

# Research on the Impact of Online Review Features on Hotel Customers' Purchase Intention

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**Abstract:** With the rapid development of the Internet, online travel booking has gradually flourished and become an important form of tourism product trading. This paper builds a theoretical framework based on Stimulus-Organism-Response (SOR) model and perceived risk theory to analyze how the characteristics of online reviews affect potential consumers' purchase intention. In the theoretical framework of this paper, the characteristics of online reviews are taken as independent variables, including the content quality of online reviews, the prestige value of reviewers, the timeliness of reviews, the number of reviews, and the positive emotional tendency of reviews. The perceived risk of consumers is set as the intermediate variable. The purchase intention of potential consumers is set as the result variable. After data collection, SPSS was used to conduct reliability and validity analysis, correlation analysis, regression analysis and mediation effect test. The results show that the content quality of online reviews, the prestige value of reviewers, the timeliness of reviews, the number of reviews and the tendency of positive reviews have significant positive effects on the booking intention of potential consumers. Perceived risk plays a partial mediating role, and perceived risk negatively affects consumers' booking intention. Finally, the research results and gives suggestions to hotel managers were discussed.

**Keywords:** Online reviews, Purchase intention, Perceived risk, Tourism e-commerce.

## 1. Introduction

With the rapid development of China's economy, people's income levels and living standards are also continuously improving, and the demand for tourism is gradually increasing. Data from the China Domestic Tourism Development Report 2023-2024 shows that the number of tourists and tourism revenue during major holidays in 2023 both saw a certain degree of growth compared to 2022, especially during the "Mid-Autumn + National Day" long holiday period, both domestic tourism trips and domestic tourism revenue have returned to pre-COVID-19 levels, with a 4.1% increase compared to 2019, and tourism revenue increased by 1.5% compared to 2019. Research reports on China's online accommodation booking industry indicate that China's accommodation consumer market has good development prospects, with a continuously growing market size and a stable growth trend in the accommodation industry over the years. As consumers' ability to consume hotels gradually increases, more consumers begin to focus on the cost-effectiveness of hotels, and their requirements for hotel stay experiences and service attitudes are also getting higher. However, the virtual nature of the online environment makes consumers have uncertain cognition about the real hotel stay experience and services, which leads to perceived risk that reduces the booking intention of potential consumers for hotels and has adverse impact on the online booking behavior for hotels.

When shopping online, consumers cannot directly see the physical goods, and some products may have quality issues or not match the merchant's description. Especially for experiential products like hotels, consumers cannot accurately judge the hotel's products and quality before staying in the hotel. To reduce the risks brought by the inability to personally experience the product and the lack of understanding of the product and services, consumers usually

read product information carefully and view other consumers' evaluations and feedback on the product before purchasing, in order to better understand the real situation of the product. In addition to the detailed product information provided by the merchant, comments provided by other users on the product also help potential consumers make wiser purchasing decisions and reduce shopping risks. Compared to consumers of tangible goods, the impact of online reviews on hotel consumers' purchase intention is greater. For hotels, how to carry out online review management, communicate effectively with customers, and make timely rectifications to enhance their attractiveness to consumers, thereby driving hotel service consumption, is also an important operational decision. Therefore, conducting research on the influence of online review characteristics on hotel consumers' purchase intention has practical significance and theoretical value.

The structure of this paper is arranged as follows. The second part is a literature review and theoretical basis. Then, the theoretical model and research hypotheses are proposed. The fourth part describes the research methods. The fifth part is the statistical analysis and hypothesis testing. Finally, the conclusion is summarized, and suggestions are made for hotel managers.

## 2. Literature Review

### 2.1. Online Reviews

Online reviews are an integral part of online word-of-mouth (WOM), which is an extension of traditional WOM in the modern digital age. With the development of internet technology, traditional WOM has gradually evolved into the new form of online WOM. WOM refers to the phenomenon of oral communication among people, a form of informal communication, including telephone conversations and face-to-face exchanges, existing between the communicator and the receiver, and is non-commercial in nature (Arndt, 1967).

A primary direction of word-of-mouth research focuses on customer satisfaction and trust, as well as how dissatisfaction and complaints are transformed into word-of-mouth communication. In short, WOM is considered in this model, the ultimate result of the conversion of customer satisfaction and trust (Chiou, Droge, and Hanvanich, 2002). Hanson (2000) points out that online WOM utilizes internet platforms to disseminate information through various online media (Hanson, 2000).

Online reviews are evaluative messages about products, services, or businesses conveyed by customers with relevant purchasing experiences to other consumers and the general public through various online platforms (Hennig-Thurau et al., 2010). Studies show that potential customers generally trust online review information based on product usage experiences more than product description information offered by sellers, considering this type of review information to be more comprehensive and more genuinely reliable (Chevalier and Mayzlin, 2006). Beverley et al. (2013) analyzed the impact of the source credibility of online reviews and website reputation on consumer purchase intention, with trust and attitude as intermediary variables (Beverley et al., 2013).

Most scholars analyze the relationship between online reviews and consumer purchase intention from the aspects of the review source, review itself factors, and review receiver characteristics. Some scholars focus on review characteristics when studying online reviews, exploring the correlation between review length, review quantity, review valence, and review quality and purchase intention (Mudambi and Schuff, 2010). This paper selects five characteristic factors of review content quality, reviewer prestige value, review timeliness, review quantity, and positive emotional tendency of reviews to analyze the influence mechanism of online review characteristics on consumer purchase intention.

## 2.2. Perceived Risk

The concept of perceived risk was initially introduced to the field of consumer behavior from psychology by Harvard professor Bauer. Bauer (1960) emphasizes that perceived risk is a personal subjective feeling of consumers and is not based on objectively existing risks (Bauer, 1960). Building on this, Cox (1967) further refines the definition of perceived risk, dividing perceived risk into pre-purchase and post-purchase stages. The pre-purchase stage refers to the perceived risk generated when consumers have multiple choices before purchase and consumer behavior is not goal-oriented, unclear about which choice is most suitable for themselves; the post-purchase stage refers to the perceived risk brought about by the deviation from expectations after consumers make a purchase (Cox, 1967). Mitchell (1999) believes that perceived risk is the consumer's subjective estimation of potential uncertainty and risk probability during the purchase process, and compared to perceived value, perceived risk has a more significant influence on the consumer decision-making process. Therefore, consumer purchase behavior can be seen as a process of minimizing perceived risk (Mitchell, 1999). Chen and Dhanasobhon (2008) found through a study of online book reviews that review quality and reviewer credibility have a certain impact on book sales. Consumers can understand product quality and service levels, after-sales guarantees, and detailed product information through online reviews, reducing uncertainty in purchasing and striving to reduce their perceived risk (Chen and Dhanasobhon, 2008).

## 3. Research Hypotheses

### 3.1. The Relationship between Online Review Characteristics and Perceived Risk and Purchase Intention

In the online shopping environment, since consumers cannot directly contact and experience the products, consumers need to rely more on the merchant's description to evaluate product quality, which increases the uncertainty and perceived risk of shopping. To reduce this risk, online reviews become a key source of information for consumers. By carefully reading the product's online reviews, consumers can obtain more detailed information about the product, thus more accurately assessing product quality and reducing perceived risk during the shopping process (Hao and Ye, 2010). In addition, high-quality online reviews usually introduce the product's features and advantages in more detail, reflecting the reviewer's attitude and credibility. Such reviews are more likely to be accepted and trusted by consumers, thereby further reducing perceived risk and promoting consumer purchase decisions (Wang and Zheng, 2016). Therefore, the hypotheses are proposed as followed:

H1a: Review content quality has a negative impact on consumer perceived risk;

H1b: Review content quality has a positive impact on consumer purchase intention.

The quantity of online reviews can, to some extent, serve as an indicator of a product's popularity and market performance. A large number of online reviews for a product usually indicates that it has garnered widespread attention and acceptance. Because a large number of reviews implies that more consumers have provided evaluations and feedback on the product, offering potential consumers a richer source of information (Wang, Li, and Sun, 2016). Therefore, comprehensive information can help consumers more accurately assess product quality, reducing perceived risk during the purchase process and aiding in making wise purchasing decisions. Thus, the hypotheses are proposed as followed:

H2a: The number of reviews has a negative impact on consumer perceived risk;

H2b: The number of reviews has a positive impact on consumer purchase intention.

The timeliness of reviews refers to the time interval between when the review is published and when the consumer views the review. When this time interval is short, the review is generally considered timelier. Timely reviews often contain the latest product information, service quality, and the latest company dynamics. Only by obtaining the latest review information in a timely manner can consumers make more accurate purchase decisions, thus avoiding potential risks brought about by outdated information. Therefore, the hypotheses are proposed as followed.

H3a: The timeliness of reviews has a negative impact on consumer perceived risk; H3b: The timeliness of reviews has a positive impact on consumer purchase intention.

The prestige value of reviewers, also known as the credibility or rank of reviewers, is an important indicator for measuring the credit level of website members. In consumer purchase decisions, the impact of comments made by reviewers with different prestige values is different. Most consumers believe that comments made by reviewers with high prestige value are more objective and authentic, and have

a higher reference significance (Senecal and Nantel, 2004). Therefore, this paper assumes that when consumers see comments posted by reviewers with high prestige value, potential consumers are more likely to generate hotel booking intentions. Thus, the hypotheses are proposed as followed.

H4a: The prestige value of reviewers has a negative impact on consumer perceived risk.

H4b: The prestige value of reviewers has a positive impact on consumer purchase intention.

Positive online reviews have a significant impact on customer purchasing attitudes. Positive reviews can enhance the visibility of tourism companies and increase the likelihood of being purchased. Research by Meijer and Kleinnijenhuis (2006) shows that positive reviews have a positive effect on customer decision-making (Meijer and Kleinnijenhuis, 2006). Positive reviews can significantly increase consumer trust in products or services. Describing the product's advantages and user satisfaction experiences can stimulate potential customers' desire to purchase and reduce perceived risk. Therefore, the hypotheses are proposed as followed.

H5a: Positive reviews have a negative impact on consumer perceived risk.

H5b: Positive reviews have a positive impact on consumer purchase intention.

### **3.2. The Relationship between Consumer Perceived Risk and Purchase Intention**

The perceived risk that consumers feel when choosing products has a direct impact on their purchase intention. The higher the perceived risk, the lower the consumer's trust in the product, which may lead to a more negative attitude towards the product's quality or services. This negative attitude further reduces the likelihood of consumers actually purchasing. Therefore, reducing perceived risk through online reviews is crucial for enhancing consumer purchase intention and actual purchase behavior. In summary, the hypothesis is proposed as followed.

H6: Perceived risk negatively affects purchase intention.

### **3.3. The Mediating Effect of Perceived Risk**

When consumers book hotels online, they understand the hotel's products and services by reading relevant reviews. Hotel-related reviews affect consumers' emotions and attitudes. A positive attitude can reduce their perceived risk and promote their purchase decision, while a negative attitude increases their perceived risk and reduces consumer purchase intention. Studies on online shopping have found that perceived risk is a key factor affecting consumer purchase intention; the higher the consumer's perceived risk, the more negative their attitude, and the lower the possibility of purchasing the product. Studies on online reviews have proven the mediating role of perceived risk; online reviews affect perceived risk, which in turn affects consumer purchase intention. In summary, the hypotheses are proposed as followed.

H7a: Perceived risk mediates the relationship between review content quality and consumer purchase intention.

H7b: Perceived risk mediates the relationship between the number of reviews and consumer purchase intention.

H7c: Perceived risk mediates the relationship between review timeliness and consumer purchase intention.

H7d: Perceived risk mediates the relationship between reviewer prestige value and consumer purchase intention.

H7e: Perceived risk mediates the relationship between positive reviews and consumer purchase intention.

## **4. Methodology**

Data for this study was collected through a survey using an online platform, the Questionnaire Star (<https://www.wjx.cn/>). A total of 433 questionnaires were collected through online surveys, and based on two situations, unqualified questionnaires were screened out. One situation involved survey subjects who did not have actual hotel booking experience or did not browse online reviews when booking hotels; the other involved respondents who chose the same answer for all questions or incorrectly answered the lie detection question, indicating careless or perfunctory responses. This resulted in 360 valid responses, with a valid return rate of 83%.

The descriptive statistical results of the sample met the overall sampling requirements. The gender ratio was balanced. The majority of respondents were aged between 18-35, an age group that is the main body of online shopping, using the internet more frequently, and having more common behaviors of staying in hotels. In terms of education level, the survey subjects of this study mainly had a college degree or above, with a higher level of education, providing a certain guarantee for the quality of the survey. Most respondents had more than three online shopping experiences per month, indicating that the survey subjects of this study had relatively rich experience in online hotel reservations.

Reliability testing results showed that the Cronbach's alpha coefficients for online review characteristics, perceived risk, and purchase intention were all above 0.8. Moreover, removing a question item from each variable did not result in an increase in the corresponding reliability coefficient. Therefore, the credibility of the experimental data in this study is high, meeting the standards, and can be used for subsequent research analysis. Validity testing indicated that the overall KMO value was 0.932, and the significance coefficient of Bartlett's test was less than 0.05, indicating that the scale was suitable for factor analysis. In the exploratory factor analysis, seven factors were extracted using the maximum variance method for rotation, namely review content quality, review quantity, review timeliness, reviewer prestige value, positive reviews, perceived risk, and purchase intention. The factor loading coefficients for the seven measurement variables were all greater than 0.5, indicating a high degree of correlation between the measurement variables and their corresponding factors (see Table 1).

**Table 1.** Exploratory Factor Analysis

Variable	Item	Factor Loading						
Perceived Risk	I worry that the hotel will have unsanitary conditions and cause me physical discomfort.	0.796	-0.146	-0.161	-0.128	-0.087	-0.096	-0.130
	I am worried that choosing this hotel might be a mistake, leading to regret, complaints, and dissatisfaction.	0.791	-0.122	-0.172	-0.126	-0.096	-0.081	-0.189
	I am concerned that the hotel's staff service and cleanliness will not meet my expectations.	0.785	-0.154	-0.151	-0.118	-0.150	-0.155	-0.098
	I worry that spending money on booking this hotel may not be worth it, and the cost-performance ratio may not satisfy me.	0.779	-0.154	-0.144	-0.106	-0.173	-0.164	-0.086
Review Content Quality	The content of reviews can provide a wealth of useful information.	-0.205	0.795	0.117	0.099	0.117	0.150	0.027
	The content of reviews is objective.	-0.094	0.778	0.214	0.083	0.143	0.052	0.132
	The content of reviews is closely related to the product.	-0.135	0.776	0.132	0.142	0.128	0.078	0.158
	The content of the reviews is authentic.	-0.128	0.771	0.119	0.081	0.129	0.132	0.162
Reviewer's Prestige	The professionalism of the review content is very important.	-0.127	0.128	0.791	0.179	0.076	0.101	0.099
	The reviewer has a good reputation and track record.	-0.131	0.185	0.776	0.024	0.186	0.129	0.091
	The reviewer has a high level of recognition.	-0.160	0.130	0.765	0.125	0.125	0.105	0.103
	The reviewer possesses specialized knowledge related to the hotel industry.	-0.198	0.140	0.760	0.141	0.118	0.126	0.121
Number of Reviews	I pay more attention to hotels with a higher number of reviews.	-0.129	0.128	0.183	0.800	0.134	0.127	0.134
	Many people have left comments about the hotel.	-0.195	0.075	0.133	0.786	0.117	0.178	0.125
	Comments about the hotel are mixed, with both praise and criticism.	-0.115	0.183	0.123	0.784	0.164	0.161	0.205
Purchase Intention	After browsing online reviews, I would recommend this hotel to my friends.	-0.128	0.184	0.199	0.145	0.798	0.087	0.172
	Online reviews have been of great help in making my purchasing decision.	-0.158	0.201	0.129	0.194	0.794	0.154	0.096
	After browsing online reviews, I would consider booking this hotel.	-0.206	0.141	0.177	0.099	0.765	0.184	0.192
Review Timeliness	Timely posted reviews are very important.	-0.219	0.186	0.115	0.130	0.079	0.783	0.109
	Recently posted reviews are very important.	-0.147	0.065	0.170	0.160	0.175	0.776	0.204
	The most recent comments can reflect the most up-to-date information about the product.	-0.095	0.139	0.156	0.183	0.152	0.771	0.173
Positive Reviews	Positive reviews are more valuable.	-0.111	0.169	0.111	0.129	0.142	0.137	0.807
	The hotel has many positive reviews.	-0.174	0.137	0.149	0.218	0.141	0.143	0.773
	I pay more attention to the positive comments about the hotel.	-0.199	0.157	0.137	0.128	0.157	0.215	0.730

## 5. Result

Table 2 presents the results of the regression analysis. Model 1 shows the impact of the explanatory variables on the intermediate variable, indicating that all five variables significantly negatively affect perceived risk. Models 2 and 3 provide the standardized regression coefficients for the models with only explanatory variables and after the inclusion of the intermediate variable on the dependent variable,

respectively. The results indicate that the five explanatory variables of online reviews significantly positively affect purchase intention. Moreover, after the inclusion of the intermediate variable perceived risk in Model 3, the standardized coefficient for the impact of online reviews on purchase intention decreases but remains significant, indicating that perceived risk plays a partial mediating effect in their relationship. Thus, it can be concluded that hypotheses H1 through H7 are all supported by the statistical data.

**Table 2.** Result of Mediating Effect Test

	Model 1 Perceived Risk	Model 2 Purchase Intention	Model 3 Purchase Intention
Control Variables			
Gender	-0.084*(-1.963)	0.088**(2.110)	0.080**(1.782)
Age	-0.006(-0.120)	-0.041(-0.898)	-0.050(-0.996)
Education	0.116**(2.440)	-0.032(-0.685)	-0.030(-0.593)
Monthly Disposable Income	0.024(0.546)	-0.054(-1.269)	-0.058(-1.281)
Monthly Online Shopping Frequency	-0.038(-0.889)	-0.077*(-1.843)	-0.070*(-1.612)
Explanatory Variables			
Review Content Quality	-0.154***(-3.050)	0.186***(3.788)	-0.160***(3.014)
Reviewer's Prestige	-0.197***(-3.863)	0.167***(3.368)	0.145**(2.324)
Review Timeliness	-0.156***(-2.946)	0.158***(3.065)	0.128**(2.226)
Number of Reviews	-0.127**(-2.418)	0.139***(2.701)	0.113**(1.980)
Positive Reviews	-0.164***(-3.077)	0.187***(3.583)	0.161***(2.738)
Mediator variable			
Perceived Risk			-0.237***(-2.349)
N	360	360	360
R <sup>2</sup>	0.178	0.206	0.285

Notes: \* p<0.1, \*\* p<0.05, and \*\*\* p<0.01.

## 6. Conclusion and Implication

This paper constructs a theoretical model by reviewing and organizing relevant literature on online reviews and purchase intentions, and empirically verifies the relationship between online review characteristics and hotel customers' purchase intentions. The characteristics of online reviews significantly affect consumers' perceived risk. Higher quality, greater quantity, stronger timeliness, higher reviewer prestige value, and a large number of positive reviews can enhance consumer confidence and reduce concerns about purchase risks.

Perceived risk plays a mediating role between online review characteristics and purchase intentions. When booking hotels, the information asymmetry between consumers and businesses prevents consumers from accurately understanding hotel products and services, leading to perceived risk in online hotel reservations. To reduce their perceived risk, consumers will view product-related information to improve their understanding and complete purchase decisions.

The conclusions of this study have the following managerial implications: (1) Online merchants should innovate in online marketing methods and focus on the value of online reviews for products. By effectively managing and encouraging online reviews to reduce consumer perceived risk and increase purchase intentions. (2) Businesses can adjust the order of online reviews to prioritize high-quality reviews and those with images or videos, which helps consumers view reviews and obtain product information. Responding promptly to negative reviews and improving product service and quality can, in turn, increase consumer satisfaction. (3) Businesses can choose to collaborate with platforms and websites with higher credibility to reduce consumer perceived risk of the website and platform, thereby increasing the likelihood of consumer purchases.

The questionnaire survey implemented in this paper targets the hotel service industry but does not distinguish types of hotels. Different types of hotels have different target customers, and the demands for hotel quality and services may vary. Future research can focus on different types of hotels to explore the impact of online review characteristics on hotel customers.

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