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Flying-Related Concerns among Airline Customers in Finland and Sweden during COVID-19

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Abstract: COVID-19 hit the global economy hard in early 2020, and airline industry was among the biggest commercial victims. Governments closed borders, the virus scared off travelers and the aircraft stayed on the ground to a large extent. The forecasted record year turned out to be the worst in the history of aviation. This study focused on the concerns of airline customers and analyzed the differences between the customer behavior in two focus markets, Finland and Sweden. The article is based on a questionnaire and the answers of 2004 airline customers. The results show that even though the overall COVID-19 strategy was very different between the focus markets, the same concerns still arose. The main concerns were related to quarantines and convenience of traveling, but health was also a major worry. The impact on climate change and public opinion were among the least concerning factors for most. The Swedes were less concerned about the quarantine upon returning, which may not be surprising due to their more liberal COVID-19 strategy at the time. Other attributes that were analyzed (gender, airline loyalty tier, age) suggest that females are categorically more concerned than males, the travel-related annoyances affect all travelers regardless of the tier and that travelers from different age groups are concerned about different aspects of traveling during a pandemic. The data gathering for this research was carried out in collaboration with Finnair, Finland's national carrier.

Keywords: airline customers; COVID-19 concerns; passenger concerns

1. Introduction

The year of 2020 was expected to be the greatest year in the history of aviation. Followed by the strong year of 2019, IATA's forecast for 2020 included a 4.0% YoY growth for worldwide expenditure on air transportation and 6.0% growth for available seat kilometers [1]. The first news of a new virus in China surfaced in January 2020 [2], but its likeliness to spread worldwide [3] and to cause major financial effects for the aviation business were determined to be relatively limited [4,5]. The situation escalated rapidly, and in April 2020 COVID-19 was determined to be the biggest crisis in the history of aviation [6–8], causing two years of lost growth in travel [9]. During 2020, several airlines were forced to cease their operations [10], go through reconstruction processes [11] and obtain financial support from the governments. The total value of government financial support reached USD 173 billion in 2020 [12]. Numerous bankruptcies were failed [13,14], aircraft stayed on ground and employees were laid off.

Airline CFOs and heads of cargo reported in October 2019 that they were positive about future growth of air travel but less positive about cargo due to the slow-down in world trade as a result of trade disputes [1]. The year turned out to be very different in many aspects. For the full year of 2020, domestic travel revenues were −43% globally, whereas international travel dropped −85% vs. 2019. Chinese and Russian domestic

markets recovered quickly to near the normal state by Q3/2020, but other countries revealed fragility. Summer 2020 improved the international travel situation especially within Europe, but the enforced quarantine rules caused another drop in the fall. The industry losses have been evaluated to be around USD 118 billion for the full year of 2020 and the passenger numbers dropped to the 2003 levels. It is estimated it will take up to 2024 for the industry to reach 2019 levels [12].

The aim of this study was to understand the main concerns airline passengers may have felt during the pandemic and see if there are differences between the focus markets, Finland and Sweden. Since the beginning of the global COVID-19 pandemic, these two countries have had different approaches to handling the crisis. Whereas Finland followed the other Western countries with strong control and shutdown of businesses, Sweden had a more liberal strategy which allowed more freedom to move and continue normal life, taking into account the remote working possibilities when applicable [15], but letting, for example, restaurants remain open with certain precautions and self-control [16]. In general, Sweden's strategy focused more on recommendations than requirements [17], to induce the public to modify their behaviors voluntarily to combat the pandemic [18].

During the data collection phase of this study, Finnish citizens were allowed to travel with certain limitations. The countries were divided to three categories: Green: risk of getting coronavirus is on the same level or lower than in Finland; Red: the risk of getting coronavirus is higher than in Finland; and Gray: the countries outside the EU's border decision. Traveling to/from the "Green" countries was not controlled. Traveling to the "Red" countries was not advised without a justified reason, and travelers from these countries were required to undergo a 14-day self-quarantine with potential health checks upon returning. Traveling to "Grey" countries was not advised, and traveling from these countries to Finland was restricted to the most imperative reasons only. The fourteen-day self-quarantine with the potential health checks upon returning was applied [19]. During the time of the data collection, Sweden had a similar categorization in place, dividing the countries into three categories: not advised within the EU, non-essential travel not advised within the EU and non-essential travel not advised outside the EU [20]. The self-quarantine was only recommended and limited to seven days [21], based on doctors' discretion [22]. In general, most measures within infection control in Sweden were and still are taken without coercion, as they see that well-informed and motivated people respond to recommendations and self-responsibility better than coercive measures [23]. Since these two markets had very different overall policies around COVID-19, we wanted to know whether these policies correlated with the concerns. In addition, we evaluated whether certain demographic sub-groups (by age, gender or loyalty tier) are more concerned than the others.

In earlier studies, it has been suggested that older people are more likely to adopt precautionary measures during pandemics [24–27] and more specifically during COVID-19 [28]. Furthermore, females have been noticed to be more willing to follow recommended behaviors during a pandemic [24] and also when it comes to COVID-19 [29]. In addition, the correlation between socio-economic status and health is well-established in epidemiologic research [30], and it also affects the risks perceived [31].

The main research question of this study was: How do customers' concerns due to COVID-19 differ based on the gender, age, flying activity and national COVID-19 restrictions? To answer this question, an email questionnaire was sent to ten thousand individual Finnair loyalty program customers. The participants were asked to evaluate the magnitude of nine pre-selected concerns and rate them accordingly. The results were analyzed with several statistical methods, and conclusions were based on these analyses in relation to earlier studies. Understanding whether the customers see COVID-19 more as a health risk or an annoyance affecting their traveling will help the airlines to focus their efforts on tackling the relevant concerns among different customer groups when similar worldwide disruptions occur.

2. General Concerns Related to Flying during COVID-19

Fenichel et al. [32] stated that people respond to epidemiological risks with behavioral change. They may engage in avoidance behavior and cancel their travel plans due to unclear communication or unbalanced news rather than being sick. On the other hand, Skyscanner's [33] recent findings suggest that due to the ongoing pandemic, travelers are able to cope better with the psychological challenges of COVID-19, and those considering and acting on a desire to travel have a higher tolerance of risk. Their results state that health concerns are the biggest travel barrier followed by changing rules and regulations. On top of these aspects, we wanted to evaluate several other concerns that could affect travelers' behavior. Our research focused on the nine pre-determined concerns listed and described below.

2.1. Impact on Climate Change

Air travel's impact on climate change has been a major concern for environmentalists for decades [34–36]. In recent years, the general public has also paid more attention to the environmental aspects of traveling and also shared their views and criticism on social media. Different movements, such as flygskam, Fridays for Future and the no-fly movement, have received a lot of media attention and have also changed peoples' behavior, e.g., using trains instead of planes as a means of transportation [37]. Since air travel's impact on climate change is not related to COVID-19, it could be used as a semi-solid reference point. Comparing the other concerns to the impact on climate change has helped us to understand the magnitude of each concern. Based on these aspects, "Impact on climate change" was selected as one the pre-defined concerns.

2.2. My Well-Being and Health

During travel, people with diverse origins are enclosed in close proximity for hours or days and then discharged to move onto many distant places. Therefore, as Wilson [38] described, human migration has been the main source of epidemics throughout recorded history. Furthermore, Hertzberg et al. [39] found out that the disease transmission in an aircraft is limited to only one row in front of or behind an infectious passenger, but the movements of passengers and crew may further facilitate disease transmission. The IATA survey [40] stated that 86% of the respondents felt safe on board due to the enforced COVID-19 measures. On the other hand, the same survey suggested that up to 80% of the respondents were very concerned or somewhat concerned about different parts of the travel experience with respect to COVID-19. As Lamb et al. [41] suggested, policies on mask wearing or disinfecting procedures of aircraft could help to reduce the concerns related to commercial flying. Another study from Sotomayor-Castello et al. [42] stated that 75.6% of their respondents reported feeling "somewhat" to "extremely concerned" about contracting an infectious disease while flying. The study by Barbieri et al. [31] suggested that the respondents believed air travel to be the most dangerous travel mode when considering the likelihood of contracting the virus. Understanding the level of concern related to customers' well-being and health provides insights into whether people see COVID-19 as a health issue or an annoyance affecting their traveling. Hence, "My well-being and health" was selected as one of the concerns to be analyzed.

2.3. Negative Public Opinion towards Air Travel

COVID-19 was widely discussed in all news media during 2020, regarding restrictions set by the governments and comments from politicians and health care professionals encouraging people to stay home and to avoid unnecessary traveling. Air travel and especially leisure traveling was discouraged in order to stop the virus from spreading [20,43,44]. Unnecessary traveling was seen as a threat to the recovery process. A Skyscanner [33] report stated that social risks ("I don't want to be the first one to travel") began to emerge and started to affect travelers' decision making. However, it was ranked

as the least concerning issue compared to other aspects, such as health, financial situation and general uncertainty related to travel. "Negative public opinion towards air travel" was selected as one of the concerns in order to understand whether people actually changed their behavior to please the public.

2.4. Potential Quarantine at the Destination

Governments across the globe set different kinds of restrictions and quarantines for arriving passengers as a preventive action [44,45]. Usually, the length of the quarantine varied between 7 and 21 days, depending on travelers' country of origin and latest COVID-19 test results [45–47]. Many states introduced unprecedented peacetime measures ranging from border closures and travel bans to the suspension of visa exemptions, as well as internal mobility restrictions, including full lockdowns and quarantine for incoming passengers [48]. The consequences of breaking the quarantine rules varied between countries and could be anything between admonition, a fine or imprisonment [49,50]. The relatively long quarantine times could exceed the length of the planned holiday trip. To provide context, in 2019, travelers from the United Kingdom spent an average of 8.7 nights on holidays overseas [51], while globally the average trip length increased to 16 days [52]. This could mean that a major part of a vacation could have been spent in isolation. We wanted to understand whether this was something people found concerning and added "Potential quarantine at the destination" as one of the concerns to be analyzed.

2.5. Potential Quarantine upon Returning

Throughout the year 2020, the governments and several major companies in Finland and Sweden encouraged people to work remotely whenever possible [15,53]. For some professions, this was easier to execute, but this was not the case for hands-on workers who had to work at their office, workstation or similar. If workers were unable to work from home, a potential quarantine upon returning could mean 7-to-14 days of unpaid leave when returning from a trip abroad. Moreover, the potential quarantine upon returning could restrict daily living activities, hobbies, daily errands and so on. We wanted to understand how big of a concern this was for the respondents and hence added "Potential quarantine upon returning" as one of the pre-selected concerns.

2.6. Travel Restrictions Set by the Governments

Grais et al.'s [54] findings highlight the importance of coordinated surveillance and planning during a global pandemic. Nevertheless, during COVID-19, global coordination has been lacking, and governments across the globe have introduced different policies surrounding traveling. In Finland, returning to Finland was allowed for its citizens from anywhere in the world [55], but traveling to other countries was controlled by the destination country [19]. Ever-changing restrictions may cause confusion for the travel companies but especially for the travelers. "Travel restrictions set by the governments" was selected as one of the concerns to understand this possible confusion and its effect better.

2.7. Long Refund Process in the Case of Cancellation

Soon after the outbreak of COVID-19, several airlines faced delays in refunds in the case of flight or ticket cancellation [56–58]. The first four months of the pandemic caused the same number of refund requests as normally received in three years , and the US Department of Transportation reports for September and October 2020 showed that the number of customer complaints about refunds were 30–40-times higher than in 2019, representing up to 88% of total number of complaints [59,60]. The refunds caused bottlenecks throughout the process, which meant that customers had to wait for a long time to get their money back. "Long refund process in case of cancellation" was chosen as a pre-selected concern to understand peoples' risk appetite from a financial perspective.

2.8. Involuntary Changes when Traveling and Not Being Able to Return as Planned

The spread of the virus, changing travel restrictions and high fluctuation in demand forced airlines to change their network rapidly and unexpectedly [61,62]. For the passenger, this could mean complicated re-routings, long delays or alternative carriers when traveling. In addition to these involuntary changes in the itinerary, this could also result in airlines combining same day/route connections and removing scheduled flights. "Involuntary changes when traveling" and "Not being able to return as planned" could cause annoyance at, e.g., school or work, and hence were selected to be part of this study.

3. Methods

3.1. Participants

The data gathering for this research was carried out in collaboration with Finnair, Finland's national carrier, which provided their customer data for the survey. Finnair has a relevant market share in the Nordics, and hence it was estimated that a statistically sufficient number of responses could be collected from the two key markets, Finland and Sweden. Data collection was carried out as part of a Finnair survey conducted in September 2020. The survey invitations were sent by email to ten thousand Finnair loyalty program (Finnair Plus) members. The target group was selected based on the following criteria:

- Is a Finnair Plus member (juniors excluded): being a loyalty member exposes a person to an airline's communication and marketing material, which could affect their behavior. Juniors were excluded to focus on the decision makers and to avoid possible limitations in obtaining consent.
- Flew on a Finnair-marketed flight in 2019: passive members were left out to obtain more recent and accurate signals from the active Finnair customers. Since COVID-19 affected traveling from early 2020 onwards, the earlier year was selected as the more relevant indicator of usual travel behavior.
- Did not opt out of surveys: this general criterium was in use to respect the customer's choice.
- Had not been surveyed in the previous 60 days: being surveyed too regularly could affect a person's interest in surveys in general.
- Approximately 70% of respondents from Finland: as Finland is the key market for the airline and for the study, it was seen as relevant to obtain a significant proportion of responses from Finland.

We received altogether 2744 responses, of which 2406 were fully completed, the response rate for started surveys being 27.44%. The higher the Finnair Plus tier, the higher the response rate, as can be seen in Table 1. The scope of this study included responses from Finland and Sweden only, with the number of responses for these two countries totaling 2250, and the fully completed responses amounting to 2004.

Table 1. Survey participants and the response rates.

		Contacted	Started Surveys	Response Rate
Tier	Basic	5000	964	19%
	Silver	2500	739	30%
	Gold	1500	555	37%
	Platinum	980	472	48%
	Lumo	20	14	70%
Language	Finnish	6483	1983	31%
	Other	3517	761	22%
Origin	Finland	7220	2124	29%
	Other	2780	620	22%
Total		10,000	2744	27%

In addition to the usual demographics (including age group, gender, tier, language, country of origin), the survey consisted of seventeen main questions and their sub-questions. For the purpose of this study, we focused on the question related to concerns only, which included nine sub-questions. The respondents were asked to grade the concerns on a 5-point rating scale (1 = none at all, 2 = a little, 3 = a moderate amount, 4 = a lot, 5 = a great deal). The question and the list of concerns in their original format and order can be seen below.

On a scale 1–5, how concerned are you about each of the following when it comes to travel by air in the future?:

- Involuntary changes in the itinerary when traveling;
- Impact on climate change;
- Potential quarantine at the destination;
- Travel restrictions set by the governments;
- Potential quarantine upon returning;
- My well-being and health;
- Not being able to return as planned;
- Negative public opinion towards air travel;
- Long refund processing time in the case of cancellation.

Unfinished responses were filtered out. We analyzed the data based on the following attribute variables: country of origin, age group, gender and loyalty program tier. The exact formats can be seen below:

- Country (open field, blank);
- Age group (under 25, 25–34, 35–44, 45–54, 55–64, 65 or over, N/A, blank);
- Gender (M/F/N/A, blank);
- Tier (Basic, Silver, Gold, Platinum, Lumo, blank).

Since the number of respondents with the Lumo tier was low (n = 11), the group was combined with the respondents with the Platinum tier (n = 378). When comparing the difference between different gender groups, only male (n = 1253) and female (638) participants were considered, whereas respondents with no answer to this question (totaling n = 68) were left out. The same logic was applied to the age groups, where respondents with no answer were not analyzed (n = 150). The respondents under 25 (n = 17) were combined with the 25–34 group (n = 175) to form a new group, 34 or under.

In order to reach the Lumo level, one has a 12-month tracking period to fly 150 or more oneworld flights, of which at least 100 need to have been flown with Finnair, or 450,000 tier points have to earned, out of which 350,000 need to be earned from Finnair flights. This equates to 76 flights or 150,000 points with Finnair or other oneworld carriers for the Platinum level, 80,000 points or 46 flights for Gold and 30,000 points or 20 flights for Silver. There are no flight- or point-related requirements for the Basic tier [63].

3.2. Statistical Analysis

We selected two main methods to validate the statistical significance of our results. Since the investigated variables were not continuous, both methods were non-parametric tests. In the case of two variables only (country, gender), we used the Mann–Whitney U-test method, which does not depend on assumptions about the distribution. It can also be used when the conditions of normality are not met and when the sample is small, and the data are semi-quantitative or at least ordinal [64]. In the case of more than two variables (age group, tier) we used the Kruskal–Wallis test, the non-parametric equivalent for the ANOVA test that assesses the differences among three or more independently sampled groups on a single, non-normally distributed continuous variable. Non-normally distributed data (e.g., ordinal) are suitable for the Kruskal–Wallis test [65].

In order to rank the concerns, we used net value score and means. Net value score represents the share of 4 and 5 (4 = a lot, 5 = a great deal) ratings minus the share of 1 and

2 ratings (1 = none at all, 2 = a little). Mean was calculated by considering only the fully completed surveys.

4. Results

4.1. The Main and Minor Concerns in Finland and Sweden

In order to understand the relative significance of each concern, we wanted to rank them in order. The below table (Table 2) shows the mean, N, standard deviation and net value score for each concern for the total data group, followed by Table 3 listing the concerns per investigated market.

Table 2. Mean, N, standard deviation and net value score for all respondents.

Concern	Mean Total	N Total	Std. Deviation Total	NVS Total
Potential quarantine at the destination	3.95	1997	1.025	60%
Travel restrictions set by the governments	3.58	1999	1.048	40%
My well-being and health	3.41	1998	1.216	23%
Not being able to return as planned	3.38	2000	1.166	22%
Potential quarantine upon returning	3.33	1999	1.202	20%
Involuntary changes when traveling	3.18	1997	1.036	12%
Long refund process in the case of cancellation	2.89	1999	1.195	−10%
Impact on climate change	2.49	1996	1.168	−35%
Negative public opinion towards air travel	2.07	1999	1.076	−58%

Table 3. Mean, N, standard deviation, net value score and statistical significance for Finland and Sweden.

Concern	Mean Finland	N Finland	Std. Deviation Finland	NVS Finland	Mean Sweden	N Sweden	Std. Deviation Sweden	NVS Sweden	Sig.
Potential quarantine at the destination	3.96	1890	1.022	61%	3.89	107	1.067	55%	0.535
Travel restrictions set by the governments	3.57	1892	1.046	39%	3.69	107	1.076	48%	0.198
My well-being and health	3.41	1893	1.208	23%	3.47	105	1.359	29%	0.438
Not being able to return as planned	3.38	1893	1.157	23%	3.41	107	1.310	21%	0.668
Potential quarantine upon returning	3.34	1893	1.197	21%	3.06	106	1.279	7%	0.029
Involuntary changes when traveling	3.17	1890	1.036	11%	3.38	107	1.015	27%	0.040
Long refund process in the case of cancellation	2.88	1893	1.198	−10%	2.97	106	1.142	−2%	0.368
Impact on climate change	2.48	1889	1.172	−36%	2.61	107	1.088	−28%	0.169
Negative public opinion towards air travel	2.08	1892	1.077	−58%	2.00	107	1.055	−60%	0.464

We can see that *Potential quarantine at the destination* was the overall biggest concern, followed by *Travel restriction set by the governments* and *My well-being and health*. The top three concerns were the same across the two countries. Additionally, the bottom three concerns (*Long refund process, Impact on climate change, Negative public opinion towards air travel*) were in the same order across the countries. The order of the remaining three concerns (*Not being able to return as planned, Potential quarantine upon returning and Involuntary changes when traveling*) seemed to vary between Finland and Sweden. Whereas Swedes were more worried about the *Involuntary changes when traveling* (NVS 27% vs. 11% in Finland), Finns ranked the *Potential quarantine upon returning* much higher (21% vs. 7% in Sweden). *Not being able to return as planned* seemed to have the same magnitude of concern across the countries even though the overall ranking was different (fourth in Finland, fifth in Sweden).

The same indications can be seen with means that showed no difference in order against NVS for the totals nor Finland. In Sweden, the weaker concern of *Potential quarantine upon returning* stands out also with means. *Not being able to return as planned* was ranked higher than *Involuntary changes*, being the only exception for the rankings per NVS. The absolute difference between these two concerns remained small.

Based on these findings, we can state that *Potential quarantine at the destination* was the major concern in both countries. The second biggest concern was the *Travel restrictions set by the governments*. Both concerns can be seen as annoyances, i.e., factors that may ruin a trip or make it very complicated for the travelers. They are also both actions that are made to prevent the virus from spreading. As *My well-being and health* was only the third-highest concern with significantly lower scores, it can be stated that travelers are more concerned about the safety measures affecting their trip negatively than the virus itself.

Impact on climate change and *Negative public opinion towards air travel* seemed to be the least concerning issue for the respondents. What is surprising is that both concerns ranked so low but have received a lot of attention in the media. When using *Impact on climate change* as a reference point (ranking relatively low in both markets) to understand the magnitude of directly COVID-19-related worries, we can see that travelers took the situation seriously and seemed really affected by the ongoing situation. Even though *Negative public opinion towards air travel* may have affected peoples' behavior on social media [13] , it did not seem to have a big effect on the traveling itself. What is surprising is that even though flight shame has received a lot of attention in Sweden, it was not visible in the results. In fact, both ranking methods suggest that Swedes are even less concerned than Finns when it comes to the *Negative public opinion towards air travel*. Additionally, the *Impact on climate change*, which is also closely related to flight shame, ranked the second lowest across both rankings.

To validate whether our findings are of statistical significance (significance level = 0.050), we used the Mann–Whitney U-test to compare the two focus groups, Finland and Sweden. Based on the NVS and means, we evaluated that the most significant differences between these two groups were related to *Travel restrictions set by the governance, Potential quarantine upon returning* and *Involuntary changes when traveling*. In order to obtain the full analysis, we also decided to evaluate the other concerns. Our null hypothesis for all the concerns was that the distribution is the same across categories of country.

The only statistically significant differences between the two countries were related to *Quarantine upon returning* (sig. = 0.029, Finns were more concerned) and *Involuntary changes when traveling* (sig. = 0.040, Swedes were more concerned). These findings are not very surprising. In Finland, the guidance from the government and restrictions among public were much stronger at the time [19,53], making it difficult to continue normal living right after a trip abroad. In Sweden, the public opinion was more liberal [15–18,21–23] and normal life was not as restricted as in Finland at the time of the survey. When it comes to *Involuntary changes when traveling*, it must be noted that Finnair's only hub is the Helsinki airport, meaning that for travelers from Sweden, it is more likely that they have to have

more stops on their journey than travelers from Finland. Involuntary changes when traveling may cause more concern for connecting passengers with one or more stops than passengers with fewer stops or direct flights. No other statistically significant differences were found, which means that, for example, differences in the concern of *Travel restrictions set by the government* were not significant enough to pass the test.

4.2. Age Group

Additionally, the differences between certain age groups were analyzed. The means, group sizes (N) and standard deviations can be seen in Table 4 below. We used the Kruskal–Wallis test to validate our results for statistical significance (significance level = 0.050). The null hypothesis for all the concerns was that the distribution is the same across age groups.

Table 4. Mean, N, standard deviation and statistical significance based on age groups.

Concern	Mean 34 or Under	N 34 or Under	Std. Deviation 34 or Under	Mean 35–44	N 35–44	Std. Deviation 35–44	Mean 45–54	N 45–54	Std. Deviation 45–54	Mean 55–64	N 55–64	Std. Deviation 55–64	Mean 65 or over	N 65 or over	Std. Deviation 65 or over	Significance
Potential quarantine at the destination	3.96	192	0.94	3.87	452	1.057	4.02	557	0.995	4.04	426	1.075	3.93	220	0.953	0.033
Travel restrictions set by the governments	3.59	192	1.103	3.46	452	1.043	3.60	560	1.055	3.65	426	1.047	3.65	221	0.964	0.044
My well-being and health	3.25	192	1.176	3.24	453	1.241	3.42	559	1.205	3.58	424	1.184	3.64	220	1.225	0
Not being able to return as planned	3.29	192	1.179	3.33	453	1.165	3.46	560	1.156	3.50	425	1.172	3.19	221	1.147	0.005
Potential quarantine upon returning	3.29	192	1.264	3.30	453	1.199	3.41	559	1.153	3.42	426	1.196	3.05	220	1.256	0.004
Involuntary changes when traveling	3.16	191	1.081	3.10	453	1.049	3.20	560	1.021	3.29	425	1.025	3.17	221	0.985	0.178
Long refund process in the case of cancellation	2.88	192	1.185	2.74	452	1.190	2.89	558	1.219	2.96	427	1.175	3.04	222	1.145	0.009
Impact on climate change	2.56	192	1.285	2.41	451	1.236	2.46	559	1.122	2.53	425	1.111	2.50	220	1.116	0.313
Negative public opinion towards air travel	2.31	191	1.207	2.07	452	1.034	1.97	559	1.024	2.07	427	1.078	2.05	221	1.109	0.027

Based on Table 4, we could see some great differences between different age groups. *My well-being and health* ranked high especially for older age groups, whereas younger travelers weighted this more lightly. *Negative public opinion towards air travel* seemed to affect mainly younger travelers. *Potential quarantine at the destination* was a major concern for all groups, but 35–44-year-olds saw this as less concerning than others. Similar results are seen for *Travel restrictions set by the governments*. *Potential quarantine upon returning* as well as *Not being able to return as planned* were more concerning among middle-aged (45–54, 55–64) travelers. *Long refund process in the case of cancellation* did not rank high compared to other concerns, but the 65-or-over group saw this as more concerning than others did.

Based on the Kruskal–Wallis test, we can see that there were statistically significant differences across the age groups when it came to the following concerns: *My well-being and health* (sig. = 0), *Negative public opinion towards air travel* (sig. = 0.027), *Potential quarantine at the destination* (sig. = 0.033), *Potential quarantine upon returning* (sig. = 0.004), *Travel restrictions set by the governments* (sig. = 0.044), *Long refund process in the case of cancellation*

(sig. = 0.009) and *Not being able to return as planned* (sig. = 0.005). Based on the analysis, there was no statistically significant difference when it came to *Impact on climate change* and *Involuntary changes when traveling*.

As the findings suggest, the older people were more concerned when it came to *My well-being and health*. This could be expected since the virus was causing more severe health issues among older people [66]. *Negative public opinion towards air travel* was a bigger concern, especially among younger people, which may indicate that younger people are more concerned when it comes to their own role and position in society, active social media usage and environmental awareness. *Potential quarantine at the destination* was a major concern for all the groups. Interestingly, 35–44-year-olds were the least concerned when it came to *Travel restrictions set by the governments* and *Potential quarantine at the destination.*

Those 65 or over were less concerned when it came to the *Potential quarantine upon returning*. This could be related to the assumption that older people tend to no longer have an active work life and therefore have fewer obligations after trips. The same reason could be used to understand why those 65 or over were more concerned about the *Long refund process in the case of cancellation*; being retired may often mean less flexibility in financial liquidity. *Not being able to return as planned* was a more significant concern for age groups 55–64 and 45–54, which could also be related to working life and perhaps more senior roles in their respective jobs. Returning late from a trip could affect their everyday life negatively.

4.3. Gender

For the gender comparison, we used two groups, female and male. The means, group sizes (N) and standard deviations can be seen in Table 5 below. We used the Mann–Whitney U-test to validate our results for statistical significance (significance level = 0.050). The null hypothesis for all the concerns was that the distribution is the same across both gender groups.

Table 5. Mean, N, standard deviation and statistical significance based on gender.

Concern	Mean Female	N Female	Std. Deviation Female	Mean Male	N Male	Std. Deviation Male	Significance Level
My well-being and health	3.56	680	1.196	3.33	1250	1.223	0
Negative public opinion towards air travel	2.32	681	1.137	1.93	1250	1.015	0
Impact on climate change	2.79	681	1.204	2.32	1247	1.113	0
Potential quarantine at the destination	4.02	682	1.019	3.94	1247	1.018	0.040
Potential quarantine upon returning	3.37	681	1.219	3.32	1250	1.196	0.272
Travel restrictions set by the governments	3.65	683	1.078	3.56	1249	1.031	0.038
Long refund process in the case of cancellation	3.01	680	1.214	2.83	1251	1.186	0.002
Involuntary changes when traveling	3.37	682	1.014	3.10	1248	1.037	0
Not being able to return as planned	3.49	683	1.162	3.33	1249	1.165	0.004

What was surprising is that females were categorically more concerned than males when it came to traveling during COVID-19. As both genders are treated equally when it comes to the quarantines, travel restrictions and travel-related annoyances, it seems that there is something more fundamental causing this difference. Concerns of negative public opinion and impact on climate change are very subjective in nature and have no clear linkage to one's gender. Thus, the differences between genders suggests that there is a psychological phenomenon where females rate concerns categorically higher than males. *Potential quarantine upon returning* showed no statistically significant difference (sig. = 0.272) in the results, whereas all the other concerns did.

4.4. Tier

We also wanted to see whether there were differences between different tiers. The order of the tiers followed the logic: Basic—Silver—Gold—Platinum—Lumo, Platinum and Lumo being combined in this context in order to obtain relevant group sizes. The means, group sizes (N) and standard deviations can be seen in Table 6 below. We used the Kruskal–Wallis test to validate our results for statistical significance (significance level = 0.050). The null hypothesis for all the concerns was that the distribution is the same across the tier groups.

Table 6. Mean, N, standard deviation and statistical significance based on loyalty tier.

Concern	Mean Basic	N Basic	Std. Deviation Basic	Mean Silver	N Silver	Std. Deviation Silver	Mean Gold	N Gold	Std. Deviation Gold	Mean Platinum–Lumo	N Platinum–Lumo	Std. Deviation Platinum–Lumo	Significance
Potential quarantine at the destination	3.94	662	1.041	3.93	532	1.046	3.93	416	1.043	4.05	387	0.941	0.445
Travel restrictions set by the governments	3.55	663	1.036	3.54	534	1.093	3.55	416	1.074	3.73	386	0.963	0.058
My well-being and health	3.49	662	1.233	3.37	531	1.228	3.34	416	1.198	3.41	389	1.184	0.138
Not being able to return as planned	3.42	664	1.176	3.36	533	1.176	3.34	416	1.178	3.38	387	1.121	0.683
Potential quarantine upon returning	3.29	662	1.242	3.31	533	1.220	3.33	416	1.174	3.42	388	1.137	0.489
Involuntary changes when traveling	3.21	662	1.035	3.17	533	1.084	3.15	416	1.035	3.19	386	0.970	0.871
Long refund process in the case of cancellation	3.05	663	1.211	2.97	532	1.209	2.80	416	1.148	2.58	388	1.133	0
Impact on climate change	2.67	663	1.218	2.55	533	1.186	2.39	411	1.139	2.22	389	1.021	0
Negative public opinion towards air travel	2.21	661	1.098	2.09	533	1.098	2.06	416	1.079	1.83	389	0.957	0

Three out of nine null hypotheses were rejected: *Negative public opinion towards air travel* (sig. = 0), *Impact on climate change* (sig. = 0) and *Long refund process in the case of cancellation* (sig. = 0). Not surprisingly, the higher-tier members were less concerned about the *Negative public opinion towards air travel*. Being on a higher tier is a result of frequent flying, and thus being very concerned about the public opinion would be somewhat contradictory. As seen in the table, Gold and Platinum–Lumo members were less concerned, whereas Basic and Silver members put more emphasis on this concern. Equally unsurprising was the result that travelers on higher tiers were less concerned about the *Impact on climate change*. Being very concerned about climate change would contradict high-tier travelers' behavior. Platinum–Lumo members were also less concerned when it came to the *Long refund process in the case of cancellation*. This could be a result of being more used to cancelling tickets and thus being less concerned about the process as a whole or a result of having a more stable financial situation. In either of the cases, the annual amount of money spent on air travel is very high, and waiting slightly longer for a refund might not have that big of an impact as for travelers on lower tiers with an expected smaller annual travel budget.

We found no statistical difference when it came to quarantines, travel restrictions, health or changed schedules and itineraries. This highlights the nature of the virus: it touches everyone regardless of your tier and possible travel restrictions, quarantines and travel-related annoyances apply to all.

5. Discussion

Our findings state that *Potential quarantine at the destination* was the major concern in both countries. The second biggest concern was *Travel restrictions set by the governments*, followed by *My well-being and health*, which had significantly lower scores than the top two concerns. Thus, we stated that travelers were even more concerned about the safety measures affecting their trip negatively than the virus itself. On the other hand, as Nair and Sinha [67] described, people with less travel history were the most concerned about the number of COVID-19 cases in the possible destination. *Impact on climate change* and *Negative public opinion towards air travel* seemed to be the least concerning issue for the respondents in both countries. Using *Impact on climate change* as a reference point showed that travelers took the situation seriously and seemed really affected by the ongoing situation. On the other hand, as Holden [68] suggests, even green individuals cast aside their green concerns when traveling by plane. In general, various studies show that climate change problems do not play a role at all when people decide to enter an airplane [69]. This could indicate that people may rank climate change lower in order to feel better about their own travel behavior. On the other hand, a study by Baumeister et al. [70] showed that environmentally minded passengers actually do think about the green choice whenever it is available and clearly indicated. In general, this study focused on the people that actually fly, and a large portion of them do so even relatively frequently. It can be argued that the results would be different if people who do not fly were included.

Our findings suggest that even though flight shame has received a lot of attention in Sweden, it is not reflected in the answers. *Impact on climate change* was ranked low in both countries, even lower in Sweden. As Jacobson et al. [71] suggested, rational knowledge about the threat of climate change may not be powerful enough to make people reduce flying. It was also noted that Swedes are even less concerned than Finns when it came to the *Negative public opinion towards air travel*. On the other hand, it could be questioned whether Swedes who are Finnair loyalty members actually fly more in general. Scandinavian Airlines (SAS), the flagship carrier of Sweden, Denmark and Norway, with their frequent flyer program, is more of a natural choice for the Swedes, meaning that they may have a higher status with SAS and have the Finnair program as their secondary option. Thus, Swedes who responded to the survey could actually represent frequent travelers who put less emphasis on the climate and public opinion in general.

The only statistically significant differences between Finland and Sweden were related to *Quarantine upon returning* and *Involuntary changes when traveling*. Our findings show that *Quarantine upon returning* was a major concern for Finns, whereas Swedes did not worry about this aspect that much. This was backed up by the articles and government policies during the time of the survey, which showed that the restrictions in Finland were stricter than in Sweden but also that in Sweden the general public atmosphere was more liberal, which could have caused less anxiety about the possible quarantines as well. In Finland, there was a perceived stigma towards people in quarantine, driven by fear and blame for infection, which led to a reluctance to disclose one's coronavirus status to others [72]. The *Involuntary changes when traveling* could cause more concern for stop-over passengers, which in our case would mean especially customers originating from Sweden.

As our findings suggest, the older people were more concerned when it came to *My well-being and health*. This is in line with Public Health Agency of Sweden's [28] survey results from May 2020, which show that there is a positive correlation between age and worrying about health aspects of COVID-19. Similar results were found in a later survey [73]. Potential quarantine at the destination was a major concern for all age groups. As Seyfi et al. [48] suggest, this may also have longer-term implications on the relative attractiveness of the countries to tourists after quarantines and other safety measures have been eased. The 35–44-year-olds were the least concerned when it came to *Travel restrictions set by the governments* and *Potential quarantine at the destination*, which could indicate that this group is either not affected by these limitations or they do not care about them as much as others. A study by Arli et al. [74] suggested that the rebellious attitude towards COVID-19 social distancing is strongest in the age group 25–34, followed by the age group 35–44.

Negative public opinion towards air travel was a bigger concern, especially among younger people. This is not surprising, especially for Sweden, where there are Instagram accounts focused on framing and shaming influencers as climate villains and clueless citizens [75]. Furthermore, Andersson's [76] study suggested that younger generations seem to be more interested in traveling in a sustainable way, but that this sort of behavior also implies stress and anxiety among them.

Our findings show that females were categorically more concerned than males when it came to traveling during COVID-19. The difference between genders suggests that there is a psychological phenomenon where females rate concerns higher than males in general. The Public Health Agency of Sweden's survey [73] supports this view, as they found out that anxiety towards becoming seriously ill due to COVID-19 was higher among women than among men. Additionally, it has been suggested that women are more likely to follow COVID-19-related social distancing guidelines than men [74].

Barbieri et al. [31] suggested that socio-economic inequality and morbidity may affect perceived risk via impacts on the availability of different transport modes when traveling during a pandemic. As we found no statistical difference when it came to quarantines, travel restrictions, health or changed schedules and itineraries among respondents on different tiers, we suggest that these aspects of the virus affect everyone regardless of their tier or socio-economic status.

6. Conclusions

Due to COVID-19, there are several significant concerns that affect customers' behavior in terms of travel. Concerns are not only related to the virus and possible contagion, but even more to factors that make traveling more difficult. Uncertain and changing restrictions and quarantine policies are the major concern for airline frequent travelers. As Grais al. [54] suggested, coordinated surveillance and planning during a global pandemic is the key to controlling the virus. In addition, we can state that such co-operation is also needed to minimize travelers' concerns during a pandemic. Based on our study, there is a lot of uncertainty that could perhaps be solved by better communication and coordination.

In a wider picture, we can see that COVID-19-related concerns are significant and have a greater magnitude than climate-change-related concerns. This finding should be worrying for environmentalists: whereas COVID-19 is a short-term problem for the world population, climate change is here to stay. This highlights the distorted and short-term vision that travelers may have; environmental issues are forgotten or ignored if they affect one's own travel behavior [68,69]. There is a bit of hope among the younger generations, who take environmental issues more seriously but also suffer from anxiety and stress related to the same issues [76].

Government guidance and restrictions have had a major role during the COVID-19 pandemic. Finland and Sweden had different strategies related to quarantines, lockdowns and the general approach: whereas Finland gave a lot of decision power to institutions and authorities, Sweden's liberal strategy placed strong trust in the individuals. By doing so, Sweden was able to keep everyday life more normal, which also diminished the concern related to quarantines upon one's return. Further studies are needed in order to understand how coercive versus non-coercive measures affected peoples' behavior on a larger scale.

The key takeaways for airlines are related to one's gender, tier and age. Females were categorically more concerned than males when it came to traveling during a pandemic. In order to lower the barrier for traveling, airlines should think about crisis communication from this perspective. Further studies are needed to understand how the concerns may evolve after the pandemic, how the initial concerns should be tackled and what would make females feel more at ease. Travelers on higher tiers are less worried about the delays in refunds, which could allow airlines to start the refund process from the other end of the

tier spectrum. This could result in a larger number of pleased customers and less complaints in general. Even though health-related concerns were less significant than those related to quarantines and restrictions, they still play a major role. This aspect is also something that the airlines can directly act on. Providing relevant pandemic-related safety measures and processes is nowadays a must. As there is a positive correlation between age and health-related concerns, airlines should take this into consideration when selecting the tone and channels for customer communication during a pandemic.

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