

The impact of airlines' policies during COVID-19 on traveler's repurchase intention. The case of Aegean Airlines.

Abstract

The COVID-19 outbreak had a drastic impact on the hospitality and air transport industry. After an international lockdown and mass flight cancellations in March 2020, airlines were required to issue full refunds to their customers or offer alternative options like credit vouchers, for future flights. Aegean Airlines is one of the airlines that suspended any refund option and only offered vouchers to its customers. The purpose of this study is to examine likely impacts of Aegean Airline's crisis response as a case study during the COVID-19 pandemic on an airline's customers' future decisions to use the same airline again or to revisit their destination. A survey was created and disseminated online during the height of the crisis and the data were analyzed through quantitative, logistic regression models, and textual qualitative analyses. The findings of this exploratory study suggest that the airline's cancellation policy, combined with poor customer service communications and transparency, negatively influence passengers' re-purchase intentions as well as their willingness to revisit the airline's host country in the future.

Keywords: COVID-19, Airlines, Cancellation policy, customer satisfaction, consumer behavior, destination image.

1.Introduction

The COVID-19 pandemic changed people's lives around the world drastically. Businesses have seen their profits plummet since February 2020 when the pandemic began to hit countries and regions outside Wuhan where the pandemic emerged in December 2019. Thus, businesses had to quickly adapt to a new way of doing business and, in many cases, suspend their operations. Tourism-related industries like hospitality, transportation, museums etc. are hit intensely by the pandemic.

The pandemic's threat to the air transport and the entire aviation industry was especially severe, as airlines were forced to cancel their flights nearly altogether. The COVID-19 crisis is viewed as the worst crisis encountered in the history of the aviation industry (The Guardian, 2020); airline stock prices fell sharply during the crisis due to investors' interpretation of information (Maneenop & Kotcharin, 2020) and resulted in thousands of job cuts. Thousands of flights were cancelled when dozens of countries around the world closed their borders. Greece closed its

borders on the 13th of March 2020 for all international passengers and many EU countries (e.g. Spain, Italy, UK, Sweden). This led to a 98% decrease in flights for Greece from mid-March to mid-May (Capital, 2020). Financially, this could probably mean billions of euros that had to be returned to passengers for cancelled flights.

This crisis has created ripples through the aviation industry, with hundreds of thousands of flights being cancelled, aircraft makers and their suppliers saw their orders falling harshly, and the hospitality industry experienced an unprecedented decrease in bookings and requests. On a global scale, IATA announced that airlines needed to spend around 55 billion euros from February to June 2020 due to the pandemic, while more than 25 million jobs related to aviation around the world vanished (Capital, 2020). Numerous airlines were able to secure government support to help recover from the crisis; for example, Air France-KLM received 11 billion euros from the Netherlands; Lufthansa received 10 billion euros from Germany, Austria and Switzerland combined (Abate et al., 2020)

Under 261/2004 European Commission (EC) Regulation, customers are entitled to full refunds as well as compensations if their flights are cancelled by the airlines. Yet, following the lockdown in March 2020, many airlines offered vouchers to the affected passengers and disabled the refund option. The EC received complaints about airlines' not providing refunds to consumers for cancelled flights (Euronews, 2020). Although EC stressed that passengers are entitled to a refund option if they ask for it in addition to vouchers, and that it was willing to enforce the entitlement if needed (Euronews, 2020). Some airlines like Greece and Italy flag carriers adopted a policy that allowed them to offer vouchers as the only form of reimbursement. The practice was extended to other travel businesses in EU as well. On the 2nd of July 2020, the European Commission started infringement proceedings by sending a letter to formally notice Czechia, Cyprus, Greece, France, Italy, Croatia, Lithuania, Poland, Portugal and Slovakia on the grounds that their national rules infringe EU law on travelers' rights (EC, 2020). According to the EC, those ten Member States violate Article 12(4) Directive (EU) 2015/2302 which clearly states that *'The organizer shall provide any refunds required [...], reimburse any payments made by or on behalf of the traveler for the package minus the appropriate termination fee. Such refunds or reimbursements shall be made to the traveler without undue delay and in any event not later than 14 days after the package travel contract is terminated'* (EU, 2015).

Although service failure happens from time to time in all industries, organizational response to service failures have been considered vital in the service recovery journey and on customer behavioural intentions (Strizhakova et al., 2012, Sembada et al., 2016). Van Vaerenbergh et al., (2019) argue that flight cancellations are one of the most complicated service failures, engendering negative consequences such as missing holidays or special events; and thus, the negative emotions associated with the failure are related to goal blockage rather than to the flight cancellation, which makes an airline's focus on providing new service (like booking another flight) simply not enough in many cases.

This paper is among the first attempts to examine consumers' responses to customer service and exceptional cancellation policies during early stages of the COVID-19 crisis, such as a "voucher-rather-than-refund" policy adopted by some airlines. Using Aegean Airlines, the flag carrier of Greece, as a case study, this paper explores whether poor crisis management and communications had any impact on consumers' future purchase intentions and whether this is extended to destination image.

2. Literature review

2.1 Competition in the air transport industry

The development of tourism, destinations and air transport can be described with a brief chronological analysis: Air transport begun in the 1930s with postal services and services for businesses. However, after World War II, with the wealth of large airplanes, carriers counted more on passenger revenues. Yet, in late 1990s the new generation of tourism began, in which air traffic rose and air fares became cheaper even for long-haul intercontinental tourism (Bieger and Wittmer, 2006). Today, air transportation is considered the main mode for international travel, most prominent of the tourism industries (Papatheodorou, 2002).

The field of macro-economics teaches that oligopolistic conditions enable organizations to gain exceptionally large profits from consumers (Sawyer, 1982). However, lower-cost carriers (LCCs) increase competition and eliminate oligopolies (De Neufville, 2008). In such way, when low-cost carriers appeared in the beginning of the 2000s, there was a paradigm shift in business models which included airport planning, flying and tourism (De Neufville, 2008). In other words, LCCs worked as catalysts in regional development, jobs creation, tourism development and other ways, in which local authorities negotiated mutually beneficial arrangements that were not present with Full Service Airlines (FSAs) (De Neufville, 2008). The growth of LCCs has exploded in the last fifteen years, and there are many airports that exist solely because of the huge number of LCCs making use of them every day (Business Insider, 2018). Literature supports that the rise of LCCs in Europe is marked by new forms of leisure breaks, short-stay city tourism, the rise of attractions and the second home ownership of many people requiring elastic travels (Bieger and Laesser, 2001; Bieger and Wittmer, 2006). LCCs became real competitors to FSAs which led to a revolution in the aviation industry and accelerated the failure of many popular airlines (Simple Flying, 2019).

2.2 Consumer satisfaction & (re)purchase intentions

The relationship between service quality and customer satisfaction is one of the topics that has been discussed extensively in literature (Taylor and Baker, 1994). The impact of customer satisfaction on future purchase intentions also has been widely discussed either from a management or a marketing perspective (Hellier et al., 2003; González et al., 2007; Gounaris et al., 2010). In the aviation industry, service quality describes an extended list of activities, from purchasing a ticket, to arriving at the final destination and luggage collection, post-flight. The airline industry is very competitive; thus, it is important for airlines to understand and meet customer expectations appropriately (Chow, 2015). Numerous studies have investigated the impact of service quality on customer satisfaction (Namukasa, 2013, Farooq et al., 2017), repurchase intention (Srivastava & Sharma, 2013) and customer loyalty (Hellier et al., 2013, Hapari et al. 2017), both in the airline industry and elsewhere.

A few studies focused on the behavioral intentions of consumers when selecting an airline. These are some factors identified in the literature that determine what influences customers' purchase intentions and decisions of airline selection, such as service quality, baggage services and purpose of travelling (Fig. 1).

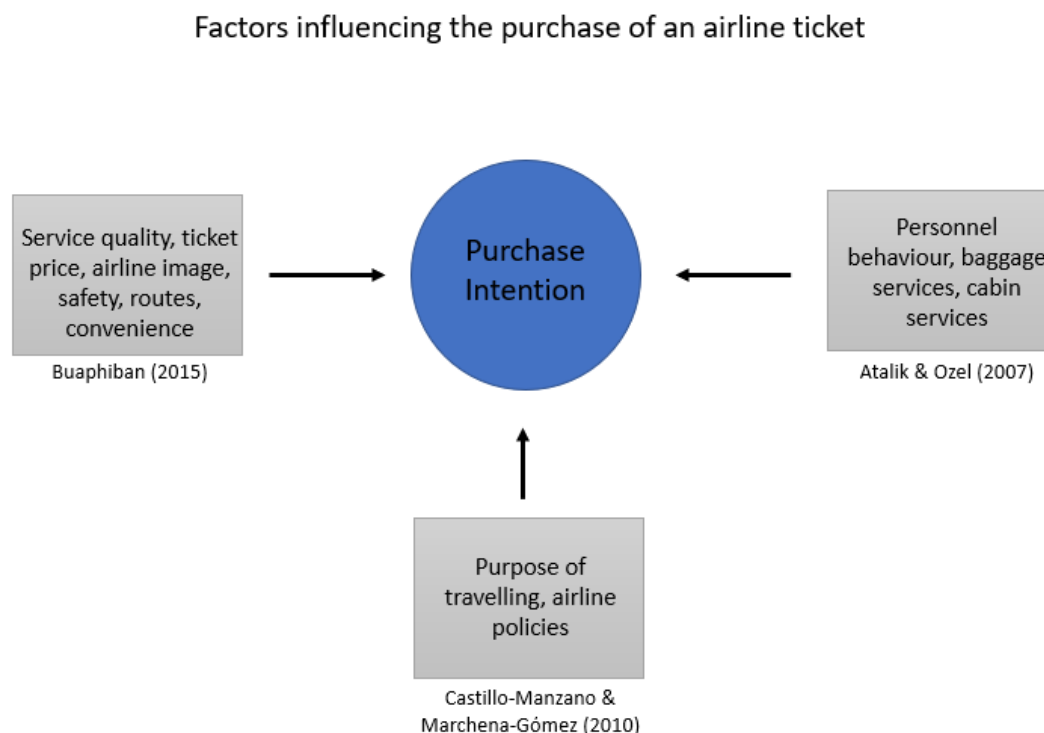


Figure 1: Studies about consumers' purchase intentions for airline tickets

Models like Figure 1 often refer to "service quality", but do not highlight the amplified importance of effective public relations, direct communication and transparency with customers via its channels or public media, when faced with a crisis. In that situation, curbing the crisis and regaining consumers' trust becomes a service priority (Yang et al., 2015, Beldad et al., 2018).

Following pandemic lockdown, thousands of airline passengers faced uncertainty and lack of information regarding their flights, which were cancelled after border closures and a flight ban which was enforced by almost all countries around the world. Further, customers whose flights were cancelled by Aegean Airlines faced financial loss if they could not immediately utilize credit vouchers, and were unable or unwilling to wait 12 months for a possible refund in the future. This paper investigates, as a case study, the impact on Aegean Airline's customer satisfaction of AA's poor crisis communication and customer service during COVID-19, combined with their no-refund policy, and whether that customer satisfaction level may influence customers' future purchase intentions

H1:

An airline's perceived-as-poor support communications (PSC), in the context of a no-refund policy during a pandemic crisis, has an impact on customer satisfaction.

H2: Customers' satisfaction levels with an airline's responses to a crisis have an impact on their intended, future purchase decisions with the same airline.

2.3 Cancellation policy and repurchase intention

There are many factors that control customer satisfaction and repurchase intentions with the delivered product or service, such as quality, customer service, after-purchase service and policies such as a money-back guarantee and cancellation policy. In the early days of commercial aviation, airlines adopted the policy that a customer could cancel their reservation at any time without paying a cancellation fee (Aydin et al., 2013). Since approximately 30–35 per cent of airline bookings in the 1990s were canceled before departure, the booking management process had to be able to update their terms and policies to control cancellations and impose some sort of penalties (Chen, 2016). Cancellation policies are primarily designed to minimize losses (Smith et al., 2015) as it could be a major loss in business revenue (Aydin et al., 2013). Customers' search behavior and willingness to book, are affected by cancellation policies and cancellation fees (Chen et al., 2011, Chen & Xie, 2013).

The present literature on cancellation policies, however, is largely focused on *customer*-initiated cancellations, and does not generally address consumers' reactions to cancellations that are initiated by airlines. Airlines cancel flights for several reasons, such as overbookings, operational reasons or natural disasters. COVID-19 has caused mass flight cancellations due to countries' decisions to close borders to visitors, putting airlines under the severe pressure of thousands of customers' inquiries about the status of their flights and their options after the enforced cancellation. This research investigates consumers' responses in the case of Aegean Airlines' cancellation policy, as implemented during a pandemic.

H3:

An airline's no-refund cancellation policy during the crisis has a negative effect on passengers' intention to use the same airline again

2.4 Air transportation and destination image

The term destination image first appeared in literature in the 1970s (Hunt, 1972). Destination image is based on attributes, functional consequences, expected benefits, and the symbolic meanings or psychological characteristics that travelers correlate with a specific destination (Padgett & Allen 1997, Tapachai & Waryszak 2000, Govers et al., 2007). There are numerous studies on the relationship between destination image and destination preference or visitation intention (Baloglu, 2000); destination familiarity (Court and Lupton, 1997); tourists' geographical locations; trip purpose; and the image as projected by the destination (Govers et al., 2007).

The attractiveness of tourist destinations derives from their natural resources (e.g. their natural beauty or the local culture), combined with the existing infrastructure (e.g. hotels, airports, restaurants, shopping centers). These two fundamentals are interlinked as natural resources can make a basis for the development of infrastructure (Bieger & Wittmer, 2006). Yet, the volume of tourists in turn influences the types of infrastructure that are built in a tourism destination, and sometimes there are so many tourists that they reduce the quality of the tourist experience (Bieger & Wittmer, 2006). Literature also suggest that service perceived in relation to LCCs plays an important role in affecting a passengers' future behavioural intentions in revisiting the same destination and willingness to recommend the destination to others (Hsu et al., 2016).

From a tourism destination perspective, repeat visitation has served as an indicator of the favourable perception of the "destination brand" in question (Pike, 2005; Oppermann, 2000).

Repeat visitation has been associated with positive word-of-mouth, competitive price and amenities of the flight, and other demographic, psychological, and . One of the aims of this study is to explore how a national carrier's responses to a widespread, non-voluntary cancellation crisis can impact that nation's destination image, in connection with other motivational variables.

H4: Passengers' intentions to not repurchase from the airline are extended to the destination image and revisiting Greece.

H5 : A refund from other Greek tourism businesses apart from Aegean Airlines, has an impact on holiday makers' intention to revisit Greece.

3. Aegean Airlines case study

Aegean airlines is the flag carrier airline of Greece and the largest Greek airline. Aegean started operating in 1999 and became a star Alliance member in 2010. As of 2019, the fleet consists of 61 aircraft and is currently comprised by 47 Airbus family aircraft and 14 Bombardier Q series family aircraft (Aegean Group, 2020). In October 2013, Aegean Airlines acquired Olympic Air which resulted in increasing flight frequencies and connections to Greek islands, including some of the more remote. In 2018, Aegean transferred 14 million passengers, that is a 6 % increase since 2017 (Aegean Group, 2020). Aegean's 2019 timetable included a network of 151 destinations, 31 domestic and 120 internationals in 44 countries (Aegean Group, 2020). Aegean Airlines accounted for 49 % of passenger traffic in the Athens Airport in 2016, followed by Ryanair (16.3 %), Lufthansa (3.1 %) and EasyJet (2.8 %) (EU, 2018). According to official European Union data (2018), tourism is an important contributor to the Greek economy. In 2016, tourism directly contributed 6.4% to the country's GVA and supported nearly 366 thousand jobs, which constituted approximately 10% of jobs in Greece. 2016 was the 4th record year for the country in terms of international tourist arrivals, totaling 28 million visitors, an increase of 7.5% on 2015. Visits from the EU accounted for 61.3% of all arrivals, representing an overall growth of 15% in 2016.

Amid the COVID-19 outbreak, Aegean had to cancel nearly all international flights and many national routes. In March 2020, the Aegean Air Chairman, Efthimios Vasilakakis said that the airline was operating at 0.05% of its daily total capacity and asked for government's support to recover from massive losses due to the pandemic. The airline had 70% of its employees on furlough since March 2020, while reporting financial damage of 85.4 million euros for the first three months of 2020 (Kathimerini, 2020). Aegean Air received hundreds of complaints online regarding their refund policy (iEfimerida, 2020). The company publicly announced in February 2020 that all customers who had booked a ticket between the 23rd of February and the 20th of March could reschedule their flight with no additional cost or request a refund for their cancelled flights (iEfimerida, 2020). Later in March, the company removed the refund option from their website, and started issuing credit vouchers to all its customers who had cancellations at later dates (iEfimerida, 2020). Then, on July 1, Aegean announced that the company will top up an additional 10% on the value of customers' credit vouchers, which must be redeemed within 18 months; and only if not utilized by then, can customers claim refunds for the cancelled flights. (Travelstyle, 2020).

4. Provisional Conceptual Framework

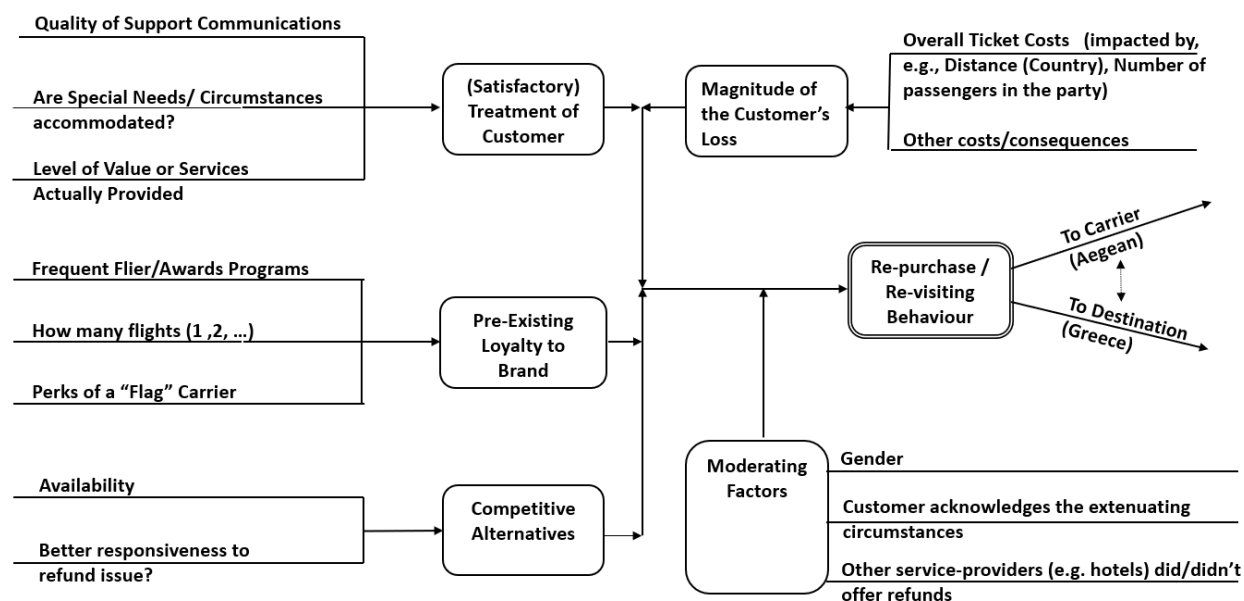


Figure 2: Provisional conceptual framework regarding re-purchase/re-visiting behaviour, to the carrier and/or to Greece, under crisis, mass-cancellation circumstances

The conceptual framework presented here adapts elements from those in the reviewed literature—which largely address normal circumstances. The roles of service quality and of competitive pressures are examples. However, the framework depicted in Figure 2 also addresses some research gaps in measuring customer satisfaction in the airline industry, in contexts of corporate crises. In those situations, all parties can likely expect *some* inconvenience or loss; but the impact can perhaps be mitigated.

This study aims to provide evidence to support a number of hypotheses that are suggested by the conceptual framework. The paper also presents some observations based on textual analyses of customers' comments, which suggest possible hypotheses for additional research and testing.

This study is intended as an exploratory pilot study. The cancellation crisis was still in progress when data were collected, and different airlines were offering different bonuses and incentives. The authors wanted a snapshot of customers' reactions to a specific airline, with specific policies and communications stances in place at that time (which could conceivably change), which impacted them. It was, therefore, not intended to test, systematically, all relations in Figure 2; rather, to draw out preliminary data to support key relations in the framework, especially those that may not be highlighted in the existing literature, and also to inform a potentially more comprehensive study to follow.

5. Methodology

5.1 Data collection

The anonymized raw data for this study were obtained by means of an online survey that was developed and disseminated through Surveyplanet™, between the 25th of June and the 19th of August 2020. The survey link along with a short description of the study purpose were placed on various online travel groups as well as on the official Aegean Airlines (AA) Facebook page. Participants were sought who had been impacted by Aegean Airline's policies for Covid-related flight cancellations. Only people who booked their flights with Aegean Airlines and experienced cancellation or altered travel plans related to COVID-19 pandemic were invited to complete the survey.

A total of 258 valid respondents completed the survey, answering questions about their experiences with Aegean Airlines during the COVID-19 pandemic, as well giving other demographic and contextual information. The majority of respondents (93%) had their AA flights cancelled amid the lockdown, subject to their no-refund, voucher-only policy. The few exceptions were respondents with other, related grievances: The majority of these were non-Europeans with exceptional circumstances like US travelers who were banned from entering Europe but had connection flights within EU that hadn't been cancelled, or Australians who were banned from leaving home.

The exploratory intent was to collect data for initial understanding of the variables' relationships, and to inform the design of a follow-up instrument, for testing and subsequent study. Participants were asked whether they attempted to contact the airline, once or more than once, after the enforced cancellations following the lockdown; and asked their level of satisfaction upon contacting the airline with regards to their flight being cancelled. Their level of satisfaction with the airline's customer service was measured on a Likert scale, from totally-unsatisfied [0] up to highly satisfied [10]. Participants were asked, as well, if their own flight with the airline was cancelled (as distinguished from, for example, problems arising from international travel bans). Demographic questions included were for gender and age ranges.

Participants were asked, as well, whether Aegean's policies "might affect", negatively, their future decisions to use the airline again and/or to revisit Greece. These responses were measured with 10-point Likert scales, ranging from 'Low (1)' to 'High (10)' levels of expected impact. To minimize any potential circularity of these questions with respect to the question about respondents' Satisfaction, the two forecast questions did not ask respondents to report *feelings* or *judgments* about the airline or country, such as "Do you feel they should be boycotted?"; rather, the focus was on the participant's *anticipated concrete actions*.

Additionally, respondents were asked how often they had used Aegean Airlines previously, if at all. Their answers were intended as a proxy indicator for customer loyalty, to see if this variable had an impact on their decision-making process. A final question was about their purpose for travel to Greece; and for participants who were flying for holiday purposes, whether they received a refund from other businesses in Greece, such as hotels, or car rentals). One additional, open-ended comment question, allowed for responses that could be analyzed for common themes.

5.2 Data analysis

A mixed-methods approach was used to analyze the data for this exploratory study. Data were collected in the midst of an ongoing global, and novel, crisis. Textual analysis was used to identify, and code, themes in respondents' comments; and the most prevalent themes were carried forward into the study's quantitative analysis, via appropriate dummy variables.

The primary quantitative analyses for the study were logistic regressions. The raw data for the analyses do not support the assumptions for using linear-regression-based models. Ordinal dependent variables were considered for these analyses, for satisfaction and for action intentions. These were transformed from the raw Likert values for these variables in the data, with transition cutoffs for the ordinal categories that reflected the distributions of the raw data, such as based on quartiles. (The specific cutoffs applied are detailed below, where the distributions of the raw data are displayed.) Where the appropriate modelling assumptions applied, ordinal logistic regression was used; otherwise, binary logistic regression models were used instead.

The predictor variables for these analyses were dummy variables for either specific variables, such as a flag indicating the theme of Poor Support Communications, or for specific ordinal categories of variables, such as whether a person's Satisfaction level reached the highest ordinal category.

For all the quantitative techniques, the data were loaded into Minitab™ Version 20 for implementation. For the preliminary textual analyses of the open-ended text in the comment fields, repeat themes were assessed qualitatively. Two of the authors read every participant's comments, and reached a consensus about what themes were present in each one's comments—flagging these with “1”s in corresponding columns for dummy-variables for those themes, which were added into the dataset. (The dummy variables' default values were “0”s, if the corresponding themes were not present in someone's comments). A few of these textual themes complemented responses found also via the survey's short-answer questions: For example,

survey answers indicating that multiple non-successful attempts were made to contact the airline aligned with comments (not necessarily made by the same respondents) that could be summarized as highlighting poor service-support communications. Similarly, survey answers about *other* airlines or entities giving refunds aligned with similar themes made via comments. In such cases, dummy variables were created, which flagged records in which a respondent pointed to a theme, such as Poor Support Communication—regardless of whether this occurs via a short-answer response, or an open-ended comment, or both.

Before proceeding to test the hypotheses, descriptive statistics were prepared, to illustrate the distributions of each of the variables, including the dummy variables that were generated from textual analysis.

6. Results

6.1 Descriptive statistics

Table 1 shows the distributions of the demographic variables Gender, Age, and Region of Residence, among the respondents. There is a prevalence of females (56.6%) over males (43.4%), and a trend to older age groups. Only 4 participants (1.6%) are below 25, and the plurality, 107 (41.5%) are above 45. Respondents' locations were varied with dominance from Europe, followed by the UK, Australia, and the USA.

Gender	n (%)
Female	146 (56.6%)
Male	112 (43.4%)
Age	
18-25 Years	4 (1.6%)
25-35 Years	55 (21.3%)
35- 45 Years	92 (35.7%)
>45 Years	107 (41.5%)
Region_Residence	
AFRICA	6 (2.3%)
ASIA	2 (0.8%)
AUSTRALIA	31 (12%)
CONT'L EUROPE_NOT GREECE	127 (49.2%)
GREECE	7 (2.7%)
MIDDLE EAST	8 (3.1%)
N. AMERICA	15 (5.8%)
UK or IRELAND	59 (22.9%)
Unclear	3 (1.2%)

Table 1: Distributions for Gender, Age, and Region of Residence

Out of the 258 respondents, 240 had their own AA flight cancelled, whereas 18 were unable to fly because of their home countries' lockdown regulations, like USA and Australia.

Distributions of the three, Likert-scale variables are shown in Table 2. Unsurprisingly, most people who were recruited were quite dissatisfied.

Quantitative Variables	n	Mean	StDev	Minimum	Q1	Median	Q3	Maximum
Q4_How Satisfied	258	0.52	1.45	0	0	0	0	10
Q5_AffectReAirline	258	8.19	2.61	1	8	9	10	10
Q6_AffectReGreece	258	5.62	3.6	1	1	6	9	10

Table 2: Distributions for the three Likert-scale Variables

These data were transformed, for purposes of the logistic regressions. Table 3 shows ordinal categories that correspond to ranges of Likert-scale values in the raw data. The ranges' cutoffs reflect the actual distributions in the raw data, per Table 2. For Satisfaction, for example, *SatA* reflects the many cases with Likert value = 0 (the distribution's mode); *SatB* extends to roughly a standard deviation above the distribution's mean (Likert values 1 to 2); and *SatC* corresponds to all higher raw values for Satisfaction in the data. For the other variables, their ordinal category-ranges correspond to roughly the quartile ranges in their raw data: (1) the minimum value up to the "first quartile"; (2) from there to the "second quartile" (i.e., up to the median); (3) from the median up to the "third quartile"; and (4) from there to the maximum value.

Category Names, and Ranges of the Corresponding, Raw Likert Values				
Quantitative Variables	1	2	3	4
Q4_How Satisfied	SatA (0 - 0)	SatB (1 - 2)	SatC (3 - 10)	---
Q5_AffectReAirline	AffectAirlineQ1 (1 - 7)	AffectAirlineQ2 (8 - 8)	AffectAirlineQ3 (9 - 9)	AffectAirlineQ4 (10 - 10)
Q6_AffectReGreece	AffectReGreece_Q1 (1 - 1)	AffectReGreece_Q2 (2 - 5)	AffectReGreece_Q3 (6 - 8)	AffectReGreece_Q4 (9 - 10)

Table 3: Ranges used for Ordinal Categories for the Quantitative Variables

The distributions of three remaining variables that give background for the respondents' service experiences, are shown in Table 4. A large majority of participants (221, 85.7%) had tried to contact Aegean at least two times for a resolution of their concerns. (According to the comment fields, there were often *many* attempts made, without hearing back.) The distribution of numbers of previous flights was bimodal: Most participants were either flying for the first time (114, 44.2%) or had already flown more than two times (106, 41.1%). 74 participants (28.7%) were not flying for holiday purposes; but of those holidaying in Greece, three quarters of them had gotten at least some refunds for other services associated with their intended trip (139/184).

Background Variables	Response Options	Counts	Relative Frequencies
Attempts made to contact airline	No	11	4.3%
	Yes, once	26	10.1%
	Yes, more than once	221	85.7%
How many previous flights with the airline	More than 2 times before	106	41.1%
	2 times before	25	9.7%
	Once before	13	5.0%
	This was the first time	114	44.2%
Refunds from other businesses (If flying for a holiday in Greece)	Not flying for a holiday	74	28.7%
	None	45	17.4%
	Yes, All	110	42.6%
	Yes, Some	29	11.2%

Table 4: Distributions for Contact Attempts, Previous Flights, and Refund from Other

6.2 Textual Themes

Among all participants who completed the survey, there were 78 unique participants who contributed optional, open-ended comments that included one or more of the coded themes summarized in Table 5. Poor service communication (PSC) was a featured complaint for over half (41, 52.6%) of those participants. For all comments combined, PSC represented over 1/3 of all mentions of coded themes (41/111). Other repeated themes include unfavorable comparisons with other service providers, lack of appropriate special accommodations, respondents' attempts to get refunds from their bank or credit card company instead of the airline, and consideration of taking legal action.

Number of Mentions of Specific Themes within Comments										Total mentions of coded themes
	Loyalty Expectation	Poor Communications	NoSpecial Accommodations	WorseThan Competitors	AirlineChallenges Acknowledged	Other ServicesGave Refunds	Considering LegalAction	GotAVoucher OrPartial Refund	TryingForBank OrCreditCard Refund	
Totals	9	41	9	13	1	10	8	10	10	111

Table 5: Distributions for Coded Themes within Comments

This overall distribution of comment themes is consistent across all the eight regions that are listed in Table 1. Figure 3 confirms this, with respect to the PSC theme. The numbers of

mentions of that theme in each region are closely proportional to the counts of study participants in the regions. This suggests that people's perceptions on this issue are consistent across regions, relative to numbers of people exposed to the same problem.

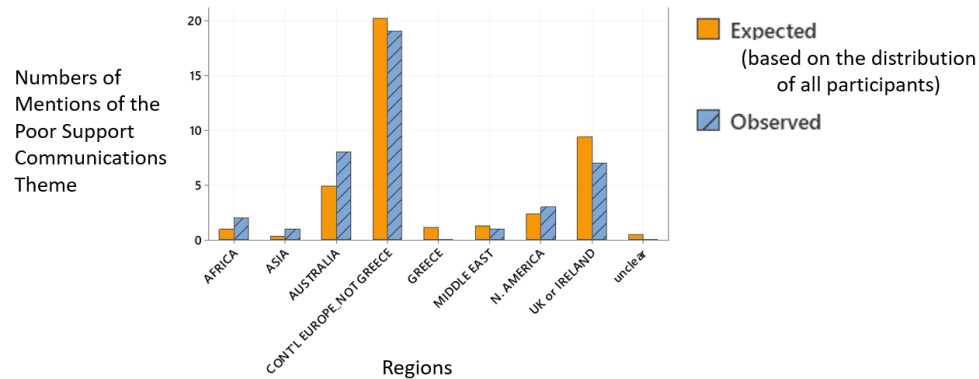


Figure 3: Poor Support Communications Theme Consistency Across Regions

From a qualitative research perspective, it can be useful to not just encode themes, but to also look at individual quotes more fully. This gives a sense of participants' lived experiences through what they have encountered (Boylorn, 2008). What were the actual experiences of people who, thematically, flagged a communications problem?

According to one respondent from the UK, *"Tried to ring them, waited 15 minutes on hold and then the line dropped, " Tried different numbers, no reply. Emailed them and got automatic reply back."* An Australian respondent summarized, *"They make it very difficult to contact them and get refund. I will never again use Aegean."* That was a common conclusion. But another respondent from the UK was more forgiving, *"I would still fly with them, though, in the future, as I understand these were exceptional circumstances."*

The last quote illustrates an important point: A person's *satisfaction* with the airline's responses was conceptually different from that person's forecast of whether they would *change their purchase behaviour* as a consequence.

Some people expected that past loyalty should be rewarded—if nothing else, in terms of communications support: A respondent from Russia wrote, *"I am Silver status passenger for Aegean and had more than 50 flights with Aegean..... I was caught by Aegean cancellation abroad in the middle of a return trip (same ticket); and I was surprised to find they stop online support with rebooking. No more euros will be [spent] for Greece or Aegean ever."*

There were other concerns that no special accommodations were experienced: A respondent from the UK wrote, *"I am pregnant and I can't reschedule the trip and they have not even responded to my email."* Writes another from the UK, *"I explained to Aegean this flight [is] for my 85 years old father to return to UK following death of his wife. He will not be flying again due*

to his age/health so a voucher that cannot be refunded until 12 months have passed was useless.”

Customers with knowledge of experience with competitors were disappointed, as well: *“Ryanair and Wizz managed to return the money, Aegean didn’t.”* and another respondent from France *“I had no troubles with some other low-cost carrier but Aegean behaved the worst with the customers.”*

6.3 Hypothesis Testing

The research hypotheses of this paper are assessed primarily through logistic regressions, as discussed in Section 5.2. Conclusions are intended to be general, for airlines in similar circumstances to the case study. It is acknowledged, however, that the data available for tentative findings, are based on inputs from customers for one specific airline, under the unique circumstances it was facing at that time. For evaluating the overall weight of evidence, mentions of p-values or “statistical significance” are intended as just one consideration among others, including effect size.

6. 3.1: Hypothesis 1 (H1) – An Airline’s perceived-as-poor support communications (PSC), in the context of a no-refund policy during a pandemic crisis, has an impact on customer satisfaction.

Conditions were satisfied for performing an ordinal linear regression, with the ordered-category response variable *OrdinalSat*, transformed from the raw *Satisfaction* data. Results for three alternative models are shown in Figure 4.

For each predictor variable, the Odds Ratio represents the change in odds for reaching a higher *Satisfaction* value, versus lower *Satisfaction* values, if the binary predictor variable takes the value shown in the figure’s left column (e.g., a “1”) rather than the alternative (the “base case”, e.g., “0”).

The odds for an event occurring (e.g., attaining *Satisfaction* level *SatC*) are defined by the ratio $p/(1-p)$, where p is the probability of the event occurring. Technically, the model forecasts the *natural log* of the odds for the response event, using the coefficients displayed at the left of each panel in the figure; so, for each predictor, the corresponding odds ratio (OR) equals the antilog of the displayed coefficient. For example, in **Model 1**, $OR = e^{(\text{Coefficient for Poor Support Communication} = 1)} = e^{(-1.967)} = 0.14$

Response Variable	Value	Count
OrdinalSat	SatC	16
	SatB	38
	SatA	204
	Total	258

Link Function: Logit

Predictor	Model 1						Model 2						Model 3					
	Coef	SE Coef	P	Odds Ratio	95% CI Lower	95% CI Upper	Coef	SE Coef	P	Odds Ratio	95% CI Lower	95% CI Upper	Coef	SE Coef	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-1.257	0.353	0.000				-2.346	0.7466	0.002				-1.517	0.4313	0.000			
Const(2)	0.277	0.325	0.394				-0.713	0.7251	0.326				0.1218	0.4067	0.765			
PoorSupportCommunication 1	-1.967	0.371	0.000	0.14	0.07	0.29	-1.845	0.3935	0.000	0.16	0.07	0.34	-1.788	0.3847	0.000	0.17	0.08	0.36
FlightCancelled 1							0.3839	0.6864	0.576	1.47	0.38	5.64						
Q1_Gender Male							-0.527	0.3433	0.125	0.59	0.30	1.16						
MoreThan2Flights 1							0.9887	0.34	0.004	2.69	1.38	5.23	0.9678	0.3339	0.004	2.63	1.37	5.06
NotForHoliday 1							0.7337	0.3451	0.033	2.08	1.06	4.10						
WorseThan 1													-0.981	0.3389	0.004	0.37	0.19	0.73
Log-Likelihood	-152.2						-143.2						-142.5					
G Test of All Slopes Equal Zero	$G = 25.888$, $df = 1$, $p < 0.001$						$G = 44.047$, $df = 5$, $p < 0.001$						$G = 45.278$, $df = 3$, $p < 0.001$					
Goodness-of-Fit Tests																		
Pearson	$\chi^2 = 1.037$, $df = 1$, $p = 0.308$						$\chi^2 = 39.010$, $df = 39$, $p = 0.469$						$\chi^2 = 5.758$, $df = 11$, $p = 0.889$					
Deviance	$\chi^2 = 1.067$, $df = 1$, $p = 0.302$						$\chi^2 = 39.010$, $df = 39$, $p = 0.102$						$\chi^2 = 5.653$, $df = 11$, $p = 0.895$					
Measures of Predictive Ability																		
Concordance Ratio	0.33						0.71						0.67					
Somers' D	0.27						0.50						0.50					
Goodman-Kruskal Gamma	0.72						0.53						0.58					
Kendall's Tau-a	0.10						0.17						0.17					

Figure 4: Ordinal Logistic Regressions for the Response Variable *OrdinalSat*

On these interpretations, Model 1 appears to tentatively support **H1**: The reference case for the ordinal dependent variable is SatC, corresponding to the highest raw values obtained for satisfaction (Likert values at least 3). Figure 4 shows that if a customer flags Poor Support Communication (PSC) by their responses to the survey, or via a comment, the odds of their reaching SatC, compared to a lower satisfaction category, are reduced x 0.14 (the odds ratio). That is, the odds of their expressing the highest satisfaction level, if they experience PSC, are reduced by a factor of about 7. This effect size could be considered “large” (Chen et al.,2010); and the result is nominally significant (p-value = 0.00). In the other panels of the figure, where control variables have been included in the model, the odds ratio for PSC remains virtually unchanged.

An assumption of ordinal logistic regression is *proportional odds*, for every transition of the response variable’s ordinal categories. Just as, for example, a customer flagging PSC reduces their odds of reaching SatC (versus lower satisfaction) x 0.14, they also reduce the odds of their reaching *at least SatB* (versus a lower satisfaction) times roughly that same amount (0.14). (And so on, if there had been more lower categories.)

Below the left panel in the figure, the Goodness of Fit tests indicate that the data reasonably fit the distribution assumptions for the logistic regression model (they are not “significantly”

different from them). The G test “of all slopes equal zero” is analogous to a test for overall significance of a regression, and suggests the model is significant. The Somer’s D measure and Concordance Ratio suggest some predictive ability for the model; for example, the actual response values match the predicted ones in 33% of cases.

Adding additional predictors to the model is seen to improve its predictive ability. In Model 2 (concordance ratio = 71%) the predictor “more than two flights” (i.e, frequent flyer) increases the odds of greater satisfaction x 2.69, and having flown *not* for a holiday increases the greater satisfaction odds x 2.08. Both are significant, and are lower-medium effect sizes. The variables Gender, however, and whether one’s own flight was Cancelled, do not have an appreciable impact; both effect sizes are quite low (factors of about 1.5), and they are not nominally significant ($p > 0.05$).

H1 Is supported.

Model 3 explores the additional, possible impact of a dummy variable called “WorseThan”. The qualitative data reveal a negative impact if a respondent is aware that *other* airlines or businesses gave refunds, though Aegean found reasons not to do so. “WorseThan” has a value “1” if either or both: A participant commented on this discrepancy, or they noted in the survey that other businesses gave refunds. Although this predictor appears to have a significant, medium impact on satisfaction (odds ratio = 0.37, $p < 0.005$), adding it to the model does not clearly strengthen the its overall, predictive ability compared to Model 2; for example, its concordance ratio (67%) is less than Model 2’s (71%). One possible reason is that the variables “NotForHoliday” and “WorseThan” are strongly, inversely correlated with each other, so they could not be both included in the model, together. (This is because when NotForHoliday is flagged True, then a common reason for WorseThan being flagged True—namely, other Greek businesses gave a refund on the holiday—can’t arise.)

6.3.2: Hypothesis 2 (H2) – Customers’ satisfaction levels with an airline’s responses to a crisis have an impact on their intended, future purchase decisions with the same airline.

To analyze factors that impact on intentions to repurchase from the airline, the proportional odds assumption was not met, for attempting an ordinal logistic regression. An alternative approach is dichotomizing the ordinal response variable, at each cutoff point between its ordered levels. Binary logistic regressions were run for each of these dichotomized response variables.

Response Variable Distributions				Value	Count		Value	Count		Value	Count							
EVENT:				1	205	*	1	155	*	1	118	*						
				0	53		0	103		0	140							
				Total	258		Total	258		Total	258							
Link Function: Logit				* [Raw Likert Scores ≥ 8]			* [Raw Likert Scores ≥ 9]			* [Raw Likert Scores = 10]								
Response Variable:	Expected Impact on Purchase is at least in the Second Ordinal Category						Expected Impact on Purchase is at least in the Third Ordinal Category						Expected Impact on Purchase is at least in the Top Ordinal Category					
Predictor Variables	Coef	SE Coef	P	Odds Ratio	95% CI Lower	95% CI Upper	Coef	SE Coef	P	Odds Ratio	95% CI Lower	95% CI Upper	Coef	SE Coef	P	Odds Ratio	95% CI Lower	95% CI Upper
Constant	-0.646	0.753	0.39				-0.448	0.683	0.512				-0.426	0.683	0.533			
OrdinalSat_SatB 1	-0.703	0.459	0.126	0.49	0.20	1.22	-0.982	0.397	0.013	0.37	0.17	0.82	-1.446	0.459	0.002	0.24	0.10	0.58
OrdinalSat_SatC 1	-2.357	0.672	0.000	0.09	0.03	0.35	-1.324	0.64	0.039	0.27	0.08	0.93	-1.352	0.696	0.052	0.26	0.07	1.01
PoorSupportCommunication 1	1.600	0.457	0.000	4.96	2.02	12.14	1.049	0.434	0.016	2.86	1.22	6.68	0.414	0.447	0.355	1.51	0.63	3.64
MoreThan2Flights 1	-0.615	0.366	0.093	0.54	0.26	1.11	-0.402	0.285	0.158	0.67	0.38	1.17	-0.297	0.278	0.285	0.74	0.43	1.28
Q1_Gender Male	0.697	0.385	0.071	2.01	0.94	4.27	0.613	0.283	0.030	1.85	1.06	3.21	0.467	0.269	0.083	1.59	0.94	2.70
FlightCancelled 1	1.189	0.585	0.042	3.28	1.04	10.34	0.196	0.54	0.717	1.22	0.42	3.51	0.13	0.535	0.807	1.14	0.40	3.25
WorseThan 1	-0.038	0.376	0.92	0.96	0.46	2.01	-0.153	0.287	0.595	0.86	0.49	1.51	-0.104	0.275	0.705	0.90	0.53	1.55
	Deviance R ²			21.38%			Deviance R ²			9.62%			Deviance R ²			7.56%		
	Deviance R ² (Adjusted)			18.71%			Deviance R ² (Adjusted)			7.60%			Deviance R ² (Adjusted)			5.60%		
	Area Under ROC Curve			0.752			Area Under ROC Curve			0.682			Area Under ROC Curve			0.654		
	AIC			222.0			AIC			329.7			AIC			344.9		
	BIC			250.4			BIC			358.2			BIC			373.3		
	Wald Test			χ ² =41.65, df=7, p<0.001			Wald Test			χ ² =27.82, df=7, p<0.001			Wald Test			χ ² =21.82, df=7, p<0.005		

Figure 5: Binary Logistic Regressions for Dichotomized Response Variables, at the Cut-offs for the ordinal variable AffectReAirline

The bottom predictor row in the figure illustrates what proportional odds would look like, though clearly, in this case, that predictor is not contributing to this model, based on both p-values and OR's that approximately equal 1. But note that whenever the bottom predictor is flagged, the displayed odds ratios are approximately the same for all panels in that row.

The odds changes are not proportional in that manner, for example, for the effects of Satisfaction on expected-impact-on-purchase. The odds ratios across rows for satisfaction are not all approximately equal.

The base case for satisfaction in the analysis is SatA, corresponding to a *zero* score in the Likert-scale raw data. If satisfaction is in the highest category, SatC (second predictor row in the figure), that markedly decreases the odds for a higher expected-impact-on-purchase. SatC reduces those odds, with respect to reaching *at least the second ordinal category* for the response (left panel), x 0.09. This large OR is an odds reduction by a factor of 11; and the p-value is < 0.001. Although SatC reduces the odds also (in the middle and right panels) with respect to obtaining at least the third or the fourth ordinal levels of impact on purchase decision, those reductions are notably less than the factor of 11, for the left panel. In those other cases, the odds reductions are approximately by a factor of 4.

The above suggests that higher satisfaction does, overall, have clear impact on repurchase intention—but is less predictive of what specific ordinal level will be reached for that variable, once it reaches at least the second level. Recall that the “second ordinal level” for purchase

intention refers already to a Likert-score of at least 8 in the raw data. Whether the fine-tuned differences in purchase-intention raw scores, from 8 to 10 would translate to actual differences in purchase *behaviours* in the future, would need more study.

The odds pattern described above is reversed for the predictor SatB, which is the middle ordinal category for satisfaction (the first predictor listed in the figure). Where SatB applies, the largest odds change for the response variable occurs in the *right* panel. The OR, given SatB, for reaching at least the *top* ordinal category for purchase-decision impact is 0.24 ($p = 0.002$), reducing odds by a factor of 4. Moving left, the odds impact is less: The OR, given SatB, for reaching at least the third ordinal category for purchase decision is 0.37 ($p = 0.013$), a factor of 3 odds reduction. Level SatB may have no impact at all on the odds of reaching (left panel) at least the second purchase-decision category. The confidence interval for that OR wraps around the value 1.0, implying no clear effect.

The above suggests that a lower level of satisfaction, if it is at least greater than zero, does reduce the odds of reaching at least the highest two levels of purchase-decision impact, which might salvage a few sales for the airline. But unfortunately, from a sales viewpoint, satisfaction level SatB will not likely impact the chance of whether the Likert level of impact on repurchase reaches at least 8.

Of other control variables considered, the most generally impactful is Poor Support Communication, with, again, non-proportional odds across levels of the response-variable. When PSC is flagged, the odds of reaching *at least* the second ordinal response level (Likert score at least 8) for purchase intention increase times 5. But PSC has markedly less effect on odds ($OR = 2.86$) for a jump to at least the third response level (raw score at least 9); or on odds ($OR = 1.51$, $P > 0.05$) for a jump to at least the fourth level (raw score = 10). Similar to the point made for SatC, PSC appears to have, overall, have clear impact on repurchase intention, in conjunction with satisfaction—but it is less predictive of what specific ordinal level will be reached for that variable, if it reaches at least the second level.

None of the remaining variables considered—MoreThan2Flights, Gender and FlightCancelled—appear to clearly affect the odds for increased purchase decision impact, if effect sizes and p-values are both considered.

Comparing Figures 4 and 5 suggests that predictors WorseThan and MoreThan2Flights may yet impact on purchase decision—but only as mediated by Satisfaction. That is, neither variable impacts the odds for purchase decision directly; but both impact the odds for satisfaction, which in turn impacts purchase decision.

Based on the measures on the bottom of Figure 5, the left panel seems to represent the strongest model of the three, for predicting the expected impacts on purchase decision. Its R-square shows the model accounts for over 20% of the variation in the data, compared to much smaller R-squares for the other models. Also, the left model's higher area under the ROC curve, indicates

greater classification accuracy than the others', and its lower values for AIC and BIC are preferable, when comparing models.

All told, this evidence supports H2. Customers' satisfaction levels impact their level of intent to re-purchase.

6.3.3: Hypothesis 3 (H3) - An airline's no-refund cancellation policy during the crisis has a negative effect on passengers' intention to use the same airline again

Intuitively, it seems that if the airline had a more popular policy for refunds, its customers would not be questioning their re-purchase decisions. This also appears supported in some of the quotes discussed in Section 6.2, along the lines of "The cancellation had urgent, and time-sensitive impacts, for which vouchers would not be helpful.

But for testing H3 formally, the study was constrained because the airline's refund policy was a given for all participants; there was no comparator group who experienced a different policy. This also applied for commenters. An airline could, nominally, have had a better policy, yet a customer might still be angry about their lived emergency, if they needed replacement cash *immediately*.

To begin addressing this challenge, the dummy variable *WorseThan*, described in Section 6.3.1, can partly serve as a proxy, for the contrast between Aegean's no-refund policy and policies of other airlines and businesses that gave refunds. A participant with *WorseThan* = "1" indicated, by their answers or comments, that they knew of alternative-policy organizations. Some of the *WorseThan* = "0" participants, on the other hand, may not have realized, despite other grievances, that Aegean's policy was not universal for the industry. Did being in first group increase the chances of expecting a negative impact on one's repurchase intention?

As noted in the second to last paragraph of Section 6.3.2, the *WorseThan* predictor has been found to *not* directly affect the odds for a higher-level of expected impact on purchase. But it is significant impactor (OR = 0.37, $p < 0.005$) on a participant's level of satisfaction, which, as essentially a mediator, does impact the purchase decision.

In that sense, though H3 is not formally tested, it appears that whether or not the airline could have had a different policy, it could have mitigated the dissatisfaction level, through better communications, for example, and this could have reduced the impact on repurchase decisions.

6.3.4: Hypothesis 4 (H4) - Passengers' intentions to not repurchase from the airline are extended to the destination image and revisiting Greece.

Hypothesis 5 (H5) - A refund from other Greek tourism businesses apart from Aegean Airlines, has an impact on holiday makers intention to revisit Greece.

Figure 6 explores the impact of the repurchase-decision variable, as a predictor, on the intention to revisit Greece, with controls for other possible predictors, including ordinal Satisfaction levels (Base case = level SatA).

Response Variable	Value	Count
AffectReGreece_Binary	1	132 (Event) {Raw Likert Scores ≥ 6 }
	0	126
	Total	258

Link Function: Logit

Predictor	Model 1						Model 2					
	Coef	SE Coef	P	Odds Ratio	95% CI Lower	95% CI Upper	Coef	SE Coef	P	Odds Ratio	95% CI Lower	95% CI Upper
Constant	0.200	0.746	0.789				-0.035	0.519	0.946			
AffectRePurchase_AtLeastIn 2 nd OrdinalCategory 1	1.791	0.451	0.000	5.99	2.48	14.51	1.652	0.423	0	5.22	2.28	11.96
OrdinalSat_SatB 1	-0.861	0.425	0.043	0.42	0.18	0.97	-0.829	0.429	0.053	0.44	0.19	1.01
OrdinalSat_SatC 1	-2.400	1.130	0.033	0.09	0.01	0.82	-2.27	1.09	0.038	0.10	0.01	0.88
PoorSupportCommunication 1	-0.387	0.500	0.439	0.68	0.25	1.81						
MoreThan2Flights 1	-0.858	0.291	0.003	0.42	0.24	0.75	-0.788	0.291	0.007	0.46	0.26	0.81
Q1_Gender Male	-0.018	0.287	0.951	0.98	0.56	1.72						
FlightCancelled 1	-0.846	0.603	0.161	0.43	0.13	1.40						
WorseThan 1	0.121	0.291	0.677	1.13	0.64	2.00						
OthersInGreeceRefundedMe 1							-0.743	0.414	0.073	0.48	0.21	1.07
NotForHoliday 1							-1.236	0.455	0.007	0.29	0.12	0.71
	Deviance R ² 16.29%						Deviance R ² 17.65%					
	Deviance R ² (Adjusted) 14.06%						Deviance R ² (Adjusted) 15.97%					
	Area Under ROC Curve 0.751						Area Under ROC Curve 0.761					
	AIC 317.3						AIC 308.4					
	BIC 349.2						BIC 333.3					
	Wald Test $\chi^2=37.49$, df=8, p<0.001						Wald Test $\chi^2=40.29$, df=6, p<0.001					

Figure 6: Binary Logistic Regressions for Dichotomized Response Variable for Affect on Visiting Greece

To reduce the model's complexity and improve fit, binary logistic regression is used, rather than ordinal. The response variable, *AffectReGreece_Binary*, is based on participants' Likert-scale responses for expected impact on future revisits to Greece. The threshold for assigning "1" is if the raw-data value is at least equal to the source variable's median, which is 6. The predictor variable of repurchase intention is based on whether at least the second ordinal category is

reached for the expected impact on purchase. This represents at least 8 on that variable's raw-data Likert-scale.

Model 1 shows that, all else being equal, a customer's higher expectation of reconsidering their purchase (...AtLeastIn2ndOrdinalCategory = 1) increases the odds times nearly 6 that their revisit-Greece decision will be impacted as well. (A large effect size; p -value < 0.001). This effect can be mitigated if there is some customer satisfaction. At the highest satisfaction, level SatC, the odds of reconsidering Greece are decreased $\times 0.09$, a factor of 11 ($p < 0.05$). Mitigation is less for satisfaction at level SatB, with a weaker OR = 0.42 ($p < 0.05$).

Frequent Flyers' loyalty, it appears, is more to the country than to its airline. Whereas the frequent flyer variable did not contribute meaningfully for predicting impacts on purchase decision (Figure 5), it does lower chances of reconsidering visits to Greece. (OR = 0.42, $p < 0.005$).

Based on p -values and small effect sizes, the other variables appear not to contribute meaningfully to the model. "Poor Support Communications" and "WorseThan", in particular, are both arguments against the *carrier*, and they do not appear to impact, directly, people's revisit-Greece decision.

Model 2 includes two other predictors: whether the trip was not for holiday, and whether other businesses in Greece gave the respondents refunds. Note that *WorseThan* included that same, latter information as being potentially negative—as examples that contrast with Aegean for *not* giving refunds. But with respect to image of the *country*, Greece, these same cases might be viewed positively. The OR direction in Model 2 is consistent with that possibility; the odds of reassessing a visit to Greece decrease if other Greek businesses gave refunds. But the effect size for OR (0.48) is relatively low, and the p -value is 0.073. Not having traveled on holiday however, does clearly mitigate the odds of reconsidering travel to Greece (OR = 0.29, a factor > 3; and $p < 0.01$).

Model 2 is the slightly stronger of the two models; it explains about 18% of the variation in the data (R-square), compared to 16% in Model 1. It has a slightly larger area under the ROC curve (0.761 compared to 0.751; "1.0" would be perfect), and lower AIC and BIC measures, which is preferred. Both models would be considered statistically significant, overall. ($p < 0.001$).

Therefore, while acknowledging potentially-mitigating factors in the model, the data support **Hypothesis 4**, that intentions to repurchase extend to the expected impact on revisiting Greece. Model 2 is suggestive that **Hypothesis 5** may also be true, regarding the impact if other Greek businesses gave refunds; but based on relatively low observed effect size and high p -values, it cannot be considered conclusive.

7. Discussion:

In a competitive and complex industry like aviation, there are many factors that should be considered when it comes to decisions that have direct impact on customers. In this study we conducted a survey to examine whether customer service and cancellation policy during the COVID-19 crisis are likely to impact customers' future decision to use the same airline again. The case of Aegean Airlines is used as a case study, since it is one of the European airlines that offered only credit vouchers valid for 12 months, instead of immediate refunds to customers impacted by cancellations. Tsafarakis et al. (2018) previously measured customer satisfaction of Aegean Airlines passengers and found that satisfaction depends on offers, value for money, service, and price.

This study revealed that 82% of respondents tried to get in touch with the airline more than two times without any success during the crisis, either to discuss their options after the enforced cancellation or to claim a refund. The results indicate a strong inverse relationship between level of satisfaction with the airline's communication and customer service during the crisis and repurchase intention. Some crisis-evoked emotions such as anger and sadness being prominent in crisis communication had remarkable behavioural implications (Wei & Kim, 2020) with many respondents commenting how AA customer service was unreachable by email or phone amid the outbreak. In fact, some of the comments used words that reflected negative emotions and disappointment like the expression "never again" which is repeated more than once regarding using the airline again. These results are backed by a recent study by Mehta et al. (2021) which used unsupervised sentiment analysis to measure people's satisfaction with how companies handled everyday business during the pandemic, and found that companies could not keep up to the expectations of customers. However, some respondents showed understanding and stated that the exceptional circumstances associated with the COVID-19 outbreak wouldn't impact their decision to fly with the same airline in the future.

Results are suggestive that non-frequent flyers are slightly more inclined against re-purchasing, following their negative customer service experience than those who used the airline more than two times. A possible explanation for this comes from the context of experience reflection. First time or occasional users' experience with the airline is based on their current experience amid COVID-19 crisis which is obviously negative; whereas frequent users have previous experiences which are likely positive because it has led them to repeatedly purchase tickets with Aegean Airlines. Similarly, frequently flyers are found more likely to still re-visit Greece, possibly due to positive associations and customer perceived value with past visits in the country. This result is supported by current literature about how satisfaction can influence repurchase intention amid the pandemic, and how brand image and perceived value affect customer satisfaction, regardless of the restrictions that the COVID-19 outbreak imposed (Yiuliantropo et al., 2019).

Comments from passengers like the silver member quoted earlier mentioned they may even forego their available free miles, showing that brand loyalty is not absolute. Failure to honour the cancellation policy and give the legally mandated refund is harmful to the business reputation, as well as trust damaging.

Many respondents seem to connect low price with poorer customer service, which added to their anger that Aegean Airlines, a flag carrier, responded to the crisis more poorly than LCCs', with respect to getting a refund, this can be explained by salient attributes of passenger satisfaction and dissatisfaction are differently perceived by passengers in economy or business class and full-service or low-cost carriers (Sezgen et al., 2019)

While vouchers seem to be a reasonable and acceptable solution, especially in a massive crisis like COVID-19 which left airlines in a fragile financial position and struggling to raise cash for their survival, passengers believe they should have the option to choose rather than being forced to accept vouchers, especially if they had no other plans to travel in the near future like many respondents stated, or had valid humanitarian reasons to reject the voucher option, such as health issues.

Another theoretical contribution of this study is the mediating role it shows is played by satisfaction with a national flag carrier's service and policies, and customers' intentions to revisit the national destination. Specifically, for the case study, it investigated if the Greek flag carrier's customer service and management of the crisis impacted on customers' image about Greece as a destination or their intention to visit Greece in the future. Although the impact of destination image on behavioural intentions and decision-making process is widely investigated by scholars (Tan and Wu, 2016; Kani et al., 2017), the relationship between airlines' service and destination image has not been widely explored yet. Hsu et al. (2016) found a significantly positive relationship between perceived airline service and destination image, as well as a significantly positive relationship between destination image and behavioural intention to revisit the destination. The results of this study also indicate positive relationship between customer satisfaction with Aegean Airline service and intention to visit Greece (more specifically, it shows that increased satisfaction reduces the odds of reconsidering future visiting to Greece). That finding is also reflected in several respondents' comments where it is clearly indicated that the airline's poor performance gives a bad impression about Greece. However some respondents seem to view the flag carrier airline as a separate entity from the country and wrote that they would still visit Greece, but maybe consider flying with another airline. Respondents were also asked about the purpose of flying to Greece and 71.3% who stated that they were traveling for holidays were asked if they received any refund from other Greek businesses (e.g hotels, car rentals etc.). The analysis did not reveal a clear, significant relationship between the refund of other businesses and intention to visit Greece, which can be due to several factors such as the relative lower value of reservations compared to the airline tickets.

8. Conclusions:

The aim of this pilot, exploratory study is to gain insights into how airline's customer service and cancellation policy during the COVID-19 outbreak impacted consumer perception and repurchase intention. While it is recognized that the mass cancellations led to higher volume of calls and requests than what the airline's customer service could handle, customers—especially loyal

ones—expect even better services during crisis times (Ma, 2018). The results of the survey suggest that customers were very dissatisfied with Aegean's customer service as customers tried to deal with their flight cancellations and the credit voucher option offered by the airline. Many respondents stated that they should have been given refunds for their cancelled flights for various reasons. The airline response, and non-response, in the sense of not answering phone calls and emails at all, and policy all seemed to greatly impact customer's intentions to rebook with the same airline again, with not much distinction between frequent flyers and others.

Airlines should understand the important role of brand equity in customer trust and satisfaction (Jiang et al., 2017). Previous studies emphasize the importance of communication with customers and stakeholders during and post crisis (Helm & Tolsdorf, 2013, Ham & Kim, 2019, Wei & Kim, 2020). Respondents' verbatim comments show that they had high expectations from the company during the crisis, being a flag carrier airline, and noted its comparative poor handling of the crisis, with respect to other popular LCCs (e.g. Ryanair) which lived up to their expectations. This accords with past research findings that customers have higher expectations from reputable firms (Roggeveen et al., 2007, Busuioc & Lodge, 2017) and they are more likely to switch to another company due to dissatisfaction if there is poor performance (Shapiro et al., 2001). The negative perception and loss of trust seem to be extended to Greece as a destination too. Respondents who were planning a holiday in Greece and were denied a refund from the airline seem to have a greater intention to avoid visiting the country in the future regardless of being fully or partially refunded by other businesses such as hotels and car rentals.

9. Study implications:

The findings of this study could be useful for policy makers and practitioners for better understanding the important dimensions of airline service quality. Customers expect higher standards of service quality from national flag carriers compared to LCCs. Companies should establish better communication with customers during crises and establish a better crisis management plan with full transparency. Lastly, it is recommended that the company reconsiders the voucher policy in order to retain their customer base and regain customer trust.

10. Limitations and future research

This study presents an exploratory snapshot of customers' responses to the crisis-handling of Aegean Airlines; however, there are a number of limitations. First the study used a convenience sample, recruited from social media travel channels and groups that were likely to be aware of the airline crisis, and affected by it in some way. Consequently, customers who seek advice in such groups may not be fully representative of the average traveler. For example, the study participants may be more outspoken than non-participants, who are not active users of social media and online travel channels. Second, the study's qualitative components aimed to get a richer sense of the participant group, to help inform future studies to get fuller representation, but generalizations from these data should be made with caution. Results from

the qualitative data could be used to design more thorough questionnaires, which are less dependent on direct self-report.

Also, the analyses carried some coded themes from the open-ended comments into the quantitative analysis, by means of dummy variables. A limitation is that if someone does not explicitly add a comment on a theme, they may, nonetheless, have had a similar experience. This could lead to underestimating the magnitudes of these variables' impacts on the odds for an Effect variable, since some in the group with the predictor dummy variable = 0 may have been misclassified. Therefore, the specific calculated magnitudes of OR's in these cases should be used with caution.

Future studies may examine the impact on consumer attitude and loyalty towards companies, and future repurchase intentions, for other hospitality and service industries, based on their cancellation policies, and crisis management and communication, during the COVID-19 crisis. This article is an attempt to answer the challenge raised by Zenker & Kock (2020) to evaluate whether present knowledge around tourism is still valid under the "new normal" powered by COVID-19. More and more top-tier hospitality journals request submissions related to the effect of the pandemic in the industry, since past findings might have become outdated (Piccinelli et al., 2021). Future research should focus on consumer concerns around their well-established consumer rights in these fast-changing situations.

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