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ANALYSING THE PROFILE OF TOURISTS IN FOUR-AND FIVE-
STAR HOTELS IN THE ALGARVE REGION: ONLINE REVIEWS
AND RATINGS



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AND RATINGS

Mestrado em Direção e Gestão Hoteleira
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Investimento

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2024

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THE ALGARVE REGION: ONLINE REVIEWS AND RATINGS

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Declaro ser o autor deste trabalho, que é original e inédito. Autores e trabalhos consultados estão devidamente citados no texto e constam da listagem de referências incluída.

Ana Margarida Oliveira Ferreira

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To my parents, for always supporting me and prioritising my education. To my grandfather, who saw the beginning of this journey but is no longer here to see its conclusion.

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Resumo

Tema: O setor hoteleiro tem assistido a uma crescente transformação digital, em grande parte impulsionada pelo uso de plataformas de reserva e opinião, como o TripAdvisor, que permitem aos turistas compartilhar as suas experiências através de avaliações online. Estas, são uma fonte crucial de informação não só para os consumidores, mas também para os hoteleiros, que podem utilizá-las para compreender melhor o perfil e o comportamento dos seus clientes e melhorar o desempenho dos seus negócios. Este processo, é especialmente relevante na hotelaria de quatro e cinco estrelas, onde as expectativas dos clientes são mais elevadas. Além disso, sendo este setor altamente vulnerável a pandemias, que podem alterar de forma significativa o comportamento dos consumidores, a análise de avaliações online surge como uma poderosa ferramenta capaz de identificar as tendências do setor hoteleiro e as alterações no comportamento dos turistas durante estes períodos atípicos. Neste sentido, as informações provenientes das avaliações online devem ser aproveitadas por todos os hoteleiros, mas em especial por aqueles que operam em importantes destinos turísticos, como a região do Algarve - popular e importante destino turístico europeu, localizado em Portugal.

Objetivos: Este trabalho tem como objetivo verificar de que forma as avaliações online publicadas em plataformas de reserva e opinião podem ser uma ferramenta útil para conhecer o perfil dos turistas e identificar o seu comportamento, na hotelaria de quatro e cinco estrelas. Tal finalidade originou as seguintes questões de pesquisa: 1) Qual o perfil dos turistas da hotelaria de quatro e cinco estrelas identificados nos estudos baseados em comentários online? 2) Que benefícios para os hoteleiros são identificados nos estudos, relativamente ao conhecimento dos turistas através da análise de comentários online? 3) Qual o comportamento dos turistas em hotéis de quatro e cinco estrelas da região do Algarve antes e durante a pandemia provocada pela doença COVID-19? 4) Será que o comportamento dos turistas em hotéis de quatro e cinco estrelas da região do Algarve se modificou com o aparecimento da pandemia de COVID-19? Com o propósito de alcançar este objetivo e responder às questões de pesquisa, o trabalho é conduzido em duas partes. Primeiramente, é realizada uma revisão sistemática da literatura com o intuito de verificar o estado da arte relativamente à definição do perfil dos turistas

na hotelaria de quatro e cinco estrelas a partir de comentários online e, através das principais implicações de gestão apontadas nos estudos investigados, identificar os benefícios para os hoteleiros associados ao conhecimento dos seus clientes através das avaliações online. Seguidamente, é desenvolvido um estudo com o objetivo de identificar o comportamento dos turistas dos hotéis de quatro e cinco estrelas da região do Algarve, antes e durante a pandemia de COVID-19, através da análise de avaliações online, e averiguar possíveis alterações no comportamento destes hóspedes entre os dois períodos. A escolha da região do Algarve deve-se à sua popularidade e importância como destino turístico europeu.

Metodologia: Uma vez que este trabalho se divide em duas partes, são adotadas duas metodologias distintas. Primeiramente, é conduzida a revisão sistemática da literatura, baseada nos estudos de Le et al. (2019) e de Oliveira et al. (2020), e repartida em cinco importantes etapas. Na primeira etapa são apresentados os objetivos e as questões de pesquisa, enunciadas anteriormente. Na segunda etapa é elaborado o protocolo de revisão, que inclui revistas com arbitragem científica publicadas entre 1 de janeiro de 2008 e 31 de maio de 2022, através de 19 palavras-chave relacionadas com o conteúdo partilhado pelos turistas e com o setor hoteleiro. A terceira etapa diz respeito à pesquisa da literatura, realizada em duas bases de dados, a Biblioteca do Conhecimento Online (B-on) e a Web of Science (Wos). Perante um minucioso processo de seleção e análise aos documentos encontrados, aqueles capazes de responder às questões de pesquisa são submetidos à quarta etapa, respeitante ao levantamento da informação chave de cada artigo. Por último, na quinta etapa, são sintetizados os resultados dos artigos. Quanto à metodologia da segunda parte deste trabalho, esta prende-se pela extração de avaliações online partilhadas na plataforma do TripAdvisor, escritas nas línguas inglesa, portuguesa, espanhola, alemã e francesa, publicadas entre janeiro de 2018 e abril de 2023 e relativas a 93 hotéis de quatro e cinco estrelas da região do Algarve, presentes no Registo Nacional de Empreendimentos Turísticos (RNET). Como complemento, os seguintes dados são ainda extraídos: localização dos hotéis e dos utilizadores; idioma dos comentários; data da estada; tipo de viajante; número de contribuições dos utilizadores e média das classificações. Depois da extração, os dados recolhidos passam por um processo de refinamento, para que a análise seja facilitada, e todos os comentários são traduzidos para a

língua inglesa. Com a ajuda do software NVivo 14, são realizadas análises de sentimento e de frequência aos dados.

Resultados: A revisão sistemática da literatura resultou na análise de 39 artigos, publicados entre os anos de 2013 e 2022, que possibilitaram responder às questões de pesquisa propostas. Desta forma, foi identificado o perfil dos turistas dos hotéis de quatro e cinco estrelas e verificado que o comportamento destes é influenciado pelo país de origem, o idioma dos comentários, o tipo de viajante e o motivo da viagem. Adicionalmente, foi observado que a categoria hoteleira afeta a experiência e as expectativas dos clientes e que os níveis de satisfação e as expectativas dos hóspedes para com os produtos e os serviços hoteleiros são maiores em hotéis de quatro e cinco estrelas. Por outro lado, através das principais implicações de gestão fornecidas pelos estudos considerados para esta revisão sistemática da literatura, foram sintetizados os benefícios para os hoteleiros, associados ao conhecimento dos seus clientes através da análise de avaliações online. A possibilidade de adequar e melhorar a oferta, acompanhar a mudança nas preferências dos clientes, prever comportamentos futuros, estabelecer a alocação ótima dos recursos financeiros e traçar estratégias eficazes de marketing e promoção, são alguns dos benefícios encontrados. Aproveitá-los, ajuda os profissionais da hotelaria a melhorar o desempenho dos seus negócios, possibilitando que a satisfação dos hóspedes seja alcançada. Relativamente ao segundo estudo, perante a análise de 17601 avaliações online de hotéis de quatro e cinco estrelas da região do Algarve, foi possível identificar o comportamento destes turistas antes e durante a pandemia e verificar que, apesar do volume de avaliações ter reduzido bastante com a pandemia, o comportamento dos turistas durante o período pandémico seguiu um padrão bastante semelhante àquele verificado no período anterior, com exceção dos resultados obtidos sobre o continente de origem dos turistas. Por outro lado, em ambos os períodos, os hotéis de quatro e cinco estrelas da região do Algarve foram avaliados positivamente pelos clientes.

Implicações da investigação: Este trabalho fornece contributos teóricos e práticos capazes de ajudar todos os profissionais da hotelaria de quatro e cinco estrelas a compreenderem melhor o perfil dos clientes que frequentam estas categorias hoteleiras, podendo auxiliar na gestão dos seus negócios. Além disso, elucida os hoteleiros sobre os benefícios associados ao conhecimento dos seus clientes através

da análise das avaliações online. Por outro lado, este trabalho também pode ajudar principalmente os profissionais da hotelaria de quatro e cinco estrelas que operam em hotéis da região do Algarve, ao permitir que estes entendam o comportamento dos hóspedes que se alojam em hotéis destas categorias, e permite fornecer aos profissionais da indústria hoteleira informações sobre como tirar proveito das avaliações online. Por fim, além de ser um contributo para a produção científica já existente sobre avaliações online, este estudo abre caminho para o desenvolvimento de futuras investigações complementares, por parte dos académicos, e atesta a importância da utilização de um software adequado para a recolha e análise de dados.

Originalidade: Apesar da existência de vários artigos sobre avaliações online no setor hoteleiro, são poucos os estudos que se focam na hotelaria de quatro e cinco estrelas e ainda mais escassos os trabalhos que reúnem estudos sobre estas categorias hoteleiras com o propósito de estudar o perfil deste tipo de turistas. Além disso, embora alguns artigos analisem avaliações online referentes à hotelaria da região do Algarve, são raros os estudos que apresentam uma análise considerando a pandemia provocada pela doença COVID-19. Neste sentido, este estudo preenche essas lacunas de investigação, para além de sugerir implicações teóricas e práticas para académicos e profissionais da hotelaria de quatro e cinco estrelas.

Palavras-chave: Algarve, avaliações online, COVID-19, gestão hoteleira, hotéis quatro e cinco estrelas, mineração de dados.

Abstract

Purpose: This work aims to explore how online reviews can be a useful tool for identifying tourist behaviour in hotels. The study is conducted in two parts. The first part involves a systematic literature review to examine the state of the art regarding tourist profiles in four- and five-star hotels and to identify benefits for hoteliers by understanding their customers through online reviews. The second part involves analysing online reviews to study tourist behaviour in four- and five-star hotels in the Algarve region (Portugal) before and during the COVID-19 pandemic, and to investigate any behavioural changes.

Methodology: In the first study, peer-reviewed journals published between January 1, 2008, and May 31, 2022, were analysed using 19 keywords and searched across two databases. In the second study, online reviews from 93 four- and five-star hotels in the Algarve are analysed. These reviews, written in English, Portuguese, Spanish, German, and French, were published on TripAdvisor between January 2018 and April 2023.

Findings: After analysing 39 articles, it was identified that the behaviour of tourists staying at four- and five-star hotels is influenced by their country of origin, review language, traveller type, and trip purpose. On the other hand, the benefits for hoteliers associated with understanding their customers through the analysis of online reviews were synthesised. Furthermore, through the analysis of 17,601 online reviews, it was found that the behaviour of tourists during the pandemic followed a pattern very similar to that observed in the pre-pandemic period.

Originality: Although there are many articles on online reviews in hospitality, few focus specifically on four- and five-star hotels or combine research on these categories to study the profile of this type of tourist. Additionally, while some studies analyse online reviews for Algarve hotels, few consider the impact of the COVID-19 pandemic.

Keywords: Algarve, COVID-19, data mining, four- and five-star hotels, hotel management, online reviews.

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1. Introduction

From 2009 to 2019, the tourism industry experienced continuous global expansion, with notable growth in international tourist arrivals and revenue. The year 2019 saw strong growth in international tourism, with nearly 1.5 billion arrivals, although the pace of growth was slower compared to the exceptional years of 2017 and 2018 (World Tourism Organization, 2021). However, these promising results did not continue in the following years due to the COVID-19 pandemic. Travel restrictions and widespread lockdowns imposed by countries to curb the spread of the virus, led to a sharp drop in international demand, resulting in a 74% decrease in international arrivals in 2020, -69% in 2021, -34% in 2022 and -12% in 2023 (UN Tourism, 2021, 2024; UNWTO, 2020). It was not until the first quarter of 2024 that the global tourism industry began to recover, with international tourist arrivals reaching 97% of pre-pandemic levels (UN Tourism, 2024).

In Portugal, 2023 was a year of strong recovery for the tourism sector, with estimates suggesting that tourism activity surpassed the record levels of 2019. There was a 7.7% increase in arrivals of non-resident tourists, 11% more guests in tourist accommodation establishments and a 10% rise in overnight stays in these establishments (Instituto Nacional de Estatística, 2024). In the same year, the country offered 7,681 tourist accommodation establishments, including 1,624 hotels with approximately 250,000 beds - an increase of over 50% in the number of beds over the past 10 years (TravelBI, 2023). Undoubtedly, Portugal has built a remarkable reputation as a tourist destination, evidenced by being voted Europe's Best Tourist Destination for the sixth consecutive time in 2023 (Turismo de Portugal, 2023).

The hotel sector has been undergoing a growing digital transformation, largely driven by the use of booking and review platforms such as TripAdvisor. These platforms, by allowing tourists to share their experiences through online reviews, become a crucial source of information not only for consumers but also for hoteliers, who can use them to better understand the profile and behaviour of their clients and improve their business performance (Ahani et al., 2019; Berezina et al., 2016; Oliveira et al., 2020). This process is particularly relevant in four- and five-star hotels, where customer expectations regarding the quality of products and services

are higher (Padma & Ahn, 2020; X. Xu et al., 2017). Furthermore, as this sector is highly vulnerable to pandemics, which can significantly alter consumer behaviour, the online reviews analysis emerges as a powerful tool to identify trends in the hotel industry and changes in tourist behaviour during these atypical periods (Bi et al., 2024; Hu et al., 2021). In this sense and given that knowing the customer is considered a key point in hotel management (Talón-Ballesteros et al., 2018), the information derived from online reviews should be utilised by all hoteliers, especially those operating in major tourist destinations, such as the Algarve region- a popular and important European tourist destination located in Portugal.

Thus, this study was conducted to examine how online reviews published on booking and review platforms can serve as a useful tool to understand the profile of tourists and identify their behaviour in four- and five-star hotels. This objective led to the following research questions: 1) What is the profile of tourists in four- and five-star hotels identified in studies based on online reviews? 2) What benefits for hoteliers are identified in the studies regarding the knowledge of tourists through online review analysis? 3) What was the behaviour of tourists in four- and five-star hotels in the Algarve region before and during the COVID-19 pandemic? 4) Has the behaviour of tourists in four- and five-star hotels in the Algarve region changed with the onset of the COVID-19 pandemic? In order to achieve this objective and address the research questions, this work was developed in two parts: preparation and submission of two scientific articles to academic journals.

The first article, titled "Systematic literature review on the profile of tourists in four- and five-star hotels based on online reviews", is a systematic literature review aimed at assessing the state of the art regarding the definition of the tourist profile in four- and five-star hotels, based on online reviews. It also seeks to identify the benefits for hoteliers related to understanding their customers through the analysis of online reviews, based on the main management implications highlighted in the studies investigated. Following the methodologies of Le et al. (2019) and Oliveira et al. (2020), the systematic literature review was conducted in five key stages: 1) defining research objectives and questions; 2) developing the review protocol; 3) conducting the literature search; 4) identifying key information per article and 5) synthesising article content by dimensions of analysis. The results are presented and discussed, along with management implications, limitations, and proposals for

future research. The article was submitted to the European Journal of Tourism, Hospitality and Recreation (EJTHR) on June 6, 2023, accepted on February 16, 2024, and published on August 9, 2024, in Volume 14 (2024): Issue 1 (August 2024). Additionally, the study was accepted and presented at the 7th edition of the TMS ALGARVE 2022: Sustainability Challenges in Tourism, Hospitality and Management conference, held from November 16 to 18, 2022, at the Real Marina Hotel & Spa in Olhão, Algarve. Appendices A, B, and C contain all the documents confirming the article's submission, acceptance, and publication in the journal. Appendices D, E, F, and G include documents proving the submission, acceptance, participation/presentation and the conference program.

The second article, titled "Tourists' behaviour in four- and five-star hotels in the Algarve region before and during COVID-19 pandemic: An analysis based on online reviews" was conducted to identify the behaviour of tourists in four- and five-star hotels in the Algarve region before and during the COVID-19 pandemic, and investigating whether there were changes in the behaviour of these guests between the two periods. To achieve these objectives, online reviews of four- and five-star hotels in the Algarve region, shared on the TripAdvisor platform and written in five languages, were extracted and analysed. With the help of NVivo 14 software, the data were subjected to sentiment and frequency analyses. This allowed for the presentation and discussion of the obtained results and the theoretical and practical implications, limitations, and proposals for future studies. The article was submitted to the Journal of Tourism and Development on September 21, 2024 (Appendix H). The manuscript is currently under review by the referees.

Despite several articles on online reviews in the hotel sector, few studies focus on four- and five-star hotels. Even fewer bring together studies on these hotel categories to study the profile of this type of tourist. Moreover, although some articles analyse online reviews of hotels in the Algarve region, few studies present an analysis considering the COVID-19 pandemic. In this regard, this study fills these research gaps and suggests theoretical and practical implications that may be useful for the performance of hoteliers' businesses. Additionally, this research contributes to the existing literature by expanding the current investigation on online reviews in the hotel industry. It paves the way for scholars to develop complementary future research.

This work follows the following structure. First, a systematic literature review titled "Systematic literature review on the profile of tourists in four- and five-star hotels based on online reviews" is presented, followed by the article "Tourists' behaviour in four- and five-star hotels in the Algarve region before and during COVID-19 pandemic: An analysis based on online reviews". The layout and formatting of the content in both articles follow the author guidelines required by the respective journals. Finally, the final considerations, which cover the research implications, the work limitations, and the recommendations for future studies are, presented. It is important to mention that, in the Portuguese abstract, when referring to "avaliações online," this includes both ratings and online reviews.

2. Article I: Systematic literature review on the profile of tourists in four- and five-star hotels based on online reviews

Systematic literature review on the profile of tourists in four- and five-star hotels based on online reviews

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Abstract

This systematic literature review analyses peer-reviewed journals published from 1 January 2008 to 31 May 2022 inclusive, using 19 keywords related to content shared by tourists and the hotel sector, in the Biblioteca do Conhecimento Online (B-on) and the Web of Science (Wos). The 39 articles considered for this analysis are classified according to the name of the journal in which they appeared and respective year of publication, the location of the hotels analysed, the booking and opinion platform used, as well as the number of reviews and hotels studied. In addition to contributing to the existing literature on online reviews, this study provides theoretical input that hoteliers can use to aid their business performance and enables the development of further research by scholars. Although several studies analyse online reviews, these are still being little used in the hotel industry in order to profile tourists. In this respect, this work intends to fill this research gap.

Keywords: online reviews; hotel management; four- and five-star hotels; tourists' profile; systematic literature review

1. Introduction

Online reviews have become increasingly important for the hospitality industry. As they are opinions and recommendations shared by consumers on social media, blogs, booking and opinion platforms, among others, they represent a powerful source of information not only for decision-making by potential tourists but also for companies, giving them the opportunity to improve their business and get to know their customers better (Ahani et al., 2019; Berezina et al., 2016; Oliveira et al., 2020). In recent years there has been an increase in the number of studies examining online reviews through booking and opinion platforms, revealing a growing interest in the area, and it has been proven that guests have higher levels of satisfaction in four- and five-star hotels (Ahn et al., 2017; Hongxiu Li et al., 2020; Huiying Li et al., 2013; Pacheco, 2016). Since knowing the customer is considered a key point in hotel management (Talón-Ballesteros et al., 2018), and given that the analysis of online reviews is still being little used in the hotel industry in order to define tourist profiles, this systematic literature review aims to verify the state of the art regarding the definition of tourist profiles in four- and five-star hotels based on online reviews. In addition, this work intends to understand and summarise what previous studies point out as the main implications of hoteliers and the hotel industry in general having knowledge about guests' profiles based on the analysis of online reviews posted by them on booking and opinion platforms. Besides contributing to the existing literature by expanding the current research on the use of online reviews in the hotel industry, this research provides hoteliers with theoretical inputs that could be useful for their business performance and paves the way for the development of future research by scholars.

The study is divided into five sections. Firstly, the introduction clarifies the aim of

this work. Secondly, a literature review is carried out on the subject under study. Next, the methodology used to select the studies and the procedures followed to analyse them are explained. The fourth section deals with the presentation and discussion of the results. Finally, the main conclusions of the research are presented, as well as its limitations and recommendations for future work.

2. Literature review

With the rapid development of information technology, the way users browse and share information has changed, providing new forms of communication that allow users to share their opinions and recommendations with other users on various platforms, such as social networks, blogs, and review sites (Berezina et al., 2016; Pacheco, 2016). This information, known as user-generated content (UGC), has become increasingly important for the hotel industry as it is a crucial source of information for potential customers and hotel companies (Oliveira et al., 2020; Serra Cantallops & Salvi, 2014).

Firstly, online reviews have the power to influence the decision-making process of potential customers when looking for hotels, as they allow consumers to receive a large volume of information and evaluate hotel offers more quickly, enabling a reduction in the risk associated with the process of purchasing certain products and services (Serra Cantallops & Salvi, 2014).

Secondly, online reviews allow hoteliers to get to know their customers better and improve hotel performance (Berezina et al., 2016). Since knowing the customer is considered a key point in hotel management, and since this sector is characterised by a heterogeneous set of customers with different expectations, needs and perceptions of service, it is important to segment the market and understand the

differences between customers (Ahani et al., 2019; Francesco & Roberta, 2019; Talón-Ballesteros et al., 2018). In this sense, in addition to the textual component of online reviews, it is also vital to consider the metadata of the reviews (such as the age of the guests, the purpose of the trip, the language and the hotel category), which have the potential to enable hoteliers to evaluate guest behaviour and allows to get global factors that affect the generation of reviews to be evaluated (Oliveira et al., 2022). In this way, by analysing the online reviews provided by their customers, hoteliers can obtain relevant information about the overall performance of their hotels, consumer behaviour, the precise needs to improve in the products/services offered and the demands of the market (Oliveira et al., 2020).

In this way, since it has been proven that guests have higher levels of satisfaction in four- and five-star hotels (Ahn et al., 2017; Hongxiu Li et al., 2020; Huiying Li et al., 2013; Pacheco, 2016), this systematic literature review aims to verify the state of the art regarding the definition of tourist profiles in four- and five-star hotels based on online reviews.

3. Methodology

This systematic literature review is based on the studies by Le et al. (2019) and Oliveira et al. (2020). It is divided into five important stages that ensure that the research, extraction, and synthesis of the explored content is consistent and transparent, as can be seen in Figure 1.

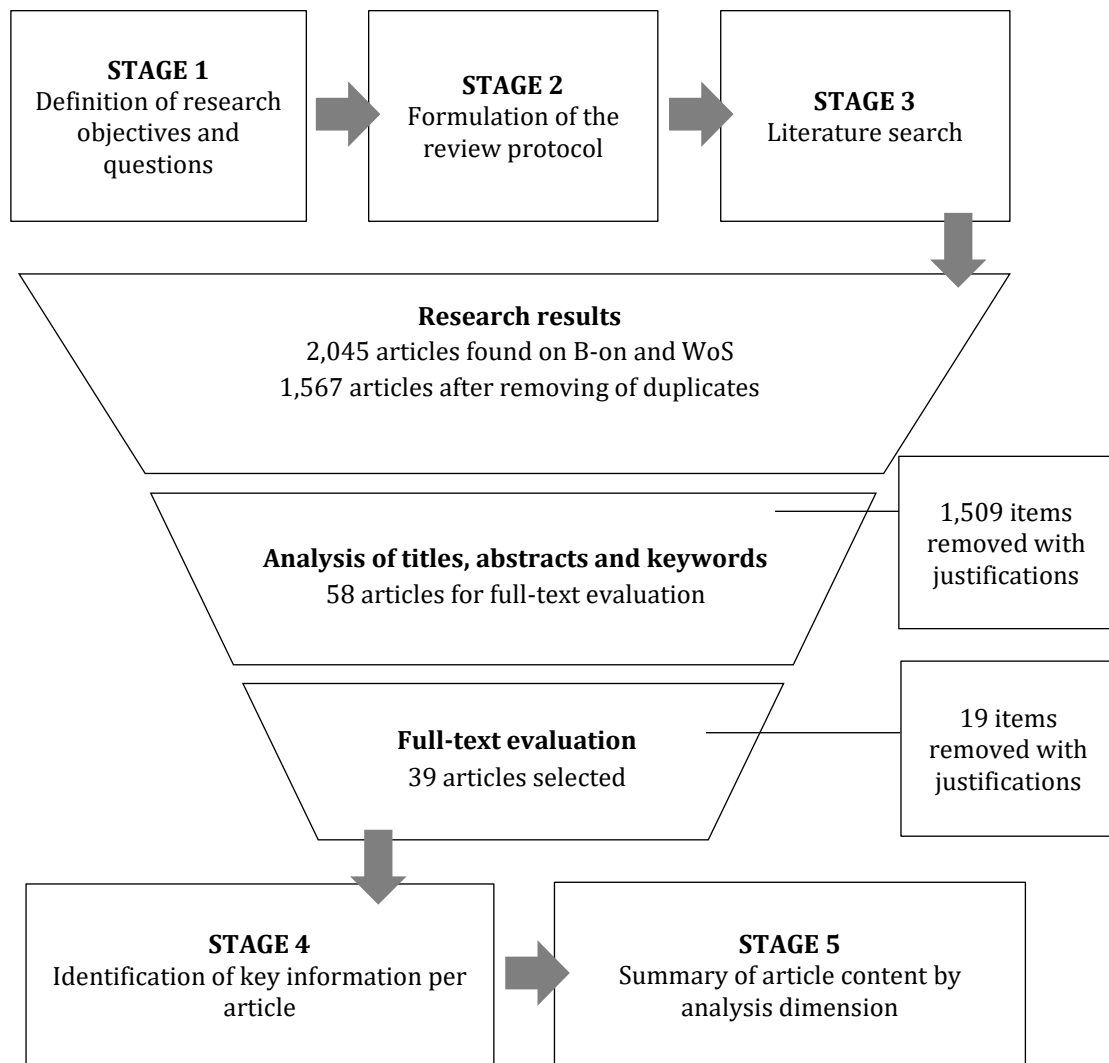


Figure 1. Systematic literature review process
Source: Adapted from Le et al. (2019)

The study aims to verify the state of the art regarding the definition of the tourist profile in four- and five-star hotels based on online reviews, and, given the main management implications pointed out in the investigated studies, to identify the benefits for hoteliers regarding their knowledge of customers through online review analysis. In this respect, the following research questions were formulated: 1) What is the profile of tourists in four- and five-star hotels identified in studies based on online reviews? 2) What benefits for hoteliers are identified in the studies, regarding the knowledge of tourists through online review analysis?

After outlining the objectives and defining the research questions, a systematic literature review protocol was created, in which key terms related to the content shared by tourists and the hotel sector were identified and combined with Boolean operators "OR" and "AND," as shown in Table 1. The literature search was conducted in two databases, the Biblioteca do Conhecimento Online (B-on) and the Web of Science (Wos), to identify articles that contained the identified key terms as subjects (SU) or topics (Topic) (Table 1). These databases were chosen for this study because they combine results from numerous renowned databases, such as: Scopus; Academic Search Complete; Business Source Complete; Supplemental Index; Library, Information Science & Technology Abstracts; ScienceDirect; Directory of Open Access Journals; IEEE Xplore Digital Library; Emerald; Taylor & Francis; SciELO; among others. The total number of articles resulting from this search is presented in the same table, in the "Results without filters" column.

Table 1. Databases, key terms, Boolean operators used in the search and number of results obtained

| Databases | Key terms and Boolean operators | Results without filters | Results with filters |
|-------------|--|-------------------------|----------------------|
| B-on | SU (online reviews OR tourists reviews OR travellers reviews OR user generated reviews OR consumer generated reviews OR online ratings OR tourists ratings OR travellers ratings OR user generated ratings OR consumer generated ratings OR user generated content OR consumer generated content OR eWOM OR electronic word of mouth) AND SU (hotel management OR hotel sector OR hospitality and tourism OR hotel data analysis OR hotel text analysis) | 1,142 | 1,074 |

| Databases | Key terms and Boolean operators | Results without filters | Results with filters |
|------------------|--|--------------------------------|-----------------------------|
| Wos | online reviews OR tourists reviews OR travellers reviews OR user generated reviews OR consumer generated reviews OR online ratings OR tourists ratings OR travellers ratings OR user generated ratings OR consumer generated ratings OR user generated content OR consumer generated content OR eWOM OR electronic word of mouth (Topic) AND hotel management OR hotel sector OR hospitality and tourism OR hotel data analysis OR hotel text analysis (Topic) | 1,502 | 971 |

Source: Own work

Filters were applied to the search for the inclusion and exclusion of articles, leading to a decrease in the number of results, displayed in Table 1 as "Results with filters".

Table 2 presents the filters considered in the search.

Table 2. Filters applied in the search

| Filters | Databases | |
|------------------------------------|---|---|
| | B-on | Wos |
| Review period | Starts on 1 January 2008. Based on the study by Oliveira et al. (2020). | |
| Types of sources/ documents | Peer-reviewed academic journals. | Articles and review articles. |
| Disciplines/ Categories | Library and Information Science; Social Sciences and Humanities; Sports and Leisure; Business and Management. | Information Science, Library Science; Social Sciences Interdisciplinary; Hospitality, Leisure, Sports, Tourism; Management; Business. |
| Language | English, Spanish and Portuguese. | |

Source: Own work

On 31 May 2022, the search resulted in a total of 2,045 articles that met the established criteria and were imported into Mendeley, a reference management software. After excluding 478 duplicate records, 1,567 documents remained, as shown in Figure 1. Then, the title, abstract and keywords of these articles were read, leading to the exclusion of 1,509 articles because their content did not fit the purpose of this study and did not allow for answering the research questions. After

this process, 58 articles were left for full-text evaluation.

After careful reading and complete evaluation of the text, 19 articles were excluded for the following reasons: the data had been obtained through a questionnaire, without collecting or analysing online reviews (Spoerr, 2021); the analysis referred to the tourism sector and not to the hotel sector, as online reviews were collected not only from hotels but also from restaurants and attractions of the destination (Fazzolari & Petrocchi, 2018); the main objective was to demonstrate the usefulness, validate or develop a model related to online reviews (Aakash & Gupta Aggarwal, 2022; Chang et al., 2019; M. Li et al., 2020; Manolitzas et al., 2022; Moro et al., 2017; Nguyen et al., 2021); data from a single hotel unit had been collected and examined (Pokryshevskaya & Antipov, 2017; Rhee & Yang, 2015b); they did not show results related to four- and five-star hotels, and the information presented did not enrich the present work (Ban et al., 2019; Glaveli et al., 2022; Lee et al., 2020; Radojevic et al., 2015); and finally, some articles were presented in the form of systematic literature reviews (Bore et al., 2017; Oliveira et al., 2020; Sann et al., 2021; Serra Cantalops & Salvi, 2014; Zarezadeh et al., 2022).

Thus, 39 investigations were considered for this study, and their main information was compiled into an Excel spreadsheet, including title, authors, name of the journal in which they appeared and the respective year of publication, the location of the analysed hotels, the booking and opinion platform used, as well as the number of online reviews and hotels studied. In addition, the results of the studies and their management implications were analysed. Therefore, it was possible to obtain the results presented below.

4. Findings and discussion

4.1. Overview of selected papers

Considering the articles selected for this study, three journals stand out as they represent 41% of the total publications (Table 3). Taking into account the Tourism, Leisure and Hospitality Management category of Scimago Journal & Country Rank, the International Journal of Hospitality Management, Tourism Management and International Journal of Contemporary Hospitality Management are ranked 5th, 1st and 7th, respectively, in the year 2021.

Table 3. Number of articles per scientific journal

| Journal name | No. of articles | % | Journal ranking |
|--|-----------------|-----|-----------------|
| International Journal of Hospitality Management | 7 | 18% | 5th |
| Tourism Management | 5 | 13% | 1st |
| International Journal of Contemporary Hospitality Management | 4 | 10% | 7th |
| Information Technology & Tourism | 2 | 5% | 24th |
| Journal of Hospitality Marketing and Management | 2 | 5% | 10th |
| Journal of Vacation Marketing | 2 | 5% | 27th |
| Others | 17 | 44% | - |

Source: Own work

More than half of the articles were published in the last five years, with 2020 showing the highest number of publications (Figure 2). From 2013, the year of the oldest publication, to 2022, there has been a remarkable growth in the number of studies that included the extraction and analysis of online reviews written by tourists in the hospitality sector.

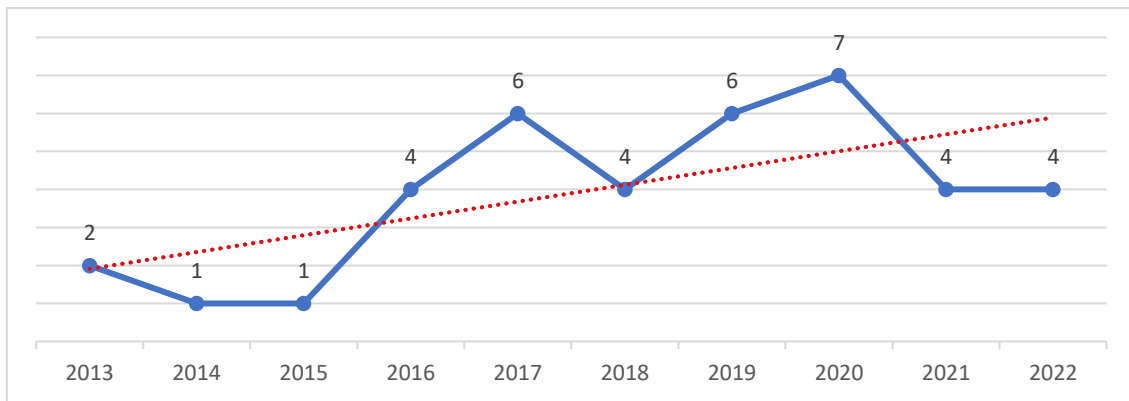


Figure 2. Number of articles by year of publication
Source: Own work

Most of the articles collected online reviews from hotels located in the United States of America, followed by hotels located in China and Portugal. It is important to note that, in one study, the authors selected hotels located in 20 tourist destinations evenly distributed across four geographic regions – the Americas, Asia-Pacific, Europe, and Middle East/Africa (Banerjee & Chua, 2016), while, in another article, hotels from four countries in the same regions mentioned above were considered (Francesco & Roberta, 2019), and a further study covered hotels located in two European countries and one Eurasian country (Mariani et al., 2020).

In 27 studies, data were extracted from TripAdvisor (Figure 3), the largest online hotel review platform in the world and widely investigated by the academic community (Banerjee & Chua, 2016; N. Hu et al., 2019), and in 11 investigations the Booking.com platform was selected, indicated as a suitable source to ensure the authenticity of the extracted data, since only customers who book through Booking.com can publish reviews after their stay (X. Xu et al., 2017).

It is worth mentioning that, in two articles, TripAdvisor and Booking.com were used simultaneously, confirming the possibility of combining online reviews from various sources, possessing different textual components and rating scales (Antonio et al., 2018; Phillips et al., 2020). On the other hand, the TripAdvisor platform was used in

conjunction with the Ctrip platform in two studies (Alemán Carreón et al., 2021; Liang et al., 2016). Finally, two articles selected the Agoda platform (Wu et al., 2017; Zhou et al., 2014) and one investigation chose the Daodao platform for data collection (Huiying Li et al., 2013). Thus, Figure 3 presents a total number of results higher than the number of selected articles.

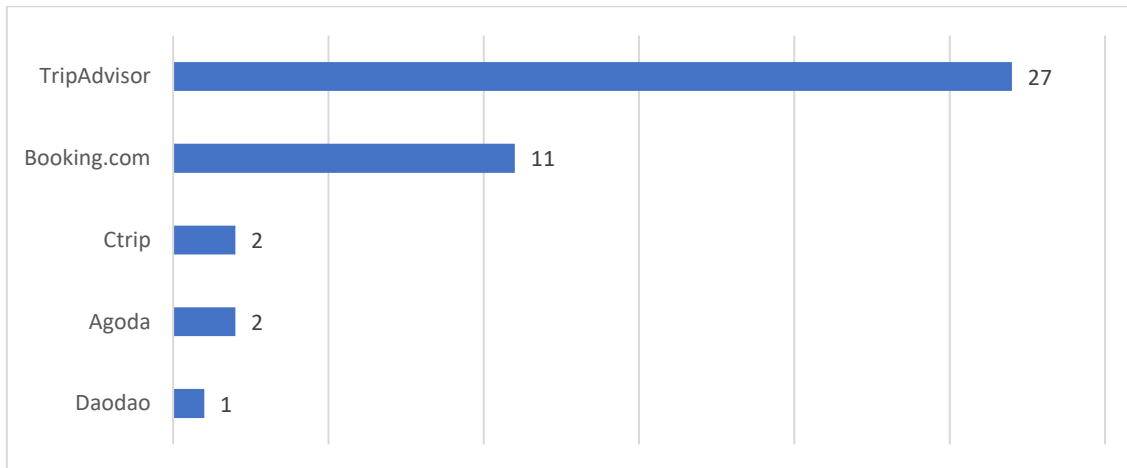


Figure 3. Number of studies by booking and opinion platform used
Source: Own work

In the majority of the studies, online reviews from more than ten hotels were collected (Figure 4), with three investigations standing out for having collected data from over 10,000 hotel units (Hongxiu Li et al., 2020; Y. Liu et al., 2017; Radojevic et al., 2018). Conversely, four articles stood out for including data from less than ten hotels (Padma & Ahn, 2020; Sann & Lai, 2021; Tsiotsou, 2019). Regarding the number of online reviews, it can be noted that all studies analysed more than 500 reviews; however, one study stands out for investigating nearly 5,000,000 online reviews (Radojevic et al., 2018).

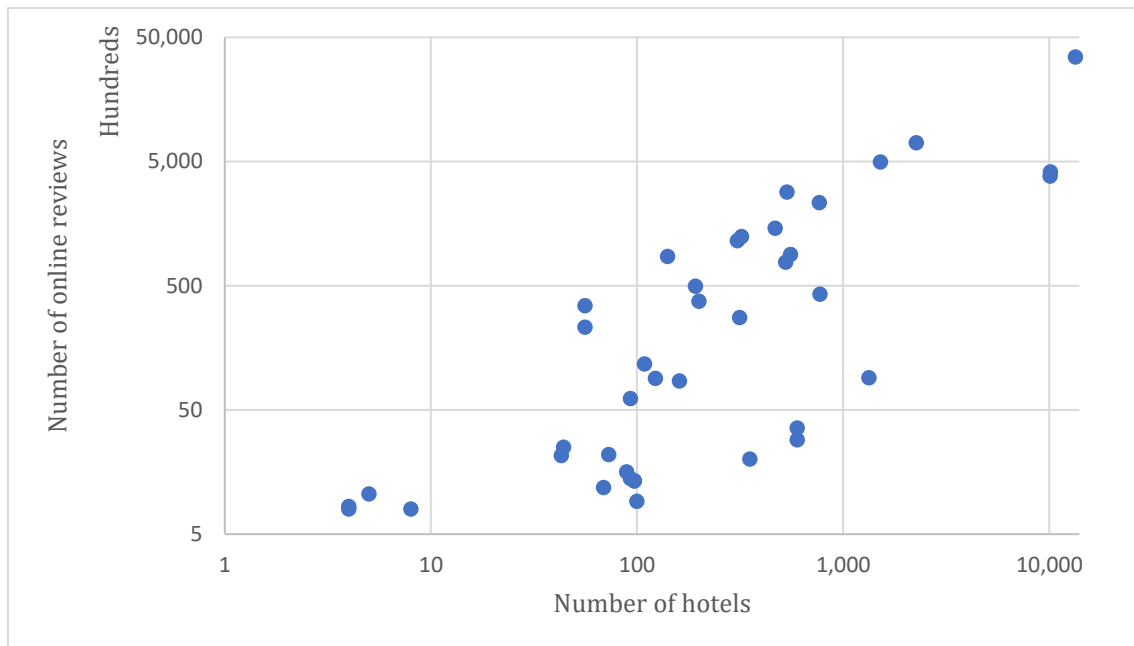


Figure 4. Number of hotels and number of online reviews per article
Source: Own work

4.2. The profile of tourists in four- and five-star hotels based on online reviews

Investigating user preferences and behavioural patterns through online reviews available on booking and opinion platforms, such as Booking.com and TripAdvisor, is a valuable source of information for the hotel industry, and can assist managers in their decision-making and hotel performance, as well as in obtaining knowledge about customers (Ahani et al., 2019; Berezina et al., 2016).

Certain authors have valued the personal data of users who write online reviews, and several studies have been conducted that contribute to obtaining knowledge about customers in the hotel industry. Examples are the investigations of Moro et al. (2022), Tsiotsou (2019, 2022), Wu et al. (2017) and Zhou et al. (2014), in which the country of origin of users was analysed to establish behavioural patterns related to travellers' cultural differences and their predisposition to express satisfaction regarding their hotel experiences, revealing that satisfaction varies according to the

country of origin of users.

Based on the analysis of online reviews of four- and five-star hotels located in Hangzhou, China, Zhou et al. (2014) drew conclusions about the satisfaction of customers from five market origins. Thus, the authors identified that tourists from Oceania were the most satisfied, followed by Chinese and American tourists, and the markets of Western Europe and Southeast Asia were the least satisfied. In addition, it was recognised that the public areas (lounge, lobby, pool and fitness centre) were the attributes that contributed most to customer satisfaction, while their dissatisfaction was related to aspects associated with the physical environment of the rooms (size and cleanliness) and the hotel (dated quality of facilities and noise level), as well as the value for money (room price), the location (close to attractions and accessibility with public transport) and the staff (language skills and efficiency in solving problems). The advice to hotel managers was that they should improve the aspects identified as negative for guest satisfaction.

Later, the results of the Zhou et al. (2014) study were partially corroborated by the findings of Wu et al. (2017), who discovered, when analysing online reviews of five-star hotels in Shanghai, China, that tourists from Oceania and North America were the most satisfied and that staff and service were the attributes that contributed the most to this feeling. In contrast, Japanese and Korean tourists were the least satisfied, and their concerns were primarily related to tangible aspects of the hotels. In this respect, the authors emphasize the importance of staff delivering high-quality service to their customers.

Alternatively, Tsiotsou (2019) studied the differences in the evaluation of European guests by exploring online reviews of four- and five-star hotels in Greece, and concluded that the ranking by tourists descends in the order of Northern, Eastern,

Western, and Southern Europeans, that is, Northern Europeans were the most generous in evaluating hotels, while Southern Europeans were the least generous. In this respect, Tsiotsou (2019) suggests that hoteliers should encourage Northern European guests to leave online reviews, as they were the ones who rated the hotels the best.

Later, when investigating online reviews of five-star hotels in Northern Greece, the same author recognised that Northern Europeans valued the staff, Eastern Europeans appreciated the hotel's physical attributes/environment, Western Europeans focused mainly on basic products, such as the room and food, and Southern Europeans were concerned with services (Tsiotsou, 2022). With this study, the author concluded that guests' cultural differences should be considered when interpreting online reviews, so that hotel managers can tailor their services and develop effective marketing and promotion strategies. The findings of Tsiotsou (2022) corroborate and expand the results of the previous study by Kitsios et al. (2021), which, through the analysis of online reviews of five-star hotels in Thessaloniki, Greece, indicated that factors significantly affecting customer satisfaction are related to location, staff, rooms and services. However, it is important to highlight that, in this study (Kitsios et al., 2021), the country of origin of the online review users was not considered.

In order to understand the influence of culture on tourists' perception of hotel attributes, Moro et al. (2022) analysed online reviews from foreign guests and concluded that, regardless of cultural origin, location and price were the attributes that most and least satisfied customers, respectively, in four-and five-star hotels in New York. These findings partially corroborate the results of a previous study by Kim et al. (2016), who found that location was the attribute that most satisfied

customers in four- and five-star hotels in New York. Like the study by Kitsios et al. (2021), the study by Kim et al. (2016) did not consider the country of origin of the users of online reviews.

In addition to analysing the country of origin of users, research has also been conducted examining the language of online reviews to investigate guest evaluation behaviour considering linguistic differences (Alemán Carreón et al., 2021; Antonio et al., 2018; Hongxiu Li et al., 2020; Y. Liu et al., 2017; Mariani et al., 2019; Pacheco, 2016; Schuckert et al., 2015). The results indicate that customer satisfaction varies depending on the language in which the online reviews are written. Most studies have focused on four- and five-star hotels.

In order to compare the satisfaction behaviour of English and non-English-speaking guests, Schuckert et al. (2015) analysed the language of online reviews written by hotel customers in Hong Kong, China, and found that customers who wrote in English were the most satisfied and the most likely to stay in four- and five-star hotels. In contrast, guests who did not write online reviews in English were less satisfied with four- and five-star hotels because they had high expectations, while guests who wrote in English enjoyed their stay without being very demanding.

Expanding on the Schuckert et al. (2015) research, Pacheco (2016) investigated the distribution and difference in classification behaviour of hotel guests in Porto, Portugal, based on the language of online reviews written in English, Portuguese, Spanish, French and Brazilian Portuguese. The author found that guests who wrote in Brazilian Portuguese were the ones who gave the highest ratings to four- and five-star hotels, while guests who wrote in Spanish and French gave the lowest ratings. Later, in another study, the same author revealed that room and service were the predictor attributes of guest satisfaction in four- and five-star hotels in Portugal,

based on the analysis of online reviews written by hotel customers located in Lisbon, Algarve, Porto and Madeira Island (Pacheco, 2017). In this study the language of the online reviews was not considered.

In another approach, Y. Liu et al. (2017) emphasized the importance of segmenting customers based on hotel categories, by comparing the satisfaction of domestic and international tourists through the language of online reviews from hotels in Beijing, Shanghai, Guangzhou, Hangzhou and Sanya, China. Thus, it was possible to ascertain that most guests who wrote in international languages (English, German, French, Italian, Portuguese, Spanish, Japanese and Russian), as well as in Chinese (domestic customers), rated five-star hotels positively. However, several four-star hotels were highly rated by guests writing in international languages but received a lower score from domestic customers.

Extending the results of studies by Schuckert et al. (2015), Pacheco (2016) and Y. Liu et al. (2017), Antonio et al. (2018) examined online comments written in English, Spanish and Portuguese, in combination with hotel sales data in Portugal, and revealed that four- and five-star hotels obtained higher ratings in reviews written in English in comparison to reviews written in Spanish and Portuguese. Furthermore, the authors found that customers who wrote reviews in Portuguese and Spanish opted to share online reviews on the Booking.com platform and the majority of guests who commented in English chose the TripAdvisor platform, highlighting the importance of research being developed through more than one data source.

In another study, having analysed online reviews from Italian, American and Chinese travellers staying in hotels located in Hong Kong, London, New York and Dubai, Francesco & Roberta (2019) found that people from different countries perceive and emphasize hotel attributes differently. Thus, they observed that the

attribute most emphasized by Italian tourists in four- and five-star hotels was location, and American and Chinese clients highlighted cleanliness and service attitude, respectively, in five-star hotels. The results of this study may help hotel managers determine the optimal allocation of scarce financial resources, considering customer satisfaction criteria (Francesco & Roberta, 2019). For this analysis, the authors considered not only the language in which the online reviews were written (English, Chinese and Italian), but also the users' country of origin (USA, China and Italy), a method also used by other authors in their research (Gunasekar et al., 2021; Mariani et al., 2020; Oliveira et al., 2022; Phillips et al., 2020; Sann & Lai, 2021).

In recent years, several studies have been developed examining customer preferences through online reviews, and it has been proven that guests show higher satisfaction levels in four- and five-star hotels (Ahn et al., 2017; Uslu Cibere et al., 2020; Hongxiu Li et al., 2020; Huiying Li et al., 2013; Y. Liu et al., 2017; Pacheco, 2016, 2017; Phillips et al., 2020; Tsiotsou, 2019; Wong, Rasoolimanesh, & Pahlevan Sharif, 2020; Zhou et al., 2014). However, after examining online reviews of hotels located in the top 100 cities in the United States, these results were not verified in the study by Xu et al. (2017), as it was found that guests in four- and five-star hotels showed less satisfaction with hotel attributes and services compared to customers staying in lower categories. The authors justify this by the fact that guests have higher expectations regarding products and services in higher category hotels, since the cost is higher. The previous study by Huiying Li et al. (2013) also addressed this issue, as it was found, when investigating online reviews of hotels located in Beijing, China, that some factors that guests consider important when booking four- and five-star hotels, such as the bed, the room and reception services, did not meet their

expectations.

Later, the investigation by Padma & Ahn (2020) confirmed the conclusions of Xu et al. (2017) by verifying that guests in five-star hotels have much higher expectations compared to those staying in lower-rated hotels, based on the investigation of online hotel reviews in Malaysia. Therefore, the study by Hongxiu Li et al. (2020) may clarify this fact by finding, through the analysis of online reviews of hotels located in Sanya, Beijing, Guangzhou, Shanghai and Hangzhou in China, that the cleanliness, location, room, service and value are basic factors for customer satisfaction in four- and five-star hotels, and if the performance of these attributes falls short of guests' expectations, they will be dissatisfied.

Customer dissatisfaction can lead to complaints, and there is evidence that online complaint behaviour is influenced by hotel category (Fernandes & Fernandes, 2018; N. Hu et al., 2019; Sann et al., 2020). Fernandes & Fernandes (2018) analysed online reviews with negative statements regarding hotels located in Porto, Portugal, and found that guests in four- and five-star hotels expressed greater dissatisfaction with the service, particularly customer care, location, and value. Service and value were also the factors with the most complaints made by customers in four- and five-star hotels in the investigations by Hu et al. (2019) and Sann et al. (2020), based on the examination of reviews of hotels in New York and the United Kingdom, respectively. In this respect, the authors suggest hoteliers should ensure that the high-quality standards expected by customers are provided, or even exceeded (Fernandes & Fernandes, 2018), and that the space for shortfalls that cause dissatisfaction be reduced (Sann et al., 2020). In addition, through the analysis of online reviews, hoteliers have an excellent opportunity to understand the causes of guest dissatisfaction, allowing the re-evaluation of strategies and the direction of limited

financial resources towards improving negative factors (Fernandes & Fernandes, 2018).

Furthermore, through the analysis of online reviews, it is possible to know if the tourist travelled alone, as a couple, with family, friends or for business. It has been proven that, when placed in different group compositions, travellers present dissimilar expectations and preferences towards hotel attributes and services, and that the determinants and levels of guest satisfaction, as well as their rating patterns, depend on who they are travelling with (Ahn et al., 2017; Banerjee & Chua, 2016; S. Liu et al., 2013; X. Xu, 2018; Yadav & Roychoudhury, 2019). The studies by Ahani et al. (2019) and Tsiotsou (2019) confirmed these findings, as it was identified, based on the analysis of online reviews of hotels located in the Canary Islands (Spain) and Greece, respectively, that guests who travelled with family and as a couple were those who expressed greater satisfaction in four- and five-star hotels.

On the other hand, there is evidence that guests travelling for business report lower levels of satisfaction than those travelling for leisure (Banerjee & Chua, 2016; J. M. Kim et al., 2022; Liang et al., 2016; Radojevic et al., 2018). These findings were also confirmed in four- and five-star hotels, according to the studies by Wu et al. (2017) and Ahn et al. (2017), as it was verified, based on the observation of online reviews of hotels located in Shanghai and New York, respectively, that business travellers presented lower satisfaction compared to other travellers. Wu et al. (2017) found that guests travelling for business presented specific concerns related to business-oriented services and recommend that, to increase the satisfaction of these customers, hoteliers should inform guests at check-in about all the business facilities and services offered by the hotels. Table 4 summarizes the above studies.

Table 4. The profile of tourists in four- and five-star hotels based on previous studies that used online reviews

| Source | Purpose | Geography/ Category/ No. of reviews | Key findings |
|-------------------------|--|---|--|
| Zhou et al. (2014) | Provide comparative and benchmarking insights about customer satisfaction. | Hangzhou (China) 4 and 5 stars 1,345 | Tourists from Oceania, China and the United States expressed greater satisfaction, in contrast to the Western European and Southeast Asian markets. |
| Wu et al. (2017) | Evaluate the experiences of international clients. | Shanghai (China) 5 stars 2,000 | Tourists from Oceania and North America expressed greater satisfaction, while customers from North-East Asia showed less satisfaction. |
| Tsiotsou (2019) | Identify cross-cultural differences in the evaluations of tourists from Central, Eastern, Northern and Southern Europe. | Greece 4 and 5 stars 1,055 | The ranking of tourists goes down in order of Northern, Eastern, Western, and Southern Europeans. |
| Tsiotsou (2022) | Identify critical value-creation elements of luxury services and examine cross-cultural differences of customers from four European regions (East, North, South and West). | Northern Greece 5 stars 838 | Northern, Eastern, Western and Southern Europeans valued the staff, the hotel's physical attributes/environment, the basic products (room and food) and the services, respectively. |
| Kitsios et al. (2021) | Examine and compare aspects of guest satisfaction and dissatisfaction. | Thessaloniki (Greece) 5 stars 2,595 | Customer satisfaction is significantly affected by factors related to location, staff, rooms and services. |
| Moro et al. (2022) | Understand how countries of origin and respective embedded cultures influence tourists' perceptions. | New York 1 to 5 stars 115,297 | Regardless of cultural origin, location and price were the attributes that satisfied the most and the least customers, in order, in four- and five-star hotels. |
| B. Kim et al. (2016) | Identify and compare factors known as satisfiers and dissatisfiers. | New York 1 to 5 stars 919 | Location was the attribute that satisfied the most customers in four- and five-star hotels. |
| Schuckert et al. (2015) | Explore the distribution and difference in the rating behaviour of English-speaking and non-English-speaking guests. | Hong Kong (China) 1 to 5 stars 86,000 | Customers who wrote in English were the most satisfied and the most likely to stay in four- and five-star hotels. |
| Pacheco (2016) | Explore the distribution and differences in rating behaviour of English, Portuguese, Spanish, French and Brazilian guests. | Porto (Portugal) 2 to 5 stars 2,150 | Customers who wrote in Brazilian Portuguese were the ones who gave the highest ratings to four- and five-star hotels. In contrast, guests who wrote in Spanish and French gave the lowest ratings. |
| Pacheco (2017) | Study the impact of specific satisfaction attributes on overall satisfaction. | Lisbon, Algarve, Porto and Madeira Island (Portugal) 2 to 5 stars 285,000 | Room and service were the predictor attributes of guest satisfaction in four- and five-star hotels. |
| Y. Liu et al. (2017) | Offer new insights into the determinants of hotel customer satisfaction by | Beijing, Shanghai, Guangzhou, | Guests rated positively the five-star hotels. Several four-star hotels were rated very highly by |

| Source | Purpose | Geography/ Category/ No. of reviews | Key findings |
|------------------------------|--|---|---|
| | discriminating among customers by language group. | Hangzhou and Sanya (China) 0 to 5 stars 412,784 | international guests, but received a lower rating from national guests. |
| Antonio et al. (2018) | Understand how guests from different origins and different international destinations evaluate hotels. | Portugal 2 to 5 stars 23,322 | Reviews written in English obtained higher ratings in four- and five-star hotels when compared to reviews written in Spanish and Portuguese. |
| Francesco & Roberta (2019) | Investigate whether there are differences in the way Italians, Americans and Chinese travellers perceive and emphasise several hotel attributes. | Hong Kong, London, New York and Dubai 1 to 5 stars 9,000 | Location was the attribute most emphasised by Italian tourists in four- and five-star hotels, while American and Chinese customers highlighted cleanliness and service attitude, respectively, in five-star hotels. |
| Xu et al. (2017) | Examine customer satisfaction and dissatisfaction toward attributes of hotel products and services. | USA 0 to 5 stars 3,596 | Guests at four- and five-star hotels showed less satisfied with hotel attributes and services compared to customers staying in lower categories. |
| Huiying Li et al. (2013) | Illustrate that online hotel reviews can be used to systematically identify customer satisfaction factors. | Beijing (China) 2 to 5 stars 42,668 | Some factors that guests consider important when booking four- and five-star hotels, such as the bed, the room and reception services, did not meet their expectations. |
| Padma & Ahn (2020) | Understand the attributes of luxury hotels that contribute to guest satisfaction and dissatisfaction. | Malaysia 5 stars 800 | Guests in five-star hotels have much higher expectations compared to those staying in lower-rated hotels. |
| Hongxiu Li et al. (2020) | Unravel how the role of hotel attributes can differ in accordance with different hotel star ratings and distinct customer segments. | Sanya, Beijing, Guangzhou, Shanghai and Hangzhou (China) 0 to 5 stars 412,784 | Cleanliness, location, rooms, service and value are basic factors for customer satisfaction in four- and five-star hotels. |
| Fernandes & Fernandes (2018) | Characterise complainers' profile and online complaints and determine which factors may impact them. | Porto (Portugal) 2 to 5 stars 1,191 | Guests in four- and five-star hotels expressed greater dissatisfaction with the service, particularly customer care, location and value. |
| Hu et al. (2019) | Investigate how customer complaints vary across different hotels grades. | New York 1 to 5 stars 27,864 | Service and value were the factors with the most complaints in the four- and five-star hotels. |
| Sann et al. (2020) | Investigate the online complaint behaviour targeting six different hotel attributes. | United Kingdom 2 to 5 stars 2,020 | |
| Ahani et al. (2019) | Identify the important factors for hotel selecting. | Canary Islands (Spain) 4 and 5 stars 9,128 | Guests who travelled with family and as a couple were those who expressed greater satisfaction in four- and five-star hotels. |
| Tsiotsou (2019) | Identify cross-cultural differences in the evaluations of tourists from | Greece 4 and 5 stars 1,055 | |

| Source | Purpose | Geography/ Category/ No. of reviews | Key findings |
|----------------------|--|---|--|
| | Central, Eastern, Northern and Southern Europe. | | |
| Wu et al. (2017) | Evaluate the experiences of international clients. | Shanghai (China) 5 stars 2,000 | Business travellers presented lower satisfaction compared to other travellers in four- and five- star hotels. |
| Ahn et al. (2017) | Demonstrate how different compositions of group members can influence people's travelling experiences. | New York 2 to 5 stars 125,076 | |

Source: Own work

4.3. The benefits of hoteliers knowing their customers through online review analysis

Due to its open structure, the analysis of consumer-generated content provides the opportunity to produce more accurate reports on customer experiences compared to traditional research methods such as interviews (Kitsios et al., 2021). In this respect, hoteliers should be aware of how this content can add value to their businesses and how it can be used to improve performance and business success (Kitsios et al., 2021). Through the key management implications provided by the studies considered for this review, it was possible to synthesise the benefits of hoteliers knowing their customers through online review analysis, presented in Figure 5.

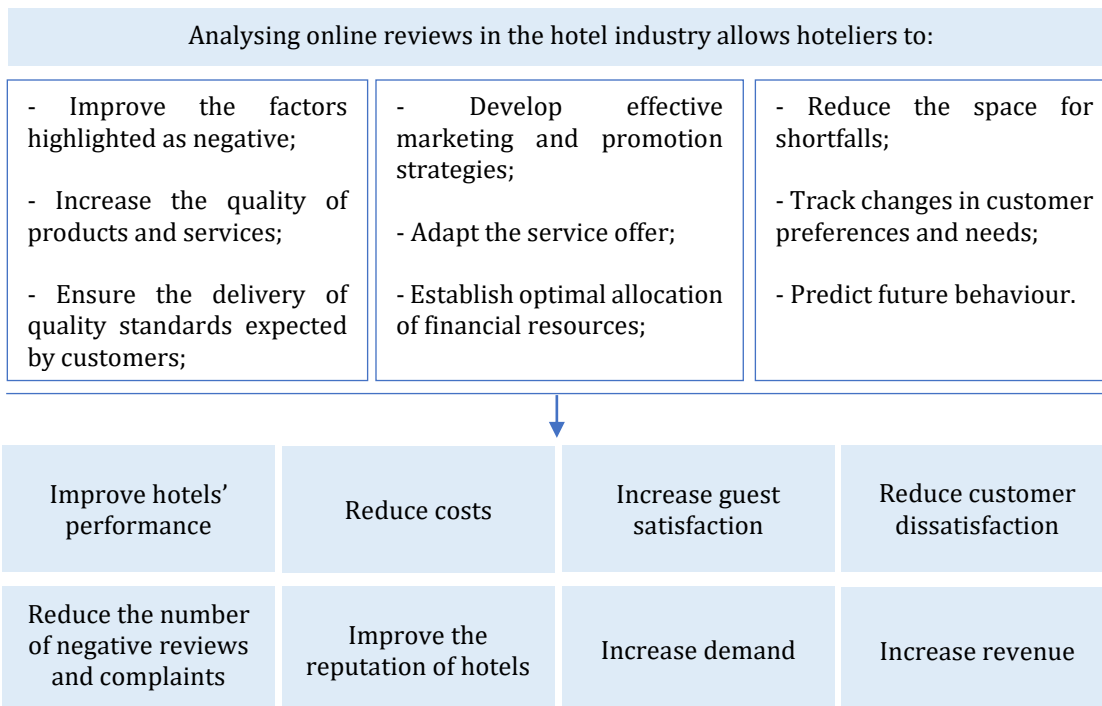


Figure 5. Benefits of hoteliers getting to know their customers by analysing online reviews.
 Source: Based on the results of studies by Ahani et al. (2019), Ahn et al. (2017), Antonio et al. (2018), Fernandes & Fernandes (2018), Francesco & Roberta (2019), Hu et al. (2019), Kitsios et al. (2021), Huiying Li et al. (2013), Y. Liu et al. (2017), Moro et al. (2022), Padma & Ahn (2020), Sann et al. (2020), Schuckert et al. (2015), Tsiotsou (2019, 2022), Xu et al. (2017) and Zhou et al. (2014).

Indeed, analysing online reviews allows hoteliers to better understand their customers and benefit from a series of advantages that contribute to improving hotel performance. However, in order for hoteliers to take advantage of the information freely provided by customers, the use of suitable software for collection and analysis becomes indispensable, as well as the allocation of workers to regularly monitor it (Wu et al., 2017).

5. Conclusions

The present systematic literature review aimed to verify the state of the art regarding the definition of tourist profiles in four- and five-stars hotels based on online reviews and, through the main management implications pointed out in the investigated studies, sought to understand the benefits for hoteliers associated with knowledge of their customers through the analysis of online reviews. The objectives

were achieved through a rigorous analysis of 39 articles published between 2013 and 2022, organised by the name of the journal in which they appeared and the respective year of publication, the location of the analysed hotels, the booking and opinion platform used, as well as the number of hotels and online reviews included in the studies. Additionally, the results of the articles considered for this review and their main management implications were investigated.

Conclusions suggest that the behaviour of tourists in four- and five-star hotels is influenced by their profiles. Factors such as tourists' country of origin, the language in which online reviews are written, the type of traveller, and the purpose of the trip influence their evaluations and should be considered when analysing online reviews in order to construct detailed behavioural patterns. In addition, the hotel category also affects the experience and expectations of customers. It is proven that guests' satisfaction levels and expectations for hotel products and services are higher in four- and five-star hotels. Therefore, it is important for hoteliers to provide the expected quality standards in order to achieve guest satisfaction.

Indeed, when used to its full advantage, the analysis of online reviews constitutes an important tool for obtaining knowledge about customers. This allows hoteliers to enjoy a range of advantages capable of creating value for companies and improving their performance. However, the use of appropriate software for data collection and analysis, as well as the allocation of workers to frequently monitor online reviews, is essential.

This study provides theoretical contributions that allow us to better understand the tourists who frequent four- and five-star hotels and can be applied by hoteliers as an aid in business management, improving their performance. On the other hand, this study stands out from the others because it is an innovative contribution and

different from existing studies on online reviews, enriching scientific production in this field of research and paving the way for future complementary research.

Study limitations include the research approach, which considered articles in English, Spanish and Portuguese published between 1 January 2008 and 31 May 2022, and related to the following disciplines: Library Science; Information Science; Interdisciplinary Social Sciences; Social and Humanistic Sciences; Hospitality, Leisure, Sports and Tourism; Management and Business. Thus, future studies could consider the analysis of other material. Furthermore, since only the management implications pointed out in the investigated studies were considered, the benefits for hoteliers associated with knowledge of their customers through the analysis of online reviews were not studied in depth. Thus, this matter could be further explored in future works. Alternatively, it would be of interest to complement the theme addressed in this study by investigating tourist profiles for other hotel categories, as well as other types of accommodation. In addition, studies could be conducted on tourist profiles considering different types of management, full and limited-service hotels, or luxury, mid-range, and budget hotels.

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3. Article II: Tourists' behaviour in four- and five-star hotels in the Algarve region before and during COVID-19 pandemic: An analysis based on online reviews

Tourists' behaviour in four- and five-star hotels in the Algarve region before and during COVID-19 pandemic: An analysis based on online reviews

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Abstract | Online review analysis provides hoteliers with several useful advantages for their business performance, particularly in identifying consumer behaviour in the hospitality industry. Since the hotel industry is highly vulnerable to pandemics, which can alter consumer behaviour, review analysis emerges as an excellent tool for identifying trends in the hospitality sector, allowing recognition of changes in consumer behaviour due to the pandemic. In this context, this study aims to identify tourists' behaviour at four- and five-star hotels in the Algarve region (Portugal) before and during the COVID-19 pandemic, as well as to recognise differences that occurred among the two periods through the analysis of 17,601 online reviews published on TripAdvisor between January 2018 and April 2023. Using NVivo 14 software, frequency and sentiment analyses are conducted to evaluate tourist behaviour in relation to hotel attributes and specific metadata. Results reveal that four- and five-star hotels in the Algarve were predominantly evaluated positively by customers during both periods, and no significant differences were observed in guest behaviour during the pandemic. In addition to contributing to the existing literature on online reviews in the hotel industry, this study provides hoteliers with theoretical and practical insights that may be useful for improving their business performance.

Keywords | Algarve, COVID-19, Four- and five-star hotels, Online reviews, Text mining

1. Introduction

The travel and tourism sector is an activity area that plays an important role in Portugal's economy. Characterised as the country's most considerable service-exporting activity, it generated tourism receipts in 2023 that represented 48.6% of service exports, 19.9% of total exports, and 9.5% of Gross Domestic Product (TravelBI, 2024e). This sector's good performance enabled Portugal to rank 12th in the Travel & Tourism Development Index in 2024, an index that measures indicators and policies related to tourism and travel in 117 economies (World Economic Forum, 2024).

One of Portugal's main tourist regions is the Algarve, which in 2023 boasted the largest accommodation capacity in the country's tourist accommodation establishments and was the leading destination in the number of overnight guest stays (TravelBI, 2024d, 2024b). In the same year, 16.5% of all employees in Algarve had jobs related to the tourism sector, making it the Portuguese location with the highest percentage of employment linked to this activity sector (TravelBI, 2024c).

In 2019, tourism in the Algarve region had its best year ever, with 5 million guests staying in tourist accommodation establishments (+7.01% compared to 2018), of which 29.06% were residents and 70.94% were non-residents. In the same year, Algarve recorded 21 million overnight stays (+2.53%), the majority of which were made by foreign guests (76.14%). As a result, the region's tourist accommodation establishments achieved 1.2 billion in total revenue, of which 910 million was related to accommodation profits (Instituto Nacional de Estatística, 2020).

However, the tourism industry is highly vulnerable to unexpected occurrences such as pandemics (Hu et al., 2021). On 31 December 2019, the World Health Organization (WHO) was alerted to several unknown pneumonia cases in Wuhan, China, which were later identified as a new type of coronavirus. On 30 January 2020, the WHO declared the new coronavirus outbreak a Public Health Emergency of International Concern (PHEIC). On 11 March 2020, it was characterised as a pandemic caused by the COVID-19 disease (Organização Pan-Americana da Saúde, 2023). Due to generalised lockdowns and travel restrictions imposed by countries to contain the virus' spread, the pandemic has caused a huge drop in international demand, causing an unprecedented interruption in tourism (UNWTO, 2020).

In 2020, the number of guests in Algarve's tourist accommodation establishments fell by 3.1 million compared to 2019 (-60.67%) and overnight stays totalled 7.9 million (-62.25%), of which foreign guests made 51.66%. With this outcome, the total revenue of the region's tourist

accommodation establishments and profits from accommodation totalled 462 million euros (-62.34%) and 346 million euros (-61.91%), respectively (Instituto Nacional de Estatística, 2021). The year 2021 was also impacted by the constraints of the COVID-19 pandemic due to confinement measures imposed, with negative effects on the tourism sector. Despite having grown compared to 2020, it was still below the levels of 2019 (Instituto Nacional de Estatística, 2022). In 2022, a year significantly marked by the return of foreign tourists to Portugal, the tourism sector came close to record figures in 2019 (Instituto Nacional de Estatística, 2023).

On 5 May 2023, WHO declared the end of PHEIC and determined that COVID-19 is now an established and ongoing health problem (World Health Organization, 2023). In 2023, Algarve's tourism sector reached and surpassed levels of some statistical indicators obtained in 2019, with 5.1 million guests (+1.36% compared to 2019) and 20.4 million overnight stays (-2.47%) in the region's tourist accommodation establishments, which led to 1.6 billion in total revenue (+29.86%) and 1.2 billion in revenue from accommodation (+29.12%) (TravelBI, 2024a).

Given that the tourism sector has been severely affected by the COVID-19 pandemic, there is a need to investigate its impact on the hotel sector, particularly regarding changes in guest behaviour. In this context, this study aims to identify tourists' behaviour at four- and five-star hotels in the Algarve before and during the COVID-19 pandemic, as well as recognise changes influenced by the pandemic through the extraction and analysis of online reviews made between January 2018 and April 2023. In this way, tourist behaviour will be identified by characterising demand, including geographic, sociodemographic, and psychographic factors. In addition, it is intended to provide hoteliers with theoretical and practical contributions that may be useful for their business performance, as well as contribute to existing literature by expanding current research on the use of online reviews in the hotel industry.

The study is divided into five sections. After the introductory section, we present a literature review on the subject under study and an explanation of the methodology. The fourth section presents analyses and discusses the results. Finally, the study presents its main conclusions, along with management implications, limitations, and recommendations for future research.

2. Literature review

2.1. Online reviews: User characteristics and hotel attributes

It has been proven that analysing online reviews enables the assessment of hotel performance, consumer behaviour, improvement needs and market demands (Oliveira et al., 2020). Additionally, it can be confirmed that, alongside textual content, review metadata - such as users' age, trip purpose, comments' language, stay date, hotel location and category - has the potential

to help hoteliers assess various factors that influence reviews publication (Oliveira et al., 2022; Ye et al., 2018).

The systematic literature review conducted previously by Ferreira et al. (2024), which compiled studies using online review analyses, made it possible to understand that in four- and five-star hotels, guest satisfaction varies according to country of origin (Tsotsou, 2019, 2022; Wu et al., 2017; Zhou et al., 2014), comments' language (Antonio et al., 2018; Pacheco, 2016; Schuckert et al., 2015) and traveller type, i.e. solo, couple, family, friends or business travellers (Ahani et al., 2019; Ahn et al., 2017; Tsotsou, 2019; Wu et al., 2017). In addition to these factors, studies have also shown that users' experiences in writing online reviews influence ratings assigned to four- and five-star hotels (Amatulli et al., 2019; Liang et al., 2016).

On the other hand, online reviews provide a wealth of information on how different hotel attributes are evaluated, and it has been shown that the importance given by customers to attributes varies according to the hotel's star rating (Rhee & Yang, 2015). In four- and five-star hotels, the main attribute responsible for customer satisfaction is value for money in studies by Li et al. (2013), Limberger et al. (2014), Rhee & Yang (2015) and Wong et al. (2020), and was indicated by Li et al. (2013) that this attribute plays an important role in customers' booking decisions and post-purchase satisfaction. Nevertheless, in a study by Cibere et al. (2020), which investigated the performance of six attributes, value for money ranked last, with cleanliness being the top-rated attribute by customers. In addition, cleanliness appears to be customers' third most valued attribute in investigations by Wong et al. (2020) and Rhee & Yang (2015), proving the impact that intangible services have on customer experience.

Service was a determining factor for customer satisfaction in four- and five-star hotels in Pacheco (2017) and Ríos-Martín et al. (2019) studies. Although it was not the most relevant attribute, Cibere et al. (2020), Kim et al. (2016), Limberger et al. (2014), Rhee & Yang (2015), and Wong et al. (2020) also highlight it as an attribute that contributes to guest satisfaction. It has been verified that service quality can directly influence hotel recommendations to third parties and the desire to return to the same hotel (Padma & Ahn, 2020).

Similarly, rooms have been identified as an important attribute for guest satisfaction in four- and five-star hotels in many studies (Cibere et al., 2020; Kim et al., 2016; Kitsios et al., 2021; Limberger et al., 2014; Pacheco, 2017; Padma & Ahn, 2020; Rhee & Yang, 2015; Wong et al., 2020). According to Kitsios et al. (2021), for guest satisfaction to be achieved, hotel rooms must be pleasant, clean, comfortable and cosy. Additionally, room size is also a factor that customers value (Kim et al., 2016; Pacheco, 2016).

On the other hand, in investigations by Athanasopoulou et al. (2023), Kim et al. (2016), Kitsios et al. (2021) and Li et al. (2013), the location was considered the most valued attribute by customers of four- and five-star hotels. Kitsios et al. (2021) recommend that, when building future hotels, location and accessibility should be considered. For existing hotel companies, they suggest improving access to tourist attractions and/or transportation hubs. In contrast, in studies by Cibere et al. (2020), Wong et al. (2020) and Rhee & Yang (2015), location was the least important attribute for customers, possibly because it is only relevant when choosing a hotel (Limberger et al., 2014; Pacheco, 2017; Wong et al., 2020).

In addition to the attributes mentioned above, staff were also a key factor in customer satisfaction at four- and five-star hotels in some studies (Athanasopoulou et al., 2023; Kim et al., 2016; Kitsios et al., 2021; Padma & Ahn, 2020; Ríos-Martín et al., 2019). As the only element that can immediately adapt to each customer's needs, hotel staff gain particular importance by providing an individualised experience tailored to customers' specific needs and expectations (Ríos-Martín et al., 2019). According to Athanasopoulou et al. (2023) and Kitsios et al. (2021), friendly, well-trained, and efficient staff enhance customer satisfaction.

Lastly, sleep quality is identified as a satisfaction attribute in studies by Cibere et al. (2020), Rhee & Yang (2015) and Wong et al. (2020). However, Ríos-Martín et al. (2019) and Rhee & Yang (2015) note that online reviews rarely mention sleep quality. Customers consider it a basic expectation, similar to cleanliness since a higher-category hotel is generally expected to provide better sleep quality.

2.2. Online reviews in the COVID-19 pandemic

Since the hotel industry is highly vulnerable to pandemics, it has been suggested that COVID-19 may alter consumer behaviour in the long term (Hu et al., 2021). Given that text analysis provides insights into trends in the hotel industry (Bi et al., 2024), several studies have utilised analysis of online hotel reviews to understand differences in consumer evaluations before and during the pandemic.

An example is the study by Xu et al. (2023), which indicated that the pandemic positively affected customer ratings, although the effect was less pronounced in higher-star hotels. However, these results were not found in studies by Raedts et al. (2023), which revealed that customers rated four-star hotels less positively during the pandemic. Nevertheless, customers valued the same hotel attributes in both investigations during the new reality: services, rooms, breakfast, and location. Additionally, studies by Cheng et al. (2021) highlighted services, rooms, and locations. However, the authors noted that the main guest experience determinants at five-star hotels did not change with the pandemic.

On the other hand, with the emergence of COVID-19, customers began to place greater importance on attributes related to cleanliness, hygiene, and safety measures (Hu et al., 2021; Raedts et al., 2023), and it was found that those who were concerned about health-related issues and positively commented on how hotels managed the pandemic, rated four- and five-star hotels higher (Raedts et al., 2023; Xu et al., 2023), especially when travelling for business purposes (Xu et al., 2023).

In conclusion, online reviews' heterogeneous and real-time nature can help hotel managers understand the post-pandemic sector dynamics (Bi et al., 2024) and can help them prepare actions to ensure customer satisfaction (Alamoodi et al., 2021).

3. Methodology

3.1. Sampling and data collection

TripAdvisor is the world's largest travel advice platform, with over 1 billion ratings and reviews on 8 million accommodation and other businesses (TripAdvisor, 2023). It was selected to extract online reviews of four- and five-star hotels in the Algarve.

Before the process of extracting online reviews, the Registo Nacional de Turismo (2023) was used to search hotels intended for investigation, resulting in 104 four- and five-star hotels located in Algarve (12-06-2023). However, since the current investigation aims to analyse reviews written from the beginning of 2018 onwards, 11 hotels could not be considered due to their opening years being in 2018 or later. Therefore, only hotels that inclusive had been open until 2017 were considered for the study. The 93 selected hotels (64 four-star and 29 five-star) were searched on TripAdvisor using their names, addresses, postal codes, and official websites.

Next, an Excel sheet was created with 93 hotel units, each assigned an identification number. Each hotel was linked to its corresponding TripAdvisor page, and a bot was developed in C# serving as a web scraper to collect online reviews published since January 1, 2018, in five languages: English, Portuguese, Spanish, German, and French. The data extraction took place on July 27, 2023, and lasted three days, meaning that some reviews posted between July 27 and 29 were also collected. The collection resulted in a total of 39,851 reviews, which were inserted into an Excel sheet. Additionally, the following data were extracted: hotel location (municipality) and user location, number of user contributions, type of traveller, date of stay (different from the review date), average ratings, and language review.

3.2. Data refining

Before analysing online reviews, it was necessary to refine the data, which involved converting unstructured text data into structured data (Ban et al., 2019). Firstly, all rows in the Excel sheet

that contained one or more empty cells were removed (n=18,988). Secondly, a manual process was carried out on the user location column, ensuring that cities and tourist provinces were presented in the form of countries, and any rows with data that did not correspond to a valid location were also removed (n=18,943). Finally, the stay date column was formatted as a date, and the dates were sorted in ascending order.

Since the goal was to analyse online reviews from January 2018 onward, all reviews with a stay date before this period were removed (n=18,596), as some guests wrote reviews in 2018 but stayed in 2017, for example. Reviews with a stay date in May 2023 or later were also excluded (n=17,601), as on May 5, 2023, WHO declared the end of the PHEIC (World Health Organization, 2023). It's important to note that TripAdvisor presents stay dates as month and year, making it impossible to account for reviews from guests who stayed during the first five days of May 2023. Lastly, all reviews were translated into English using an online translator, ensuring the analysis was conducted in the same language.

After refining the data, a total of 17,601 reviews were obtained. Two databases were then created in Excel: the first covering the pre-pandemic period, consisting of 13,329 reviews made between January 2018 and January 2020, as WHO declared the coronavirus outbreak a PHEIC on January 30, 2020 (Organização Pan-Americana da Saúde, 2023); and the second covering pandemic period, with 4,272 reviews recorded between February 2020 and April 2023, as shown in figure 1. As mentioned earlier, since TripAdvisor displays stay dates as month and year, the pre-pandemic database includes reviews from guests who stayed on January 30 and 31, 2020 - dates that technically belong to the pandemic period.

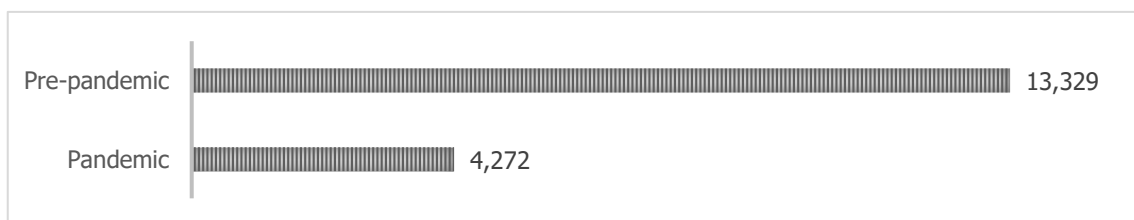


Figure 1 - Number of online reviews considered by period

Source: Own work

3.3. Data analysis

Since analysing a large volume of data can be demanding, using appropriate software to analyse and categorise online reviews becomes necessary (Oliveira et al., 2020). Like the study by Oliveira et al. (2022), NVivo 14 was utilised since it is designed to assist researchers in qualitative data analysis. It is important to note that this software can only analyse one language at a time and does not recognise sarcasm, double negatives, slang, linguistic variations, idiomatic expressions,

or ambiguity. However, it remains an effective tool for obtaining an overall summary of opinions (Oliveira et al., 2022).

In this context, two databases were imported into the software, resulting in two separate projects. These data were used for both quantitative and qualitative analysis. The quantitative analysis allowed for the visualisation of online review distribution by metadata, such as hotel location (municipality), language review, user location (country and continent of origin), stay date, type of traveller, number of user contributions, and average ratings for each period under study. Qualitative analysis, which focused on the text of online reviews, enabled sentiment analysis and word (or term) frequency analysis.

Sentiment analysis is characterised by its ability to determine the polarity of a document, comment, opinion, or emotion expressed by someone, where polarity can be positive, neutral, or negative (Alaei et al., 2019), and was used to detect the sentiment present in each sentence of guests' comments. Frequency analysis, to identify the hotel attributes most discussed by customers, was employed to search the most mentioned words and their respective derivatives (e.g., clean, cleaned, cleaning, cleanness, cleans) in each sentence of the comments. These analyses considered data from each period.

4. Results and discussion

4.1. Quantitative analysis

As can be seen in figure 2, the Algarve region is composed of 16 municipalities, with most of the four- and five-star hotels located along the coastal areas. No hotels were observed in São Brás de Alportel and Alcoutim.

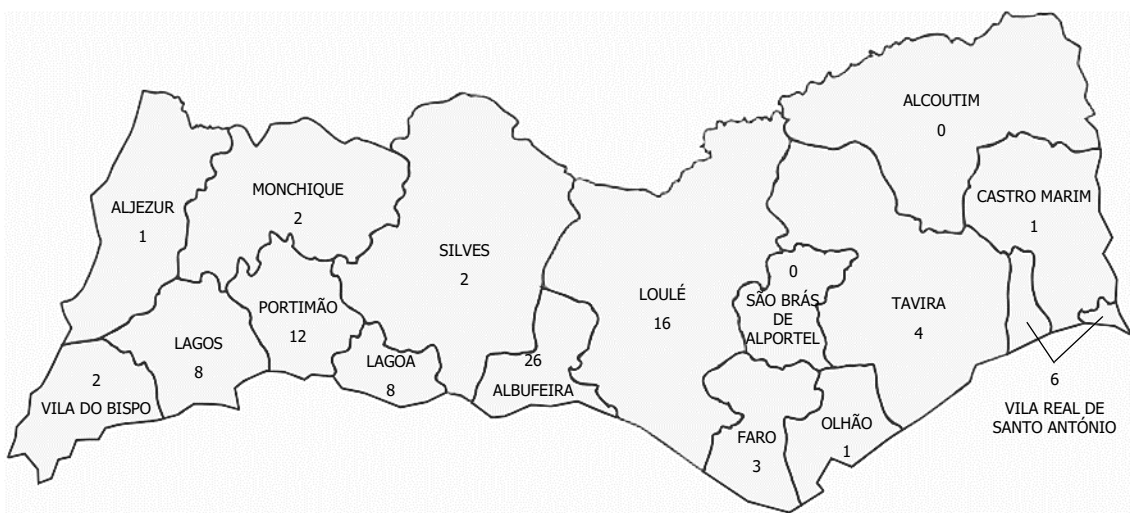


Figure 2 - Number of four- and five-star hotels by municipalities in Algarve
Source: Adapted from Associação Nacional de Municípios Portugueses (2020)

Regardless of the study period, the majority of online reviews collected come from tourists staying in hotels located in the municipalities of Albufeira, Portimão, Loulé, Lagoa, and Lagos, which, as previously verified (Figure 3), have a higher number of four- and five-star hotels.

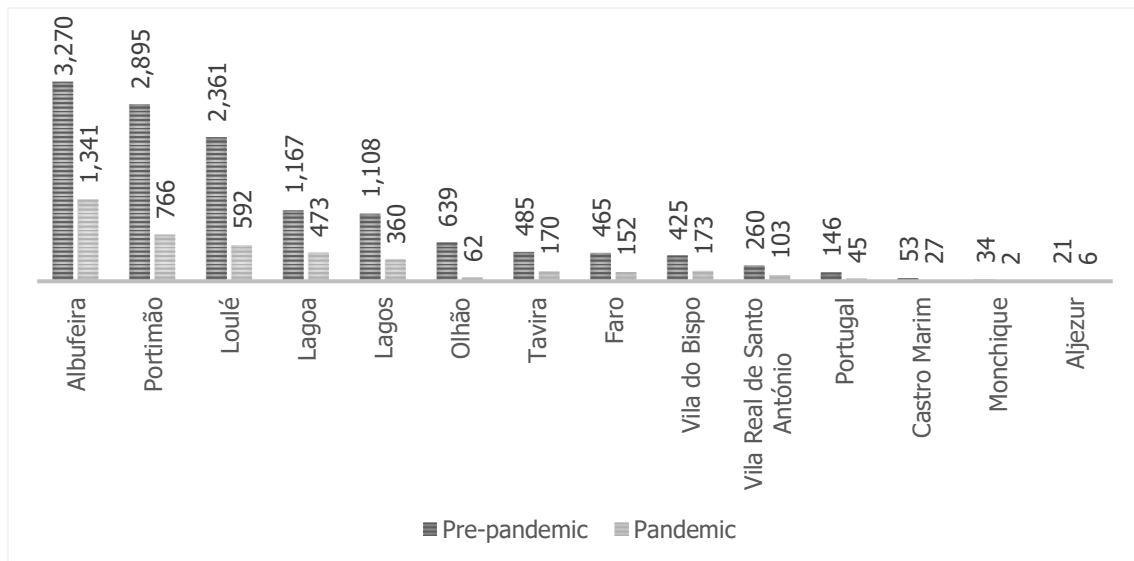


Figure 3 - Number of online reviews by Algarve municipalities

Source: Own work

For the two periods in question, more than half the comments were written in English (Figure 4). This was followed by comments written in Portuguese, Spanish, and German in the pre-pandemic period and in Portuguese, German, and Spanish in the pandemic period. French was the least used language by tourists in both periods.

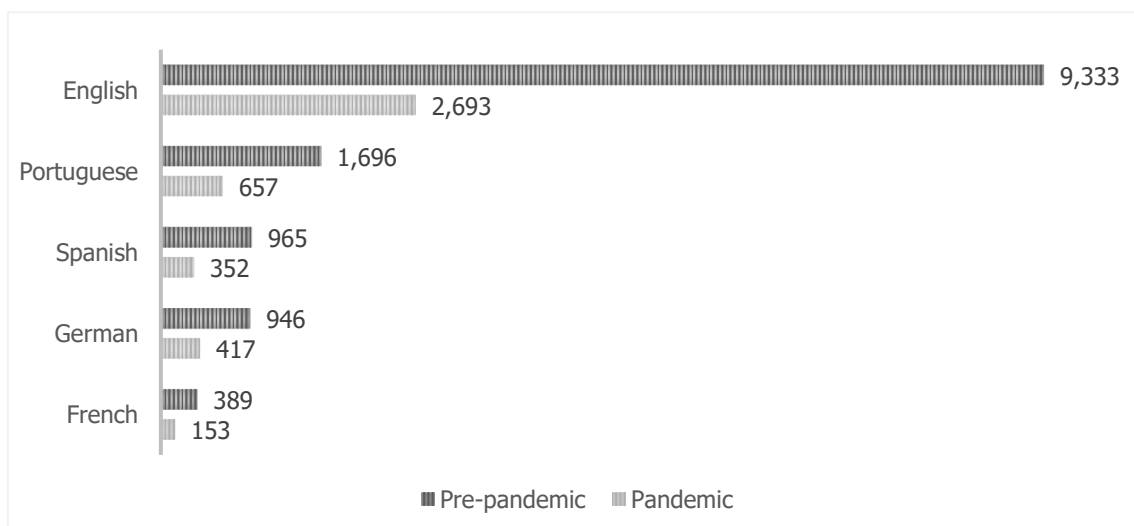


Figure 4 - Number of online reviews by language

Source: Own work

In Table 1, fifteen countries with the highest number of tourists who submitted online reviews under study are listed, with the United Kingdom standing out, accounting for approximately 52% and 45% of total tourists in pre-pandemic and pandemic periods, respectively, and Portugal, with around 13% and 17% in first and second periods under study. The same table also shows the origin of tourists by continent, highlighting that in both periods, over 90% come from Europe. It is important to mention that reviews from tourists originating from Azerbaijan, Russia, and Turkey were counted twice, as these countries are part of both Europe and Asia, resulting in the total number of reviews in the table being higher than the total number of extracted reviews (an additional 20 reviews). In smaller numbers, tourists from Africa were also present during both periods.

Table 1 - Number of online reviews by country and continent of tourist's origin

| Country of origin | Pre-pandemic | % | Pandemic | % |
|----------------------------|---------------------|----------|-----------------|----------|
| United Kingdom | 6,898 | 51.8% | 1,930 | 45.2% |
| Portugal | 1,687 | 12.7% | 714 | 16.7% |
| Spain | 979 | 7.3% | 363 | 8.5% |
| Germany | 779 | 5.8% | 380 | 8.9% |
| Ireland | 717 | 5.4% | 186 | 4.4% |
| United States | 425 | 3.2% | 141 | 3.3% |
| France | 403 | 3.0% | 154 | 3.6% |
| Brazil | 226 | 1.7% | 37 | 0.9% |
| Switzerland | 208 | 1.6% | 83 | 1.9% |
| Canada | 162 | 1.2% | 49 | 1.1% |
| Belgium | 90 | 0.7% | 29 | 0.7% |
| Netherlands | 79 | 0.6% | 28 | 0.7% |
| Australia | 77 | 0.6% | 8 | 0.2% |
| Austria | 76 | 0.6% | 18 | 0.4% |
| Italy | 44 | 0.3% | 19 | 0.4% |
| Others | 479 | 3.6% | 133 | 3.1% |
| Continent of origin | | | | |
| Europe | 12,205 | 91.5% | 3,977 | 93.0% |
| North America | 613 | 4.6% | 199 | 4.7% |
| South America | 284 | 2.1% | 44 | 1.0% |
| Asia | 107 | 0.8% | 41 | 1.0% |
| Oceania | 89 | 0.7% | 11 | 0.3% |
| Africa | 45 | 0.3% | 6 | 0.1% |

Source: Own work

Regarding stay dates, tourists primarily chose to stay between April and October in the pre-pandemic period, while they mainly opted for April, August, September, and October in the pandemic period (Figure 5).

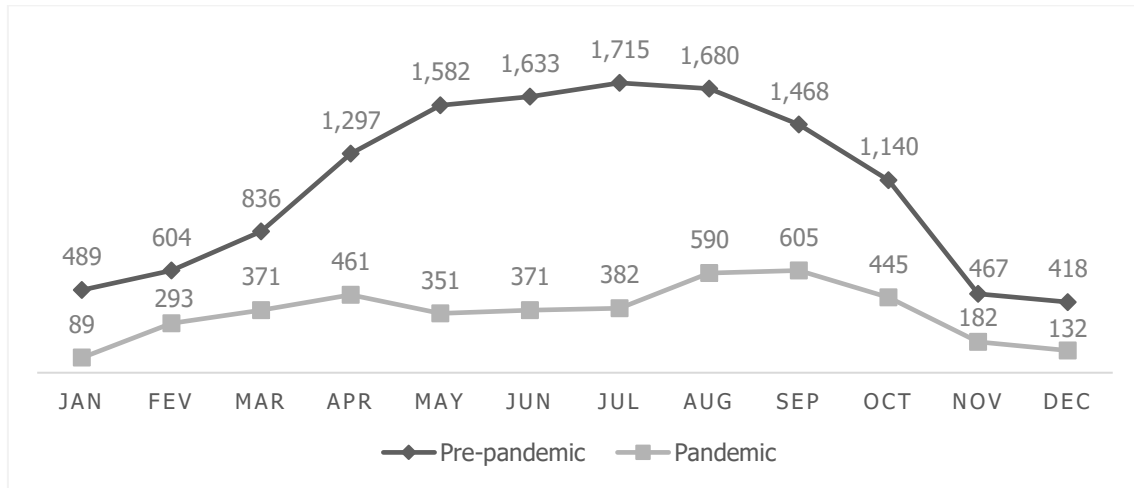


Figure 5 - Number of online reviews by stay date

Source: Own work

Based on figure 6, more than half the tourists who stayed in four- and five-star hotels in the Algarve travelled as a couple in both periods. This category of hotels also saw a considerable number of tourists travelling with family and friends. Guests travelling for business and those travelling alone were fewer, with more solo travellers than business travellers during the pandemic, which was not the case in the pre-pandemic period.

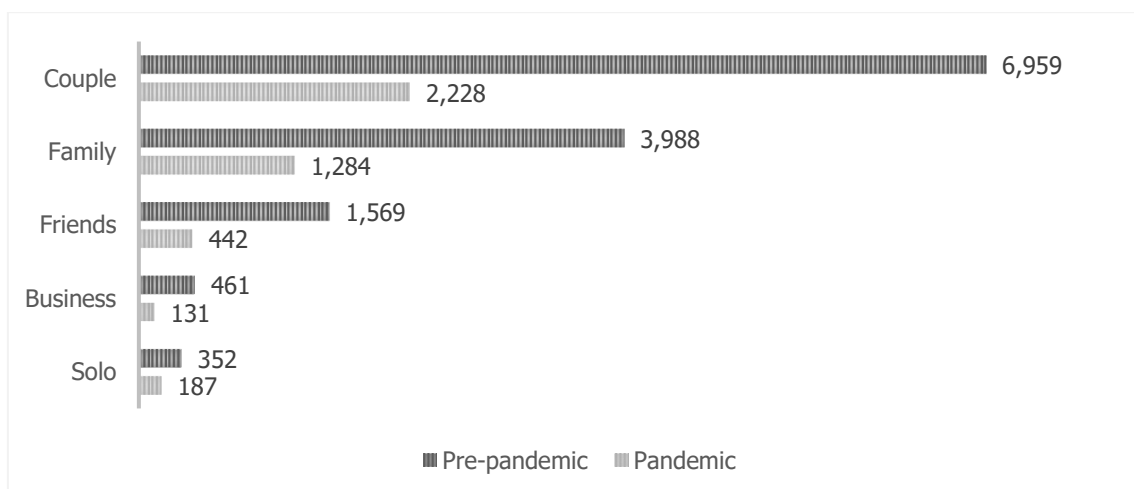


Figure 6 - Number of online reviews by traveller type

Source: Own work

Regarding tourists' experience writing online reviews, the majority are experienced, meaning it is not their first time writing an online review for both periods under study (Figure 7).

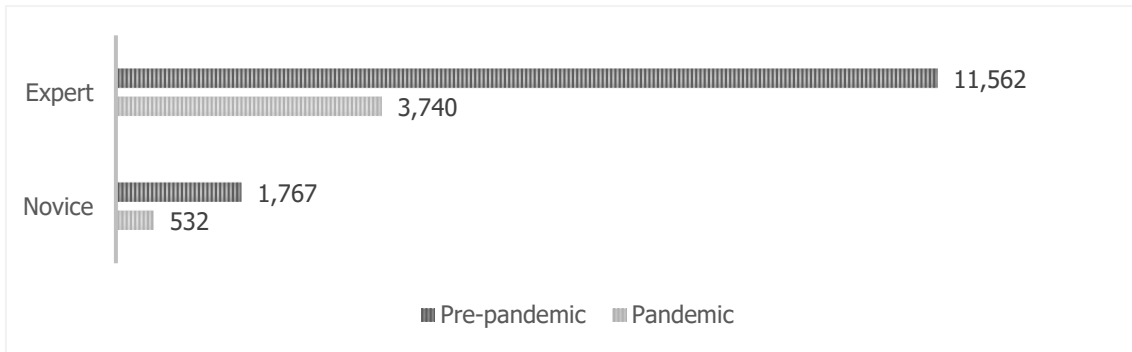


Figure 7 - Number of online reviews by user contributions

Source: Own work

Since TripAdvisor allows hotels to be rated up to five points, four- and five-star hotels in the Algarve region were mostly rated positively by tourists, with ratings of 4 and 5 points (Figure 8).

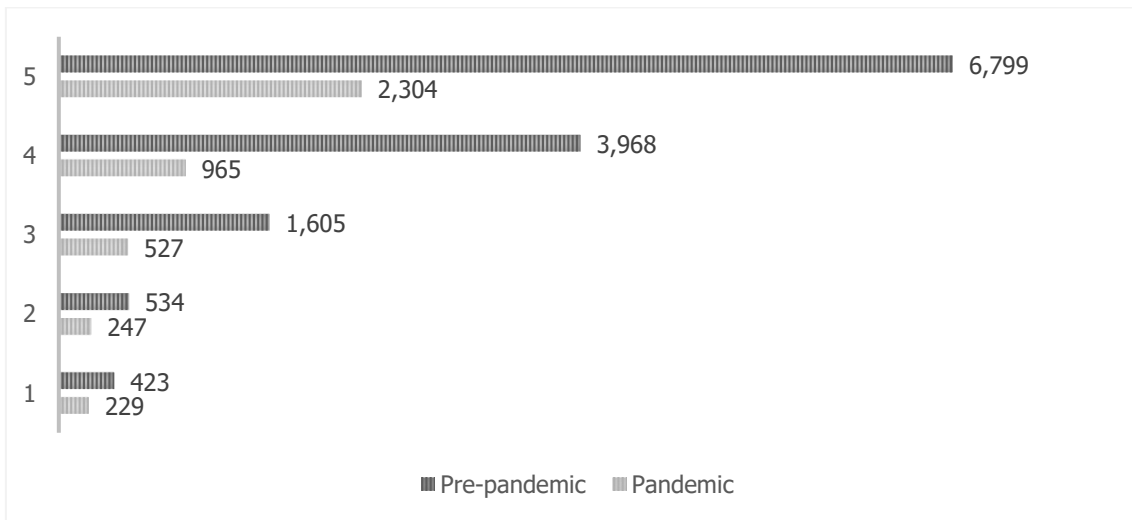


Figure 8 - Number of online reviews by average rating

Source: Own work

4.2. Qualitative analysis

To simplify qualitative analysis reading, including sentiment and frequency analyses, positive sentiment encompasses moderately positive and very positive sentiments analysed together. The same applies when discussing negative sentiment, which refers to both moderately negative and very negative sentiments grouped simultaneously.

4.2.1. Sentiment analysis

Regardless of the study period, it can be stated that tourists staying in four- and five-star hotels in the Algarve primarily wrote reviews with positive sentiments, with 74.5% in the pre-pandemic period and 73.2% in the pandemic period. Of these, approximately 29% were reviews with very positive sentiments in each period (Figure 9). This finding supports the results of studies by Bayer

& Emir (2017), Oliveira et al. (2022) and Tontini et al. (2017), which demonstrated that tourists tend to share more positive reviews than negative ones. Conversely, reviews with negative sentiments accounted for 25.4% in the first period and 26.9% in the second period, showing a slight increase in customer dissatisfaction during the pandemic. This corroborates the findings of Raedts et al. (2023), which indicated that customers rated hotels less positively during the pandemic. Of these percentages, 11.9% and 13.2% were reviews with very negative sentiments in pre-pandemic and pandemic periods, respectively.

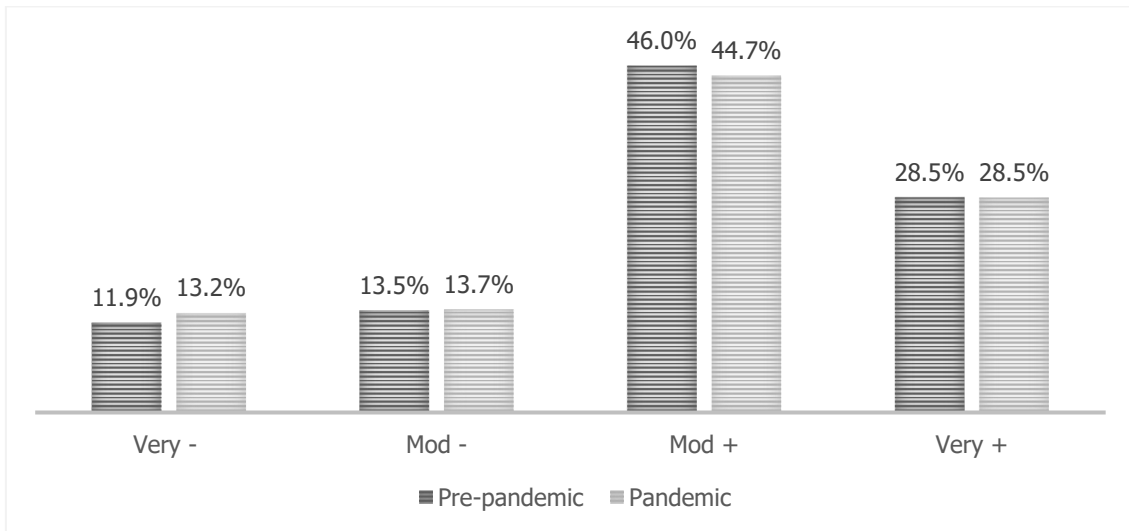


Figure 9 - Overall sentiment of online reviews

Source: Own work

From another perspective, figure 10 shows that nearly half the comments express positive or mixed sentiments (containing both positive and negative sentiments), with 47.1% and 46.1% in the pre-pandemic period and 45.7% and 46.9% in the pandemic period, respectively. Fewer comments exhibit negative or neutral sentiments (without any sentiment), accounting for 4% and 2.9%, respectively, in the first period and 5% and 2.3% in the second period. These results confirm the statements made regarding the previous chart, indicating that tourists predominantly expressed positive sentiments and were more dissatisfied during the pandemic.

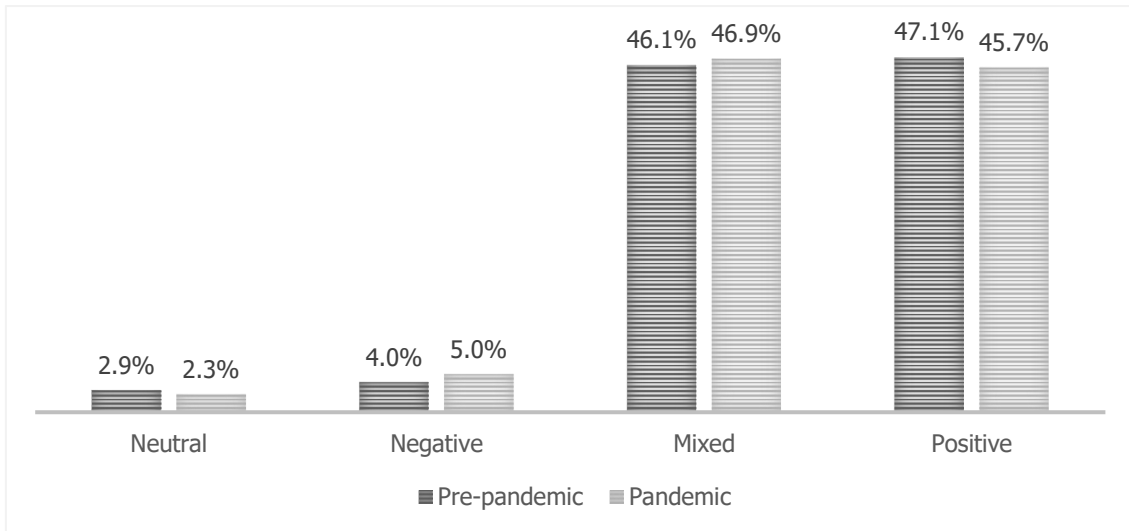


Figure 10 - Overall sentiment of coding references

Source: Own work

4.2.2. Frequency analysis

Table 2 lists the ten most mentioned words in the comments during the two periods in question. It can be observed that, for both periods, the first four words are the same and appear in the same order (rooms, staff, pool, and breakfast). The following three words (food, restaurants, and beaches) hold different levels of importance across the two periods, with food being more frequently mentioned in pre-pandemic comments and beaches in the pandemic period. "cleaning" and "bar" follow, occupying the same positions in both periods. Lastly, "areas" were a frequently mentioned hotel attribute by tourists in the period before the pandemic, while during the pandemic, customers emphasised "views".

Table 2 - Frequency analysis results

| | Pre-pandemic | | Pandemic | |
|----|--------------|-------|-------------|-------|
| 1 | rooms | 1.94% | rooms | 1.93% |
| 2 | staffs | 1.29% | staffs | 1.34% |
| 3 | pool' | 1.21% | pools | 1.22% |
| 4 | breakfasts | 0.87% | breakfasts | 0.92% |
| 5 | foods | 0.76% | beaches | 0.77% |
| 6 | restaurant' | 0.74% | foods | 0.77% |
| 7 | beach' | 0.73% | restaurants | 0.74% |
| 8 | cleans | 0.67% | cleaning | 0.68% |
| 9 | bar' | 0.64% | bars | 0.66% |
| 10 | areas | 0.63% | view' | 0.59% |

Source: Own work

The words room, staff, pool, and breakfast were most frequently mentioned by tourists, partially corroborating studies results by Kitsios et al. (2021), Oliveira et al. (2022) and Padma & Ahn (2020). The words room, staff, pool, and breakfast were most frequently mentioned by tourists, partially corroborating results from studies by Hu et al. (2021) and Raedts et al. (2023). These four hotel attributes will receive special attention in the following section, where they will be subjected to sentiment analysis.

It is important to note that only words related to hotel attributes were retained in the frequency table. Words that did not meet this condition, such as "hotel," which refers to the hotel unit itself, and "day," which is not a hotel attribute, were removed.

4.2.3. Sentiment analysis of select hotel attributes

Regarding the four selected hotel attributes (Figure 11), it can be observed that in the pre-pandemic period, breakfast was the most valued attribute by customers, with 82.3% of comments expressing positive sentiment, followed by staff (80.5%), rooms (76.4%), and the pool (74.6%). During the pandemic period, however, the highest number of positive comments shifted to staff (80.5%), followed by breakfast (80.1%), rooms (78.5%), and the pool (73%). This indicates that customers placed more value on rooms than in the previous period, as evidenced by the increased percentage associated with this attribute. Despite these observations regarding comments with very positive sentiment, the staff stands out in both periods, with 44.5% of total comments in the pre-pandemic period and 46.7% in the pandemic period, highlighting an increase in tourist satisfaction with staff during the pandemic.

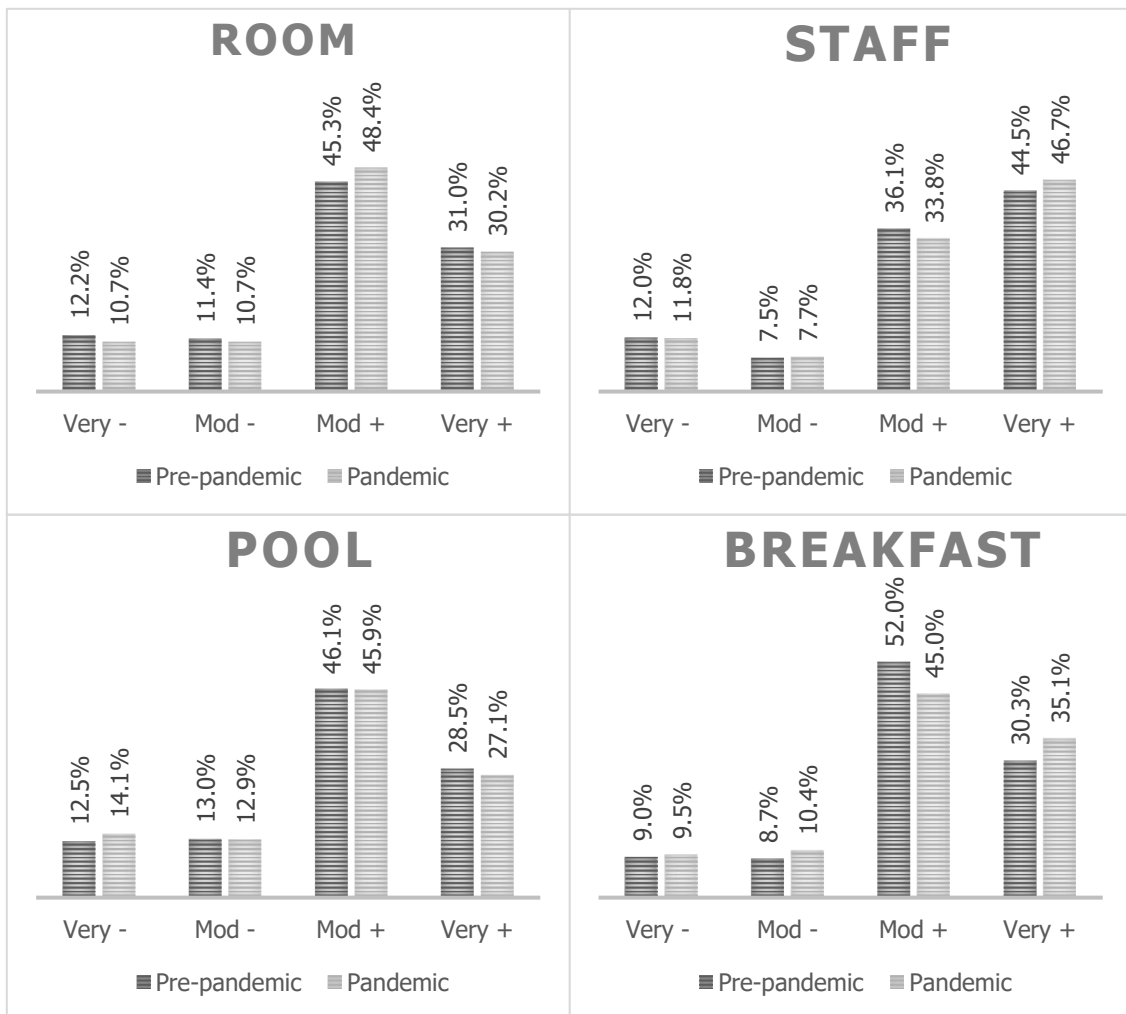


Figure 11 - Sentiment towards selected hotel attributes

Source: Own work

On the other hand, regardless of the period, the pool was the hotel attribute that generated the highest percentage of negative reviews, with 25.4% and 27% in the first and second periods, respectively. The pool also received most comments with very negative sentiment, with 12.5% in the pre-pandemic period and 14.1% in the pandemic period. Additionally, it is evident that during the pandemic, tourists became more dissatisfied with the pool compared to the previous period and breakfast.

4.2.4. Sentiment analysis of metadata

Considering the language in which comments were written, it is observed that comments in Portuguese exhibit the highest levels of positive sentiment, with 79.1% before the pandemic and 77.2% during the pandemic (Figure 12). Following these are comments written in English (74.6%), Spanish (73.3%), German (72.1%), and French (69.3%) in the pre-pandemic period. This order shifted with the pandemic, as after Portuguese, the comments in German (75.3%) were next, followed by English (72.9%), Spanish (69.5%), and French (68.8%). On the other

hand, with the pandemic, the percentage of positive sentiment comments written in German was the only one to increase. German comments also featured the highest number of very positive sentiment comments, with 34% in the first period and 36.5% in the second period.

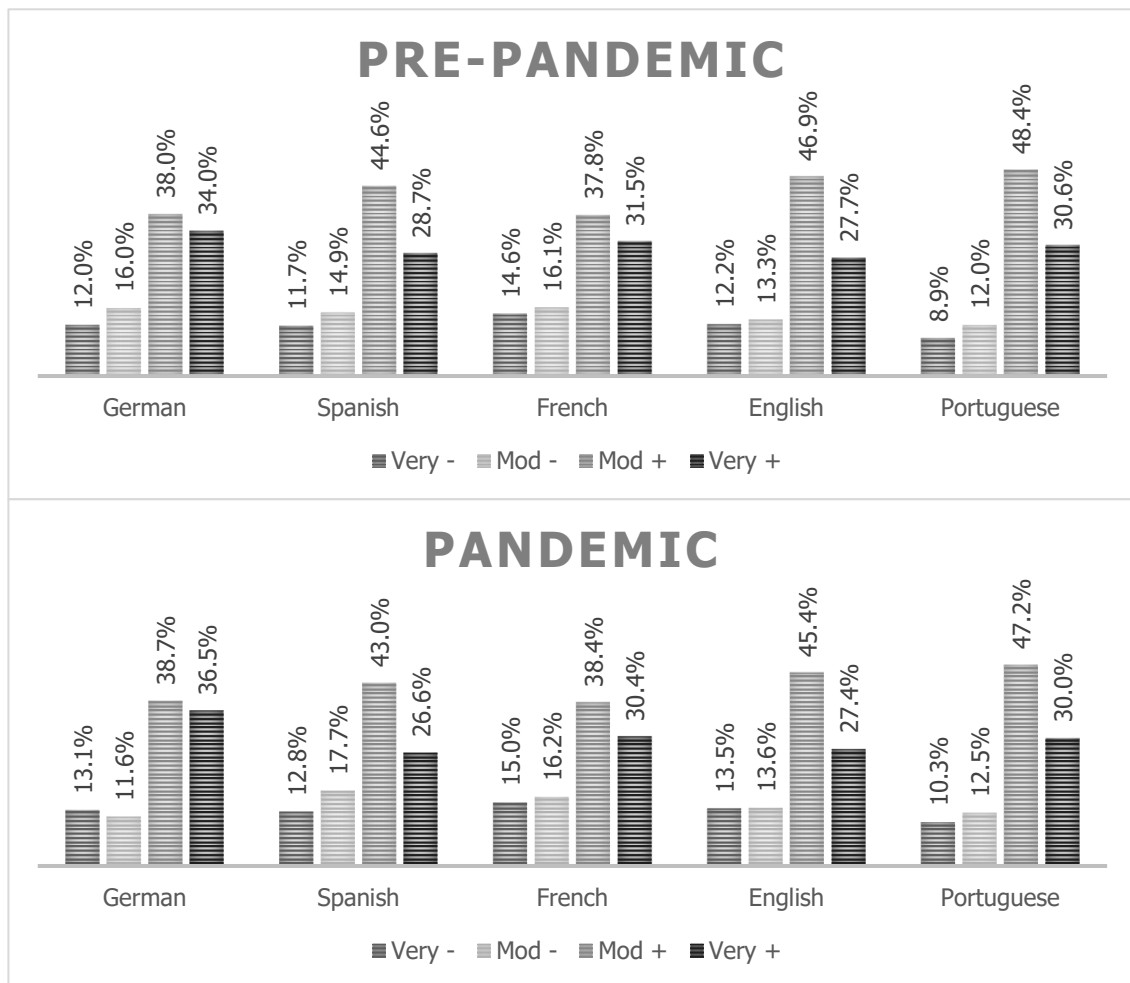


Figure 12 - Tourist sentiment by language

Source: Own work

In contrast, comments written in French showed the highest percentages of negative sentiment, with 30.7% in the pre-pandemic period and 31.2% in the pandemic period. Of these percentages, 14.6% and 15% correspond to comments with very negative sentiments, respectively. Furthermore, with the pandemic, the percentage of negative sentiment comments written in Spanish, French, English, and Portuguese increased.

Considering tourists' continent of origin (Figure 13), it is noted that, in the period before the pandemic, comments with the highest percentage of positive sentiment were written by guests in the following order: from South America (79.2%); North America (77.3%); Asia (76.8%); Africa (75%); Europe (74.3%); and Oceania (73%). However, Asian tourists wrote most comments with very positive sentiments (32.2%). During the pandemic, tourists from Africa wrote the highest

number of comments with positive sentiment (85.2%), with 40.7% being very positive, followed by comments from North American guests (79.3%), Europe (73%), Asia (68.3%), South America (66.9%), and Oceania (58.6%). Additionally, during the pandemic, the percentage of positive sentiment comments from tourists from Africa and North America increased.

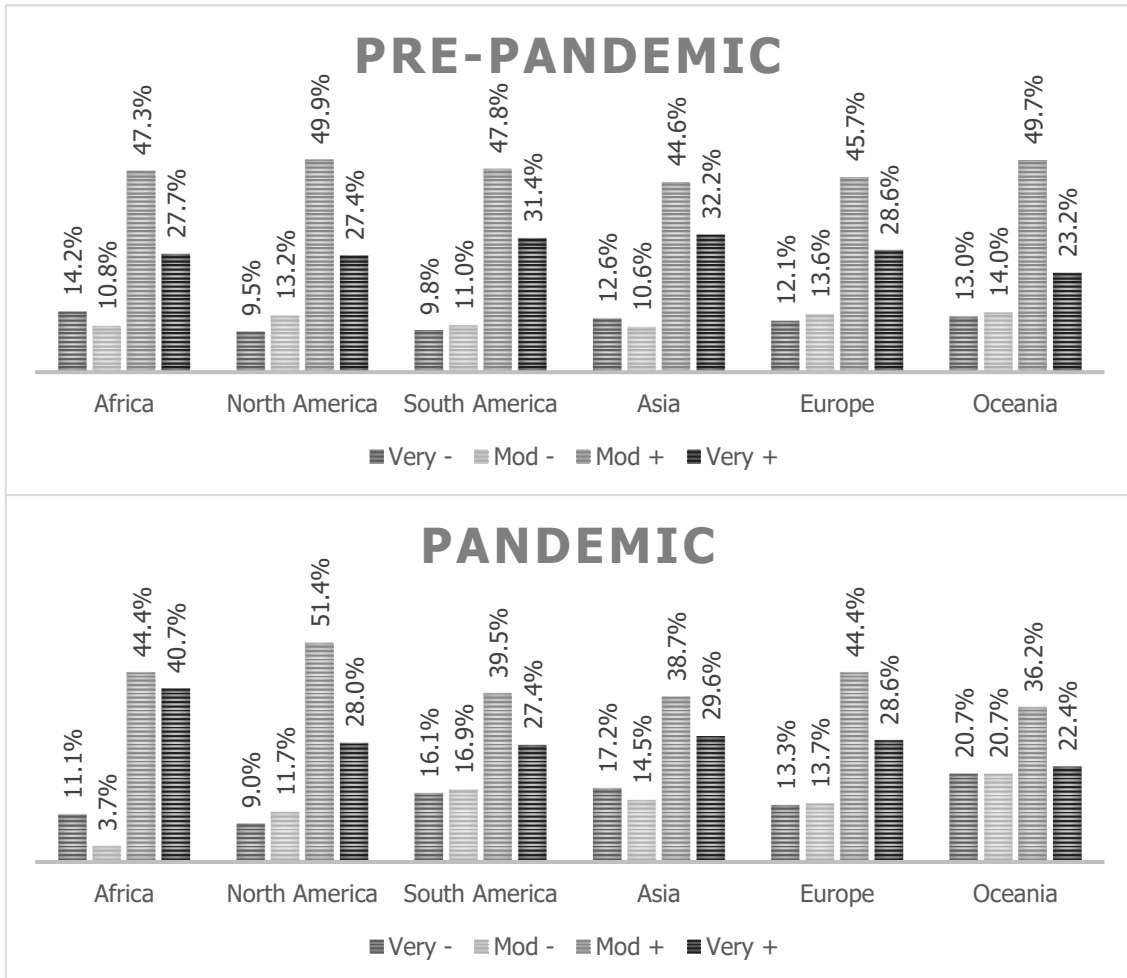


Figure 13 - Tourist sentiment by continent of origin
Source: Own work

In contrast, during both periods under study, customer comments from Oceania had the highest percentage of negative sentiment, with 27% in the first period and 41.4% in the second period. Additionally, customers from this continent also made the most comments with very negative sentiment during the pandemic (20.7%). In contrast, before the pandemic, customers from Africa stood out (14.2%). It was also observed that, during the pandemic, the number of negative comments from South American tourists from Asia, Europe, and Oceania increased.

Considering dates of stay, it is evident that the period from December to February contributed most to positive customer sentiment, with 80.3% and 77.9% in periods before and during the pandemic, respectively. This same period also saw the highest percentage of comments with very

positive sentiment, with 29.8% and 29.3% in the first and second periods, respectively (Figure 14). In both periods, and terms of positive sentiment, the months of March to May followed (75.8% in the pre-pandemic period; 75.3% during the pandemic), then September to November (74.7%; 73%), and June to August (72.3%; 69.9%). This indicates that the sentiment of comments, when evaluated by stay date, was not significantly altered by the pandemic despite a slight decline in percentages.

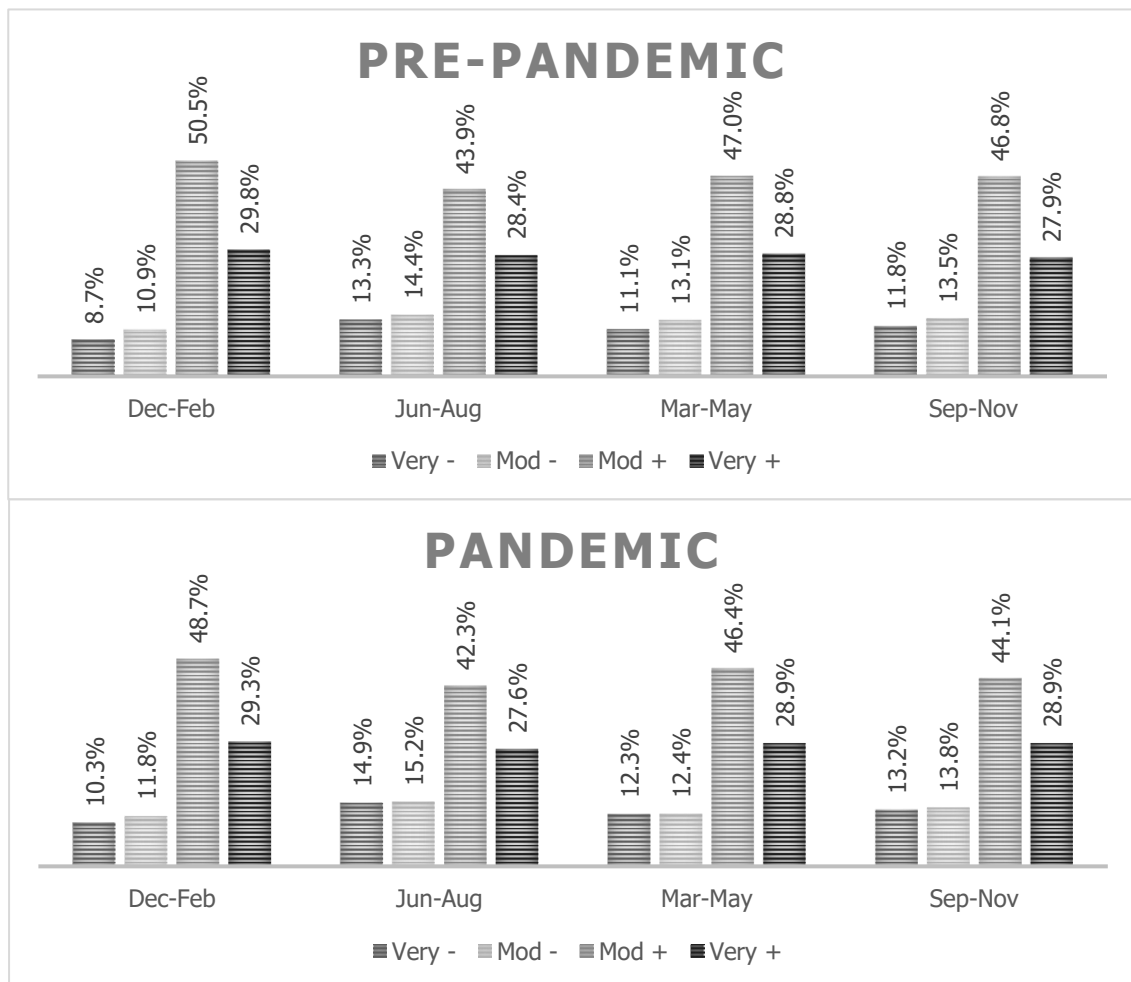


Figure 14 - Tourist sentiment by stay date

Source: Own work

On the other hand, the most negative sentiment comments were written between June and August, with 27.7% and 30.1% in the pre-pandemic and pandemic periods, respectively. This same period also saw the highest number of comments with very negative sentiment, with 13.3% before the pandemic and 14.9% during the pandemic.

Regarding the type of traveller (Figure 15), it is evident that guests travelling for business purposes wrote most positive comments in both periods (80.6% in pre-pandemic period; 78.4% during the pandemic), followed by comments from guests who travelled alone (76.1%; 76.4%),

as a couple (75.3%; 74.5%), with friends (74.6%; 73.7%), and with family (72.7%; 69.8%). Notably, during the pandemic, the percentage of positive comments from guests who travelled alone was the only one to increase. On the other hand, business travellers also made the highest number of very positive comments, with 30.4% in each period.

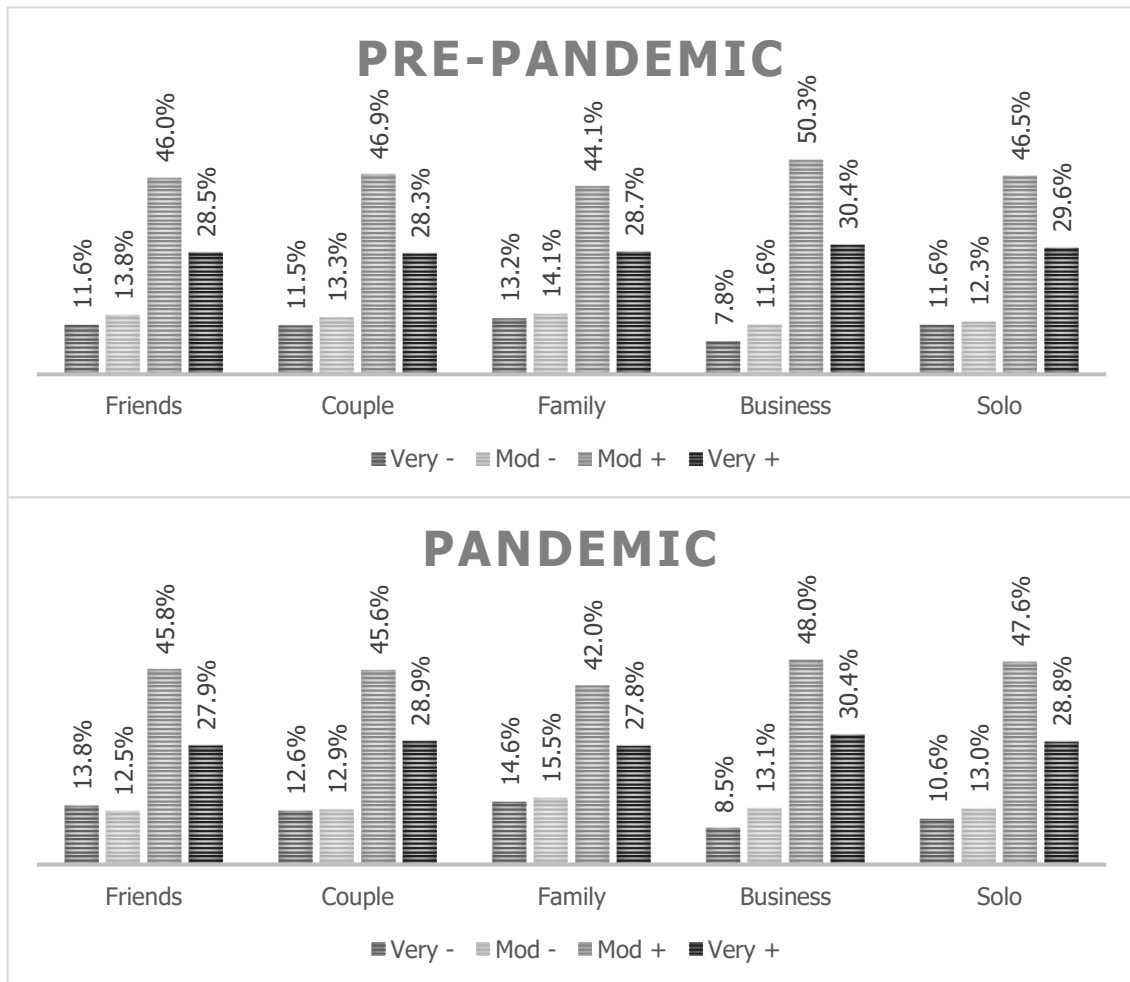


Figure 15 - Tourist sentiment by traveller type

Source: Own work

Conversely, in both periods, guests who travelled with family were the ones who wrote the most negative comments, with 27.3% in the pre-pandemic period and 30.2% during the pandemic. This type of traveller also expressed the highest levels of very negative sentiment in their comments, with 13.2% in the first period and 14.6% in the second period. Additionally, with the pandemic, travellers who travelled as a couple, for business, with family, and with friends wrote more negative comments than in the previous period.

Considering tourists' experience writing online reviews, the highest number of positive comments was written by those posting an online review for the first time (novices), with 78% in both the pre-pandemic and pandemic periods (Figure 16). Of these, 32.1% and 33% wrote comments with very positive sentiment in the first and second periods, respectively.

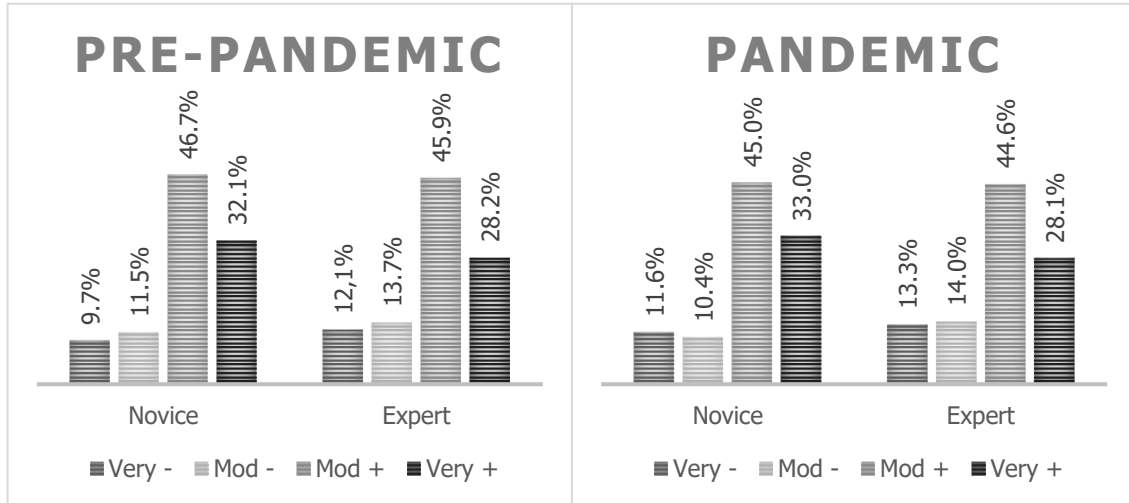


Figure 16 - Tourist sentiment by contribution number

Source: Own work

Conversely, experienced tourists who frequently write online reviews (experts) posted the most negative comments, with 25.8% in the pre-pandemic period and 27.3% during the pandemic, of which 12.1% and 13.3% were very negative. With the pandemic, negative comments from this group of tourists increased.

5. Conclusion

The main objective of this study was to identify tourists' behaviour in the four- and five-star hotel sector in Algarve, Portugal, both before and during the COVID-19 pandemic, as well as to recognise differences that occurred between the two periods. By analysing 17,601 online reviews from 93 hotels made between January 2018 and April 2023, the results reveal that although the volume of reviews significantly decreased with the onset of the pandemic, online reviews during the pandemic period followed a pattern very similar to that observed in the pre-pandemic period, except for results related to tourists' continent of origin. Regardless of the period studied, four- and five-star hotels in the Algarve region were predominantly rated positively by customers.

Considering the results obtained, it is highlighted that priority should be given to the quality of staff, breakfast, rooms, and pools, as these are attributes most frequently mentioned by customers in the analysed reviews in both study periods. Hoteliers should primarily invest in human capital, as reviews about staff showed the highest levels of very positive sentiment, and

they should pay special attention to hotel pools, as most reviews with very negative sentiment were about this attribute in both periods.

On the other hand, hoteliers should aim to retain and attract customers who write online reviews in Portuguese and German and those who travel between December and February, as they have written the most positive statements about the hotels, regardless of the study period. Additionally, customers who stayed for business reasons and those who wrote an online review for the first time were the ones who wrote the most favourable comments about hotels in both periods. It is important for hotels to have business-oriented services and infrastructure and for staff to encourage their customers to leave online reviews, especially those who have never done so before. Regarding tourist's continent of origin, those from South America and Asia wrote the most positive reviews about hotels in the pre-pandemic period. However, with the onset of the pandemic, customers from Africa took that position. Therefore, it is important for hotel managers to develop strategies to attract clients from these markets.

From another perspective, hoteliers should strive to offer differentiated services that meet the needs of customers who write in French and travel with family. They need to prepare strategies to maintain service quality during peak months (June to August), as this is when the highest number of negative reviews were observed in both periods. Additionally, conditions should be provided for customers from Oceania, as these guests wrote the most negative comments in both periods. The most significant change in guest behaviour who wrote reviews about the analysed hotels concerns tourists from Africa before COVID-19. They were the ones who wrote the most very negative reviews, but with the pandemic, they have become the main contributors to very positive comments.

The results of this study can help hoteliers operating in four- and five-star hotels in the Algarve better understand their customers. This understanding can lead to operational improvements and adjustments to service offerings aimed at increasing positive sentiment in online reviews. Additionally, this study highlights the importance of using text analysis software to examine online reviews, which represents a valuable tool for hospitality businesses.

This investigation provides practical and theoretical contributions that offer a better understanding of tourists in these types of accommodations, which can be applied by hoteliers to aid in business management, thereby improving their performance. On the other hand, in addition to contributing to the existing scientific literature on online reviews, this study paves the way for the development of future complementary research by academics, as it confirms the analysis of online reviews as an effective tool for discovering tourist behaviour.

As with any study, this research has limitations. One limitation is that it considered only one online review platform, TripAdvisor. Additionally, the study was restricted to reviews written in Portuguese, English, Spanish, German, and French about four- and five-star hotels in the Algarve from January 2018 to April 2023, limiting the generalizability of findings. Furthermore, since stay dates are reported only by month and year on TripAdvisor, the data for the pre-pandemic period included reviews from customers who stayed on January 30 and 31, 2020, dates that should have been classified as part of the pandemic period. Additionally, it was impossible to include reviews from customers who stayed during the first five days of May 2023 in the analysis of the pandemic period.

Future studies could validate and/or compare results obtained in this research using other review platforms or employing different data mining techniques. Additionally, this study could be expanded to include other languages and regions within Portugal and other countries and hotel categories. Lastly, more focused research could be conducted on hotel attributes and online metadata reviews to understand better the reasons behind customer satisfaction and dissatisfaction in each market.

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4. Discussion and conclusion

The objective of this study was to examine how online reviews published on booking and review platforms can be a useful tool in identifying the behaviour of tourists in four- and five-star hotels. In this context, the following research questions were formulated: 1) What is the profile of tourists in four- and five-star hotels identified in studies based on online reviews? 2) What benefits for hoteliers are identified in the studies regarding the knowledge of tourists through online reviews analysis? 3) What was the behaviour of tourists in four- and five-star hotels in the Algarve region before and during the COVID-19 pandemic? 4) Has the behaviour of tourists in four- and five-star hotels in the Algarve region changed with the onset of the COVID-19 pandemic? To achieve the objective of this study and answer the research questions, the study was conducted in two parts.

In the first part of this work, a systematic literature review was carried out to verify the state of the art regarding the definition of the profile of tourists in four- and five-star hotels based on online reviews. Additionally, through the main management implications identified in the investigated studies, the aim was also to recognise the benefits for hoteliers in knowing their customers through online reviews. In the second part, online reviews of four- and five-star hotels in the Algarve region were extracted and analysed to identify the behaviour of tourists who visit these hotels, both before and during the COVID-19 pandemic, and investigate whether there were changes in the behaviour of these guests between the two periods.

After a thorough analysis of 39 articles published between 2013 and 2022, the profile of tourists staying at four- and five-star hotels was identified, and it was found that their behaviour is influenced by their country of origin, reviews, language, traveller type and trip purpose. Additionally, it was observed that the hotel category affects the clients' experience and expectations and that the satisfaction and expectations of guests regarding hotel products and services are higher in four- and five-star hotels. Furthermore, the benefits for hoteliers with understanding their clients through analysing online reviews were synthesised. Some of the benefits identified include adapting and improving the offering, monitoring changes in customer preferences, predicting future behaviours, establishing optimal allocation of financial resources, and developing effective

marketing and promotion strategies. Leveraging these benefits can help hoteliers enhance their business performance and increase guest satisfaction.

On the other hand, from the analysis of 17,601 online reviews written in English, Portuguese, Spanish, German, and French, published on TripAdvisor between January 2018 and April 2023, regarding 93 four- and five-star hotels located in the Algarve, it was found that although the volume of reviews decreased significantly during the pandemic, the behaviour of tourists during the pandemic period followed a pattern quite similar to that observed in the pre-pandemic period. In both periods, the four- and five-star hotels in the Algarve region analysed were mostly rated positively by the customers. Additionally, through frequency and sentiment analyses, customers' most valued hotel attributes were identified, and recommendations were provided to hotel professionals on which attributes they should prioritise. Furthermore, a sentiment analysis considering the continent of origin of the customers, review language, stay date, traveller type and their experience in writing online reviews allowed the identification of the behaviour of those who shared more/less positive opinions, as well as provided suggestions that hoteliers should consider to achieve the satisfaction of all their clients.

This work provides theoretical and practical contributions that can help all professionals in four- and five-star hospitality to better understand the profile of their clients, assist in business management, and understand the benefits associated with client knowledge through the analysis of online reviews. Additionally, the results of this work can primarily help professionals in four- and five-star hotels operating in the Algarve region by allowing them to understand the behaviour of guests staying in these hotel categories. Moreover, besides contributing to the existing scientific literature on online reviews, this study paves the way for the development of future complementary investigations by academics. It highlights the importance of using appropriate software for data collection and analysis. Furthermore, this work provides hospitality industry professionals with information on how to leverage online reviews. When used effectively, the analysis of online reviews can be an excellent tool for aiding hotel businesses, particularly in gaining insights into their clients and improving business performance.

As with any study, this work has limitations that should be considered. In the first study, the research approach was limited to articles written in English, Spanish, and

Portuguese published between January 1, 2008, and May 31, 2022, and related to specific disciplines: Library Science; Information Science; Interdisciplinary Social Sciences; Social and Humanistic Sciences; Hospitality, Leisure, Sports and Tourism; Management and Business. Additionally, the benefits for hoteliers associated with understanding their clients through the analysis of online reviews were not studied in depth, as only the management implications highlighted in the reviewed studies were considered to address the first research question. In the second study, the sample was restricted to online reviews written in Portuguese, English, Spanish, German, and French for four- and five-star hotels located in the Algarve region, published on TripAdvisor, from January 2018 to April 2023, which limits the generalizability of the study's results. Moreover, since TripAdvisor reports the stay date as month and year, the data for the pre-pandemic period included reviews from clients who stayed on January 30 and 31, 2020, dates that should belong to the pandemic period. It was not possible to include in the pandemic period reviews analysis from clients who stayed during the first five days of May 2023.

Future studies could consider a different research approach from the one used in the first study and delve deeper into the benefits that hoteliers can gain from understanding their clients through the analysis of online reviews. Additionally, the results obtained in the second study could be validated and/or compared using other review platforms or data mining techniques. Furthermore, the sample in future studies could be extended to include other languages and regions of Portugal and other countries. More focused research on hotel attributes and the metadata of online reviews could also be conducted to understand the reasons behind satisfaction and dissatisfaction in each market. Finally, for both methodologies applied in this work, other hotel categories, types of accommodation, different management styles, full-service and limited-service hotels, luxury, mid-range, and budget hotels could be considered.

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Appendix A - Proof of submission EJTHR



Ana Ferreira <ana.o.ferreira24@gmail.com>

[EJTHR] Submission Acknowledgement

1 mensagem

ejthr@citur-tourismresearch.com <ejthr@citur-tourismresearch.com>

6 de junho de 2023 às 15:52

Responder a: Mara Franco <ejthr@citur-tourismresearch.com>

Para: Ana Ferreira <a70184@ualg.pt>

Ana Ferreira:

Thank you for submitting the manuscript, "Systematic literature review on the profile of tourists in four- and five-star hotels based on online reviews" to European Journal of Tourism, Hospitality and Recreation. With the online journal management system that we are using, you will be able to track its progress through the editorial process by logging in to the journal web site:

Submission URL: <https://ejthr.citur.uma.pt/index.php/revt/authorDashboard/submission/53>

Username: a70184

If you have any questions, please contact me. Thank you for considering this journal as a venue for your work.

Mara Franco

Appendix B - Proof of acceptance EJTHR



Ana Ferreira <ana.o.ferreira24@gmail.com>

[EJTHR] Editor Decision

ejthr@citur-tourismresearch.com <ejthr@citur-tourismresearch.com>

16 de fevereiro de 2024 às 15:06

Responder a: Vânia Costa <vcosta@ipca.pt>

Para: Ana Ferreira <a70184@ualg.pt>, "Marisol B. Correia" <mcorreia@ualg.pt>, Ana Isabel Renda <arenda@ualg.pt>

Ana Ferreira, Marisol B. Correia, Ana Isabel Renda:

We have reached a decision regarding your submission to European Journal of Tourism, Hospitality and Recreation, "Systematic literature review on the profile of tourists in four- and five-star hotels based on online reviews".

Our decision is to: Accept Submission

Appendix C – Publication notice EJTHR



Ana Ferreira <ana.o.ferreira24@gmail.com>

New Issue | European Journal of Tourism, Hospitality and Recreation

ejthr@citur-tourismresearch.com EJThr2020# <ejthr@citur-tourismresearch.com>

12 de agosto de 2024 às 11:55

Dear author,

I am pleased to announce the new issue of *European Journal of Tourism, Hospitality and Recreation*. The issue is now available on our website:

<https://sciendo.com/issue/EJTHR/14/1>

We wish you all good readings!

Best wishes,

Mara Franco
Editor-in-Chief

European Journal of Tourism, Hospitality and Recreation



EJTHR Sciendo: <https://content.sciendo.com/view/journals/ejthr/ejthr-overview.xml?lang=en>

Appendix D - Proof of submission – TMS ALGARVE 2022 Conference



Ana Ferreira <ana.o.ferreira24@gmail.com>

Fwd: [TMS2022] TMS ALGARVE 2022: Submission Acknowledgement

ana margarida ferreira <anocasforever@gmail.com>
Para: ana.o.ferreira24@gmail.com

15 de junho de 2022 às 11:38

----- Forwarded message -----

De: **José António C. Santos** <tms2022@ualg.pt>
Date: quarta, 15/06/2022 à(s) 11:35
Subject: [TMS2022] TMS ALGARVE 2022: Submission Acknowledgement
To: Ana Ferreira <a70184@ualg.pt>

Dear Ana Ferreira:

Thank you for your submission, "Systematic literature review on the profile of tourists in four and five-star hotels based on online reviews" to TMS ALGARVE 2022. With the online conference management system that we are using, you will be able to track its progress through the editorial process by logging in to the conference web site:

Submission URL:
<http://www.esght.ualg.pt/tms2022/index.php/tms2022/TMS2022/author/submission/336>
Username: a70184

If you have any questions, please contact me. Thank you for considering this conference as a venue for presenting and possibly publishing your work.

José António C. Santos
TMS ALGARVE 2022

TMS ALGARVE 2022: Sustainability Challenges in Tourism, Hospitality and Management
[/tms2022/index.php/tms2022/TMS2022/index](http://tms2022/index.php/tms2022/TMS2022/index)

Appendix E - Proof of acceptance – TMS ALGARVE 2022 Conference



Ana Ferreira <ana.o.ferreira24@gmail.com>

Fwd: [TMS2022] TMS ALGARVE 2022 Editorial Decision on Paper: ACCEPT

ana margarida ferreira <anocasforever@gmail.com>
Para: ana.o.ferreira24@gmail.com

20 de junho de 2022 às 16:54

----- Forwarded message -----

De: **Helder Brito Carrasqueira** <hcarrasq@ualg.pt>

Date: segunda, 20/06/2022 à(s) 16:21

Subject: [TMS2022] TMS ALGARVE 2022 Editorial Decision on Paper: ACCEPT

To: Ana Ferreira <a70184@ualg.pt>

Cc: Marisol B. Correia <mcorreia@ualg.pt>, Ana Isabel Renda <arenda@ualg.pt>

Dear author Ana Ferreira:

Congratulations, your submission Systematic literature review on the profile of tourists in four and five-star hotels based on online reviews has been accepted for presentation at TMS ALGARVE 2022 which is being held 2022-11-16 at .

Thank you and looking forward to your participation in this event. Please check the REGISTRATION information on the conference website, because registration is necessary for participating in this event.

Best regards


Helder Brito Carrasqueira

University of the Algarve/ESGHT

Phone 965411922

hcarrasq@ualg.pt

TMS ALGARVE 2022: Sustainability Challenges in Tourism, Hospitality and Management
[/tms2022/index.php/tms2022/TMS2022/index](http://tms2022/index.php/tms2022/TMS2022/index)

 **AF-C-R.pdf**
245K

Appendix F – Certificate of participation and presentation – TMS ALGARVE 2022
Conference



Ana Ferreira <ana.o.ferreira24@gmail.com>

TMS Algarve 2022 - Certificate of participation and presentation

TMS 2022 <tms2022@ualg.pt>

27 de novembro de 2022 às 21:22

Para: ANA MARGARIDA OLIVEIRA FERREIRA <a70184@ualg.pt>


Dear colleague,

Attached you can find the certificate of attendance and presentation. We thank you for your participation and hope that it has met your expectations.

Best regards

The organizing committee

<http://www.esght.ualg.pt/tms2022/>

 ID 336.pdf
265K



TMS ALGARVE 2022:

Sustainability Challenges in Tourism, Hospitality and Management
Universidade do Algarve. Olhão, Portugal, 16-19 November 2022
CERTIFICATE OF ATTENDANCE AND PRESENTATION

We certify that:

Ana Margarida Oliveira Ferreira

Has attended the TMS ALGARVE 2022 conference and made the presentation of:
ID 336 - Systematic literature review on the profile of tourists in four and five-star hotels based on online reviews

The Chairs of The TMS Algarve 2022

José António C. Santos

Alexandra Rodrigues Gonçalves

Appendix G – Conference Program – TMS ALGARVE 2022 Conference

| | | | | | | | | | | |
|--|--|---|---|--|---|---|---|--|--|--|
| | Ana Luísa Ladeiras. <i>The forgotten destination: how cross-border collaboration creates new opportunities for tourism development</i> ID 254 | Jariago. <i>More than a simple seller: the role of travel agents in tourism market</i> ID 265 | analysis of App Store Optimisation (ASO): empirical evidence based on main Spanish hotel chains ID 192 Juana María Padilla-Piernas, María Concepción Parra-Marroño, Miguel Ángel Baltrán-Suero. | Rivero, Tomás López-Guzmán. <i>Travelling with pets: Profiling dog-owners as tourists through artificial neural networks</i> ID 58 | Pessoas, Estilo de Vida e Comportamento Sustentável: um Estudo com Turistas em Jericoacoara, Ceará, Brasil ID 354 | Helio Irigaray, Renata Tolentino. <i>Cultura e Comprometimento: Investigação em uma Organização Pública de Ensino Superior Brasileira</i> ID 4 | Fernandes Meequita, Maria João Barata. <i>O impacto da neurociência no aprendizado dos colaboradores de uma organização</i> ID 123 | Duarte Baltazar. <i>Plano de ação de combate à violência doméstica: O papel da entidade empregadora na presença de crime de violência doméstica</i> ID 146 | Cruz, Luis M.S. Laureano. <i>Predicting Sentiment Analysis in Home Holiday Rentals: A Portuguese Experience</i> ID 309 | |
| 12:05-12:20 | Milene Lança, Patrícia Pinto, Manuel Alector Ribeiro. <i>Residents' Well-being and Pro-Tourism Behaviours in the Algarve Region</i> ID 512 | Belem Barbosa, Alirszá Shabami Shojai. <i>Impact of Smart tourism technologies (STT) on Destination image and Intention to revisit</i> ID 283 | | Maciej Czaplewski, Rafał Kłóśka, Adam Stacky. <i>Analysis and forecasting of passenger traffic at the airports of Faro and Goleenów</i> ID 284 | Isabel Sofia Loureiro, Helena Gomes, Vânia Costa, Fernanda Ferreira, Raquel Pereira. <i>Thermal Tourism: Study of the profile and motivations of the practitioner in Portugal</i> ID 390 | Isadora Ney Matos de Albuquerque, Fátima Regina Ney Matos, Rafael Fernandes de Meequita. <i>Soft skills e hard skills: análise bibliométrica a partir da ISI Web of Science</i> ID 11 | Ana Filipar Sousa, Dora Martins. <i>Competências para a gestão de trabalhadores remotos</i> ID 311 | Lucas Almeida dos Santos, Vânia Medianeira Flores Costa. <i>Gestão de conflitos empresariais: uma proposta de modelo teórico integrando a Mediação e Justiça Restaurativa</i> ID 240 | Maria Amparo Centeno-Carballido, Rubén Lado-Sestayo, Milagros Vival-Búa, Andrea Martínez-Salguero. <i>La Insolvencia Empresarial en los Restaurantes Independientes Españoles</i> ID 453 | |
| 12:20-12:35 | Grażyna Furgala-Selezniow, Malgorzata Jankun-Woźnicka. <i>The tourism impact on lakeshores</i> ID 615 | Deniza Alieva, Gulnoza Usmonova, Sherzod Aktamov, Shukhrat Shadmanov. <i>Passion or profession: factors that can help to attract highly qualified ex-employees after pandemic</i> ID 578 | | Miguel Camacho-Ruiz, Ramón A. Carrasco, Gema Fernández-Avilés, Antonio Latorre. <i>Tourism destination events classifier based on Artificial Intelligence techniques</i> ID 412 | Márcia Fernandes Vaz, Paula Odete Fernandes, Maria José Alves, Fernanda A. Ferreira, Vânia Costa, Alcina Nunes. <i>The Importance-Satisfaction Matrix as a strategic tool for Termas de Chaves thermal spa priority improvements</i> ID 398 | Isabel Fonseca, Carlos Rui Madeira, Ana Paula Rodrigues. <i>Eficácia nas Equipas de Enfermagem nos Cuidados de Saúde</i> ID 185 | Priscila Soares Elpo, Danyella da Cunha Lemos. <i>Felicidade no trabalho: Instrumento para diagnóstico em empresas de base tecnológica</i> ID 355 | L. Javier Cabeza-Ramírez, Ana Castillo-Canalejo, Francisco Saco de Larriva. <i>Un meta-análisis sobre las Políticas Activas del Mercado de Trabajo</i> ID 299 | Eldomar Alcoforado, Joseane Azevedo, Vitória Silva. <i>Implantação da Hotelaria Hospitalar em um Hospital Público Federal – Benefícios e Barreiras: o caso do HCUFFPE</i> ID 628 | |
| 12:35-12:55 | Debate | Debate | Debate | Debate | Debate | Debate | Debate | Debate | Teresa Ferreira, Miguel Rodrigues. <i>The impact of leadership in times of a pandemic on the performance of commercial teams: study of the tourism sector in Portugal</i> ID 581 | |
| Lunch | | | | | | | | | | |
| 13:00 - 14:30 | | | | | | | | | | |
| 14:30 - 15:00 | | | | | | | | | | |
| Keynote 3: Professor Fevzi Okumus. <i>Sustainability Efforts of Rosen Hotels and Resorts</i> . Chair: Nina Prebensen | | | | | | | | | | |
| Debate | | | | | | | | | | |
| 15:00 - 15:10 | | | | | | | | | | |
| Parallel Sessions 4 | | | | | | | | | | |
| 15:15-16:55 | Room 1 (Plenary) S28 Tourism Sustainability 5 EN Hybrid | Room 2 S29 Tourism Planning and Management 2 EN Hybrid | Room 3 S30 Hospitality Management 1 EN | Room 4 S31 Turismo e Tecnologia/ Turismo y Tecnología PT/ES | Room 5 S32 Marketing Digital/Marketing Digital PT/ES Hybrid | Room 6 S33 Operações Turísticas/Operaciones Turísticas PT/ES | Room 7 S34 Economía do Turismo e Sustentabilidade/Economía del Turismo y Sostenibilidad PT/ES | Room 8 S35 Gestão, Sustentabilidade e Empreendedorismo/Gestión, Sostenibilidad y Emprendimiento PT/ES | Room 9 S36 Sustentabilidade, Produto e Destinos/ Sostenibilidad, Productos y Destinos PT/ES Online | |
| Chair | Dora Agapito | Margarida Santos | Magda Wikesjö | Marisol Correia | Célia Ramos | Salvador Moral-Cuadra | Manuel Ángel Fernández Gámez | Nelson Matos | Maria Gema Nel-Lo Andreu | |
| 15:15 - 15:30 | Rashed Isam Ashqar, Célia Ramos, Carlos Sousa, Nelson Matos. <i>Health and Well-Being Tourists</i> ID 510 | Maria Rosario González Rodríguez, María Carmen Díaz-Fernández, Noemí Pulido-Pavón. <i>Tourist Destination Competitiveness: An International Approach</i> ID 263 | Luis Pereira, Miguel Ángel Domingo-Carrillo, Bernabé Escobár-Pérez, Esther Chávez-Miranda. <i>Pricing Dynamics by Hotel Profiles in Competition</i> ID 201 | Eva María Sánchez-Teba, María-Dolores Benítez-Márquez, Marisol Correia, José Jesús Vegas Malero. <i>Implications of blockchain technology for the future of tourism industry</i> ID 129 | Rinaldo Zirah, Bruno M. Ferreira. <i>Brand Activism Causes on Brand Positioning</i> ID 153 | Rafael Becerra-Vicario, Daniel Ruiz-Palomo, Sergio Fernández-Miguel, Antonio Gutiérrez-Ruiz. <i>The mediation of the environmental strategies in hotel financial performance in the context of Creating Shared Value</i> ID 285 | Francisco Sánchez-Cubo, José-Luis Sánchez-Ollero, Elisa Del-Cubo-Arroyo. <i>Collective agreements and talent management in hospitality: a double-edged sword</i> ID 24 | Virginia Pérez, German Gamar, Monica Hernández. <i>Decisiones de localización de empresas hoteleras</i> ID 48 | Beatriz Avolio Aleochi, M Belem Prados-Paiva, Eduardo Andres Pardo Pinhasica. <i>A Systematic Literature Review of Volunteer Tourism</i> ID 39 | |
| 15:30 - 15:45 | Joel Guerreiro, Pedro Cavalheiro. <i>Sustainable Tourism Observatory Platform Development</i> ID 588 | Marco Castiglioni, Mar Cobeña, Maria Aguiar-Pérez, Francisco José Asedo-González. <i>Mapping the alliance portfolio and the alliance network literature: A bibliometric analysis</i> ID 411 | Pedro Silveira, Nuno António. <i>Predicting hotel bookings cancellation under pandemic times</i> ID 339 | Pilar Peñarubia Zaragoza, Mónica Simancas Cruz. <i>Tourist Information Systems in the generation of data for knowledge of post-COVID tourism: a comparative analysis</i> ID 217 | Carlos M Almeida, Carlos M Afonso, Manuel Serra, Nuno António. <i>The Algarve Wine Producers usage of Facebook between 2019 and 2022</i> ID 270 | Lucía Valcaro Ruiz, Ana María Rosales Pérez, Macarena Torroba Díaz, Germán Ayala Jiménez, Vanessa Delcós. <i>Dynamic Systems for Cruise Port Management</i> ID 306 | Elena Victoria Lasso de la Vega, Juan Antonio Campos-Soria, Alejandro García-Pozo. <i>Sectorial heterogeneity in patterns of educational mismatch in tourism: a gender comparison</i> ID 38 | Maria Escrbano-Navas, Gemán Gamar. <i>Influence of the gender of the president in the longevity of the company</i> ID 87 | José Luis Durán-Román, Juan Ignacio Pulido-Fernández, Julia Margarita Núñez-Tabales, Francisco José Rey-Cammona. <i>Compromiso de las empresas para mejorar la sostenibilidad y la competitividad en los destinos turísticos</i> ID 63 | |
| 15:45 - 16:00 | Luis Nobre Pereira, João Albino Silva, Jorge Andraz, Rui Nunes, Christina Muha. <i>An assessment model of the Algarve as a tourism destination: a contribution for management its sustainable development</i> ID 589 | Oriol Anquera-Torrall. <i>Can the opening of a hotel transform the commercial structure around them? Evidence from an urban destination</i> ID 423 | Angel Peiró-Signes, Marival Segarra-Oña, Blanca De Miguel-Molina, María de Miguel-Molina, Joaquín Sánchez-Planellés. <i>Focus group design for Circular Economy in the hospitality industry</i> ID 484 | Ana Ferreira, Marisol B. Correia, Ana Isabel Renda. <i>Systematic literature review on the profile of tourists in four and five-star hotels based on online reviews</i> ID 338 | Frederico Dutra, Fernanda Almeida, Fábio Corrêa, Juliana Ribeiro, Fabrício Ziviani. <i>Gestão de marcas e comunicação com clientes: estudo de caso em empresas públicas do estado de Minas Gerais, Brasil</i> ID 382 | Lidia Lopez Marfil, Ángela María Callejón Gil, Marta Campos Valenzuela, Aurea Maria Peraita González. <i>Intenciones de comportamiento en el segmento senior de pasajeros de cruceros</i> ID 307 | Marina Marfil Cotilla, Juan Antonio Campos Soria, Alejandro García Pozo. <i>A sectorial analysis of the wage distribution in Spain</i> ID 92 | Iñaki Pablo Soler, Pilar López-Delgado. <i>Roles de las universidades en los ecosistemas empresariales</i> ID 94 | Rocio Arteaga-Sánchez, Lucía García-García, José Enrique Ramos Ruiz, Rosario Brito-Guerrero. <i>Motivaciones, Percepciones y Valor Percibido del Enoturista en España</i> ID 79 | |
| 16:00 - 16:15 | Cathy H.C. Hsu, Dimitrios Buthalla, Vanessa Y.Y. Wu. <i>Tourism 2030 and the contribution to Sustainable Development Goals</i> ID 622 | Xiang Lin, Eva Hagsten, Martin Falk. <i>Demand for Second Homes and Area Specific Characteristics</i> ID 560 | Angel Peiró-Signes, Marival Segarra-Oña, Blanca De Miguel-Molina, María de Miguel-Molina, Virginia Santamarina Campos. <i>Hospitality industry needs in their transition to a circular economy</i> ID 487 | Esteban Pérez-Calderín, Vanessa Miguel-Barrado, Jorge M. Prieto-Ballester. <i>Perceived sustainable development in protected areas with different levels of protection: A comparison between national parks and UNESCO Global Geoparks in Spain</i> ID 402 | Maria Jesus Carrasco-Santos, Andrea Peña-Romero. <i>Marbella as a luxury tourist destination in housing for tourist purposes. Airbnb Luxe case</i> ID 422 | Jose Ramon Sanchez, Manuel Jose Jimenez Marquez, Ana Jose Cisneros Ruiz, Maria del Carmen Palomino Garcia. <i>An Analysis Of The Corporate Social Responsibility Of The Spanish Marinas</i> ID 315 | José Luis Sánchez-Ollero, Alejandro García Pozo, Francisco Sánchez Cubo. <i>Unwelling Wages' Determinants In The Spanish Hospitality Industry</i> ID 287 | Amparo Guadalupe Casablanca Peña, Nelson Matos, Jorge A. Manríto Romero. <i>Influencia Social y Habilidades Emprendedoras, Factores para Empezar</i> ID 388 | Cecilia Maria Fernandes Fonseca, Pedro Costa, Sara Meireles, Rui Ferreira, Mariana Caçador, Ana Luciano. <i>Rural tourism: a challenge</i> ID 134 | |
| 16:15 - 16:30 | Vânia Palma Roberto, Clévio Nóbrega. <i>ABC CoLAB: Ageing perspectives</i> ID 624 | David Piedade, Patricia Pinto, Manuela Guerreiro. <i>The Customer Experience at</i> | Magda Fernandes Wikesjö, Guerreiro, Dora Agapito, Patricia Pinto. | Beatriz Cartas, Manuela Guerreiro, Ana P. Barreira. <i>The wedding ceremony at</i> | Carlos M Almeida, Carlos M Afonso, Manuel Serra, Nuno António. <i>Análise às redes</i> | Ana Ramirez, Agustín Del Castillo, Fernando Noel Aguilár, Antonio Alberto Plaza. | Manuel Ángel Fernández Gámez, Elias Bendodo, Ana Elena Hidalgo, Pablo Franco, Maria | Enrique Castellanos, David Serra, Carlos M. Afonso, Esquiel Pinto, Carlos M. | Daniela Silvestre, Manuel Serra, Carlos M. Afonso, Esquiel Pinto, Carlos M. | |



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[rtd] Agradecimento pela submissão

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Para: Ana Ferreira <a70184@ualg.pt>

21 de setembro de 2024 às 18:50

Caro/a Ana Ferreira,

Agradecemos a submissão do seu manuscrito "Tourists' behaviour in four- and five-star hotels in the Algarve region before and during COVID-19 pandemic" à revista Revista Turismo & Desenvolvimento.

Encontramo-nos em período de férias, pelo que o seu artigo seguirá para revisão tão breve quanto possível. Agradecemos a sua compreensão.

Estarei ao dispor para qualquer questão adicional, através do e-mail degei-rtd@ua.pt

URL do Manuscrito: <https://proa.ua.pt/index.php/rtd/authorDashboard/submission/37693>
Nome de utilizador: a70184a

Atenciosamente,

Carlos Costa

Por favor não responda a este e-mail. Para qualquer questão utilize o contacto da assinatura.

Please do not reply to this email. For any question, use the signature contact.

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