the difference between the two groups can be attributed to external factors or how they have coped with the sacrifices (see figure 9). For instance, while some reacted to the restrictions

and threats by making unhealthy lifestyle choices, others responded by taking advantage of the situation to establish healthy lifestyle habits and saving money:

“When you spend more time at home, you spend more time thinking about eating and living better. I am healthier now. I have also purchased less during the pandemic” (Female, 29). Some attributed their healthy lifestyle changes to having more time to prepare healthy meals, or because they do not fall for the temptations they would otherwise be exposed to, such as purchasing a snack between classes or after work. Further, some of the respondents’ lifestyle changes are caused by other external factors unrelated to the pandemic or restrictions, such as pregnancy, having a baby, or cancer. Others state that their lifestyles have not changed as their lives have not been significantly affected by the pandemic. The latter appeared to be the case for respondents who lived in geographical areas with few Covid-19 cases and thus fewer restrictions, and for essential workers who were able to maintain a relatively normal way of life.

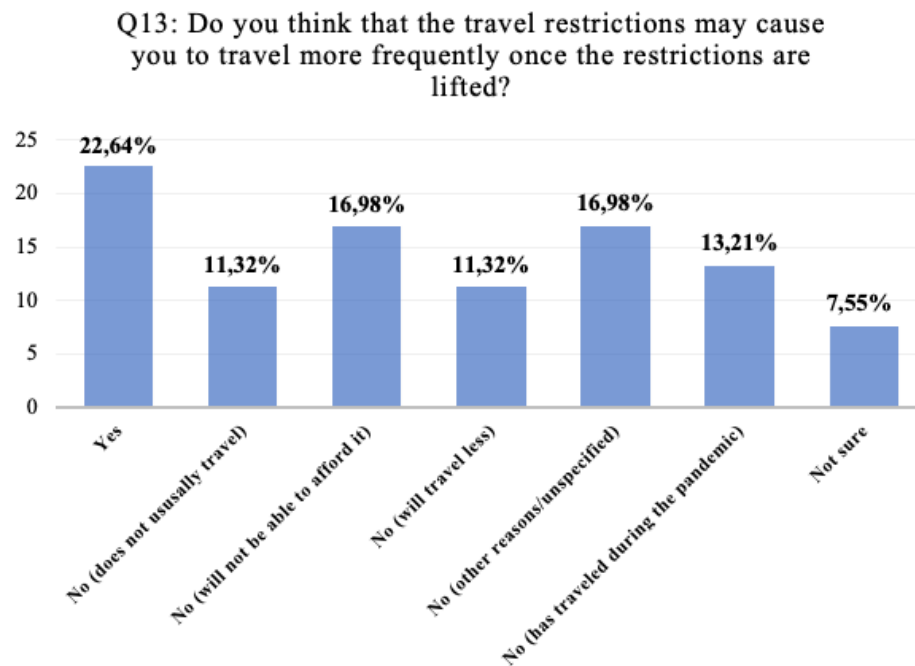
The fourth research question, *“Do sacrifices associated with the Covid-19 restrictions and recommendations give consumers a moral license to engage in self-destructive behaviours?”* investigates whether sacrifices of engaging in protective behaviours trigger licensing effects among consumers. Interestingly, the results suggest that the majority of respondents engaged in self-destructive behaviours and showed tendencies of moral licensing. Moreover, the results indicate that engaging in self-destructive behaviours may be explained by the respondents’ reactions to the sacrifices. That is, complying with the Covid-19 restrictions and recommendations freed them to engage in behaviours that are self-destructive. Because the respondents are sacrificing activities, travels, and social encounters when engaging in protective behaviours, they obtain a license to consume unhealthy foods, increase their alcohol consumption, or partake in excessive spending.

Further, several respondents also adapted additional protective behaviours to prevent spreading the virus to people in high-risk groups. Sacrifices associated with the additional protective behaviours may therefore have contributed to enhancing licensing effects. Interestingly, respondents who did not show tendencies of moral licensing appeared to have had a different reaction to the restrictions and recommendations. For instance, some seem to have taken advantage of the opportunity to develop healthier lifestyle habits or invest their financial assets more constructively. Additionally, some of the respondents’

behaviours during the Covid-19 pandemic may be attributed to other external factors. Thus, the aforementioned results suggest that the sacrifices made when engaging in protective behaviours during the Covid-19 pandemic may provide some individuals with a moral license to engage in self-destructive behaviours.

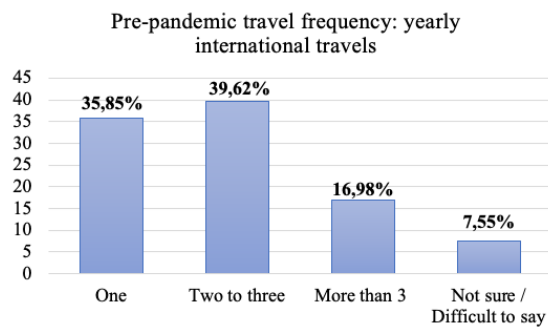
4.4 Research Question 5

Figure 10: Answers to Question 13



According to the results from the in-depth interviews, 22,64% of the respondents expressed a desire or intention to increase their travelling frequencies after the Covid-19 travel restrictions are lifted (see figure 10). The intention to travel more was attributed to several factors. First, some of the respondents had become more appreciative of the opportunity to travel and explained that they would never want to take it for granted again: *“You need to realize how great it really is to have that opportunity”* (Male, 28). Similarly, other respondents agreed that the travel restrictions had made them want to seize the opportunity when they have it: *“I have realized how vulnerable it is and how easy it is to travel within Schengen countries (...) You just need to pack your passport, catch a plane and go. I have become more aware of the importance of this during the pandemic (...) I absolutely think that I will make it a priority in the future”* (Male, 21).

Figure 11: Pre-pandemic travel frequency



The respondents' travelling frequencies before the Covid-19 travel restrictions indicate that most respondents had sacrificed travel (see figure 11). Additionally, 56,6% had also cancelled a trip due to the restrictions. Interestingly, it appears that the urge is related to sacrificing travel, and that losing the opportunity to travel makes it more tempting. One of the respondents expressed regret for not taking advantage of the opportunity to travel earlier: *"I always thought that I could do it later, but now I'm just sitting here and can't go anywhere. In the future, there will be less procrastination and more 'living in the present' (...) When this is over, I'm going to be like, 'forget about global warming, I'm going to travel the world'"* (Female, 25). One of the respondents is also convinced that the travel restrictions and not being able to travel during the pandemic has changed the meaning of travel for himself and others: *"Peoples' dreams are not what they once were."* The respondent continues to describe how he wants to realize his dreams, such as walking on a beach, eating seafood at the "riviera", and visiting historical places that he has read so much about. His next trip will be about exploring himself: *"Travel is going to be the new drug – also for me"* (Male, 52).

However, the results indicate that the majority of the respondents do not intend to increase their travelling frequency after sacrificing travel. There are several factors that may explain these findings. First, 11,38% showed a lack of interest in travel prior to the pandemic. To these respondents, the travel restrictions may not be perceived as a sacrifice: *"I don't think that I will be the first person to board a plane when the restrictions are lifted. I don't have that kind of a 'wanderlust'. I'm not the person who travels the most"* (Female, 25). Similarly, others did not feel as restricted by the international travel regulations: *"I envision myself travelling for work and holidays, but I was perfectly fine spending my vacation in Norway"* (Female, 23); *"I will not be catching up on any travelling that I have missed. It will probably be the same amount of travelling as before"* (Male, 28). Further, the results also revealed that the travel restrictions appeared to have made 11,32%

want to travel less internationally. For some, being forced to travel domestically has been a positive experience and something that they will continue doing after the pandemic: *“I have opened my eyes to Norway because I have barely experienced it. I think that I will reduce the number of international travels”* (Female, 24). In addition, the threat of the Covid-19 pandemic has made some anxious about international travel, as they fear new mutations or other pandemics in the future: *“I think you will think twice about travelling to another country, so it has the opposite effect. You are going to be a bit sceptical”* (Female, 37).

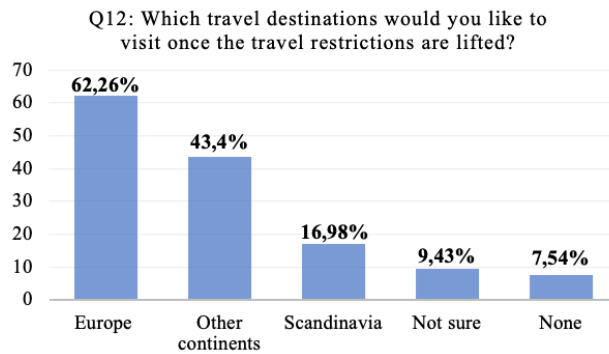
The concern about future pandemic or Covid-19 mutations was shared by several of the respondents: *“The pandemic has shocked my family. You can see how others are acting, and that you can get sick by travelling”* (Male, 29). Some also had concerns in regards to how well other countries have responded to the Covid-19 pandemic: *“There may be countries that haven’t had the opportunity to handle (the pandemic) as well as Norway has, such as developing countries that may not have access to as many vaccines as we do. I feel like Europe will be safe when Norway is safe due to the way (European) countries cooperate”* (Female, 22). Interestingly, refraining from international travel due to a perceived risk of new viruses relates to the protection motivation theory, as the perceived threat is the risk of new viruses or future outbreaks, and refraining from travel becomes a coping mechanism.

Additionally, the results also revealed several other interesting factors that may explain why some of the respondents did not intend to increase their travelling frequency. First, some reportedly travelled frequently prior to the pandemic, either due to work or other reasons. It would therefore not be possible to travel more than they already did. Second, 13,21% stated that they did travel abroad during the Covid-19 pandemic, either to visit family members or due to essential work trips. For instance, one respondent visited her family in France, while another respondent had to conduct scientific research in Denmark. Thus, they have not sacrificed travel to the same extent as other respondents. Third, one of the respondents assumed that people would become more reluctant about crowded areas and would therefore avoid typical “charter trips”. Interestingly, the fact that some of the respondents violated the recommendations to refrain from travel may disclose licensing effects. That is, one may assume that complying with the

Covid-19 restrictions provided them with a moral license to travel internationally, despite public bodies encouraging them not to.

Lastly, 16,98% were thinking more realistically in terms of their financial situation: *“It depends on your financial situation, and where you think you will be in the future”* (Male, 28). Several of the respondents state that regardless of their urges, their travelling frequency relies on whether they can afford it: *“The urge is probably there, but I don’t think my wallet will allow me to travel more when the restrictions are lifted, because I don’t think that it will get any cheaper”* (Female, 49). Thus, it appears that some of the respondents would initially say no, but added that they would if they could afford it. Thus, one may argue that despite the realistic attitudes of these respondents, the results may still disclose a greater desire to travel after the restrictions are lifted. Further, 18,87% also stated that although the travelling restrictions did not make them want to travel more frequently once the restrictions are lifted, they were certain that it would have that effect on others.

Figure 12: Future travel destinations



When asked to list travel destinations they would like to visit once the travel restrictions are lifted, 62,26% listed countries within Europe, whereas 43,4% listed more remote locations on other

continents, such as the USA or Thailand (see figure 12). Although the majority did not intend to increase their travelling frequency, it appears that only 16,98% intended to travel to closer destinations within the Scandinavian countries. Among the respondents who want to travel more after the travel restrictions are lifted, 58,33% also expressed a desire to travel to other continents. These findings indicate that they intend to engage in environmentally damaging behaviours by increasing their travelling frequency and travelling to more distant locations. Further, it appeared that 41,67% of the respondents who intend to travel more frequently due to the restrictions listed “environment” as a political topic of interest, all of which also travelled frequently before the pandemic. However,

some respondents were pessimistic about the environmental concern in society, stating that most people do not care, or that only the younger generation does.

Considering the environmental impacts of travel (Lu, 2009, 159), the aforementioned findings support the assumption that sacrificing travel provides them with a moral license to engage in environmentally damaging behaviours. That is, the respondents are aware of the environmental impacts of their behaviour, but refraining from travel during the Covid-19 pandemic to engage in protective behaviours may have liberated them to engage in behaviours that contradict their environmental concern. Similarly, it also appeared that respondents who engaged in overconsumption also sacrificed travel. Due to the environmental impacts of overconsumption (Zambrano-Monserrate et al., 2020), these findings also support the aforementioned assumption. Furthermore, these findings may disclose a potential bias among the respondents, as they seem to be aware of environmental challenges, yet intend to engage in environmentally damaging behaviours. Lastly, the results also suggest that the 16,98% who had engaged in overconsumption during the Covid-19 pandemic all appeared to have travelled at least once per year prior to the pandemic and had cancelled a trip as a result of the restrictions..

The fifth research question, “*Does sacrificing travel give consumers a moral license to engage in environmentally damaging behaviours?*” aims to disclose whether sacrificing travel gives consumers a moral license to engage in environmentally damaging behaviours. The results from the in-depth interviews suggest that although some intend to travel more after the pandemic, the majority of respondents may either maintain or decrease their travelling frequency. Some expressed an intention to decrease the number of international travels due to the perceived threat of new mutations or viruses, or to a newly developed interest in domestic travel. For others, their intent to maintain their travelling frequencies could be attributed to a lack of interest or external factors. Interestingly, some of the respondents blamed their financial situation for not allowing them to act on their urge to travel more. This indicates that even if they do not intend to increase their travelling frequency, they still expressed a desire to do so. Thus, despite the fact that most respondents may not increase their travelling frequency, one may argue that the Covid-19 travel restrictions may still have this effect on some

consumers. Additionally, some respondents who sacrificed travel had engaged in overconsumption, or expressed a desire to engage in environmentally damaging behaviours by travelling to more distant locations. Thus, one may assume that sacrificing travel may give some consumers a moral license to engage in environmentally damaging behaviours. However, this tendency did not appear to be significant for all.

5. Discussion and Conclusion

5.1 Conclusion

This thesis aims to address how consumers react to threats and restrictions caused by responses to the Covid-19 pandemic. First, the protection motivation theory provides an interesting perspective for researching the drivers behind protective behaviours. Second, the moral licensing theory serves as a possible explanation of some consumer trends that have emerged during the pandemic. Interestingly, it also became apparent that the two theories may be linked through coping appraisal due to response costs of engaging in protective behaviours. The results from the in-depth interviews uncovered tendencies that support this assumption. For instance, the findings suggest that sacrifices associated with the restrictions and recommendations were synonymous with the response costs. Although the research was centred around a specific and recent crisis, the results may still be of great relevance for future global hazards that may encourage similar protective behaviours. That is, in the case of future pandemics, epidemics or other global crises that have similar impacts on the individuals' threat appraisal or freedom of movement.

According to the findings, the perceived threat of Covid-19 increased the respondents' likelihood of engaging in protective behaviours. First, most of the respondents did perceive the threat of Covid-19 to be severe and were anxious about being infected. However, it appeared that the perceived threat was manifested in unknowingly transmitting the virus to friends and family members in high-risk groups, and not necessarily the risk of becoming ill themselves. Second, most respondents willingly complied with the restrictions and recommendations despite the significant response costs. In fact, several respondents had also voluntarily adopted additional protective behaviours.

Further, the results also indicate that the response costs associated with the restrictions and recommendations are perceived as sacrifices, which were found to trigger licensing effects among some consumers. Specifically, it appears that consumers who made sacrifices in order to limit the spread of the virus may gain moral credits that free them to engage in behaviours that are generally perceived as environmentally damaging, unhealthy, or self-destructive. In conclusion, it appears that perceived threat influences coping appraisal, which proceeds to trigger licensing effects among consumers. Thus, the aforementioned findings illustrate how two central theories in consumer psychology may be applied to predict consumer behaviour in the case of future hazards.

5.2 Managerial Implications and Recommendations

The aforementioned findings emphasize the importance of predicting consumer behaviour in case of future hazards, such as future pandemics, epidemics, natural disasters, or national and global conflicts. Therefore, it is highly recommended to consider the connection between perceived threat, protective behaviours, and moral licensing tendencies to gain a broader understanding of consumer behaviour in times of crisis. Thus, the following recommendations have been made. First, the results illustrate how a global health threat may influence consumer behaviour, and managers may therefore benefit from a broader understanding of the impacts of consumer fear on consumer behaviours. Specifically, managers should consider how the Covid-19 pandemic will impact consumers in the future and further investigate whether the threat awareness has increased. For instance, one may question whether consumers continue to engage in protective behaviours in regards to seasonal influenza, virus epidemics, and germophobia. Thus, one recommendation is to carefully monitor any potential threat in regards to public transportation services, event arenas, shopping centres, grocery stores, and other public places. Further, the Covid-19 pandemic may have changed the norms and led to a permanently greater demand for medical masks and hand sanitiser.

Second, the results also indicate that sacrifices and response costs may give some consumers a moral license to engage in self-destructive behaviours. Thus, managers need to consider how consumers react in the case of similar future events that require them to make sacrifices. For instance, some may abuse their products by indulging in unhealthy foods and beverages. Thus, it is recommended

that managers adjust their marketing efforts to align with the consumers' changing needs in the case of a future threat. Specifically, managers may consider the opportunity to profit from self-destructive behaviours by encouraging licensing effects among consumers, and promoting unhealthy foods and beverages as potential rewards for engaging in protective behaviours.

Third, a crisis on the scale of the Covid-19 pandemic may also affect consumer behaviours in terms of travel. Although one may assume that the interest in travel may spike once travel restrictions are lifted, the findings from the in-depth interviews suggest that many referred to their financial situation to explain why they do not intend to increase their travelling frequencies. Airlines and travel agencies therefore need to consider this during discussions about pricing, as more affordable travels may benefit both them as well as their consumers. For instance, by offering flights at a lower cost, it may be easier for airlines to attract consumers whose financial situation prevents them from acting on their desire to travel more. Further, some of the respondents who expressed an intention to travel more were also concerned about the environment, or had become anxious about international travel as a consequence of the Covid-19 virus. Thus, managers may also benefit from promoting local travel destinations.

5.3 Limitations

Some limitations may potentially have impacted the overall quality of the results. First, the results of a study with an explorative research design may not be statistically significant, as opposed to a descriptive design (Gripsrud, et al., 2016, p. 50). Second, the in-depth interviews were conducted using a convenience sample. That is, the respondents were recruited through personal networks and not systematically based on demographic or geographic criteria. Thus, the study results may not be considered representative of the entire Norwegian population (Easterby-Smith et al., 2012, p. 228). Third, another weakness of in-depth interviews is that the interviewer could potentially influence the respondents' answers (Gripsrud et al., 2016, p. 116). For instance, in the case of an interviewer bias, the respondents' answers may be influenced by the interviewers' body language, tone of voice, or other factors (Gravetter & Forzano, 2016, p. 391). Lastly, despite using projective techniques to ensure honest and reliable answers,

some of the respondents may still have felt hesitant to answer truthfully due to the sensitivity of the questions (Gripsrud et al., 2016, p. 116).

5.4 Directions for Further Research

The results of this research uncovered several topics that would make interesting bases for further research. First, researchers should consider elaborating on the findings about the perceived threat, the significance of response costs, and how sacrifices associated with protective behaviours may trigger licensing effects among consumers. This would allow them to obtain a more representative impression of consumer reactions to threat and restrictions during the Covid-19 pandemic. Specifically, it is recommended to conduct a quantitative study using a representative sampling technique that can be generalized to the entire population (Gravetter & Forzano, 2016, p. 135), both in Norway and other countries with similar restrictions. This could provide researchers with the opportunity to make specific comparisons and further elaborate on the findings from this study. Moreover, it would also be interesting to conduct the survey on a global scale to assess the significance of various restrictions on consumer behaviour.

Second, researchers should also consider further investigating the future impacts of the Covid-19 travel restrictions. For instance, it would be interesting to study whether there will be an increase in environmentally damaging behaviours after the travel restrictions are lifted. Future research questions could aim to disclose whether a potential growth in long-distance travel or overconsumption may be attributed to moral credits obtained from sacrificing travel due to travel restrictions. Consequently, this could potentially lead to interesting discoveries in regards to the predictions made in this thesis, and whether sacrificing travel gives consumers a moral license to engage in environmentally damaging behaviours. Lastly, in case of a future crisis with similar restrictions on the individuals' freedom of movement, researchers should consider conducting a similar study to test whether the protection motivation theory and moral licensing also can be used to provide explanations to changes in consumer behaviour in the future scenario.

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Appendix

Appendix 1: Interview guide for qualitative in-depth interviews.

(Please note that the interview guide was translated into Norwegian before the interviews were conducted. See appendix 2.)

INTERVIEW GUIDE

1. How has the Covid-19 pandemic affected you personally?
Suggested follow-up question: if necessary, ask them to elaborate on how it has affected their work situation, education, lifestyle, etc.
2. What has been your greatest concern during the Covid-19 pandemic?
Suggested follow-up question: encourage them to elaborate on their responses by following up with questions about e.g. contracting the virus, friends or family members in high-risk groups, physical and mental health, financial situation, career, and social life.
3. For whom do you think the health threats of contracting the Covid-19 virus are more severe?
4. How have you felt about being in public places during the pandemic, such as supermarkets, events, social gatherings or public transportation?
Suggested follow-up question: if the respondents are uncomfortable with being in public places during the pandemic, we may follow up with a question about what it would take for them to feel comfortable again.
5. In what ways has the Covid-19 pandemic affected your usual way of living?
Suggested follow-up question: ask whether their behaviours or routines during the pandemic differ from their normal behaviour/routines (in terms of recycling, driving, over consumption, etc.)
6. What are some of the challenges you have faced during the Covid-19 pandemic?
Suggested follow-up question: elaborate on their responses by

asking questions about the most challenging part about the restrictions, financial and social costs, as well as missed opportunities.

7. What are some of the things you have had to give up or missed out on during Covid-19 pandemic?

Suggested follow-up question: ask them about cancelled events, travel plans etc.

8. How have you coped with the challenges and sacrifices?

Suggested follow-up question: ask about dietary choices, exercise habits, over consumption and other self-destructive behaviours

9. How have people in your social circle reacted to the Covid-19 restrictions and recommendations?

Suggested follow-up question: ask about whether they have complied with the restrictions and recommendations.

10. Before the Covid-19 pandemic, how often did you usually travel, and to which destinations?

11. Did you have any traveling plans that you had to postpone or cancel due to the Covid-19 pandemic?

12. Which travel destination would you like to visit once the travel restrictions are lifted?

Suggested follow-up question: asking if they have actually planned a trip.

13. Do you think that the travel restrictions may cause you to travel more frequently once the restrictions are lifted?

14. Why do you think some people choose to travel abroad during the Covid-19 pandemic?

Suggested follow-up question: we recognize that questions about complying with the restrictions may be considered sensitive and lead to dishonest answers, but we may consider following up with a question about whether they have travelled themselves.

Background questions

15. How old are you?

16. Gender?

17. What is your current employment status?
18. What is your highest obtained level of education?
19. Where do you live?
20. Where were you born?
21. Where do you place yourself in terms of Covid-19 health risks?
Low risk, average risk, or high risk?
22. Have you been tested for the Covid-19 virus?
23. Have you been quarantined?
24. Have you been infected with the Covid-19 virus?
25. What do you think the average Norwegian thinks with regards to the government's response to the Covid-19 pandemic?
26. What do you think the average Norwegian thinks with regard to the dangers of climate change?
27. Which political topics do you consider to be the most important to you?

Appendix 2: Norwegian interview guide for qualitative in-depth interviews.

INTERVJUGUIDE

1. Hvordan har Covid-19-pandemien påvirket deg personlig?
2. Hva har du bekymret deg mest for under pandemien?
3. For hvilke grupper tror du at helserisikoen ved å bli smittet av Covid-19 er størst?
4. Hva har du følt om å oppholde deg på offentlige steder under pandemien, som for eksempel på butikken, arrangementer, sosiale sammenkomster eller på offentlig transport?
5. På hvilke måter har Covid-19-pandemien påvirket hverdagen og livsstilen din?
6. Hvilke utfordringer har du hatt under pandemien?
7. Har det vært noe du har planlagt eller vanligvis pleid å gjøre, men som du ikke har fått gjort på grunn av pandemien?
8. Hvordan har du håndtert de utfordringene og bekymringene du har hatt under pandemien?

9. Hvordan har personer i din omgangskrets reagert på Covid-19-restriksjonene?
10. Hvor ofte reiste du vanligvis før Covid-19 pandemien, og til hvilke destinasjoner?
11. Har du hatt noen reiseplaner som du ble nødt til å utsette eller avlyse som følge av pandemien?
12. Hvilke destinasjoner ønsker du å besøke når reiserestriksjonene oppheves?
13. Tror du at de nåværende reiserestriksjonene gjør at du kommer til å reise mer i fremtiden?
14. Hva tror du er årsaken til at noen har valgt å reise til utlandet under Covid-19 pandemien?

Bakgrunnsspørsmål:

15. Alder:
16. Kjønn:
17. Hva er din nåværende yrkesstatus?
18. Hva er din høyeste fullførte utdanning?
19. Hvor bor du?
20. Hvor ble du født?
21. Hvordan vil du vurdere din egen helserisiko dersom du skulle bli smittet av Covid-19? Lav, middels eller høy?
22. Har du blitt testet for Covid-19?
23. Har du vært i karantene?
24. Har du vært smittet av Covid-19?
25. Hva tror du de fleste Nordmenn tenker om myndighetenes håndtering av Covid-19-pandemien?
26. Hva tror du de fleste Nordmenn tenker om farene ved klimaforandringene?
27. Hvilke politiske saker vil du si er viktigst for deg?