

The Influence of Consumer Reviews on Consumers' Attitudes: The Moderating Roles of Price and Product Knowledge

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ABSTRACT

The purpose of the study 1 is to study the influence of the positive/negative ratio of consumer reviews (3:1, 2:2, 1:3) on consumer's product liking and purchase intention, then to examine the moderator of price (high price vs. low price). The results of the experiment show that when price is high, the ratio of consumers' review is 3:1 can raise the consumers' product liking and purchase intentions. The ratio of positive/negative consumers' review is 1:3 can reduce the product liking and purchase intentions. The study 2 is to examine the impact of existence of consumer reviews which includes three conditions (one positive review, one negative review and no review at all) on consumer perceived risk and purchase intentions, then to examine the moderator of product knowledge (high vs. low). The result support the moderating effects of product knowledge on the consumers' review and perceived risk and purchase intentions.

KEYWORDS: electronic word-of-mouth, consumer reviews, buying intentions, product knowledge, price.

1. INTRODUCTION

Many previous research find that consumer reviews will impact consumers' product attitudes [1][2][3][4], purchasing intention [5][6] and product selling volumes [7][8]. However, most of these studies discuss the impact of positive or negative consumer reviews on

consumer attitudes; little research explore the impact when positive and negative consumer reviews "appear simultaneously" except two studies made by [9] as well as [10]. The mainly study the impact of word-of-mouth consensus, i.e. the ratio of agreement and disagreement [9]. When positive word-of-mouth consensus is high, consumers' liking will be promoted. When negative word-of-mouth consensus is low, i.e. some agree while some disagree, consumer review on products will be promoted. The effect of the ratio of positive and negative consumer reviews and find out that people tend to believe positive word-of-mouth ratio of 9:1 and 8:2 [10]. It's difficult for them to believe the perfect 10:0 positive word-of-mouth ratio. Additionally, according to our understanding, so far little research examines the "simultaneous appearance" of positive/negative message on consumer attitudes.

However, we can find out very often that a certain product on a shopping website is possible to have both negative and positive reviews appearing "simultaneously". How will the amount of positive/negative reviews influence consumer attitude and purchase intention? Will the impact of consumer review be different when purchasing product at different price levels? Once a review appears for product on a shopping website, will it reduce purchasers' perceived risk and increase

their purchase intention? For consumers with different knowledge of a product, will the impact of consumer review be the same on their purchase attitude and intention?

Therefore, this study makes use of two experiments to answer these questions. Study 1 has two purposes. First, to examine the impact of the ratio of positive and negative consumer reviews (3:1, 2:2, 1:3) on consumers' liking and purchase intention; secondly, to examine the interfering role of the price of experience products on the above relationship, i.e. to examine how the interaction between the ratio of positive and negative consumer reviews (3:1, 2:2, 1:3) and the price of experience products (high vs. low) will affect consumer intention. Looking back on relevant researches on consumer review, we can find that a majority of the researches belongs to relatively low price commodities, for example, movies [9][11][8], TV shows [12] and books [13][14]. The authors point out that there will be significant difference on the amount of consumer review according to the classification of products and experience products will be easily influenced by the word-of-mouth [9][4][15]. This research will use experience products with higher price as experimental products to examine the disturbing force of product price that has seldom been explored in previous studies to provide additional contribution.

2. STUDY 1

In study1, we examine the impacts of consumer reviews for two levels of the price of experience goods. Consumer review is a type of electronic word-of-mouth (eWOM). Consumer reviews are the viewpoints of consumers on the basis of their purchase and usage of a product, addressing their personal experience, reviews and viewpoints [5]. In order to make consumers learn more about the features of their commodities, many shopping websites design the field of "consumer review" for purchasers

to write down their reviews, with the hope to enable non-purchasers know more about their commodities and the products they purchase meet their expectations better.

This study extends the study [5] and [10]. We have three points that are different from them even though we also explore the impact of consumer review. First, different from [5] who study the impact of the quantity and quality of the content of consumer review, we are going to focus on explore the effect when positive/negative consumer reviews appear simultaneously.

Second, this study extends the study which explores the impact of online word-of-mouth ratio on consumer behavior [10]. Different from their operational method on positive/negative consumer reviews, specifically, we are going to explore which kind of impacts will happen when positive/negative consumer review ratios are 3:1, 2:2 and 1:3. The reason is that, from the observation of empirical phenomena on shopping websites, four posts of consumer reviews are the most common total amount of reviews for the majority of commodities [5]. Based on this, this study will explore further the impact of four consumer reviews on consumers. Besides, in the study of [10], there is no discussion of the impact when the amount of positive and negative consumer reviews are the same or negative reviews are more than positive ones. Thirdly, the products discussed in the two studies belong to relatively fair price goods, for example, portable multimedia player (PMP)[5] or restaurants [10]. This study will use an example of relatively high price experience goods, i.e. female coat, as an experimental product to contribute to the theory.

2.1 *The main effects of the ratio of consumer reviews*

Consumer reviews are regarded as more credible than the product information provided by the manufacturers [14] because consumer

reviews come from the purchasers who subjectively provide their perceptions, which are considered to describe strong and weak points of the goods more honestly while manufacturers usually disclose only the strong points of their products. The consumer reviews provided by purchasers subjectively will be more easier for consumers to understand and be familiar with in terms of words used [5].

The ratio of positive/negative consumer reviews refer to the ratio of positive consumer reviews to negative consumer reviews or the opposite in a series of consumer reviews. That is to say, when the ratio is 3:1, it means there are three positive reviews among the four and one being negative. If the ratio is 2:2, it means there are two positive reviews and two negative. In other words, in A series of consumer reviews, the higher the ratio of positive consumer review is, the more positive opinions are given, as means most of the purchasers post relatively positive reviews on a certain product. At this time, consumers will be influenced by most of the positive reviews and increase their liking of the product and purchase intention. In a study of online word-of-mouth ratio performed by [10], it is found that viewers will have more positive attitude toward the product when positive word-of-mouth ratio is high. Therefore this study thinks that when a large amount of positive consumer reviews appear on a shopping website (a higher ratio), consumers' product liking and their purchase intention will be significantly promoted.

Similar to the about of conclusion, when positive word-of-mouth ratio is higher, it means most of the online word-of-mouth messages are negative reviews of a product or brand among a series of online word-of-mouth. After looking through a series of relatively negative online word-of-mouth, the viewers might be influenced by the majority and hold a relatively negative attitude toward the product and purchase intention. Similar to previous word-of-mouth study results, people tend to believe

in the majority's viewpoints, even though such viewpoints are not true [16]. Particularly, negative information will have bigger impact than positive information [17][18]. Researchers also find in their study that negative information will be more noticed and applied by consumers because people often feel that negative online word-of-mouth is useful because it can help them avoid buying product that is not qualified or has higher price [19]. Therefore when negative consumer review ratio is higher, it will influence people's likings on the product and the purchase intention negatively.

On the other hand, when the ratio of positive and negative review is 2:2, it means half of the purchasers post positive reviews while the other half post negative reviews. According to the prospect theory proposed by [20], people have different perception levels on losing and gaining, i.e. the unfair feeling perceived from the pain of losing will be much bigger than the unfair feeling perceived from the happiness of gaining. Generally speaking, people tend to choose loss aversion. Therefore, this study considers that, when positive and negative consumer reviews are half and half, consumers tend to believe negative consumer reviews in order to avoid loss and risk, therefore a negative impact on product liking and purchase intention will occur. Thus,

H1-1: When the amount of positive consumer reviews is higher than that of negative consumer reviews, consumers' liking on a product and their purchase intention will be significantly promoted; when the amount of positive consumer reviews and that of negative consumer reviews are the same and when the amount of negative consumer reviews is higher than that of positive consumer reviews, consumers' likings on a product and their purchase intention will be negatively affected.

Next, the disturbing degree of the price of experience goods on the foregoing effects will be discussed. This study follows the findings from previous researches, i.e. when the product that a consumer browses is an experience good, he will rely on more clues to make interpretation and judgment on the information because he is not able to know the quality of the product in advance [2][4], as means experience goods rely more on word-of-mouth information for the purchase decision-making [2][4]. However, most of the previous researches focus on relatively low price products, in order to make theoretical contributions, the experimental products of this study manipulates the variable of ‘price’ to learn about whether the impact of consumer review will be disturbed by price.

When purchasing high price experience commodities, consumers will face higher perceived purchasing risk than lower price commodities, thus they need to bear higher risk of loss. Previous researches also find out that people tend to take conservative strategy when facing higher purchase risk [20]. When positive/negative consumer review ratio is 1:3, it means a bigger amount of people will be more influenced by The content of negative consumer with you in order to avoid risks and their loss, therefore they show negative liking to the product and negative purchase intention. In other words, when higher price goods have more negative consumer reviews, they will face higher killing force than lower price goods. On the other hand, the lower price goods shopping websites having more positive consumer reviews will be easier to satisfy consumers and the promote consumers product liking significantly and further promote the purchase intention. Thus,

H1-2: When a product is a higher price and positive/negative consumer review ratio is 1:3, it will significantly reduce consumers’ product liking and their

purchase intention comparing with the other two kinds of ratios.

H1-3: When a product is a lower price and positive/negative consumer review ratio is 3:1, it will significantly increase consumers’ product liking and their purchase intention comparing with the other two kinds of ratios.

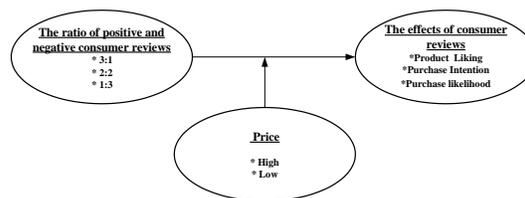


Figure1. Effects of the ratio of positive and negative consumer reviews on consumer reviews effects and the moderating effect of price

2.2 Methods

2.2.1 Participants, design and procedures

The hypotheses were tested using a 3(3:1, 2:2, 1:3) × 2 (high vs. low) analysis of covariance with price as covariate. A total of 192 responses were collected with 32 responses in each of the six treatment conditions. Respondents were aged 18-52 with 100% women. All experimental manipulations were again assessed and found to be effective in the main study. A shopping website of female coats was specifically designed in this experiment, because relevant previous researches on consumer review mainly explore relatively low price commodities, for example, books, movies, TV programs etc. This study will be different from previous researches by using relatively higher price experience product (coat) as an experimental product to provide additional contribution.

Formal experiment was then carried out. First, office workers who were voluntary to participate this experiment were randomly assigned with one of the six experimental treatments. They were told to log into the designed coat shopping website, browsing the coats that they wanted to buy. “Detailed information” and “Consumer review” appeared on the page. According to the experimental treatment assigned to them, they would browse one of the ratios including “three positive reviews and one negative reviews”, “two positive reviews and two negative reviews”, or “one positive reviews and the three negative reviews”. After reading through the consumer reviews given, participants made use of the questions to answer their product likings and their purchase intention, this study used “Brand A” for the brand of the coat to reduce the disturbance brought by brand effect. The coats at all contexts were the same; meanwhile, a pretest was used to make sure that there was no significant difference on the liking of coats. Finally, before ending the experiment, participants were asked about the purpose of this study in order to make sure that all the participants didn't really know the purpose of the study. Moreover, the participants were told that all the consumer reviews that they read before in the experiment were reviews created only for these experiment and they were not really consumer reviews.

2.2.2 Measures:

Independent Variables: The ratio of positive/negative consumer reviews: 3:1, 2:2, 1:3

For the manipulation of the ratio of consumer reviews, a pretest was conducted to ensure the success of manipulating the three kinds of ratios (3:1, 2:2, 1:3). Two research assistants helped to collect 12 consumer reviews online, six positive and six negative. 30 potential customers of office workers were invited to join the pretest. By removing the three reviews with

the highest score and that with the lowest score, six consumer reviews, three negative and positive respectively (similar to the method used by [3]) were used as the formal experimental material.

All of the consumer review messages in this experiment were collected from real consumer reviews on shopping websites, additional revision was made on every online word-of-mouth to fit for the purpose of this experiment. This study used pretest to control that every online word-of-mouth has consistent strength and length [21]. At the same time, before the implementation of the experiment, actions were taken to make sure participants have no significant inconsistency on the understanding and persuasion degrees of these consumer reviews and meanwhile it can be effectively perceived that these consumer reviews showed differences on positive/negative ratios [22][3].

Dependent Variables

The measures employed in this study were borrowed from the existing literature and adapted to the context of the study. **Product liking**[3] was operationalized by asking: “After you read the consumer review on the Internet, what is your product liking on the following items?” Responses were given on three 5-point semantic differential scales reflecting, “*Like it very much*”, “*Dislike it very much*”, “*Attractive*”, “*Unattractive*”, “*Feel good*” and “*Feel bad*”.

Purchase intention was gauged via a three-item, 5-point semantic differential scales, “*Really want to buy*”, “*Really don't want to buy*”, “*Really worth buying*”, “*Really don't worth buying*”, “*Want to recommend friends to buy*” and “*Completely don't want to recommend friends to buy*”.

Price of experience good

In order to effectively manipulate prices, this study made a pretest on the price of coats on shopping websites. In the beginning, 30 female office workers aged between 25 and 50 who had experience in the past half a year in browsing and purchasing personal products such as “clothes, handbags, shoes or accessories) were collected to join the pretest of “price manipulation”. Next, participants were asked to make comments on two groups of coats (first group for the price of TWD8000 while the second group for the price of TWD800). Participants were asked to use 5 point scale to assess the high or low price of the coat in two questions: (1) I think this coat is high price; and (2) Most of the people around me will think this coat is a high price to pick out the real high and low price in the experiment. Besides, this study asked participants to answer a questionnaire with 10 questions in seven scales regarding product involvement (taken from[??]), using them as covariance to control the impact of the difference due to different involvement on the product “coat” by individuals.

2.3 Results

Manipulation checks. Participants perceived the valence of consumer reviews as sign. In the formal experiment, there were three positive consumer reviews and three negative consumer reviews. For each review, one question of 7 point semantic difference scale (completely negative complaint = 1, completely positive recommendation = 7) was adopted to measure the positive/negative degree of the consumer review that she browsed. This variable showed a successful manipulation according to the t-test to confirm the impact of positive/negative consumer review ($M_p = 5.83$, $M_n = 4.82$, $t = 13.17$, $p = 0.000$).

The MANOVA results of Hypothesis testing 3×2 are available in Table 1. First, both the ratio of consumer review (Wilk’s lambda = 0.32, $F=123.44$, $p= .000$) and price (Wilk’s

lambda = 0.86, $F=9.20$, $p= .000$) have significance, showing its significant impact on product liking. In addition, the interaction between consumer review cost-efficiency and price reaches have significant level (Wilk’s lambda = 0.77, $F=7.03$, $p= .000$). Therefore, this study will examine all hypotheses separately.

Table 1 The results of MANOVA

MANOVA				
	Wilks’ lambda	F values	PL	PI
The ratio of consumer review : Positive/Negative (R)	0.32	123.44***	376.37***	0.32
Price : high/low (P)	0.86	9.20***	33.80***	5.34**
R * P	0.77	7.03***	5.42***	3.83**

* $p < .05$, ** $p < .01$, *** $p < .001$

First, we examined hypothesis 1 and 2. As indicated in Table1, consumer review ratio has a major effect, which reaches significant level at product liking ($F=376.37$, $p=.000$); however, it does not reach significant level at purchase intention, therefore hypothesis 1 is partially support. When positive consumer reviews are more than negative consumer reviews (3:1), consumer product liking will be highly promoted; when positive consumer reviews equal negative consumer reviews and when negative consumer reviews are more than positive consumer reviews, product liking will be reduced.

Second, we examined the main effect of price. As indicated in Table1, the interaction between the P/N ratio consumer review and price reaches significant level ($F= 7.03$, $p= .000$), the interactive effect reaching its significant level at product liking ($F= 5.42$, $p=.009$) and purchase intention ($F= 3.83$, $p=.009$). That is to say, the impact of the P/N ratio consumer review ratio on product liking and purchase intention will be determined by the price level.

Finally, we verified the major effect of the ratio of consumer review separately. The findings show that when a product is high price product and the positive/negative consumer review ratio is 1:3 ($M_{1:3} = 2.11$), it will significantly reduce the product liking ($F=15.10, p = .000$) comparing with the other two types of ratios ($M_{2:2} = 2.44, M_{3:1} = 3.46$). Therefore, hypotheses 1-2 are partially substantiated. Besides, if the product is a low price product, it is found after post-experiment comparison, that when the positive/negative consumer review ratio is 3:1 ($M_{3:1} = 0.67$), it will significantly promote the product liking and purchase intention ($M_{2:2} = 4.90, M_{1:3} = 4.52, F = 18.40, p = .000$) comparing with the other two types of ratios. Therefore, hypotheses 1-3 are partially substantiated. When positive/negative consumer review ratio is 3:1, product liking will be significantly promoted, extraordinarily higher than the ratios 2:2 and 1:3.

3. STUDY 2

In study 2, we investigate whether the presence or absence of a consumer review influence customers' perceived risk and purchasing intentions. In addition, we examine the moderating effects of high versus low product knowledge and of the presence or absence of consumer review. The questions is "Do experts and novices evaluate a consumer review the same way?"

3.1 The main effects of a consumer review on perceived risk and purchase intentions

When consumers are shopping online, they are having a higher perceived risk because they cannot look at the product in real and they can only make consumption decision on the product information provided on the websites. This study considers that consumer reviews provided by customers on shopping websites can significantly reduce the perceived risk of consumers who have limited information of the products. First, based on cue-diagnosticsity

frameworks [29][30], consumer review is a cue of products. It can help individuals to make diagnostics on product quality to avoid buying products lower than their expectations. Particularly, consumer reviews are opinions provided by previous purchasers that can help consumers know about other people's experience and learn about product quality and features and can avoid buying commodities that they don't like and to reduce the perceived risk. Secondly, according to former researches of word-of-mouth, either face-to-face or online, word-of-mouth information can significantly reduce the perceived risk and can improve consumers product knowledge and make better purchase decisions [5][24].

Previous researches find that product knowledge will influence consumers purchase decision [25] because product knowledge can help consumers to make assessments and reactions on issues. Therefore the level of consumers' product knowledge might disturb the impact of consumer review on perceived risks and purchase intention. Based on ELM [26], when consumers' information processing ability is relatively weak, they tend to use surrounding paths to process information. Therefore, consumers with less product knowledge will be more likely to use the number of information (surrounding paths) to process information and make judgments. In other words, once negative consumer information appears, or no consumer information appears, there will be higher negative impact on consumers with less product knowledge. On the contrary, once positive review appears, there will be greater positive impact on consumers with less knowledge. Thus,

H2: The impact of a consumer review on perceived risk and purchase intentions depends on product knowledge. The presence of a consumer review (compared with no consumer review) decrease perceived risk more for low

product knowledge than for high product knowledge.

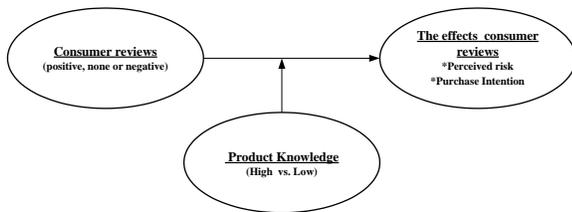


Figure2. Effects of consumer reviews on consumer reviews effects and the moderating effect of consumers' product knowledge

3.2 Methods

Participants and design. Study2 was a 3×2 between-subjects factorial experiment in which we varied the consumer reviews (no consumer review, positive, negative) and the product knowledge (high vs. low). One hundred ninety-two EMBA female students from three universities in Taiwan were randomly assigned to the experimental conditions.

Procedures. We used female luxury bag as the product category for the study because of the higher price and the relevance of this product to the EMBA student participants to improve theoretical contributions. Participants were assigned to browse the particular commodity website with three contexts: Context 1: “With one positive review”; Context 2: “With none consumer review” and Context 3: “With one negative review”. Six positive consumer reviews and six negative consumer reviews that were prepared in advance were randomly displayed beside the products to participants in the context control of “one positive consumer review”, “one negative consumer review” or “absolutely without consumer review”. Besides, in order to avoid the disturbance by other factors, brand information was hidden. After browsing, participants would take the questionnaire to answer their perceived risk and possibility to purchase. In the end, before

ending the experiment, participants were asked about the purpose of this study in order to make sure that all the participants didn't really know the purpose of the study. Moreover, the participants were told that all the consumer reviews that they read before in the experiment were reviews created only for these experiment and they were not really consumer reviews. In addition, this study would also invite participants to answer a questionnaire with 10 questions in seven scales regarding product involvement (taken from [23]), using them as covariance to control the impact of the difference due to different involvement on the product “luxury bag” by individuals.

Independent Variables

Consumer reviews: positive, none and negative

Consumer reviews consist of positive consumer reviews and negative consumer reviews [3][2]. This study adds another condition “absolutely no consumer review appears”. First, a pretest was carried out to make sure consumer reviews (positive, none, negative) manipulated successfully. Two research assistants helped to collect 24 consumer reviews online, 12 positive and 12 negative. 30 students were invited to join the pretest, seven point scale was used for the questions after their browsing to answer if the consumer review is a positive or negative. After removing six reviews with the highest scores and six with the lowest scores, 12 consumer reviews were left. Finally, valence of consumer review was examined for significant difference to make them formal experimental materials. Similar to the methods in Study1, the consumer review messages in this experiment were collected from real consumer reviews on shopping websites, additional revision was made to fit for the purpose of this experiment. This study used pretest to control that every consumer review has consistent strength and length [21]. At the same time, before the implementation of the experiment, actions were

taken to make sure the university students have no significant inconsistency on the understanding and persuasion degrees of these consumer reviews and meanwhile it can be effectively perceived that these consumer reviews are positive or negative information [3].

Besides, similar to Study1, this study also invited participants to answer a questionnaire of 4 questions with 5 point scale to measure the quality of consumer review [5]. The questions include “This is a review that has direct relationship with the product”, “The content of this consumer review is easy to be understood”, “I think the content of this consumer review is very objective” and “I think the content data of this consumer review is sufficient”. This study takes control here to use them as covariance so as to reduce the variance that might cause the effect of dependent variables.

Dependent Variables

This experiment had two dependent variables, which are based on the scales used for measurements in previous literature. They are (1) perceived risk, revised from perceived risk scale of [27] and (2) purchase intention. This study employed three questions and five point semantic differential scales to measure purchase intention, they are “really want to buy/not want to buy at all”, “worth buying/really not worth buying”, “want to recommend friends to buy/not want to recommend friends to buy at all”.

Covariate: product knowledge

Product knowledge was included as a covariate. Participants’ product knowledge was measured using [28](Cronbach’s $\alpha=.92$). Product knowledge refers to the confidence level of consumers in their memories on luxury bags. Three questions with five point scale was applied to measure “I know the kind of products such as ‘high price female bag’”, “I am the one who knows the kind of products

such as ‘high price female bag’ better than other friends”, “I know more about ‘high price female bag’ than many people”.

3.3 Results

Manipulation checks. Similar to experiment 1, three positive consumer reviews and three negative consumer reviews were used. For each positive/negative consumer review, one question of 7 point semantic differential scale (completely negative complaint = 1, completely positive recommendation = 7) was adopted to measure the positive/negative degree of the consumer review that she browsed. This variable showed a successful manipulation according to the t-test to confirm the impact of positive/negative consumer review ($M_p = 4.82$, $M_n = 5.83$, $t = 13.17$, $p = 0.000$).

Perceived risk and purchasing intentions. The ANOVA results of the existence of consumer review does have major effects on perceived risk ($F=11.244$, $p=0.001$) and purchase intention ($F=9.205$, $p=0.003$). Under the condition of significant difference of major effect, further comparison was made on the average score of the impact of the existence of perceived risk on purchase intention (as indicated in Table2). The results showed that the perceived risk with consumer review was really lower than that without consumer review ($M=3.683$) and the purchase intention under negative consumer review ($M=2.832$) was really lower than that under positive consumer review ($M=3.78$). Such results support H2-1-1 and H2-1-2. It also means that the results support H2-1-1, i.e. when commodities on shopping websites have consumer reviews, no matter positive or negative, it can help significantly reduce the perceived risk than without any consumer review. Meanwhile the results support H2-1-2, i.e. when negative consumer review appears on the commodities of shopping websites, consumers purchase intention will be significantly reduced

comparing with no consumer review or with positive consumer review.

Table 2 The main effects of consumer review

DV.	Consumer Review	Mean
perceived risk	Positive	3.422
	none	3.683
	Negative	3.529
purchase intention	Positive	3.78
	none	3.491
	Negative	2.832

Verification of H2: the interactive effect of existence of consumer review and product knowledge

The ANOVA results, both on perceived risk (F=15.411 , p=0.000) and on purchase intention (F=13.953 , p=0.000), there exists significant interactive effect between consumer review and product knowledge. Then single major effect analysis was made on the parts with significant interactive effects. Table 2 lists the mean of consumer review and product knowledge on perceived risk and purchase intention. First, positive consumer review can effectively reduce the perceived risk of consumers with less product knowledge (M=3.344) and promote their purchase intention (M=4.134) comparing with consumers with more product knowledge (M=3.638).When negative consumer reviews appear, the perceived risk (M=3.529) of consumers with less product knowledge will be effectively reduced and the purchase intention declined (M=3.276).

Table 3 The interaction of consumer review and product knowledge

D.V.	Consumer Review	Product Knowledge	Mean
perceived risk	Positive	H	3.638
		L	3.344
	None	H	3.528
		L	3.422
	Negative	H	3.717
		L	3.34
purchase intention	Positive	H	3.426
		L	4.134
	None	H	3.411
		L	3.211
	Negative	H	3.706
		L	3.276

This study supports hypotheses, that is, when consumer reviews are positive, they can significantly reduce the perceived risk of consumers with less product knowledge and promote their purchase intention; when there are no consumer reviews or there are negative consumer reviews, they will significantly increase the perceived risk of consumers with less product knowledge and reduce their purchase intention.

4. DISCUSSION

This study attempts to verify the effects caused by positive/negative consumer review ratio and the existence of consumer review as well as the disturbing influence of disturbing variables such as product price and product knowledge to fill the research gap. This article makes several contributions to the literature on consumer reviews. First, the results find that when positive consumer reviews are more than negative consumer reviews (3:1), consumers’ product liking will be significantly promoted; when positive consumer reviews equal negative consumer reviews (2:2) and when negative consumer reviews are more than positive consumer reviews (1:3), product liking will be both negatively affected. Although there is no

significant impact of consumer review ratio on purchase intention, the possible reason might be that others' opinions will influence people's attitudes toward products but not influence purchase intention. Secondly, the study finds out that when products are high price commodities, the positive/negative consumer review ratio at 1:3 will significantly reduce the product liking and purchase intention comparing with the other two kinds of ratios. That is to say, regarding high price high risk products, negative consumer review has the biggest impact on consumers. Meanwhile, for low price and low risk of products with a positive/negative the consumer review ratio of 3:1, people tend to ignore the impact of negative reviews therefore consumers product liking and purchase tension will be significantly promoted.

Third, it is discovered in this study that when positive/negative consumer review ratio is 3:1, i.e. when positive reviews are more than negative reviews, customers' product liking on high price products will be significantly promoted and remarkably higher than that of the ratios of 2:2 and 1:3. Such a finding is similar to that of previous researches that people will be influenced by positive reviews and thus the purchase intention will be promoted.

Fourth, it is discovered in this study the influencing power of consumer reviews, i.e. when commodities on shopping websites have consumer reviews, no matter positive or negative, people's perceived risk will be significantly reduced comparing with no appearance of consumer reviews. In other words, consumers will rely on the opinions of consumer reviews to make purchase decisions and consumer review has a reducing function on perceived risk.

Fifth, it is also discovered in this study that when negative consumer reviews appear for commodities on shopping websites, they will

significantly reduce consumers' purchase intention comparing with no consumer review or positive consumer review. In other words, negative consumer reviews have significantly negative impact on consumers' purchase intention; such a result is similar to that of the previous researches on word-of-mouth.

Finally, when consumer reviews are positive, the perceived risk of consumers with less product knowledge will be significantly reduced and their purchase intention will be promoted; when there are no consumer reviews or there are negative reviews, the perceived risk of consumers with less product knowledge will be highly promoted and their purchase intention will be reduced. Such a result can effectively fill the research gap in the word-of-mouth field.

4.1 Managerial Implications

This research provides a number of managerial implications. First, the empirical results of this study show that shopping websites operators should strictly monitor the negative reviews on their websites, because consumers are vulnerable to the impact of negative reviews on product liking and purchase intention. It is suggested to operators that they should encourage consumers to post positive consumer reviews on the websites in order

to promote consumers' product liking, particularly on the shopping websites of high price experience goods, consumer reviews will significantly affect consumer attitudes. Secondly, it is suggested that shopping website operators should describe in detail the information about the product, put pictures and videos to enable customers increase product knowledge and reduce the negative impact of negative consumer reviews.

4.2 Limitations and future research

This research report suffers from several limitations. First, this research explores the

disturbing variables that might influence consumer review effects, product price and product knowledge being chosen from cue-diagnostics structure. It is possible that other disturbing variables might be found if starting from other theories, for example product type. It is suggested to future studies that other possible disturbing variables can be found from different theories.

Second, the research focuses on the ratio of positive/negative consumer review as the independent variable. Previous research suggests that the consumer review order is an important factor. Subsequent research could address this issue in a consumer review context. Third, the experimental product of the study is experience goods, it is suggested that future researchers can also explore from trust product to accumulate the relative knowledge in consumer review field.

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