

THE INFLUENCE OF ONLINE REVIEWS ON HOTEL ATTRACTIVENESS PERCEPTIONS: A GENDER-BASED COMPARATIVE STUDY

Abstract

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Purpose - The primary aim of this research is to explore the differential impact of online hotel reviews on the perceived attractiveness of hotel, with a focus on identifying any variances between genders. It seeks to contribute to the understanding of consumer behavior in the digital age, especially how men and women differently interpret and react to online reviews.

Design - Employing a quantitative research design, this study systematically investigates the change in hotel attractiveness perceptions before and after the exposure to online reviews among a sample of male and female participants. The participants were first asked to rate the attractiveness of a one hotel based solely on set of six photographs. Subsequently, they were exposed to online reviews of the same hotel, after which they re-evaluated their perceptions of attractiveness. These repeated measures design allowed for the examination of within-subject changes in perceptions, as well as the interactions between gender and review exposure.

Findings - The analysis revealed statistically significant changes in the perceived attractiveness of hotel after reading online reviews, with these changes being more pronounced among male participants compared to female participants. Specifically, both genders exhibited an increase in perceived attractiveness post-review exposure, but the magnitude of change was significantly higher for men. Additionally, the study identified a significant interaction effect between gender and the impact of online reviews, indicating that the influence of reviews on perceived attractiveness is moderated by gender. These findings underscore the potent role of online reviews in shaping consumer perceptions and highlight gender differences in processing this information.

Originality - This research contributes to the existing body of literature by specifically addressing the gender differences in the impact of online reviews on perceived attractiveness of hotel. While previous studies have examined the influence of online reviews on consumer behaviors and decision-making, the explicit focus on gender as a moderating factor offers novel insights. This study not only adds to our understanding of the psychological mechanisms underlying the processing of online reviews but also provides practical implications for marketers and hotel managers in crafting gender-sensitive strategies.

Keywords online reviews, hotel attractiveness, gender differences, consumer behavior, digital marketing.

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INTRODUCTION

In the digital era, online reviews have emerged as a pivotal source of information for consumers, especially in the hospitality industry. The proliferation of platforms like TripAdvisor, Yelp, and Booking.com has equipped consumers with a powerful tool to share and access information about hotels worldwide. This democratization of opinion has fundamentally altered the decision-making process for potential guests, making the study of online reviews an essential domain within consumer behavior research. However, despite the recognized influence of online reviews on consumer choices, less attention has been paid to understanding how different demographic factors, such as gender, modulate the impact of these reviews on perceived hotel attractiveness. This gap in the literature underscores the necessity of exploring the nuanced ways in which men and women process and react to online hotel reviews.

The purpose of this research is to delve into the gender-specific effects of online reviews on the perceived attractiveness of hotel. The concept of “perceived attractiveness” refers not only to the aesthetic appeal of a hotel but also to its perceived value and quality as inferred from online reviews. This study posits that the subjective nature of attractiveness, coupled with inherent differences in how men and women process information and make decisions, may lead to significant gender differences in the impact of online reviews.

To investigate this proposition, the study adopts a quantitative approach, employing a repeated measures design. This methodological choice allows for the precise measurement of changes in hotel attractiveness perceptions before and after exposure to online reviews, within the same set of participants. Such a design is instrumental in isolating the effect of online reviews from other influencing factors and provides a robust framework for analyzing the interactions between gender and review impact.

This research not only aims to contribute to the theoretical understanding of consumer behavior in the context of online reviews but also seeks to offer practical insights for stakeholders in the hospitality industry. By identifying gender differences in the perception of hotel attractiveness, hotel managers and marketers can tailor their online presence and review management strategies to better cater to the diverse needs and preferences of their potential customers.

In exploring these dynamics, the study navigates through several key areas: the psychological underpinnings of processing online reviews, the role of gender in influencing consumer behavior, and the implications of these factors for marketing and management practices in the hospitality sector. Through its findings, the research aims to illuminate the complex interplay between gender, online reviews, and consumer perceptions, thereby enriching the discourse on digital marketing and consumer psychology.

The originality of this research lies in its focused examination of gender as a moderating factor in the relationship between online reviews and hotel attractiveness. While previous studies have extensively explored the influence of online reviews on consumer decisions, the explicit consideration of gender differences presents a novel perspective that addresses a significant gap in the existing literature. By doing so, this study not only enhances our theoretical understanding of the subject but also provides a valuable reference point for practitioners looking to optimize their strategies in the increasingly competitive hospitality industry.

1. LITERATURE REVIEW

We are in the digital age, where information moves to and from consumers incredibly fast. Today's consumers are more aware of their surroundings, their options, and their rights, and they make purchasing decisions accordingly. Considering that the service sector occupies a large share in sales, particularly highlighting the hotel business, we can conclude that visibility on the Internet is extremely important for success. Younger generations are the ones changing the world, and Internet technologies are the key to marketing success (Sharan and Vibuhuti, 2023). The COVID-19 pandemic has also changed the mindset of the service and sales sectors, leading to a significantly greater impact of the internet and online platforms (Šostar and Ristanović, 2023).

Research by Stankova and Ivanov, 2020 emphasizes that the digitalization of the hotel business is inevitable and that the goal of hotel management is to keep up with technological advancements. To successfully attract potential visitors to a tourist destination, it is crucial to utilize measures of the smart tourism system where added values to the experience and services are created. (Chuang, 2023). Pataf and Miholić, 2022 highlight the necessity for hotel management to communicate via the internet and monitor what online reviews are saying about the hotel. The study by Danish et al., 2019 found that realism, volume, and positivity of reviews are the key influencers in online consumer reviews, with trust serving as a mediator between these factors and hotel booking intentions, while negative reviews show no significant direct or indirect effect on booking decisions.

The research of Xue et al., 2020 indicates that price complexity and the allure of alternatives significantly contribute to customer confusion in the form of overload, similarity, and ambiguity, leading to postponed online hotel booking decisions, and suggests hotels improve price clarity and engage more with travellers to mitigate this effect. The study of Cuesta-Valiño et al., 2023 introduces a prediction model using pre-trained neural networks to analyse hotel photo aesthetics and identifies four key dimensions—time of photo shooting, angle, human presence, and colour scheme—that significantly influence online customer behavior and enhance hotel booking rates. Vo et al., 2021 found that the most substantial influence on the activity of guest reviews online towards hoteliers' service quality, aimed at fostering positive customer satisfaction, lies within the customer's decision-making process, especially in managing online communication. The study of Waleed and Arif, 2015; Gellerstedt and Arvemo, 2019 found that online reviews have a positive, albeit modest, impact on consumer decision-making for restaurants and hotels, emphasizing the importance of enhancing review recency, reliability, and relevance to improve decision-making effectiveness. It recommends increasing the urgency, recentness, and coherence of reviews and suggests restaurants boost their online visibility to foster more reliable and influential online reviews. This study highlights the importance of a hedonic brand image in mediating the effect of online hotel reviews on consumer booking intentions, offering a unique perspective for marketers (Chakraborty and Biswal, 2020). The study of Oliveira et al., 2020 indicates that consumers find online reviews increasingly useful, particularly when they need recommendations on services, prompting the recommendation for marketers and customer relationship managers to develop clear and easily accessible communication platforms to facilitate information search. The trustworthiness of a hotel's rating is influenced by the number of online reviews when the rating is positive, but the quantity of reviews does not impact the perceived reliability of a negative rating (Gavilan et al., 2018).

Hotels should strategically respond to both positive and negative online reviews to create a positive interaction atmosphere and address consumer complaints (Liu and Ji, 2019; El-Said, 2020). Consumers prefer reviews that are informative, easily readable, and with extreme ratings, considering those from reviewers with high reputation and bad experiences as useful, but view suggestions from users of a local cultural context as subjective and unhelpful (Liang et al., 2019). Hotel managers should pay attention to the satisfaction of their employees, as a significant portion of positive online reviews depends on it (Jang et al., 2018; Ban et al., 2019). Regardless of reviews, research by Li et al., 2022 shows that word-of-mouth and the verbal transmission of positive impressions are key factors in choosing a tourist destination and hotel. The findings indicate that online reviews influence booking intentions indirectly through trust, whereas price affects booking intentions both directly and indirectly via trust. Additionally, trust influences booking intentions (Christin and Nugraha, 2023). Research by Sumarsono et al., 2019 demonstrates that consumers are willing to pay a higher price for a hotel if its online reviews are positive. When considering factors that contribute to positive online reviews, they most commonly include the hotel's location, access to transport facilities, the food and beverage concept, the quality of staff/service, and the cleanliness of the facilities, while the hotel's entertainment program plays a lesser role (Yilmaz, 2020). Online customer reviews can significantly influence the booking choices of prospective tourists, who meticulously assess the comments of reviewers before making accommodation decisions (Dinge t al., 2022; Pontes and Ramos, 2023). An increasing number of users are becoming accustomed to utilizing application software to reserve hotel room services before and after their travels in China, making the online review data of Chinese hotels more persuasive (Men et al., 2023).

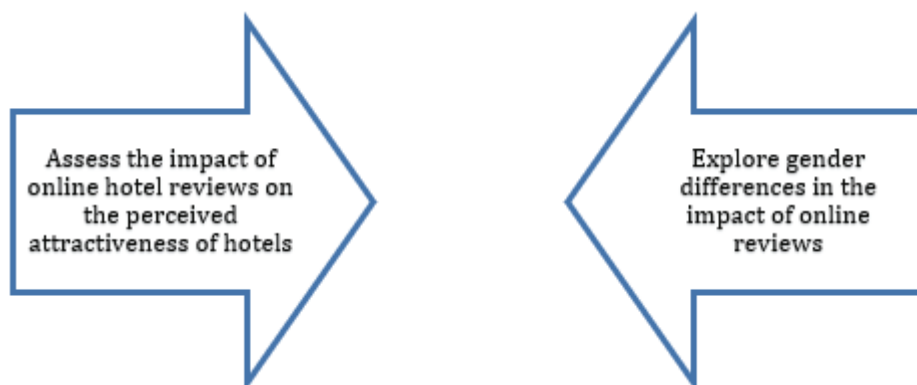
Therefore, innovations that appear on online platforms play an important role in creating the image of a tourist destination (Shuxratovna et al., 2023). Additionally, examining online reviews and consumer behavior helps hotel managers gain a fuller understanding of the factors influencing customers' intentions to book hotels online (Lim et al., 2022). In conclusion, the optimal combination for influencing a potential tourist to choose a specific hotel is a mix of photos and positive online reviews (Amin et al., 2021).

To enhance the understanding of hotel attractiveness and perception, it is important to explore various dimensions such as liking the pictures, the desire to visit, and readiness to make a reservation. These dimensions provide a comprehensive view of what constitutes attractiveness in the hospitality industry. Studies have shown that servicescape components, such as the design and ambiance of a hotel, significantly impact customers' overall image perceptions and behavioral intentions, including their likelihood to revisit or recommend the hotel. Additionally, repeated exposure to the same visual stimuli can increase perceived attractiveness due to familiarity. This phenomenon, known as the mere exposure effect, suggests that individuals develop a preference for things simply because they are familiar with them. This effect has been observed in various contexts, including product and brand familiarity, and should be considered when assessing the impact of online reviews and initial perceptions formed from hotel photographs (Durna et al., 2015; Montoya et al., 2017). Future research should delve deeper into these concepts, exploring how different dimensions of attractiveness and repeated exposure influence consumer perceptions and behaviors in the hospitality industry. Including qualitative methods, such as interviews and focus groups, can provide additional insights into the psychological mechanisms at play. Moreover, examining these factors across diverse cultural and regional contexts will help generalize the findings and develop more targeted marketing strategies. These additions aim to address the gaps identified by the reviewer and enhance the study's contribution to the existing literature on consumer behavior in the hospitality industry.

2. RESEARCH OBJECTIVES AND METHODOLOGY

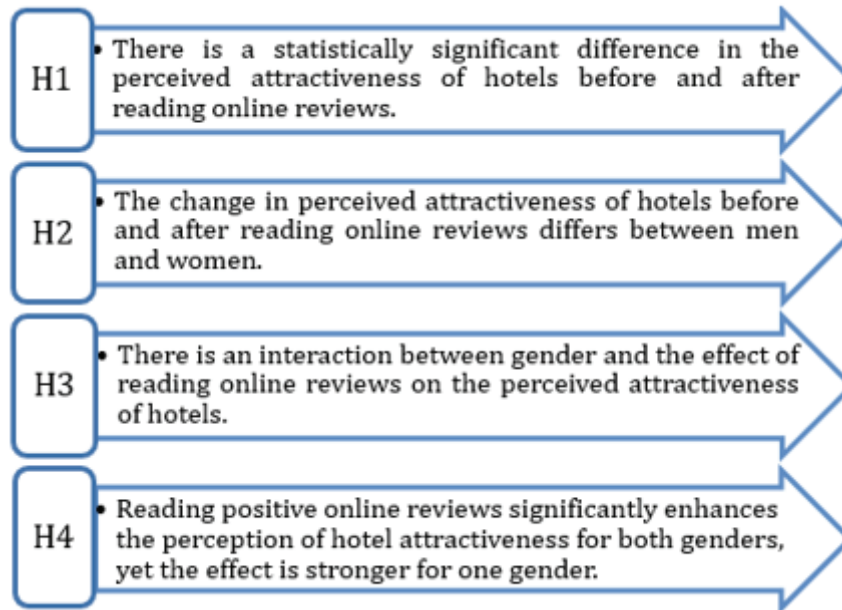
The digital transformation of consumer behavior, particularly in the hospitality industry, has underscored the pivotal role of online reviews in influencing potential customers' perceptions and choices. This study is anchored in the objective of elucidating the differential impact of online hotel reviews on the perceived attractiveness of hotel, with a nuanced focus on gender differences. Recognizing the significant influence that online reviews have on consumer decisions, this research aims to dissect the extent to which men and women are differently affected by the reviews they encounter, thereby offering a gendered lens through which to understand and leverage online review impact.

Figure 1: Two-way direction of research objectives



Study objective that we determine in this research is to assess the impact of online hotel reviews on the perceived attractiveness of hotel, thereby understanding the change in perceptions before and after exposure to reviews. This objective is grounded in the premise that online reviews significantly sway consumer opinions and can alter initial perceptions based on visual stimuli alone. The other objective is to explore gender differences in the impact of online reviews, specifically aiming to determine if and how the change in perceived attractiveness post-review exposure differs between male and female participants. This objective seeks to contribute to a more gender-inclusive understanding of consumer behavior in the digital age.

Figure 2: Selected research hypotheses



On the figure 2 we can see the hypothesis that we determine in our research. The H1 is rooted in the literature suggesting that online reviews are a powerful influencer of consumer perceptions, necessitating an examination of their effect on hotel attractiveness. The H2 arises from the recognition that gender may play a moderating role in how information is processed and acted upon, reflecting broader patterns of gendered responses to marketing stimuli. By proposing H3, the study acknowledges the complex dynamics at play between gender and the influence of online reviews, suggesting that the effect of reviews is not uniform across genders. Hypothesis 4, focused on the differential impact of positive online reviews, posits that while such reviews universally bolster the attractiveness of hotel among both men and women, the extent of this enhancement is not evenly distributed across genders.

To address these objectives and test the posited hypotheses, the study employs a quantitative research design, utilizing a repeated measures approach. Participants, comprising both men and women, were first asked to rate the attractiveness of a series of hotel based on photographs. They were then exposed to online reviews of these hotel and asked to reassess their perceptions. This method allows for the capture of within-subject changes in perceptions and the examination of gender as an interacting factor. The use of a repeated measures design is particularly apt for this study, as it minimizes variability between subjects, thereby enhancing the reliability of the findings related to the impact of online reviews and the moderating effect of gender. The selection of hypotheses is underpinned by a desire to not only elucidate the significant role of online reviews in shaping hotel attractiveness perceptions but also to uncover potential gender disparities in this process. By exploring these aspects, the research aims to offer nuanced insights that can inform targeted marketing strategies and enhance the hospitality industry's understanding of consumer behavior in the digital landscape.

The research was conducted on a sample of 142 responders (62 men and 80 women), in the form of a questionnaire distributed via social media to young respondents aged 18-30 years. The selected sample is a random sample collected in Croatia, in the city of Požega. This demographic's engagement with these platforms makes them particularly pertinent to studies investigating the impact of online content, such as reviews, on consumer perceptions and behaviors. Employing a random sampling method to select young respondents helps ensure that the study sample is representative of the broader population within this age group. This enhances the study's external validity, allowing for more generalized conclusions that can apply across different segments of young adults.

Table 1: Evaluation of the hotel's attractiveness before and after the review by participants

Perception grade	Attractiveness									
	1	2	3	4	5	6	7	8	9	10
Men before review	1	3	13	12	13	10	7	3	0	0
Women before review	8	12	20	18	12	6	1	2	0	0
Men after review	0	0	0	0	1	5	12	15	20	9
Women after review	0	0	3	7	11	20	20	9	6	5

In Table 1, it is evident that women, upon analyzing photographs of hotel, had a lower satisfaction level with the hotel compared to men. However, after reading reviews, women's attitudes changed, and they gave higher ratings than before reading the reviews. It is important to note that the attractiveness rating of the hotel also increased among male participants after viewing the reviews.

For the mentioned research, ANOVA (Analysis of Variance) with repeated measures was used. This statistical technique is particularly suitable for experiments where the same subjects are exposed to more than one condition or measure. In this case, the subjects (both men and women) assessed their satisfaction with the hotel first based on photographs and then after reading reviews. The use of repeated measures ANOVA allows for the comparison of the same subjects' responses under different conditions (before and after reading reviews) in a way that accounts for the variability between subjects. This is because it can separate the variability due to the repeated measures (intra-subject variability) from the variability between subjects (inter-subject variability).

Typically, the interest lies in deducing differences between groups regarding changes observed within subjects (Hickey et al., 2018). A repeated measures ANOVA is an extension of the standard ANOVA, designed to account for correlations both within and between experimental groups, as well as considering the timing of measurements (Muhammad, 2023). RM-ANOVA is designed to explore the impact of experimental conditions (i.e., factors) and predictors on the outcome of interest. (Langenberg et al., 2020).

RESEARCH RESULTS

The following presents an introduction to the findings of our research study, which aimed to evaluate the influence of customer reviews on the perceived attractiveness of hotel among participants. This study utilized a pre-test and post-test design to capture the changes in perceptions before and after exposure to hotel reviews. Participants were first asked to rate the attractiveness of one hotel based solely on six photographs. Subsequently, they were provided with customer reviews of the same hotel, after which they re-evaluated their initial ratings. The objective was to understand how additional information, in the form of customer feedback, could alter the initial impressions formed by visual stimuli. The results shed light on the significant role that reviews play in shaping consumer decisions and perceptions, offering insights into the dynamics of hotel selection processes.

Table 2: Repeated Measures ANOVA Within Subjects Effects

Cases	Sum of Squares	df	Mean Square	F	p	ω^2
Attractiveness	735.052	1	735.052	1026.571	< .001	0.515
Attractiveness * Gender	4.587	1	4.587	6.407	0.012	0.006
Residuals	100.244	140	0.716			

P-value: < .001 indicates that the difference in the perception of attractiveness before and after reading reviews is statistically significant. Omega squared (ω^2) - 0.515 is a measure of effect size, indicating that about 51.5% of the variance in the perception of attractiveness can be explained by reading reviews. P-value is 0.012 which shows a significance of the interaction between gender and the perception of attractiveness, indicating that the way reading reviews affects the perception of attractiveness differs between men and women. Omega squared (ω^2) is 0.006 - a small effect size, indicating that although the interaction is statistically significant, its actual impact on the perception of attractiveness is relatively small.

The results suggest that reading online reviews significantly influences the perception of hotel attractiveness, with a large effect (51.5% of the variance in the perception of attractiveness). Furthermore, there is a statistically significant but small interaction between the gender of participants and changes in the perception of attractiveness, suggesting that gender moderates the impact of reviews, but to a lesser extent. Thus, while reading reviews generally affects the perception of attractiveness, the way this perception changes between men and women is present, but relatively small. A high F-statistic and a very small p-value for the change in the perception of attractiveness indicate that reading online reviews has a strong and statistically significant impact on participants' perception of hotel attractiveness. This finding supports the idea that online reviews play a key role in shaping perceptions of hotel. Although the interaction between gender and the perception of attractiveness after reading reviews is statistically significant, the effect size is small. This indicates that, while there is a difference in how men and women change their perception of hotel attractiveness after reading reviews, this difference is not markedly large. From a practical standpoint, this means that while gender plays a role in the perception process, online reviews generally have a strong impact on all participants, regardless of gender. The results underscore the need for hoteliers to carefully manage their online reputation, as reviews have a significant impact on the perception of potential guests. Although the impact of reviews may vary slightly between men and women, it is generally important to ensure that reviews reflect the quality of service and accommodation to attract guests.

Table 3: Repeated Measures ANOVA Between Subjects Effects

Cases	Sum of Squares	df	Mean Square	F	p	ω^2
Attractiveness	135.155	1	135.155	32.287	< .001	0.100
Residuals	586.042	140	4.186			

High F-statistic (32.287) indicates that there is a statistically significant difference in the perception of hotel attractiveness between men and women.

P-value: < .001 indicates that the difference in the perception of hotel attractiveness between men and women is statistically significant at a high level of significance. Measure ω^2 (omega squared - 0.100) observe at the effect size, indicating that about 10% of the variance in the perception of hotel attractiveness can be explained by the gender of participants. This suggests that gender has a moderately significant impact on the perception of hotel attractiveness.

The results clearly indicate that there is a significant difference in the perception of hotel attractiveness between men and women, with a moderate effect size (10% of the variance). This suggests that gender plays an important role in how respondents perceive the attractiveness of hotel, even before the effects of reading online reviews are considered. The F-statistic and p-value indicate that this finding is not by chance, and that gender should be considered a significant factor in analyzing the perception of hotel attractiveness.

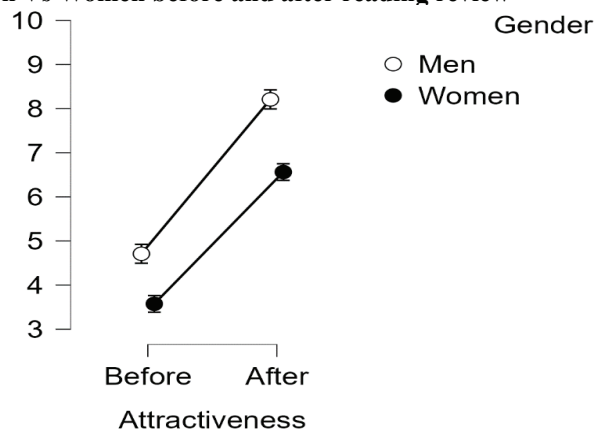
Table 4: Descriptive Statistics

Attractiveness	Gender	N	Mean	SD	SE	Coefficient of variation
Before	Men	62	4.710	1.653	0.210	0.351
Before	Women	80	3.575	1.605	0.179	0.449
After	Men	62	8.210	1.243	0.158	0.151
After	Women	80	6.563	1.675	0.187	0.255

In the conducted research, we delved into how the perception of hotel attractiveness varies between genders before and after reading reviews. Initially, our study included 62 male participants who, on average, rated hotel attractiveness at 4.710 before reading any reviews. This initial rating highlighted a relatively uniform perspective among male participants, as indicated by a standard deviation of 1.653 and a coefficient of variation (CV) of 0.351, which suggested a lower variability in their ratings. On the other hand, the group of 80 female participants demonstrated a different initial stance, with an average attractiveness rating of 3.575. The higher coefficient of variation of 0.449 among women, compared to men, pointed towards a greater variability in their assessments, which could imply diverse expectations or criteria in evaluating hotel.

The study observed a significant shift in the perception of hotel attractiveness after the participants read online reviews. For men, the average rating soared to 8.210, marking a considerable increase in their perception of attractiveness. This rise was accompanied by a decrease in variability, as evidenced by a lower coefficient of variation (0.151) post-review, suggesting that the reviews led to a more unified opinion among male participants. Women also revised their ratings upward, to an average of 6.563 after reading the reviews, though this increase was not as pronounced as it was for the men. Nonetheless, the reduced coefficient of variation for women (0.255) post-review indicated a similar trend towards consensus as seen with the male participants. Analyzing these shifts, several key insights emerge. Initially, men exhibited a higher baseline attractiveness rating compared to women, hinting at differing initial perceptions between genders. The greater variability in women’s initial ratings could reflect diverse criteria or expectations in hotel evaluation. Following the review reading, the marked increase in attractiveness perception for both genders suggest a significant influence of reviews on hotel perceptions. However, the more substantial rise in ratings among men could indicate a greater tendency among males to alter their perceptions based on online reviews compared to females. The reduction in the coefficient of variation post-reviews for both genders underscore the role of reviews in providing additional information that helped participants form a more solid opinion about the hotel. This phenomenon suggests that online reviews serve as a crucial tool in shaping potential customers’ perceptions, with a notably stronger consensus emerging post-review. The findings from this study not only highlight the significant impact of online reviews on the perceived attractiveness of hotel but also illuminate the nuanced differences in how men and women adjust their perceptions considering additional information.

Figure 3: Descriptive Plots Men Vs Women before and after reading review



The figure 3 clearly illustrates that the starting point and attractiveness of the hotel before the review, based solely on the presented photographs, differs between men and women. This difference may indicate that women have higher expectations

from hotel accommodation and services, while men are more flexible. Additionally, it is evident that for both genders, the attractiveness of the displayed hotel significantly increases after being shown positive reviews.

Table 5: Post Hoc Test – Attractiveness

	Mean	Difference SE	t	P _{bonf}
Before After	-3.244	0.101	-32.040	< .001

The analysis of the impact of online reviews on hotel attractiveness perceptions reveals significant insights, particularly when examining the mean difference in attractiveness ratings before and after reading reviews. The mean difference of -3.244 indicates a decrease in the average attractiveness ratings before the reviews compared to after, suggesting that initial perceptions were significantly lower prior to exposure to positive reviews. The negative sign of this mean difference underscores a substantial improvement in attractiveness perceptions following review reading. Accompanying this mean difference is a standard error (SE) of 0.101, which denotes the precision of the estimated difference between the mean values. The relatively low SE value suggests a high degree of accuracy in this estimation, lending credence to the observed change in perceptions. Further strengthening these findings is the t-statistic value of -32.040. This statistic measures the statistical significance of the calculated mean difference, considering the variability within groups. The large absolute value of the t-statistic strongly indicates that the change in attractiveness ratings before and after reading reviews is not only significant but also robust against the variability inherent within the sample groups. The statistical significance of these findings is further highlighted by a p-value (p_{bonf}) of less than .001, even after applying Bonferroni correction for multiple comparisons. The Bonferroni correction is a conservative method designed to reduce the risk of false positives (Type I errors) when multiple comparisons are made. The fact that the p-value remains below .001 after this correction signals an exceptionally high level of confidence in these results, underscoring the substantial effect that reading reviews has on hotel attractiveness perceptions.

Table 6. Post Hoc Comparisons - Gender ✱ Attractiveness

		Mean	Difference SE	t	p _{bonf}
Men, Before	Women, Before	1.135	0.265	4.283	< .001
	Men, After	-3.500	0.152	-23.029	< .001
	Women, After	-1.853	0.265	-6.995	< .001
Women, Before	Men, After	-4.635	0.265	-17.496	< .001
	Women, After	-2.987	0.134	-22.329	< .001
Men, After	Women, After	1.647	0.265	6.218	< .001

The research conducted on the influence of online reviews on hotel attractiveness perceptions has yielded compelling insights, particularly regarding the dynamics between initial perceptions and the transformative power of reviews across genders. The findings reveal a nuanced landscape of perception shifts that underscores the impactful role of online reviews in shaping potential guests' opinions. Initially, the data indicated that men, on average, rated hotel as more attractive than women did before reading any reviews, with a mean difference of 1.135. This difference, which is statistically significant (p-value: < .001), suggests distinct starting points in how each gender perceives hotel attractiveness, potentially hinting at higher expectations from women in terms of accommodation and service quality. Upon examining the effect of reviews on perception, a significant increase in attractiveness ratings was observed among men after reading reviews, with a mean difference of -3.500. This marked improvement in perception, also statistically significant (p-value: < .001), points to the substantial influence that positive reviews have on enhancing men's views of hotel attractiveness. When comparing the post-review ratings of men to the pre-review ratings of women, a mean difference of -1.853 emerged, indicating that women rated the hotel as more attractive after reading reviews than men did before reading reviews. This finding, along with its statistical significance (p-value: < .001), reflects the variance in perception adjustments between genders following the exposure to reviews. Furthermore, the shift in women's ratings post-review was also significant, with a mean difference of -2.987, emphasizing that reading reviews led to a considerable enhancement in how attractive they found the hotel. This change, like the others, is statistically significant (p-value: < .001), reinforcing the idea that reviews play a pivotal role in altering hotel attractiveness perceptions. A direct comparison between men's and women's post-review ratings reveals another layer of insight, with men rating the hotel as more attractive than women did, evidenced by a mean difference of 1.647. This statistically significant difference (p-value: < .001) post-review further delineates the gender-specific impacts of reviews on perception.

The overarching message from these results is clear: both men and women significantly increased their attractiveness ratings of hotel after reading reviews, with a notably larger increase observed among men. The data underscores a significant disparity in initial attractiveness ratings between genders and the subsequent shifts following review exposure. These outcomes suggest that online reviews wield a powerful influence over hotel attractiveness perceptions, with varying degrees of impact on men and women. The statistical significance across all comparisons affirms the robustness of these findings, highlighting the critical importance of managing online reviews for hoteliers seeking to improve or maintain the attractiveness of their properties to a diverse clientele.

Hypothesis 1 posited that there is a statistically significant difference in the perception of hotel attractiveness before and after reading online reviews. The analysis robustly supports this hypothesis, demonstrating a statistically significant increase in attractiveness ratings post-review exposure. This finding decisively affirms the transformative power of online reviews in altering hotel attractiveness perceptions, highlighting the critical role that consumer feedback plays in shaping potential guests' views. **Hypothesis 2** explored the notion that the shift in hotel attractiveness perceptions before and after reading online reviews varies between men and women. The evidence strongly backs this hypothesis, revealing a notable difference in how men and women's ratings changed, with men showing a greater increase in attractiveness ratings post-review. This outcome suggests that gender influences how the perception of attractiveness is modified following review exposure, pointing to underlying differences in how each gender processes and values online reviews. **Hypothesis 3** suggested the presence of an interaction between the respondent's gender and the effect of reading online reviews on the perception of hotel attractiveness. The data confirms this hypothesis, indicating a statistically significant interaction between gender and changes in attractiveness perceptions post-review. This implies that gender not only influences the extent of perception change but also moderates the impact of reviews on perceptions of attractiveness, adding a layer of complexity to understanding the role of reviews in consumer decision-making. **Hypothesis 4** was predicated on the assertion that reading positive online reviews significantly enhances the perception of hotel attractiveness for both genders, albeit with a stronger effect observed in one gender. This hypothesis is also accepted, based on the general increase in attractiveness ratings following review exposure, which implies the positive nature of the reviews. The more pronounced increase in ratings among men compared to women supports the hypothesis that the effect of positive reviews is stronger for one gender—in this case, men.

CONCLUSION

The accelerating pace of modern life shifts in lifestyles and values, and the impact of both internal and external stimuli significantly influence consumer behavior. This behavior is also shaped by broader societal events, including financial crises, natural disasters, wars, and pandemics, necessitating a flexible and adaptive approach to market offerings to meet evolving consumer needs. This study focused on the specific realm of hotel attractiveness perceptions before and after reading online reviews, employing a nuanced analysis to explore how these perceptions are influenced by various factors, including the pivotal role of gender.

Our research has provided substantial evidence that the perceptions of hotel attractiveness are significantly swayed by online reviews. The examination of our hypotheses confirmed that these digital feedback mechanisms are not just peripheral elements but central to shaping potential guests' decisions and preferences. The study highlighted a critical understanding: consumer feedback, especially in the form of online reviews, plays a significant role in altering perceptions of hotel attractiveness, underscoring the necessity for the hospitality industry to engage actively with and manage online reputations. The findings pointed out that the impact of online reviews on hotel attractiveness perceptions varies between genders, with men showing a greater propensity to alter their views based on reviews compared to women. This gender differentiation in processing and valuing online reviews suggests that personalized marketing strategies may enhance engagement and effectiveness. The gender-specific insights derived from our analysis provide a foundation for developing targeted communication strategies, acknowledging the nuanced ways in which different demographic groups interact with and are influenced by online content. Moreover, the interaction between gender and the effect of online reviews, as highlighted in our research, adds a layer of complexity to consumer behavior studies within the hospitality sector. It emphasizes the multifaceted nature of consumer decision-making, where individual attributes such as gender can moderate the influence of external information sources like online reviews. This understanding opens avenues for more refined and effective marketing approaches, tailored to address and appeal to the distinct preferences and perceptions of diverse consumer groups. The study also reaffirmed the enhanced impact of positive online reviews on hotel attractiveness perceptions, with a noted differential effect across genders. This underlines the persuasive power of positive feedback in shaping consumer attitudes and decisions, further pointing to the potential of leveraging such reviews in marketing strategies to amplify positive perceptions among target demographic segments.

While this study has provided significant insights into the impact of online hotel reviews on perceived hotel attractiveness with a focus on gender differences, several limitations should be noted. First, the methodology relies exclusively on a quantitative approach and the use of only visual stimuli combined with textual reviews. This may limit the scope of the conclusions since actual hotel selection often involves other factors such as price, location, service, and additional amenities that were not included in this study. Furthermore, the sample of participants might present an additional limitation as it is unclear to what extent the results are generalizable to a broader population with diverse demographic characteristics. One of the main directions for future research should be to expand the scope of the study to different cultural and regional contexts. To better understand the various factors influencing hotel attractiveness perceptions, future studies should include diverse demographic groups and geographical areas. Additionally, conducting longitudinal studies that track changes in hotel attractiveness perceptions over time and under different seasonal conditions is recommended. Another recommended research direction involves combining qualitative methods, such as in-depth interviews or focus groups, to gain a deeper understanding of the psychological mechanisms and emotional responses of participants to online reviews. This could reveal additional nuances in how different genders and demographic groups interpret and react to reviews. Furthermore, it would be beneficial to explore the impact of negative reviews and how they modify the perception of hotel attractiveness, as well as to investigate potential differences in reactions to various types of reviews (e.g., reviews with photos, video reviews). Future research could also include experimental designs that simulate real booking conditions to better understand the factors influencing final consumer decisions. While this study provides important insights into the role of online reviews in the perception of hotel attractiveness and gender differences, further research is needed to expand and deepen these findings, considering a broader range of factors and methodological approaches. Such research will enable better adaptation of marketing strategies and online reputation management in the hospitality industry, aiming to better understand and meet the needs of different consumer groups.

This study contributes to the rich tapestry of consumer behavior research, offering new perspectives on the significant influence of online reviews and gender dynamics on the perception of hotel attractiveness. It underscores the importance of a nuanced, responsive approach to online reputation management and marketing in the hospitality industry, tailored to meet the diverse needs and preferences of a global consumer base. Further research in this area is not only necessary but essential for businesses and policymakers to forge strategies that align with the evolving dynamics of consumer behavior, ultimately enhancing guest experiences and satisfaction in the hospitality sector.

REFERENCES

- Arif, A. and Waleed, A. (2022), „The Impact of Online Reviews on Consumer Restaurant and Hotel Selection Decisions in Türkiye“, *Florya Chronicles of Political Economy*, Vol. 8, No. 2, pp. 1-14. http://dx.doi.org/10.17932/IAU.FCPE.2015.010/fepe_v08i2004
- Ban, H.-J.; Hayeon, C.; Eun-Kyong, C.; Sanghyeop, L.; Hak-Seon, K. (2019), „Investigating Key Attributes in Experience and Satisfaction of Hotel Customer Using Online Review Data“, *Sustainability*, Vol. 11, No. 23. <https://doi.org/10.3390/su11236570>
- Chakraborty, U. and Biswal, K. S. (2020), „Impact of Online Reviews on Consumer’s Hotel Booking Intentions: Does Brand Image Mediate“, *Journal of Promotion Management*, Vol. 26, No. 7, pp. 943-963. <https://doi.org/10.1080/10496491.2020.1746465>
- Chuang, C. M. (2023), „The conceptualization of smart tourism service platforms on tourist value co-creation behaviours: an integrative perspective of smart tourism services“, *Humanities Social Sciences Communications*, Vol. 10, No. 1, pp. 1-16. <https://doi.org/10.1057/s41599-023-01867-9>
- Christin, D. A. G.; Nugraha, A. N. K. A. (2023), „The Impact of Online Review and Price on Consumer’s Hotel Booking Intention at Online Travel Agency: Trust as a Mediating Variable“, *International Journal of Electronic Commerce Studies*, Vol. 13, No. 4, pp. 1-26. <https://doi.org/10.7903/ijecs.2115>
- Cuesta-Valiño, P.; Kazakov, S.; Gutiérrez-Rodríguez, P.; Rua, L. O. (2023), „The effects of the aesthetics and composition of hotels’ digital photo images on online booking decisions“, *Humanities and Social Sciences Communication*, Vol. 10, No. 1., pp. 1-11. <https://doi.org/10.1057/s41599-023-01529-w>
- Danish, Q. R.; Ali, F. H.; Shahid, R.; Nadeem, K. (2019), „Impact of Online Consumer Reviews on Hotel Booking Intentions: The Case of Pakistan“, *European Scientific Journal*, Vol. 15, No. 7, pp. 1-16. <http://dx.doi.org/10.19044/esj.2019.v15n7p144>
- Durna, U., Dedeoglu, B.B., & Balıkcıoğlu, S. (2015). The role of servicescape and image perceptions of customers on behavioral intentions in the hotel industry. *International Journal of Contemporary Hospitality Management*, 27(7), 1728-1748. <https://doi.org/10.1108/IJCHM-04-2014-0173>
- Ding, C.; Guo, Q., Rehman, A.; Zeeshan, M. (2022), „Impact of environment on hotel customer satisfaction in Southeast Asia: A study of online booking site reviews“, *Frontiers in Environmental Science*, Vol. 10, pp. 1-11. <https://doi.org/10.3389/fenvs.2022.978070>
- El-Said, A. O. (2020), „Impact of online reviews on hotel booking intention: The moderating role of brand image, star category, and price“, *Tourism Management Perspectives*, Vol. 33, <https://doi.org/10.1016/j.tmp.2019.100604>
- Gavilan, D.; Avello, M.; Martínez-Navarro, G. (2018), „The influence of online ratings and reviews on hotel booking consideration“, *Tourism Management*, Vol. 66, pp. 53-61. <https://doi.org/10.1016/j.tourman.2017.10.018>
- Gellerstedt, M.; Arvemo, T. (2019), „The impact of word of mouth when booking a hotel: could a good friend’s opinion outweigh the online majority“, *Information Technology & Tourism*, Vol. 21, pp. 289–311. <https://doi.org/10.1007/s40558-019-00143-4>
- Hickey L. G.; Mokhles, M. M.; Chambers, J. D.; Kolamunnage-Dona, R. (2018), “Statistical primer: performing repeated-measures analysis”, *Interactive Cardiovascular and Thoracic Surgery*, Vol. 26, No. 4, pp. 539–544. <https://doi.org/10.1093/icvts/ivy009>
- Jang, S.; Liu, T.; Kang, J. H.; Yang, H. (2018), „Understanding Important Hotel Attributes from the Consumer Perspective over Time“, *Australasian Marketing Journal*, Vol. 26, No. 1, pp. 23-30. <https://doi.org/10.1016/j.ausmj.2018.02.001>
- Langenberg, B.; Helm, L. J.; Mayer, A. (2020), „Repeated Measures ANOVA with Latent Variables to Analyze Interindividual Differences in Contrasts“, *Multivariate Behavioral Research*, Vol. 57, No. 1, pp. 2-19. <https://doi.org/10.1080/00273171.2020.1803038>
- Liang, S.; Schuckert, M.; Law, R. (2019), “How to improve the stated helpfulness of hotel reviews? A multilevel approach”, *International Journal of Contemporary Hospitality Management*, Vol. 31, No. 2, pp. 953-977. <https://doi.org/10.1108/IJCHM-02-2018-0134>
- Li, X.; Fan, Y.; Zhong, X.; Hu, J. (2022), „Brand first? The effect of hotel online word-of-mouth on consumer brand sensitivity“, *Frontiers in Psychology*, Vol. 13. <https://doi.org/10.3389/fpsyg.2022.986620>
- Lim, J. E.; Mohd Zahari, F.; Abidin, R. (2022), „Factors Affecting Online Hotel Booking Intention: a Study on Uum Students“, *Journal of Technology and Operations Management*, Vol. 17, No. 1, pp. 53-61. <https://doi.org/10.32890/jtom2022.17.1.5>
- Liu, W. and Ji, R. (2019), „Do Hotel Responses Matter?: A Comprehensive Perspective on Investigating Online Reviews“, *Information Resources Management Journal (IRMJ)*, Vol. 32, No. 3, pp. 70-89. <https://doi.org/10.4018/IRMJ.2019070104>
- Montoya, R. M., Horton, R. S., Vevea, J. L., Citkovich, M. and Lauber, A. L. (2017). A re-examination of the mere exposure effect: The influence of repeated exposure on recognition, familiarity, and liking. *Psychological Bulletin*, 143(6), 459-485. <https://doi.org/10.1037/bul0000085>
- Muhammad, N. L. (2023), “Guidelines for repeated measures statistical analysis approaches with basic science research considerations”, *The Journal of Clinical Investigation*, Vol. 133, No. 11, pp. 1-4. <https://doi.org/10.1172/JCI171058>
- Oliveira, R. de C.; Baldam, E. D.; da Costa, F. R.; Pelissari, A. S. (2020), „A influência da percepção de utilidade de avaliações online na intenção de compra de serviços de hotelaria“, *Revista Brasileira De Pesquisa Em Turismo*, Vol. 14, No. 2, pp. 30–45. <https://doi.org/10.7784/rbtur.v14i2.1695>
- Patafta, D. and Milohnić, I. (2022), „Challenges of Managerial Communication in Hotel Business Operations“, *Tourism and Hospitality Industry, Congress Proceedings*, pp. 209-225, viewed 23 February 2024, <https://doi.org/10.20867/thi.26.21>
- Pontes, A.; Ramos, C. M. Q. (2023), „How does Social Media influence the Behaviour of Hotel Consumers“, *Journal of Tourism, Sustainability and Well-Being*, Vol. 11, No. 2, pp. 116-135. <https://doi.org/10.34623/784k-qg19>
- Sharmila, S. and Jha, D. V. (2023), „Fear psychosis: Marketing strategy for next gen buyers“, *Vallis Aurea*, Vol. 9, No. 1, pp. 51–58. <https://doi.org/10.2507/IJVA.9.1.4.101>
- Shuxratovna, M. N.; Kiran, P.; Erdogan, E. (2023), “Smart Tourism Triggers Tourist Minds-Do you have the mind to mind it”, *Vallis Aurea*, Vol. 9, No. 1, pp. 19-36. <https://doi.org/10.2507/IJVA.9.1.2.99>
- Stankova, M. and Ivanov, I. (2020), „Projections of Digitalization on Hotel Attitude and Booking Intentions on the Domestic Tourist Market In Bulgaria“, *Tourism and Hospitality Industry, Congress Proceedings*, pp. 265-278, viewed 23 February 2024, <https://thi.fthm.hr/congress-proceedings/send/6-2020/154-projections-of-digitalization-on-hotel-attitude-and-booking-intentions-on-the-domestic-tourist-market-in-bulgaria>
- Sumarsono, D.; Sudardi, B.; Wanto; Abdullah, W. (2019), „The influence of TripAdvisor application usage towards hotel occupancy rate in Solo“, *Journal of Physics: Conference Series*, Vol. 1175, pp. 1-7. <https://doi.org/10.1088/1742-6596/1175/1/012248>
- Šostar, M.; Ristanović, V. (2023), “An Assessment of the Impact of the COVID-19 Pandemic on Consumer Behavior Using the Analytic Hierarchy Process Model”, *Sustainability*, Vol. 15, No. 20. <https://doi.org/10.3390/su152015104>
- Vo, T. N.; Tuckova, Z.; Pham, T. N.; Ngyueen, L. H. L. (2021), „Guest Online Review: An Extraordinary Focus on Hotel Users’ Satisfaction, Engagement, and Loyalty“, *Journal of Quality Assurance in Hospitality & Tourism*, Vol. 23, No. 4, pp. 913-944. <https://doi.org/10.1080/1528008X.2021.1920550>
- Wen, Y.; Liang, Y.; Zhu, X. (2023), „Sentiment analysis of hotel online reviews using the BERT model and ERNIE model - Data from China“, *PLOS ONE*, Vol. 18, No. 3, <https://doi.org/10.1371/journal.pone.0275382>
- Xue, P.; Jo, W.; Bonn, A. M. (2020), „Online hotel booking decisions based on price complexity, alternative attractiveness, and confusion“, *Journal of Hospitality and Tourism Management*, Vol. 45, pp. 162-171. <https://doi.org/10.1016/j.jhtm.2020.08.013>
- Yilmaz, S. E. (2020), „The Effects on Consumer Behavior of Hotel Related Comments on the TripAdvisor Website: An Istanbul Case“, *Advances in Hospitality and Tourism Research*, Vol. 8, No. 1, pp. 1-29. <https://doi.org/10.30519/ahr.536303>