

## CRISIS-RESISTANT TOURISTS – A STUDY OF HOTEL ONLINE REVIEWS IN THE TIMES OF COVID-19

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### Abstract

**Introduction.** Tourists traveling in the times of crisis have a higher tolerance for risk and can be called ‘crisis-resistant’. The fact that they are ready to travel even if it is burdened with additional stress and obstacles makes them a valuable market segment for hoteliers, which is worth striving for particularly in the current pandemic situation. The research aims at better understanding of contemporary ‘crisis-resistant’ tourists through in-depth analysis of electronic Word of Mouth (eWOM). **Material and methods.** A web scrapping method was applied to acquire eWOM content posted by tourists traveling in the times of Covid-19. A total of 1239 reviews from 455 hotels were analyzed. Six hypotheses were tested with the use of T Test and Chi Square test. **Results.** The type of travel and the month of travel did not influence the frequency of coronavirus mentions. Similarly, reviews relating to COVID-19 did not vary in score nor in frequency of managerial replies. However, mention of coronavirus influenced the length of the review and its helpfulness. **Conclusions.** Crisis-resistant tourists treat issues related to the pandemic (including some in-hotel regulations and restrictions) as any other aspects of the hotel performance and accept them. Interestingly, those aspects do not negatively influence the total evaluation of the hotel, which may suggest that such tourists have already adapted to all the pandemic-induced burdens. At the same time, hotel managers fail to respond timely and adequately to negative comments, which seems to be of the key importance in such a situation.

**Key words:** crisis-resistant tourists, eWOM, hotel reviews, COVID-19, TripAdvisor

### Introduction

The global hotel industry has grown rapidly over the last decade. According to Statista, in 2018 there were 184,299 hotels worldwide. This means an increase by almost 14,300 hotels around the world for the past 10 years. In 2018, the retail value of the global hotel industry was 600.49 billion US dollars. However, the unexpected outbreak and the rapid spread of the Covid-19 pandemic greatly inhibited the development of the industry.

It has already been reported that health-related crisis influences hospitality industry through i.e. revenue management, diminishing margins, and market position [1]. The current developments only confirm this tendency. The industry was one of the first ones to be hit by the pandemic after worldwide travel was halted in early 2020. In the United States, where, prior to the pandemic, the hotel industry used to generate over \$300 billion in revenues and provided 2.1 million jobs, historically low occupancy (below 44%) and massive job loss (670,000 direct hotel industry operations jobs and nearly 4 million jobs in the broader hospitality industry), as well as hotels being closed down around and across the country, resulted in the loss of over 50% of revenues [2]. Similarly, in Europe, hotels recorded a dramatic decline in key indicators. STR Europe’s hotel industry reported all-time lows in occupancy (33.1%) and revenue per room available (RevPAR) – 30.86 euros, according to STR’s year-end 2020 data. In comparison with the year of 2019, occupancy decreased by 54.2%, RevPar by 62.5%, an average daily rate (ADR) by 18.2% [3]. The situation on the Polish hotel market does not differ significantly from that on the European market. The IGHP data shows that 2020 was the worst year in the last 25 years in Poland [4]. In 2020, the occupancy rate in more than 50 per cent of the hotels (55%) was below 30%, i.e. below the

break-even point. As few as 21 per cent of hotels recorded an occupancy rate above 40%. The number of room nights sold in 2020 decreased by more than 50% in comparison with the year of 2019. Only 1% of hotels recorded an increase in this indicator in 2020. As many as 72% of hotels also recorded a drop in the average price in 2020 compared to the previous year. The decrease in this ratio was recorded in as many as 31% of hotels at a level higher than 20%. On the other hand, however, only 9% of hotels recorded its increase.

In the recent years, a growth in external factors affecting tourism industry can be observed, which can be attributed to changes in the tourism sector itself, like globalization, intensification of international tourism, and also in a broader context, e.g. political instability, environmental issues or health-related issues [5, 6]. Faulkner proposes to categorize such negative situations according to where they originate and what the influence of the affected organization and systems (at least in a form of negligence or of maladaptation resulting in such a situation) is [5]. The first category includes situations which are self-induced or at least partially controlled by systems or organizations called ‘crises’, and those being induced by external actions or natural phenomena like earthquakes, called ‘disasters’. Another perspective on typology of crisis is suggested by Parsons, who identifies 3 basic types of crises: immediate, emerging and sustained [7]. Considering the ongoing pandemic of Covid-19, it is an evident example of the sustained crisis. It has lasted for a long time and has already severely damaged most sectors of tourism throughout the world by influencing both sides of the market: enterprises that can function in a limited scope only or remain closed, and tourists who – if not locked down completely – avoid traveling for safety or convenience reasons [8].

Although the general connotation of terms ‘crises’ or ‘disasters’ is rather negative, they just describe the situation in which:

1) status quo is challenged, 2) there is a need to regain the balance and create a new equilibrium that can potentially be better than the previous state [5]. In this context, it is understandable that some authors call to treat the current pandemic in terms of a transformational opportunity for tourism industry [9]. However, in order to “reset” and “advance” the frontiers of industrial practices, as Sigala postulates, first it is necessary to understand the dynamics of the current crisis, as in many aspects it is unprecedented [9].

Tourists traveling in the times of crisis, which affects their safety, have a higher tolerance for risk and can be called ‘crisis-resistant’ [10]. As they travel, they leave behind a “digital footprint”, often in the form of an electronic Word of Mouth (eWOM) – opinions, reviews, recommendations, which they publish on social media [11]. At the same time, in the crisis situation, tourists are suffering from uncertainty [8]. It makes them look for additional information which shapes their risk perception [12]. For this reason, many of them are taking advantage of the information technologies that they use anyway on a daily basis and are turning to social networks, searching for user generated content [13]. This kind of content is often more reliable and useful in times of crisis than information derived from other sources [9]. Social networks are then the place where crisis-resistant tourists creating and consuming eWOM meet.

The fact that crisis-resistant tourists are ready to travel even if it is burdened with additional stress and obstacles makes them a valuable market segment, which is worth striving for [10], particularly in the current situation. However, as the Covid-19 situation is unprecedented in many aspects, it is necessary to learn more about this valuable group of tourists. Therefore, based on this path of reasoning, this research aimed at understanding contemporary ‘crisis-resistant’ tourists better through in-depth analysis of eWOM they create, and – to some extent – also consume. To achieve this goal, a web scrapping method to acquire an eWOM content posted by tourists traveling in the times of COVID-19 was applied.

### Literature review

Hotel industry is very sensitive to economic changes, natural disasters, pandemics and terrorist attacks [6]. Since the beginning of the 21st century, it has experienced many crises, including those triggered by the 2001 terrorist attack on the United States, the 2003 SARS pandemic, the 2008/2009 global financial crisis, the 2011 Japanese earthquake and tsunami, the outbreak of the MERS pandemic in the Middle East in 2015, just to name a few. Each of the above-mentioned incidents had a negative impact on the hotel market. In Hong Kong, due to the SARS epidemic in 2002, the number of tourists decreased by more than 67%, and the hotel occupancy rate fell to 17% [14]. In turn, the outbreak of the MERS pandemic caused a reduction in the number of tourists visiting Korea by 16%, which also caused a large loss recorded by the Korean hotel industry, estimated at 542 million USD [14]. Hotel industry was particularly exposed to the public health pandemic due to the large-scale flow of people around the world. However, none of any other pandemics has had such a strong impact on the industry as the one caused by Covid-19. Due to the outbreak of the Covid-19 pandemic, the world economy was shut down almost overnight, which in turn caused a slowdown in the development of the global economy, the effects of which will be experienced across the globe and in the hotel industry for many years to come [15]. Outbreaks of pandemics such as Covid-19 make consumers change their perception and purchasing behavior in the hotel

industry [12]. It is reflected in declines in basic indicators, i.e., occupancy, ADR, RevPar. Yu et al. [15] note that fear of contagion can lead to potential customers’/guests’ distrust of hotel facilities, which may result in their reluctance to use such facilities. Accordingly, successful crisis management and a quick response of hotel managers has become important [16]. Therefore, hotels make every effort to prepare themselves even better and more accurately to receive guests, while minimizing the risk of transmission of the coronavirus [16].

AccorHotels, along with Bureau Veritas, a global leading provider of testing, inspection and certification, did a similar thing, as it has created a new certification system to help reopen hotel facilities, confirming a kind of compliance with appropriate safety standards and cleaning protocols [17]. HRS, the leading global corporate lodging platform, and SGS, the world’s leading inspection, verification, testing and certification company, introduced a new cleanliness-focused program for the hotel industry. The Clean & Safe Protocol provides corporations and hoteliers with a well-defined standard at a time when property hygiene is very important [18]. The Polish Tourist Organization along with the Chief Sanitary Inspectorate introduced the “Hygienically safe facility” certificate [19].

Cleanliness is associated with safety and decreased health risks [20]. Hence, early in the pandemic, the hotel industry acted quickly to improve its already stringent cleaning and security protocols in order to provide safety for both staff and guests. Hotels are responding to concerns raised by current and potential guests and national governments and are trying to ensure that they remain one of the safest places for doing business, leisure, events and employment. While cleanliness has always been one of the most important factors when choosing a hotel and one of the main sources of customers’ potential dissatisfaction with the stay [21], its importance has become a priority in the current Covid-19 pandemic. AHLA data shows that 62% of consumers rank overall cleanliness and safety among the three most important factors when choosing a hotel (along with price – 63% and location – 44%). This is 24 percentage points higher than the pre-COVID preferences, which proves how important cleanliness and safety protocols will be. They will continue to play a role in the economic recovery of the hotel market both now and after the pandemic.

The scientific interest in a complex process of information exchange between peers, called WOM – Word of Mouth – dates back to mid-sixties [22]. Probably the key factor in its growth was the fact that WOM was representing significant peer-influencing power shaping individual buying decisions and behaviors [22]. Although this feature of WOM was identified in an “analog” context, it was later confirmed also in the digital environment [23]. The same happened with another “peculiarity” of WOM, namely the fact that people more willingly listen to their friends, family or community members rather than organizations or related individuals [22]. This fact was later studied from various perspectives; however, the most important reasons for peer orientation include the perception of organizations, marketers, and paid third-party experts as more biased than individuals [24].

The real revolution in WOM appeared along with proliferation of the Internet, the environment enabling growth of eWOM. It can be defined as “all informal communications directed at consumers through Internet-based technology related to the usage or characteristics of particular goods and services, or their sellers” [23]. The eWOM phenomenon has been gaining popularity and importance since the early years of the 21st century. An undisputable engine and fuel of this trend has always

been social media, which gave users new tools to create, publish and share their own content [24, 25, 26].

The basic directions for eWOM research were already drawn by Dichter [22], who analyzed motivations of customers to share WOM and to listen to it. Following that path, many authors tried to answer two main questions: what makes people send eWOM? [24] and what makes them read and use it? [25]. Based on an extensive literature review, King et al. [24] identified more general cognitive structures for researching eWOM, departing from an assumption that every exchange of information has a sender and a receiver. Along this line of reasoning, each side has its own antecedents (why?) and consequences (what for?) for sending/receiving eWOM which should be analyzed in the context of eWOM characteristics. Yet, another dimension that is crucially important from marketers' point of view regards actual changes in buying behaviors and decisions affected by eWOM [25]. Within this dimension, two perspectives for eWOM effectiveness can be identified: individual-level (behaviors and decisions affected by eWOM) and market-level (effects on sales, brand image, etc.) [27].

Due to the information-intensive nature of tourism industry, eWOM became an important field of research among tourism and travel scholars. eWOM exchange of tourism and travel-related information is often imposed in tourism literature on travel process stages: pre-trip, during trip and post-trip [28]. It was discovered that tourists avidly used social media along all stages of their travel, mostly for gathering information [28] and sharing travel-related experience [29]. Both activities are becoming even easier due to popularization of smartphones and adequate changes in tourists' information behavior [30].

Making travel-related decisions, even in a 'normal' situation, is burdened with risk, which makes tourists run an extensive information search [31, 32]. In tourism eWOM is ranked the most important information source [23]. With regard to accommodation subsector, the most important eWOM function is to inform and influence booking decisions [25, 26, 33]. Besides, eWOM shapes customer choices and builds trust in service providers and their offer [34]. Online reviews influence direct sales of hotels and their reputation [26].

The most popular objects for eWOM research are websites of Online Travel Agencies, where it can be found in two basic forms: textual and numerical. Some authors claim that the latter is more influential as it simplifies a complex customer decision process [34]. Numerical reviews are also easier to interpret than textual reviews [24]. The motivations to publish reviews online are multiple, and the topic has already gained popularity among tourism researchers [35], which resulted in many developments in this field. One of the works was authored by Matzler et al. [36]. The authors identified 2 groups of eWOM determinants: individual (e.g., satisfaction) and group-level constructs (e.g., characteristics of the destination, prices, i.e., generally external factors) [36]. Factors from both groups may influence customers' eWOM and may also cross influence.

As shown, User Generated Content and eWOM can be influenced by many factors. However, it is to be determined whether the coronavirus pandemic may also influence the way eWOM is created and reacted to. In many markets, hotel managers responded to Covid-19 by shifting the main message of their marketing strategies and changing customer segments they are focused on. For instance, Spanish hospitality industry shifted to increasing their share of domestic travelers as well as underlying additional safety measures [37]. This, in turn, can change the elements mentioned in reviews posted by customers. In addition, as the studies of Srivastava and Kumar show, the

prevailing global pandemic has changed the importance of hotel attributes for customer satisfaction [38].

It was previously shown that both the intention to post the review and the valence of it can be influenced by the time of the year the customer stayed in the hotel. Chang, Ku & Chen [39] proved that average rating of the review was highest in December and lowest in July. Interestingly, this difference in ratings given was similar in all aspects that could have been evaluated suggesting their equal importance for customers. Various review tendencies of different customer types were also identified by Korfiatis & Poulos [40], who showed that the reason for traveling can influence the content of the review. Therefore, we propose the following hypotheses:

H1: The month of the travel influences the frequency of coronavirus being mentioned in the reviews.

H2: The type of the travel influences the frequency of coronavirus being mentioned in the reviews.

When it comes to the characteristics of the review, such as its score and depth, Chang et al. [39] indicated that the overall rating of the review should be investigated separately from each of the possible attributes. Finally, Moro et al. [41] proved that the length of the review can be influenced by both internal factors (the author of the review) as well as external factors (e.g., use of badges on the reviews' website). As such, we propose the following hypotheses:

H3: The reviews containing mentions related to the pandemic are longer compared to those without such mention.

H4: The reviews containing mentions related to the pandemic differ in score compared to those without such mention.

Looking into the effect of the reviews on customers (in terms of review usefulness) and on hotel managers (in terms of replies to the reviews), Chatterjee [42] showed the existence of the relationship between review content and the number of "helpful votes" it received. Both the depth and the polarity of the review had an impact on its usefulness for customers. In a similar way, the content and the polarity of the review influences the intention of hotel managers to post a reply to user reviews as shown by [43]. Therefore, we propose the following hypotheses:

H5: The reviews containing mentions related to the pandemic are considered more useful by review readers.

H6: The reviews containing mentions related to the pandemic are more frequently replied to by hotel managers.

## Material and Methods

### Research design

The aim of the study was to verify whether the inclusion of COVID-19-related mentions in reviews impacts either their characteristics or external reactions to them. Therefore, the research design adopted was quantitative and the research type was explanatory. A need for such a study was indicated by Srivastava [38], both in terms of gap in understanding crisis-resistant tourists as well as eWOM they generate. For the variables, the type of data and the way of measurement are presented in table 1. When it comes to data gathering approach, we followed the works of Uğur and Akbiyik [44] as well as Chatibura [45] in identifying coronavirus-related comments using keywords. For the hypotheses testing, variables presented in table 1 were used as research variables.

### Sample and data collection

The study sample consisted of all 3-star hotel facilities in Poland that possess a profile on the TripAdvisor portal. A 3-star segment was selected as it is the biggest part of the Polish hos-

**Table 1.** Research variables

Variable name	Variable type	Variable measure
Mention of coronavirus	Qualitative Dichotomous	Word containment
Travel time	Qualitative Nominal	Month of travel on TripAdvisor
Type of travel	Qualitative Nominal	Customer segment on TripAdvisor
Review length	Quantitative discrete	Number of words in review
Review sentiment	Quantitative discrete	Review's score
Usefulness of review	Quantitative discrete	Number of "Useful" votes
Hotel reply	Qualitative Dichotomous	Reply existence

pitality market consisting of almost 51% (1,426 properties out of 2,802) of hotels [46]. At the same time, TripAdvisor was chosen as a data source as it is the most popular travel website for Polish customers while being open for review posting for all types of customers [47]. At the same time, TripAdvisor was successfully used by other authors in similar international studies [44].

The data was collected using the web scrapping method. Web scrapping is used for extracting data from websites by using a programmed bot or web crawler that is analyzing the source code of the website and copying (scrapping) the relevant data. The use of web scrapping allows gathering large data sets that can be easily analyzed in short periods of time. The primary tool for the mentioned process was Parsehub application, successfully used in similar research in the past [48]. Firstly, for the data collection process, the list of 455 links for all 3-star properties' profiles was generated using the TripAdvisor build-in filter function. Secondly, in January 2021, the second web scrapping programme was run. It collected 15 most recent reviews in each facility, along with details, such as time of travel, trip type, review's text and author, and a possible reply from hotel managers. That generated a database of 6,825 reviews. Then, the reviews posted before May, 2020, or after November, 2020, were excluded, leaving the final sample at 1,239 reviews. Such a period was chosen because in 2020, Polish hotels were able to accommodate leisure tourists only between the middle of May (when hotels were reopened after the 1st lockdown) and mid-November (when the ban on leisure stays was introduced).

### Data Analysis

In order to establish whether the review mentions the coronavirus pandemic, a list of words connected with Covid-19 was generated (keywords connected with Covid-19: pandemic,

coronavirus, virus, epidemic, sanitary, hygienic, limitations, covid-19, facial mask, disinfection) and the text of the reviews in the sample was checked against it. The word bank was established based on the work of Uğur and Akbiyik [44] as well as of Chatibura [45]. A total of 301 reviews turned out to contain at least one of the words from the list. For the statistical analysis, the t-Student test was applied when it came to quantitative variables, while the Chi-square test with cross tables was used for qualitative data (partially used previously by Leung et al. [49]). SPSS and Excel were used for conducting the given analysis.

## Results

Table 2 presents the descriptive results of the results obtained through web parsing. Out of the total of 1,239 reviews, about ¼ mentioned coronavirus (301 reviews). The context of the pandemic was never outweighing more general reviews – only in May 2020 (the first month of hotels reopening) the reviews mentioning the coronavirus reached 50%. Most of the reviews of both types come from the holiday months (July-September), with August being the month with most of the reviews – almost 1/3 of the sample was generated at that time. When it comes to the type of travel, the sample was dominated by travels with family and partners. These types of travel dominated both the reviews mentioning and non-mentioning Covid-19. It is worth noticing that only about 5% of the reviewers were traveling solo. The average review contains about 75 words, with reviews mentioning Covid-19 being slightly longer, and reviews not mentioning Covid-19 being slightly shorter. However, the modal value is quite similar in both cases. The mean score of reviews is also on a similar level in both parts of the sample, while the median and modal value possess the highest possible score (5) in both cases. Finally, there are 94 replies to the reviews mentioning Covid-19 and 297 not mentioning Covid-19. In each case, the proportion rate of replies is about 30% – the value in line with the previous research in the Polish hospitality market [48].

*H1: The month of the travel influences the frequency of coronavirus being mentioned in the reviews.*

No association between the month of travel and the frequency of COVID-19-related issues being mentioned was found ( $\chi^2(6) = 3.35, p = 0.69$ ) (Tab. 3). Thus, Hypothesis 1 was not supported. The results suggest that tourists mentioned coronavirus equally often each month of their travels.

*H2: The type of the travel influences the frequency of coronavirus being mentioned in the reviews.*

No association between the type of travel and the frequency of coronavirus being mentioned in the reviews was found ( $\chi^2(4) = 5.82, p = 0.21$ ). Consequently, Hypothesis 2 was not supported. Based on the findings, it seems that tourists were equally likely to mention COVID-19 in their reviews, regardless of the type of their travel.

**Table 2.** Quantitative comparison between reviews mentioning and not mentioning Covid-19

	Reviews mentioning Covid-19				Reviews not mentioning Covid-19			
	Freq.	Mean	Median	Modal	Freq.	Mean	Median	Modal
Number of reviews	301	-	-	-	938	-	-	-
Number of replies	94	-	-	-	297	-	-	-
Length of reviews [in words]	-	88	54	32	-	70	46	29
Score of reviews	-	4.1	5	5	-	4.4	5	5
Number of likes	-	0.26	0	0	-	0.17	0	0

*H6: The reviews containing mentions related to the pandemic are more frequently replied to by hotel managers.*

No association between the existence of managerial reply and the usage of coronavirus in the reviews was found ( $\chi^2(1) = 0.02, p = 0.89$ ). As such, Hypothesis 6 was not supported. This result implies that in the context of COVID-19 pandemic, hotel managers did not take into consideration the content of the review when deciding if they should reply to the review.

*H3: The reviews containing mentions related to the pandemic are longer compared to those without such mention.*

There was a significant difference in the length of the reviews containing and not containing mentions of the COVID-19 pandemic ( $t(348.08) = -8.945; p < .001$ ) (Tab. 4). On average, reviews related to the coronavirus issues were almost twice longer (358 signs more). Thereby, Hypothesis 3 was supported. The data suggests that tourists writing about pandemic aspects were more elaborated in their reviews.

*H4: The reviews containing mentions related to the pandemic differ in score compared to those without such mention.*

The lack of significant difference in the reviews score was identified in the analyzed sample ( $t(478.97) = .489, p = .625$ ). The average difference in the score was only about 0.036. As such, Hypothesis 4 was not supported. Based on the findings, issues related to the COVID-19 pandemic do not seem to have impact on reviews score or their extremity.

*H5: The reviews containing mentions related to the pandemic are considered more useful by review readers.*

The T test analysis showed a significant difference in the number of “likes” received by reviews that contained or did not contain coronavirus mentions ( $t(429.083) = -2.354, p = .019$ ). At the same time, the difference was quite small – on average, reviews mentioning COVID-19 issues received 0.1 “likes” more. However, Hypothesis 5 was deemed to be supported. The result implies that review readers were actively seeking more information regarding the COVID-19 pandemic.

**Discussion**

The results of the analyses showed that the Covid-19 pandemic was not the main topic of the review. Among the analyzed reviews, only 25% mentioned the topic. However, it should be noted that the number of reviews containing a reference to the Covid-19 pandemic increased systematically in the period

from May (since the hotels reopened after they were fully closed in mid-March) to August 2020, while it gradually decreased between September and November. A greater number of the reviews that mentioned Covid-19 in the period of May-August 2020 resulted from an increase in tourist traffic (mainly domestic one) in Poland in each of these months, which is also shown by hotel occupancy rates in Poland [4]. However, the percentage of reviews mentioning the pandemic remained constant, resulting in Hypothesis 1 being not supported. The given data suggests then that the destination image of the Polish hotels was not largely diminished by COVID-19 and the traveling intention of Polish customers remained high. Compared to the similar research conducted in China by Lu & Atadill [13], it is a favorable outcome. In the mentioned research, China’s destination image was heavily impacted by the onset of the COVID-19 pandemic.

The holiday period is conducive to holiday trips for families, which was reflected in the analysis of the reviews. They proved that while it was travelers and their families who gave the most reviews, including those containing a note of the Covid-19 pandemic, the frequency of mentioning the pandemic was similar in reviews by all travelers’ groups. The post-holiday period (since September 2020) was characterized by a decrease in the number of hotel guests, and consequently a reduction in the overall number of reviews. Thus, the results of the conducted analyses did not indicate a statistically significant correlation between the month in which the reviewers stayed at the hotel (rejection of Hypothesis 1) and the kind of their travel (rejection of Hypothesis 2), and the frequency of coronavirus being mentioned in the reviews. Therefore, it should be concluded that the results of our analyses are not consistent with the previous findings of Chang, Ku & Chen [39] and Korfiatis & Poulous [40]. Our results also showed that the score of the review is not influenced by the mention of the COVID-19, which resulted in Hypothesis 4 being rejected. On the other hand, similar research conducted in Botswana by Chatibura [45], showed that reviews mentioning Covid-19 were overwhelmingly of positive valence, with most of the negative reviews dating back to the beginning of the pandemic. However, the research of Chatibura [45] was based on a very limited sample compared to the current analysis. A broader approach by Uğur and Akbıyık [44], who analyzed over 75,000 reviews, showed a different trend. In their text-mining study, coronavirus was shown to be a very important topic, especially in the context of travel disruptions. It should be pointed out, however, that both mentioned studies focused solely on the reviews mentioning coronavirus and did not conduct a comparison analysis with “non-covid” reviews.

Even though the number of reviews that mentioned the Covid-19 pandemic was not dominant in the analyzed sample, it should be noted that they differed from the rest of the sample in two ways. Firstly, Hypothesis 3 being supported showed that they are slightly longer than those that excluded the issue. Moreover, the confirmation of Hypothesis 5 indicated that they were more often considered to be useful by customers planning

**Table 3.** Pearson Chi Square test results

Variable	Chi Square test value	Df	Asymptotic Significance (2-sided)
Time of travel	5.82	4	0.21
Month of travel	3.35	6	0.69
Hotel's reply	0.02	1	0.888

**Table 4.** Significance of quantitative variables – Levene Test & T Test analysis

Variable	Levene Test		Equal variances	t	df	Sig. (2-tailed)	Mean difference	Srd. Error difference	95% conf. interval for the difference	
	F	p							Lower	Upper
Score of review	4.102	0.43	Not assumed	.489	478.97	.625	.036	.073	-.108	.179
Length of review	188.545	<.001	Not assumed	-8.945	348.08	<.001***	-358.126	40.038	-436.78	-279.38
No of likes	21.90	<.001	Not assumed	-2.354	429.083	.019*	-.092	.039	-.169	-.015

to stay in a hotel. Due to the lack of significant differences in the assessments of facilities in the reviews containing references to the Covid-19 pandemic and in those without them, it can be assumed that the difference in length could be a simple consequence of the fact that an additional aspect of the hotel functioning was described in the first group mentioned – the one related to Covid-19 issues. Such a finding would be in line with the work of Srivastava & Kumar [38], who found safety measures connected with COVID-19 to be one of three attributes most important to reviewers during the pandemic. What is more, the mentioned relationship prevailed both in positive and negative reviews. The other two attributes identified were smell and blue areas. At the same time, greater usefulness of these reviews may prove that tourists who were planning trips during that period still tried to minimize the risk by looking for any information on how a given hotel deals with the issue of restrictions or practical solutions in order to increase security. In this context, the obtained results are consistent with the previous studies, including Sirakaya & Woodside [31], suggesting the presence of such informational behaviors of tourists in the periods of higher risk. Similar results were obtained in analyzing review in crisis times by Leung et al. [49]. In the mentioned study, a crisis of criminal activity in hotels was analyzed. This would suggest that customers are universally actively looking for reviews possessing more information regarding current issues. Such a conclusion would be in line with the general notion of more detailed reviews being considered more helpful by readers [42].

Interestingly, the mention of coronavirus in the review did not prompt hotel managers to respond to the reviews more frequently, as shown by Hypothesis 6 being rejected. This stands contrary to the findings by Liu et al. [35], who were evaluating social media responses of hotels during bed-bug crisis in New York and identified an increase in the number of responses to the reviews at the beginning of the crisis. In a similar fashion, managers of Spanish hotels were aware of the need of proper communication with their customer base [32]. The reason for different results may suggest that with facing a global event, hotel managers were less inclined to change their standard reputation management strategies. At the same time, it must be noted that actions of hotels that reacted too rapidly, without proper understanding of the scale of the pandemic, resulted in customer dissatisfaction [32]. In addition, it was observed that the response rate to the reviews, both those containing some brief information on the pandemic and those that did not mention it at all, was neither higher nor lower than before the pandemic, and it was 30%. Such a result shows the weakness of hotels that are not responding to all customer reviews but showing that managers' stance in this regard has not changed during the pandemic market crisis and is the same as before the pandemic [48]. Thus, no particular change in managers' attitudes was observed towards the review containing the mention of the pandemic. They responded to them with the same frequency as to other reviews.

Furthermore, the statistical analysis showed that behaviors related to the reactions of hotel managers were not related to the ratings of the reviews and their duration. In this respect, the findings of the current study differ from those that are common in hotel marketing and crisis management studies [6, 35]. Such discrepancies result from the fact that the current crisis caused by the Covid-19 pandemic is unique in every aspect. Another possible explanation may be the fact that it was chain operated hotels, which usually possess best reputation management practices, that were mostly impacted by the coronavirus pandemic [2]. As they were facing the biggest changes, it might have

impacted their Standard Operating Procedures. The world has never experienced a virus crisis on such a scale, and thus comparing consumer behavior in the current situation with that of the previous crises may indicate fundamental differences.

## Conclusions

Individuals who decide to travel in the times of the increased risk undoubtedly belong to the category of "crisis-resistant" tourists. The results of the research are in line with the considerations by Hajibaba et al. [10], indicating the characteristics of "crisis-resistant" travelers. This market segment, described by the authors as highly engaged in travel and at the same time not involved in transferring risk, should be considered very attractive for hoteliers. Taking the results of the current analyses into account, "crisis-resistant" is a dominant segment among hotel guests, which allows us to be optimistic when it comes to the recovery of the hotel industry from the crisis caused by the Covid-19 pandemic.

At the same time, one should consider that – apart from individual characteristics of Covid-19-time tourists – external factors could also influence their willingness to travel. One of the most important ones is undoubtedly the image of the hotel facilities as safe places, ensuring safety in many aspects. Many hotels did a good job introducing necessary (sometimes even more than required) safety standards, and running promotional campaigns, focusing primarily on cleanliness and safety. Building and maintaining this kind of image seems to be one of the most important challenges contemporary hotel managers are facing today.

The final challenge is related to the fact that people traveling in the times of crisis will look for more information, particularly related to the current problems and the way they are approached by the hotel facility. This is the most probable explanation of the higher usefulness of the reviews containing any notion related to Covid-19, which was identified in the research. As the eWOM can be a valuable source of feedback information on the hotel performance, also hotel managers should regularly monitor the reviews and comments about their facility. Basing on it, they can prepare and introduce necessary changes in functioning of the hotel and adapting it to specific needs of tourists. What is even more important is a timely response, particularly to negative comments. According to our research, managers' responses were similarly rare as during the "pre-Covid-19" period. We believe that in the current, very demanding circumstances, significantly marked with uncertainty, such an attitude is not sufficient for building the trust among tourists, even if they belong to the "crisis-resistant" category.

The current situation is very demanding as far as hotel management is concerned, and many predictions indicate that full recovery – even when the pandemic is finally over – is going to take years. It means, that there is no other way for hoteliers to survive but to adapt wisely to the changing situation. One of the most important aspects of this adaptation should be taking a closer look at "crisis-resistant" tourists who are willing to travel despite the risks and formal obstructions, generating revenue which is so needed by hoteliers nowadays. To achieve this goal, managers should concentrate more on the digital space, as it has become the basic platform for sharing knowledge among "crisis-resistant" tourists, as well as the main channel for two-way communication between them and hotels.

The research presented in this paper aimed at building the understanding of the crisis-resistant tourist through the analysis of the trace they leave behind on recommendation portals.

Although we believe that this is a valuable approach, we are aware that in order to create a comprehensive picture of this group, more versatile research is necessary. Besides, we concentrated on one category of hotels in our research – the biggest and most popular one, but still the “one of”. As the specificity of target groups for other types of hotel facilities differs, it would be valuable to run similar research for each of them. Last but not least, there is the specificity of the situation in the period from which we sourced the reviews. Considering the changes related to the dynamic developments of Covid-19, the research should be repeated in order to verify the firmness of the identified results.

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