

## RESEARCH ON THE INFLUENCE OF NEGATIVE ONLINE COMMENTS ON CONSUMERS' PURCHASE INTENTION

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### Abstract

How do negative online comments affect consumers' purchase intention in the Internet age? In this study, the negative online comments on the network platform are taken as the research object, and the degree of involvement as the moderating variable and perceived risk as the mediating variable, so as to explore the influence of negative comments on the network on the hotel consumers' purchase intention. The results show that negative online comments have a significant negative impact on consumers' purchase intention, in which perceived risk plays an intermediary role, and the degree of involvement plays a significant regulatory role. Marketers should pay full attention to the negative online comments on the network platform, and take necessary measures to reduce the perceived risks of consumers, so as to improve consumers' purchase intention; finally, this study puts forward three specific suggestions for hotel online marketing.

Key words: Negative online comments; Perceived risk; Involvement degree;  
Consumers' purchase intention; Internet platform

### Introduction

Before the advent of Internet platforms like trip advisor and Meituan,

people chose a very different way to eat and stay. Nowadays, more and more consumers are used to searching for product information and reading other

consumers' comments on products on the Internet platform before buying. Compared with the propaganda of merchants, the comments posted by consumers on the third-party Internet platform are more objective and convenient for consumers to know the real situation of enterprises and their products.

Highly developed social network information has both advantages and disadvantages for enterprises. Negative online comments on Internet platforms have an increasing impact on consumers, which in turn affects the image and performance of enterprises in various aspects. After browsing the negative online comments, consumers are likely to have negative impression and association, which makes them less willing to buy, which will cause certain trauma to the enterprise's performance over time. Due to the large number and wide range of users browsing merchants and comments on the Internet platform every day, the image of enterprises in the eyes of the public can easily be greatly reduced due to some negative comments, causing irreparable losses.

Based on previous studies, this paper explores the impact of negative online reviews on hotel consumers' buying intentions by taking involvement degree as a moderating variable and perceived risk as a mediating variable. I hope to find out the factors that contribute to the development of enterprises, so as to provide some reference help for hoteliers in the operation and network marketing.

## Theoretical Background And Hypotheses Development Negative Online Comments

Negative online comments usually contain some negative information about product quality or service level, which has a negative impact on reducing the perceived risk of potential buyers and forming the initial trust of potential buyers (Ruan, 2015). Li et al. (2016) pointed out that some consumers will share their unhappy experiences in consumption on the network platform and post corresponding comments, which are negative online comments. The content of such comments is closely related to the development of enterprises.

According to Xu (2018), if the division is based on the way of information diffusion, online comments can be divided into negative and positive categories.

### *Perceived risk*

The literature on this concept indicates that the meaning of the term perceived risk originated from psychology. Consumers don't know that some of their behaviors may produce some unhappy consequences before consumption, because there is no way to find out whether the purchase results will make them happy before consumption. Therefore, some variables are included in consumers' purchase decisions, which are perceived risk. Perceived risk includes purchase decision variables and the possible additional effects of variables (Cui, 2019).

Wu (2019) found that when consumers come into contact with negative information about enterprises, they will choose to refuse to buy to avoid negative consequences and enhance their sensitivity to perceived risks. At this time, consumers will generally judge the risk degree of products before considering whether to buy them.

Before ordering hotel rooms or goods online, most consumers will browse other consumers' online comments through the network platform to learn more about the hotel because they have not personally visited the hotel to experience its products or services. At this time, negative online comments will affect consumers' perception of the hotel.

In the process of browsing online reviews, consumers will form their own overall evaluation of the hotel through the evaluation and comments of other consumers. Wang (2017) suggested that consumers' feelings and perceptions will change with the stimulation of the external environment, which will lead to changes in consumers' willingness to buy.

Before shopping online, consumers can't touch or see real products in advance; they can only associate them through the screen display, so they will inevitably worry about whether the purchase will produce unknown variables and whether it will bring bad consequences to themselves. The more hesitation consumers have in their hearts, the greater their perceived risks (Xu, 2018).

Before ordering hotel rooms or goods online, most consumers will browse other consumers' online comments through the network platform to learn more about the hotel because they have not personally visited the hotel to experience its products or services. At this time, negative online comments will affect consumers' perception of the hotel. Hence, we suggest:

- H1: Negative online comments have a significant positive impact on consumers' perceived risk.
- H2: Perceived risk plays a mediating role in the influence of negative online reviews on consumers' purchase intention.

#### *Involvement Degree*

Zaichkowsky (1985) defined involvement degree as the degree to which an individual feels that a product or enterprise is related to themselves.

Dong and Zhang (2009) contended that the term "involvement degree" has been paid more and more attention by Chinese scholars. People increasingly realize its particularity, and find that involvement degree is closely related to the final decision of consumers' purchase.

Under different levels of participation, the process of making purchasing decisions and the types of purchasing behaviors are different. The attitude of consumers who are often involved is not easy to be changed. Highly involved

consumers generally have brand preference and high loyalty; however, the process of low-involvement consumers' purchasing decision is relatively simple and fast, and their belief in brand is weak. Although low-involvement consumers may buy products of a certain enterprise repeatedly, they are not high-loyalty consumers (Li, 2017). Therefore, this study proposes hypothesis 3.

H3: Consumer involvement plays a moderating role in the influence of negative online comments on perceived risk. The higher the degree of consumer involvement, the greater the influence of negative online comments on perceived risk.

#### *Purchase Intention*

According to Wang (2017), purchasing decision-making behavior is divided into five steps in academia. The purchase intention belongs to the purchase decision-making stage. With its own information channels, consumers have made sufficient judgments at this time and decided whether to buy or not.

In the process of online shopping, the change of consumers' willingness to buy depends more and more on online comments (Fu and Cheng, 2019).

When they are satisfied with the enterprise or agree with the product, consumers give positive online comments, while when consumers give negative online comments, they naturally have dissatisfied experiences. Most

people have the instinct of seeking advantages and avoiding disadvantages. Consumers are more willing to believe negative online comments in order not to suffer bad consequences. People's perception of negative online comments is higher than that of positive online comments (Xu, 2018).

Based on the discussion we propose to test the following hypothesis:

H4: Negative online comments have a significant negative impact on consumers' purchase intention.

#### *Methodology, Sampling And Data Collection*

The questionnaire survey method used in this study is divided into paper version and electronic version. The electronic version of the questionnaire is mainly distributed to some We Chat groups and friends circle of Zhao Qing University by sharing the electronic questionnaire, while the paper version of the questionnaire is mainly distributed in Zhao Qing University's campus roads, student canteens and other places, because the campus roads and canteens are usually places where there are more students, which can effectively ensure the distribution efficiency.

The questionnaire design of the study is divided into two parts: the first part is the basic situation of the research object and the second part is the measurement of emotional intensity, perceived risk, and involvement degree and purchase intention of negative online

comments. The scales of all variables included in the questionnaire are found and sorted out from authoritative literature.

#### *Data Analysis*

According to the gender distribution of the samples, among the 200 participants, 136 samples were female, accounting for 68% of the total sample, while male samples accounted for 32%, which was consistent with the reality that there were more women than men in Zhao Qing University. From the point of distribution monthly cost of living, 57.5% of participants living expenses for 800-1499 CNY per month, 26.5% of participants living expenses for 1500-2999 CNY per month, living expenses for 3000 CNY a month or more of the participants (8.5%), living expenses for 800 CNY a month only 7.5% of the participants, this shows that most participants have travel booking hotel economic base, etc.

According to the distribution of daily online time, 32% of the participants were online for 3-5 hours a day, and 45% were online for more than 5 hours a day, indicating that most of the participants had sufficient online time every day, which means they had more time and opportunities to browse online comments. Contact online booking or hotel online purchase from the distribution of food products, such as time, 40% of participants in contact with the time of booking online 1-3 years, 29% of the participants contact online booking time for 3 to 5 years, 8% of the participants contact online reservation time has

reached more than five years, suggesting that most of the participants contact online booking or purchase online hotel food and beverage products have a certain fixed number of year, hotel is no stranger to online booking.

#### *Reliability and Validity Analysis*

In this study, the Pearson correlation coefficient between negative online comment, perceived risk, involvement, purchase intention and other variables was measured to explore the relationship between the variables. The variables were significantly correlated at the level of 0.01, and the scale in this study had discriminant validity.

The independent t test was used to determine whether gender affects mediating variables and dependent variables. According to the results of Levine's variance isogenicity test, the significance p value of negative online comments and perceived risk is greater than 0.05. Therefore, there is no significant difference in the perception of negative online comments and perceived risk between women and men. The significance p value of involvement degree and purchase intention is less than 0.05. Therefore, there is a significant difference in cognition of involvement degree and purchase intention between women and men.

In order to test whether variables such as monthly living expenses, daily online time, and contact time for online room reservation have an impact on consumers' perceived risk and purchase

intention, this study USES one-way ANOVA to test monthly living expenses, daily online time, and contact time for online room reservation.

According to the test results, it was found that monthly living expenses, daily online time and online booking time all had significant influence on the purchase intention  $p > 0.05$ , so these variables did not have significant influence on the purchase intention. The significance level of monthly cost of living on perceived risk was  $p > 0.05$ , so the variable did not have a significant impact on perceived risk.

The significance level of daily online time and online booking time on perceived risk was  $P < 0.05$ , indicating that daily online time and online booking time had a significant impact on perceived risk.

The p value of significance for online time of 3-5 hours and more than 5 hours per day is 0.000, which has the most significant impact on perceived risk. The significant P value of contact online booking time less than 1 year, 1-3 years and 3-5 years is 0.000, which has the most significant impact on perceived risk. However, p value was greater than 0.05 when the online booking time was more than 5 years, which had no significant influence on perceived risk.

## Results

### *The Impact Of Negative Online Reviews On Consumer Perceived Risk*

In this study, multiple linear regressions were used to evaluate the impact of negative online evaluation on consumers' perceived risk. The test results showed that the importance of online negative comments on perceived risk was  $p < 0.05$ , and the impact of online negative comments on consumers' perceived risk was significant. As shown in Table 1.

Table 1. Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error				Tolerance	VIF
1	(Constant)	1.34	.08		7.47	.00		
	Negative online comments	.382	.057	.429	6.690	.000	1.000	1.000

a. Dependent Variable: Perceived risk

Tolerance  $> 0.1$ , VIF  $< 5$ , so there is no multi-collinearity between negative online comments and consumer perceived risk. The T value is 6.690, indicating that negative online assessment has a positive impact on consumers' perceived risk. So hypothesis 1 is tested.

### *The Mediating Effect Of Perceived Risk*

By using SPSS software to negative comments together with linear analysis that consumers purchase intention, negative comments online negative influence purchase intention the regression results of this path is significant, by negative comments together with linear analysis that consumer perceived risk, perceived risk was influenced by negative comments, the regression results of this path is also significant.

By using SPSS software to negative online reviews and perceived risk and purchase intention of variance analysis and negative online reviews and perceived risk and purchase intention of linear analysis, negative online reviews and analysis of variance, perceived risk and purchase intention and negative online reviews and perceived risk and purchase intention of linear analysis of the significance of p values are less than 0.05, by mid - affects the three steps of the test, this study shows that the coefficient between variables is significant, thus can prove that the perceived risk of negative network plays an intermediary role between comments and purchase intention, That is, on the one hand, negative online comments can reduce purchase intention by enhancing perceived risk; on the other hand, negative online comments can directly and negatively affect purchase intention.

In this study, the mediating effect is further solved by using equations. Table 2. shows that  $sa=0.057$ ,  $a= 0.429$ , as shown in Table 2,  $sb=0.063$ ,  $b=-0.550$ .

Through the equation

$$Z = \frac{ab}{\sqrt{a^2 S_b^2 + b^2 S_a^2}}$$

we calculated  $Z = -14.84$ . It was known that if Z value was greater than 1.96, the mediating effect was insignificant; if Z value was less than 1.96, the mediating effect was significant. Therefore, the mediating effect of perceived risk was significant in this study. Therefore, hypothesis 2 is verified.

Table 2. Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
1	(Constant)	5.310	.138	38.35	.000		
	Negative online comments	-.146	.056	-2.61	.010	.816	1.226
	Perceived risk	-.567	.063	-9.02	.000	.816	1.226

a. Dependent Variable: Consumers' purchase intention

### *Moderating Effects Of Involvement Degree*

This study uses the interaction of hierarchical regression analysis to test whether the involvement degree of regulation, the independent variables negative online review and adjust the variables involved in the respective minus average, then the two centralized numerical multiplication, form a new interactive product item, again after their respective to the centralized independent variables and regulating variable regression.

Through the regression model summary obtained by using SPSS software, the regression model variance analysis of involvement degree and the regression coefficient analysis of involvement degree on perceived risk, it is found that the moderating effect of involvement degree is significant. This study USES the equation to further solve the regulation effect.

$$Y = 1.875 + 0.303 + 0.382 m + 0.322 x$$

mx

When  $m=0$ ,  $Y=1.875+0.303x$

When  $m=+1$ ,  
 $Y=1.875+0.303x+0.382+0.322x$

When  $m=-1$ ,  
 $Y=1.875+0.303x-0.382-0.322x$

When the degree of involvement increases by one unit, the impact of negative online comments on perceived risk increases by 0.322 units, and when the degree of involvement decreases by one unit, the impact of negative online comments on perceived risk decreases by 0.322 units.

Therefore, hypothesis 3 is that the degree of consumer involvement plays a moderating role in the process of the impact of negative online comments on perceived risk. The higher the degree of consumer involvement, the greater the impact of negative online comments on perceived risk is verified.

*The Impact Of Negative Online Reviews On Consumers' Purchase Intentions*

In order to explore the effect of negative online comments on consumers' purchase intention, this study adopted the method of multiple linear regressions. The test results showed that the significance of negative online comments on consumers' purchase intention was  $P < 0.05$ , so negative online comments had a significant impact on consumers' purchase intention.

If there is a multi-collinearity problem between negative online comments and consumers' purchase intention, measures should be taken to solve the problem. However, in this study, the collinearity analysis results show that there is no multi-collinearity problem and no action is required. T value is -6.055, indicating that negative comments on the Internet will have a negative impact on consumers and reduce their willingness to buy. Therefore, hypothesis 4 is tested.

Summary Of Empirical Results

After testing the hypothesis, empirical results of the study were obtained and summarized, as shown in Figure 1.

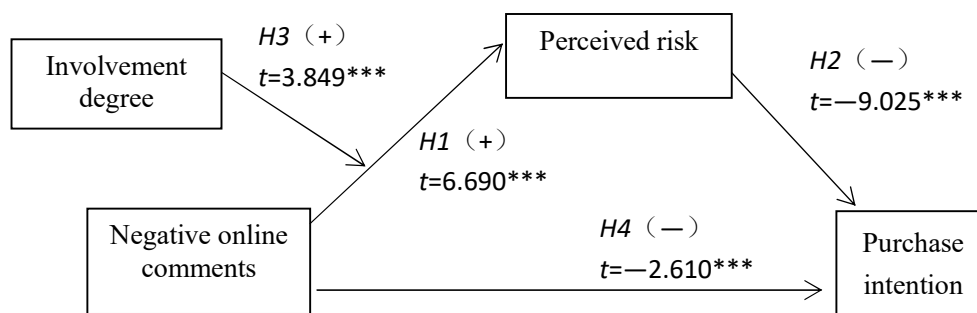


Figure 1. Research Architecture Verification Results



## Discussion and implications

### *The Impact Of Negative Online Reviews On Consumer Perceived Risk*

The research object is the negative online comments of hotels. The results show that negative online comments have a significant negative impact on consumers' purchase intention. Consumers often face various risks in the process of purchasing decisions. Especially in the process of online shopping, consumers cannot truly perceive the reality of the goods they want to buy, and there are a lot of uncertainties. However, when consumers browse online reviews on the Internet before purchase, they will have personal subjective perception, while negative online reviews will make consumers perceive the existence of risks, and thus affect consumers' final purchase intention.

Through investigation and analysis, this study believes that negative online comments have a significant positive impact on consumers' perceived risk because negative information is more likely to attract people's attention. However, when people pay attention to negative online comments, they will have psychological uncertainty and worry that they will bear additional consequences

### *The Mediating Effect Of Perceived Risk*

This study also discusses the effect of negative comments on the purchase intention of hotel customers, and points out that perceived risk plays an interme-

diary role in the effect of negative comments on the purchase intention of hotel customers. The results of this study show that negative comments on the Internet tend to increase the perceived risk of hotel consumers, and at the same time make consumers less willing to buy.

### *Moderating Effect Of Involvement*

It is worth noting that the participation of consumers has a significant moderate impact on the impact of negative online comments on consumers' purchase intention. The higher the engagement of potential hotel users, the greater the impact of negative online evaluation on their perceived risk. This is because the more engaged the consumer is and the more information the hotel is exposed to, the greater the perceived risk from negative reviews. On the contrary, because of the lack of information about the hotel, or pay little attention to the hotel's online reviews, there will be relatively less negative online reviews and consumers will have less perceived risk.

In the previous study, it was found that the monthly living expenses, daily online time and online booking time had a significant impact on the perceived risk by examining whether the mediating variables and dependent variables were affected.

As mentioned above, surfing the Internet for 3-5 hours or more per day has the most significant impact on perceived risk. Because the more time spent

online each day, the more opportunities there are to browse online reviews, the more opportunities there are to be exposed to negative online reviews, and the more opportunities there are to generate risk perception than consumers who spend less time online and browse with less negative reviews. This also proves the moderating effect of involvement degree on perceived risk from the side.

### *Managerial Implications*

First of all, negative online reviews have a significant negative impact on the purchase intention of hotel customers, and a significant positive impact on perceived risk. This suggests that hoteliers and management should take negative online reviews seriously. Because, often in the minds of consumers, a negative online review brings a perceived risk that many positive online reviews cannot compensate for. Therefore, every negative online comment should be paid great attention to by operators and management, to find out the reasons for consumers to give negative online comments, and to find their own shortcomings, so as to reduce the occurrence of such negative online comments, enhance the reputation of the hotel, and promote the long-term development of the hotel.

Secondly, the research shows that perceived risk plays an intermediary role between negative online comments and purchase intention. On the one hand, negative online comments reduce purchase intention by enhancing perceived

risk; on the other hand, negative online comments can directly and negatively affect purchase intention. People have a risk-averse instinct, and once they perceive the presence of risk through negative online reviews, their willingness to buy will naturally decrease significantly. Therefore, hotel operators and management should consider how to minimize the perceived risk of consumers.

Now is the Internet age, every little thing has the opportunity to be amplified, merchants bad attitude, sometimes more than negative comment on the perceived risk of online, because every consumer has a different experience and standards, perhaps a common negative online comments can't bring the rest of the consumer too much shocked, but it is only a businessman reply, let the consumer can easily see that the vendor to the consumer's attitude and way.

In the process of this study, by browsing some merchants to negative comments online responses on the platform, found that after consumers give negative comments, some businesses will directly under its review make some intense dissatisfaction responses, such as process, this study found in browsing the online reviews on Meituan, Zhao Qing a coffee shop for some negative comments made a satirical and attitude is relatively harsh reply, led directly to the other consumers because of the dealer bad manners are disgruntled with review, said he wouldn't want to directly to the consumption of such bad manners businesses. Therefore, other hoteliers and management should also take a cue from

the fact that whether negative online reviews are justified or not, the company itself should always be sincere and courteous in order to reduce the risk perception of other consumers.

Finally, this study also found that the degree of involvement moderated the effect of negative online reviews on the purchase intention of hotel consumers. This indicates that hotels should pay more attention to consumers with a high degree of involvement, because the higher the degree of involvement of consumers, the more they understand the

information of the hotel, the more likely such consumers will be lost, but at the same time, it is easier to develop into consumers with high loyalty. Because of the high degree of involvement of consumers already have some knowledge of hotel information, and suggests that the early recognition of the hotel has a certain, attracted by its a quality will be the next step in-depth understanding, so they are easier to lose on one hand, on the one hand, and easier to make a purchase decision, is worthy of a marketer class of consumers.

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