

Winter 12-6-2018

Influence of Media Richness of E-WOM on Consumers' Mental Imagery and Attitudes

Nian Zhao

Sichuan Agricultural University, China, 1615683273@qq.com

Xiaolin Li

Sichuan Agricultural University, China, 57929606@qq.com

Yuanhong Ma

Sichuan Agricultural University, China, 582240973@qq.com

Linbin Zhang

Sichuan Agricultural University, China, 757295155@qq.com

Liangqiang Li

Sichuan Agricultural University, China, lilq@sicau.edu.cn

See next page for additional authors

Follow this and additional works at: <https://aisel.aisnet.org/iceb2018>

Recommended Citation

Zhao, Nian; Li, Xiaolin; Ma, Yuanhong; Zhang, Linbin; Li, Liangqiang; and Cao, Yunzhong, "Influence of Media Richness of E-WOM on Consumers' Mental Imagery and Attitudes" (2018). *ICEB 2018 Proceedings*. 63.

<https://aisel.aisnet.org/iceb2018/63>

This material is brought to you by the International Conference on Electronic Business (ICEB) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ICEB 2018 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Authors

Nian Zhao, Xiaolin Li, Yuanhong Ma, Linbin Zhang, Liangqiang Li, and Yunzhong Cao

Influence of Media Richness of E-WOM on Consumers' Mental Imagery and Attitudes

(Full Paper)

Nian Zhao, Sichuan Agricultural University, China, 1615683273@qq.com
Xiaolin Li*, Sichuan Agricultural University, China, 57929606@qq.com
Yuanhong Ma, Sichuan Agricultural University, China, 582240973@qq.com
Linbin Zhang, Sichuan Agricultural University, China, 757295155@qq.com
Liangqiang Li, Sichuan Agricultural University, China, lilq@sicau.edu.cn
Yunzhong Cao, Sichuan Agricultural University, China, caoyz@sicau.edu.cn

ABSTRACT

E-WOM has become a hot research topic. Based on the theory of media richness, this paper divides online reviews into three types according to the degree of e-WOM richness from low to high - "text", "text + image" and "text + image + video". From the perspective of mental imagery, this paper explores the consumer attitudes of these three kinds of reviews with different richness. The Experimental data analysis shows that compared with "text" reviews, "text + image" reviews have more significant impact on consumers' metal imagery and attitudes; as a form of high richness e-WOM, "text + image + video" has the most significant impact on consumers' metal imagery and attitudes. This discovery points out several meaningful directions for the further study from the perspective of media richness.

Keywords: Media richness; video review; mental imagery processing; attitudes

*Corresponding author

INTRODUCTION

As an important part of e-WOM, online reviews are once regarded as an important part affecting product sales (Chevalier & Mayzlin, 2006). In addition to the product information displayed by merchants, product reviews on e-commerce websites affect consumers' perception of products (Klein, 1998). Research on the impact of reviews on consumers found that more than half of the respondents believe that online reviews have an important impact on their purchasing behavior. When product information is limited, consumers are more likely to refer to product reviews (Dai & Gu, 2017). Scholars have also done a lot of research to verify that marketers need to spend a lot of time and energy managing online reviews to meet consumer expectations (Qin, 2017).

With the development of the Internet, the speed and cost of uploading mobile short video is comparable to images. Social software Twitter, micro-blog and other short video sharing functions have been introduced. The development of mobile short video has brought the audience into the "second image reading era" (Chen & Xie, 2008). The mobile short video in UGC mode has maneuverability and authenticity, and can better meet the personalized needs of consumers (Dellarocas, 2003). Compared with words and images, mobile short video has a stronger appeal in information expression and is easier to produce. In view of the impact of mobile short video on users' decision-making process, major shopping platforms gradually introduce mobile short video reviews. Through dynamic video display products, consumers who browse reviews bring more sensory impact.

Online reviews have undergone an evolutionary process from lean to rich. Early studies on e-WOM mostly focused on single text reviews, and then evolved into a combination of image and text reviews. Since June 2017, China's largest C2C trading platform-Tianmao has allowed customers share their shopping experience by short video reviews, thus opening the domestic online video review market. Compared with traditional text and image reviews, video reviews allow publishers to have a more sophisticated channel to express their perception of the product, bringing other consumers a richer sensory experience. Now the research on the impact of image reviews and text reviews on consumers has been relatively mature. However, "text", "text + image" and "text + image + video" as different types of online review media richness, the impact of consumer attitudes and purchase intention differences is relatively scarce. Based on the perspective of mental image processing, this paper explores the impact of three different kinds of reviews on consumers' attitudes. We use Anova to analyze the effects of three types of reviews on consumer's affective attitude, cognitive attitudes and mental imagery processing. This article collects data through contextual experiments, and the marketing management inspiration is drawn finally.

LITERATURE REVIEWS

Research on the Influence of e-WOM Represented by Online Reviews

Scholars have done a lot of research on the impact of e-WOM, represented by online reviews. Since this paper mainly studies the impact of media richness of e-WOM on consumers' purchase intention, the following first discusses the impact of media forms of e-WOM. According to the different forms of e-WOM media, the corresponding research roles can be divided into

three categories - text reviews, image reviews and video reviews. Based on the research of text reviews, scholars have done a detailed and in-depth study on the impact of the quality of reviews, the number of reviews, and the validity of reviews (Song Yafei, Wang Xiuqin, 2011). On the research of image reviews, scholars have studied the consistency of image and text reviews, It is pointed out that the consistency of image and text reviews have obvious influence on consumers' purchase intention (Smith R A, 1991), and the ratio of image and text superposition reviews. Individual text reviews are more useful, and image reviews have a more significant impact on consumers' purchase of sensory products than non-sensory products (Lin Shuang, Lü Xingyang, Song Huilin, 2017). Compared with traditional text reviews and image reviews, video reviews presents relatively real visual information, expresses the user's experience of using the product in a dynamic and fluent way, and has an important impact on the perception of reviewers (Xu, Chen & Santhanam, 2015). Previous studies have involved text, images and video reviews, text reviews and image reviews are relatively mature, but the comparative study of video, image and text reviews on consumer impact differences is relatively lacking.

The Influence of Different Forms of Information on Consumer Behavior

Consumers often reference all kinds of information to assist their purchase decisions. The way information is presented has different effects on consumers, which can be categorized into verbal information and visual information. Formally, text is usually used as the representation of linguistic information, images as the representation of static visual information, and video as the representation of dynamic visual information. Rossiter believes that visual information has a dominant effect on human memory, which can trigger the processing of psychological images and enhance the memory of images (Rossiter, 1982). Babin found that the more specific visual information is, the more elaborate the processing that triggers self-imagery (Babin & Burns, 1997). The study of Bone indicates that situational credibility refers to the possibility of consumers imagining themselves in this scenario. The higher the credibility of the situation, the higher the self-relevance of consumers, and the higher the degree of mental image processing (Bone & Ellen, 1992). Yoo and Kim (2014) explored the impact of the degree of specificity of visual and linguistic information on consumers' perceptions, arguing that specific words and images will promote consumers' mental imagination, thereby creating better emotional perception. However, other scholars believe that Visual information only exists as an auxiliary role in the actual purchase process (Hughes et al., 2003). When there are many kinds of products, visual information will distract consumers' attention, and cannot quickly find useful product information, which is not conducive to consumer decision-making (Townsend & Kahn, 2014). Therefore, there are still many controversies about the influence of linguistic and visual information on consumers.

HYPOTHES AND MODELS.

Media Richness Theory (MCT) discusses whether a medium has the ability to transmit rich information (Daft & Lengel, 1986). Bodensteiner (1990) argue that whether the medium is rich or lean depends on its ability to share meaning. E-WOM is essentially a kind of mass communication. The richness of E-WOM is mainly distinguished by transmitting multiple clues and using the level of natural language. Individuals are influenced by two factors, equivocality and uncertainty, which determine their media choice behavior (Daft & Lengel, 1983). Fuzziness refers to the ambiguity of information (the sender and the receiver have different interpretations). Uncertainty refers to the gap between the amount of information needed to solve the problem and the amount of information possessed by the receiver due to the lack of information between the two parties (Mintzberg, 1981). Therefore, people face different information content and communication purposes, in order to reduce uncertainty and fuzziness, according to the amount of information carried by the media and the characteristics of the task to be handled as the basis for choice.

According to the definition of media richness, "text" reviews correspond to low-level e-WOM richness and can only convey linguistic information; "text + image" reviews correspond to medium-level e-WOM richness, which can not only convey linguistic information but also image information; "text + image + video" reviews correspond to high-level e-WOM richness can not only convey linguistic information, but also dynamic and fluent visual and auditory information.

Online reviews are generally referential as consumers' objective statements of products. Compared with simple "text" reviews, "text + image" reviews and "text + image + video" reviews contain both linguistic and visual information. Compared with single linguistic information, visual information can promote consumers to imagine their own use of the product scene, and enhance the psychological image processing of consumers (Rossiter, 1982). At the same time, the presentation of visual information is more intuitive and vivid, closing the distance between consumers and products, attracting consumers and promoting consumers' desire for products (Kim & Sharron, 2008). The combination of linguistic information and visual information can be considered to contain more information than single linguistic information. The multiple information makes consumers better understand information, reduces the uncertainty of product purchase, and has a clearer understanding of the product (Xu, Chen & Santhanam, 2015). Therefore, we put forward the following hypothesis:

- H1: Compared with the WOM in the form of "text", the WOM in the form of "text + image" has a greater impact on user's mental imagery processing (H1a), affective attitude (H1b), cognitive attitude (H1c)*
- H2: Compared with the WOM in the form of "text", the WOM in the form of "text + image + video" has a greater impact on user's mental imagery processing (H2a), affective attitude (H2b), cognitive attitude (H2c)*

Compared with "text + image" reviews, "text + image + video" reviews contain dynamic and fluent images, sounds and so on. The use of both linguistic and visual information is conducive to enhancing the effectiveness of information. Video, as a

higher-level form, will attract more attention from consumers (Connolly, 1980). Dynamic scenes and the fluency of the images make it easier for consumers to produce "visual depiction effect", imagine the scene of self-use products, and enhance the psychological image processing of consumers (Daft & Lengel, 1986). At the same time, the dynamic video screen switching, color, sound will attract consumers, promote the emotional experience of consumers, thus promoting their affective attitude. In addition, video contains more visual information, which can promote consumer's perception of the credibility of reviews, increase the persuasiveness of reviews (Xu, Chen & Santhanam, 2015), thus promoting consumer's cognitive attitude. Therefore, the following assumptions are made:

H3: Compared with the WOM in the form of "text + image", the WOM in the form of "text + image + video" has a greater impact on user's mental imagery processing (H3a), affective attitude (H3b), cognitive attitude (H3c)

In summary, the conceptual model in this paper are as follows:

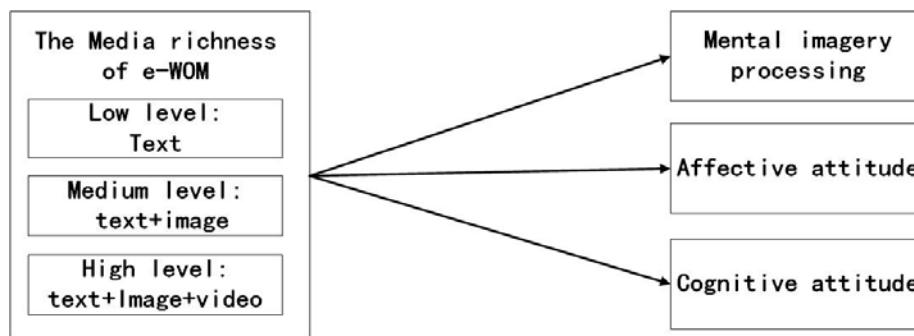


Figure 1: Conceptual Model.

EXPERIMENT PROCESS

In order to improve the validity of the formal experiment, it is necessary to screen the product type and experimental materials before experiment. Although product classifications are still widely accepted and discussed in the marketing literature, the relationship between search and experience is increasingly blurred in the Internet environment (Huang, Lurie & Mitra, 2009). On the one hand, consumer reviews provide indirect experience about the sensory aspects of a product, enabling consumers to have a full range of experience information on the Internet, which to some extent reduces the differences in certain product types (Park & Lee, 2009). On the other hand, some users provide reviews that can convert experience attributes into search attributes. For example, the taste and taste of food. In addition to video games and cameras as the classic representative of experience products and search products, but also chose backpack as a pure search products and pure experience products in the intermediate products (Xu, Chen & Santhanam, 2015). Therefore, according to the above research summary, this article controls the product type this variable, uses the backpack as the research product.

After determining the product, the selection of experimental materials, in China's B2C shopping website trading scale market share, Tianmao Mall occupies an important market share. Therefore, from the Tianmao Mall platform to search for the key word "backpack" and select the comprehensive ranking of the first product, we found that the product page contains a comprehensive review feedback mechanism, the number of reviews reached tens of thousands, in line with the standards of the products surveyed in this paper. Five groups of Video Reviews of the corresponding products are selected from each product page, and one image reviews is intercepted from each of the five groups of video reviews. One text reviews is compiled according to the video reviews to control the same reviews length (50 to 90 words). In order to avoid the impact of reviews validity and control the reviews validity to be positive, the respondents were shown five groups of "text + image + video" reviews. The respondents were asked to score according to the consistency level (Smith, 1991). Thirty participants were invited to participate in a pre-experiment to assess the consistency of the content expressed in videos, pictures and text comments. These comments are presented to the participants in projection form. Each slide shows a video comment, an image comment and a text comment with the same content, allowing the participants to score using the Likert 5-level scale, 1 means "very inconsistent", 5 means "very consistent." According to the evaluation results, a group of "text + picture + video" comments with the highest degree of consistency (the highest score) was selected as the experimental material.

The study selected students from a university in Sichuan Province as the experimental sample. The number of valid questionnaires was 300. According to the level of Internet word-of-mouth richness, the experiment was divided into three groups of experiments, each of which collected 100 valid questionnaires. Using the scenario experiment method, it was conducted separately in three classrooms, and three different experimental materials of Internet word-of-mouth richness (high/medium/low) were displayed to the respondents, and they were asked to complete the corresponding questionnaire and give certain rewards.

First, the participants were told to imagine that they were in need of online shopping for a product, and that they had sufficient ability to pay to rule out the impact of the price. At the same time, in order to avoid the interference of brand preference, the experiment carried out image blurring and text avoidance operation on brand information. The respondents are screened by

asking "whether to shop online" and "whether to view comments when online shopping". If one of the two questions answers "no", the questionnaire will be invalid. The experiment then passes through the slides, which in turn presents the scenario guides, the basic description of the product to the product, and the online review of the product. Among them, the low media richness of the word of mouth is selected by the "text + picture + video" comment in the "text" part, the medium media richness of the word of mouth by the "text + picture + video" comment in the "text + picture" part, and the high media richness of the word of mouth for high media richness is indicated by the "text + picture + video" comment. After reading the online review, the participants were asked to answer questions related to the study (see Table 1). All variables were tested using the Likert 7 scale, with 1 indicating a very low degree and 7 indicating a high degree. The measurement items were derived from the existing literature, as shown in the table below. All variables were tested using the Likert seven-level scale. The measurement items were derived from the existing literature. The scales are as follows:

Table 1: Measurement Scale

Constructs	Item	Source
Mental imagery processing	You can fluently think of the image you use the product	Zhao, Dahl & Hoeffler (2014)
	You can clearly think of the image you use the product	
	You can imagine how you use the product	
	You can imagine what it looks like after using the product	
Affective attitude	This product attracts you	Holman (1986)
	You like this product	Kim & Morris (2007)
	This product impresses you	
	If you buy this product, you will feel very satisfied	
Cognitive attitude	The material promotes your understanding of product quality	Holman (1986)
	The product information reflected in the material is true	Kim & Morris (2007)
	The product information reflected in the material is rich	
	The product information reflected in the material is very useful	

DATA ANALYSIS

Descriptive Statistical Analysis

Table 2: Demographic Analysis

Characteristic variable	Number of Features	Number	Proportion
Gender	male	138	46%
	Female	162	54%
Age	Under 18 years old	16	5.33%
	18-22 years old	131	43.67%
	22 years old or older	153	51%
Education level	Specialist	47	15.67%
	Bachelor	181	60.33%
	Master degree and above	72	24%
Total		300	100%

As can be seen from the table, the ratio of male to female students in this survey is 46% and 54%, respectively, and the ratio is basically the same. According to the survey released by China E-Commerce Research Center, the sex ratio of online shopping groups is basically equal in 2017, and both groups have great potential. From the age point of view, young people over the age of 18 account for a large proportion of the subjects, of course, this has a lot to do with the test environment for the university campus. From the perspective of education, undergraduate and master students account for more than 80% of the proportion, and the survey results published by the China E-Commerce Research Center show that college students have become the main force of online shopping.

Table 3: Online Shopping Frequency Distribution

Online Shopping Frequency	Number	Proportion
At least once a month	203	67.67%
Not at least once in three months	70	23.33%
At least once every six months	21	7%
At least once in more than half a year	6	2%
Total	300	100%

According to the survey data, the online shopping frequency of the respondents was analyzed. By analyzing the online shopping frequency data of respondents, it can be seen that most respondents have more frequent online shopping frequency, and the number of respondents who have at least one online shopping per month has reached 67.67%, at least once every three months. The proportion of respondents to online shopping has reached 91%, so it can be seen that the respondents are familiar with the environment and process of online shopping, and understand the role of consumer reviews in the online shopping process.

Reliability Analysis

The reliability of the questionnaire reflects the consistency or stability of the questionnaire results. Consistency measures whether the same content is measured by the internal topic. This paper mainly uses the indicators reflecting the internal consistency to measure the reliability of the data. Generally speaking, the reliability of the questionnaire is considered to be ideal when Chronbach's alpha (CA in the table below), factor load, composite reliability (CR) is greater than 0.7 and AVE is greater than 0.5. In this paper, SPSS software is used to analyze the data, and the relevant indicators are shown in the table:

Table 4: Reliability Indicator Values.

Variable	Mean (Variance)	CA	CR	AVE
Mental imagery processing	3.98 (1.504)	0.867	0.874	0.636
Affective attitude	4.03 (1.435)	0.811	0.866	0.619
Cognitive attitude	3.98 (1.646)	0.777	0.913	0.726

As shown in the table above, Chronbach's alpha (CA) of each construct is greater than the recommended critical 0.7, indicating a higher measurement reliability; and the comprehensive reliability (CR) is also greater than 0.7, and the average variance extraction (AVE) is greater than 0.5, indicating good consistency between measurements.

Validity Analysis

Validity reflects the authenticity of the questionnaire to reflect the problem. At present, the two methods of discriminant validity are: (1) Comparing the correlation coefficient and mean variance between constructions, the former is less than the latter, and the discriminant validity is good; (2) If the factor load of constructions is greater than the factor load of each index, the discriminant validity is good. In this paper, correlation coefficient and factor load among variables are obtained by SPSS software. As shown in the table.

Table 5: Validity Index Values.

Variable	Measurement item	Mean (Variance)	Factor load
Mental imagery processing	I1	3.73 (1.904)	0.73
	I2	3.99 (1.901)	0.63
	I3	3.99 (1.906)	0.72
	I4	4.20 (1.821)	0.76
Affective attitude	E1	4.02 (1.830)	0.77
	E2	3.93 (1.916)	0.63
	E3	4.08 (1.961)	0.62
	E4	4.09 (1.703)	0.77
Cognitive attitude	C1	3.76 (1.926)	0.86
	C2	3.86 (1.966)	0.76
	C3	4.02 (2.092)	0.64
	C4	4.29 (1.949)	0.83

Table 6: Correlation Matrix

Variable	Mental imagery processing	Affective attitude	Cognitive attitude
Mental imagery processing	0.797		
Affective attitude	0.657	0.787	
Cognitive attitude	0.649	0.688	0.852

Note: The diagonal data is the arithmetic square root of the AVE of the corresponding construct.

The correlation matrix showed that the correlation coefficients of each variable were less than the arithmetic square root of the mean variance of each variable on the diagonal, which indicated that the validity of the questionnaire was good. The factor load of each variable is greater than that of other variables, which further shows that the constructions have good convergence validity.

Because of the high correlation coefficient between multiple constructions in the correlation matrix, the multicollinearity test is carried out in this paper. The results are shown as follows:

Table 7: Collinear Statistics

Variable	Tolerance	VIF
Mental imagery processing	0.493	2.027

Affective attitude	0.442	2.264
Cognitive attitude	0.454	2.201

At present, the commonly accepted rule of thumb for judging the existence of multicollinearity is that the variance inflation factors (VIF) are less than 10 or the tolerance value is greater than 0.10. The test results show that the highest value of VIF is 2.264 and the lowest value of tolerance is 2.027. Therefore, the multicollinearity problem is not a significant problem in this paper.

In addition, since the questionnaire data are collected from a single respondent, this paper uses Haman's single factor test to detect the existence of single factor bias. In this paper, exploratory factor analysis (EFA) is carried out, and the result of non-rotation has two factors whose eigenvalues are greater than 1 (variance extraction: 33%, 27%). Therefore, the consideration of common method errors in data collection does not pose a problem. The reliability and validity of the questionnaire were all qualified, so the hypothesis was tested.

Single Factor Analysis of Variance

Mental imagery processing

Descriptive statistics of mental imagery processing are shown in the table. One-way ANOVA was performed on the variable of mental image processing, as shown in the table. The results showed that the media richness of reviews had a significant effect on the processing of consumers' mental images [$F(2,297) = 104.669, P < 0.001$]. Further, we compare the three media richness in two categories (as shown in table). The results show that compared with the "text" form of e-WOM, providing "text + image" form of e-WOM can significantly enhance the psychological image processing of consumers ($P < 0.001$), so H1 (a) is established; at the same time, compared with the "text" form of e-WOM, providing "text + image + video" form of e-WOM. As a result, H2 (a) was established. Compared with the "text + image" form of e-WOM, the "text + image + video" form of e-WOM could significantly enhance the psychological image processing of consumers ($P < 0.001$), so H3 (a) was established.

Table 8: The Descriptive Statistics about Mental Imagery Processing

The Media Richness of E-WOM	N	Mean Value	SD	SE
1 (Low Level)	100	2.74	1.20	1.12
2 (Medium Level)	100	4.08	1.05	1.05
3 (High Level)	100	5.10	1.21	1.21
Total	300	3.98	1.50	0.09

Table 9: The Variance Analysis Results about Mental Imagery Processing

Source	df	Mean Square	F	Sig.
Inter-group	2	139.785	104.669	0.000***
Intra-group	297	1.335		
Total	299			

Table 10: The Multiple Comparisons of Media Richness on Mental Imagery Processing

(I) Group	(J) Group	Mean difference (I-J)	SE	Sig	95% Confidence interval	
					lower-bound	upper-bound
1	2	-1.34*	0.16	0.000***	-1.66	-1.02
	(T)	-2.36*	0.16	0.000***	-2.68	-2.04
2	1	1.34*	0.16	0.000***	1.02	1.66
	(T+I)	-1.02*	0.16	0.000***	-1.34	-0.70
3	1	2.36*	0.16	0.000***	2.04	2.68
	(T+I+V)	1.02*	0.16	0.000***	0.70	1.34

Affective attitude

We use one-way ANOVA to analyze the variables of emotion and attitude, as shown in the table. The results showed that the media richness of reviews had a significant effect on consumers' affective attitude [$F(2,297) = 153.826, P < 0.001$]. Further, we compare the three media richness in two categories (as shown in table). The results show that compared with the "text" form of e-WOM, the "text + image" form of e-WOM can significantly enhance the affective attitude of consumers ($P < 0.001$), so H1 (b) is established; at the same time, compared with the "text" form of e-WOM, the "text + image + video" form of e-WOM can be significantly improved. H2 (b) was established because of the enhancement of consumers' affective attitude ($P < 0.001$). Compared with e-WOM in the form of "text + image", e-WOM in the form of "text + image + video" could significantly enhance consumers' affective attitude ($P < 0.001$), so H3 (b) was established.

Table 11: The Descriptive Statistics about Affective Attitude

The Media Richness of E-WOM	N	Mean Value	SD	SE
------------------------------------	----------	-------------------	-----------	-----------

1 (Low Level)	100	2.76	0.968	0.097
2 (Medium Level)	100	4.10	0.808	0.081
3 (High Level)	100	5.23	1.235	0.123
Total	300	4.03	1.435	0.083

Table 12: The Variance Analysis Results about Affective Attitude

Source	df	Mean Square	F	Sig.
Inter-group	2	153.826	148.198	0.000***
Intra-group	297	1.038		
Total	299			

Table 13: Multiple Comparisons of Media Richness and Affective Attitudes

(I) Group	(J) Group	Mean difference (I-J)	SE	Sig	95% Confidence interval	
					lower-bound	upper-bound
1 (T)	2	-1.35*	1.144	0.000***	-1.629	-1.061
	3	-2.48*	1.144	0.000***	-2.761	-2.194
2 (T+I)	1	1.35*	1.144	0.000***	1.061	1.629
	3	-1.13*	1.144	0.000***	-1.416	-0.849
3 (T+I+V)	1	2.48*	1.144	0.000***	2.194	2.761
	2	1.13*	1.144	0.000***	0.849	1.416

Cognitive attitude

The results showed that the media richness of reviews had a significant effect on consumers' cognitive attitudes [F (2,297) = 121.523, P < 0.001]. Further, we compare the three media richness in two categories (as shown in table). The results show that compared with the "text" form of e-WOM, the "text + image" form of e-WOM can significantly enhance the cognitive attitude of consumers (P < 0.001), so H1(c) is established; at the same time, compared with the "text" form of e-WOM, the "text + image + video" form of e-WOM can be significantly improved. H2(c) was established because of the enhancement of consumers' cognitive attitudes (P < 0.001), and H3(c) was established because of the enhancement of consumers' cognitive attitudes (P < 0.001) by providing "text + image + video" e-WOM compared with "text + image" e-WOM.

Table 14: The Descriptive Statistics about Cognitive Attitude

The Media Richness of E-WOM	N	Mean Value	SD	SE
1 (Low Level)	100	2.60	1.03	1.10
2 (Medium Level)	100	4.05	1.17	1.12
3 (High Level)	100	5.30	1.44	1.14
Total	300	3.98	1.65	0.10

Table 15: The Variance Analysis Results about Cognitive Attitude

Source	df	Mean Square	F	Sig.
Inter-group	2	182.238	121.523	0.000***
Intra-group	297	1.500		
Total	299			

Table 16: Multiple Comparisons of Media Richness and Cognitive Attitude

(I) Group	(J) Group	Mean difference (I-J)	SE	Sig	95% Confidence Interval	
					lower-bound	upper-bound
1 (T)	2	-1.45*	0.17	0.000***	-1.79	-1.11
	3	-2.70*	0.17	0.000***	-3.04	-2.36
2 (T+I)	1	1.45*	0.17	0.000***	1.11	1.79
	3	-1.25*	0.17	0.000***	-1.59	-0.91
3 (T+I+V)	1	2.70*	0.17	0.000***	2.36	3.04
	2	1.25*	0.17	0.000***	0.91	1.59

CONCLUSION AND ENLIGHTENMENT

Research Findings and Management Implications

This study examines the impact of e-WOM richness on consumers' attitudes from the perspective of mental image processing.

At last, the experiment data analysis shows that compared with "text" reviews, "text + image" reviews and "text + image + video" reviews have more significant impact on consumers' mental imagery and attitudes; as a form of high-richness e-WOM, "text + image + video" has the most significant impact on consumers' mental imagery and attitudes. Through empirical research and data analysis, it is found that in marketing practice, marketers can encourage consumers to send more video reviews of products, promote reviewers' imagination of experiencing products, and pay attention to managing text and image reviews so that consumers can easily obtain information about products. Incentives such as coupons, rebates and other incentives encourage consumers to publish a variety of reviews, narrowing the gap between reviewers and products, rich information will reduce consumers' perceived risk of products, and promote consumers' decision making process.

Limitations and Further Research

There are still some shortcomings in this study. Because video review is introduced in China at a relatively short time, the number of reference groups is relatively small. In this paper, the experimental samples are all college students, whether the research conclusions are extended to other groups needs further validation by future research, businessmen should also increase the promotion of this form of reviews; second, the choice of experimental materials. With the development of network technology and the popularity of video reviews, this paper directly selects the knapsack as the intermediate product to carry on the experiment. It will be able to study the influence difference of e-WOM richness on different product types. We can also explore the relationship between mental image processing, attitudes and purchase intention in the future.

REFERENCES

- [1] Babin L A, Burns A C. (1997). Effects of print ad images and copy containing instructions to imagine on mental imagery that mediates attitudes. *Journal of Advertising*, 26(3), 33-44.
- [2] Bodensteiner W. The richness imperative and cognitive style: The role of individual differences in media choice behavior. *Management Communication Quarterly*, 1990, 4(2):176-197.
- [3] Bone P F, Ellen P S. (1992). The generation and consequences of communication-evoked imagery. *Journal of Consumer Research*, 19(1), 93-104.
- [4] Chen, Y.B. & Xie, J.H. (2008). Online consumer review: word-of-mouth as a news element of marketing communication mix (in Chinese). *Management Science*, 54 (3), 477-491.
- [5] Chevalier, J.A. & Mayzlin, D. (2006). The effect of word of mouth on sales: online book reviews. *Journal of Marketing Research*, 43 (3), 345-354.
- [6] Connolly T. (1980). Human inference: strategies and shortcomings of social judgment. by Richard Nisbett; Lee Ross. *Philosophical Review*, 26(2), 297-317
- [7] Daft R L, Lengel, R H. (1983). Information richness: A new approach to managerial behavior and organizational design. *Research in Organizational Behavior*, 6(1), 73.
- [8] Daft R L, Lengel, R H. (1986). Organizational information requirements, media richness and structural design. *Management Science*, 32(5), 554-571.
- [9] Dai, D.B., Gu, X.H. 2017. User participation behavior, perceived value and customer loyalty analysis based on mobile short video social application (in Chinese). *Consumer economics*, (2), 58-65.
- [10] Dellarocas, C. (2003). The digitization of word of mouth: promise and challenges of online feedback mechanisms (in Chinese). *Management Science*, 49 (10), 1407-1424.
- [11] Holman R H. (1986). Commentary: the effect of verbal and pictorial advertising stimuli on aesthetic, utilitarian and familiarity perceptions. *Journal of Advertising*, 15(4), 66-67.
- [12] Huang P, Lurie N H, Mitra S. (2009). Searching for experience on the web: an empirical examination of consumer behavior for search and experience goods. *Journal of Marketing*, 73(2), 55-69.
- [13] Hughes, A., Wilkens, T., Wildemuth, B. M., & Marchionini, G. (2003, July). Text or pictures? An eyetracking study of how people view digital video surrogates. In *International Conference on Image and Video Retrieval* (pp. 271-280). Springer, Berlin, Heidelberg.
- [14] Kim J, Morris J D. (2007). The power of affective response and cognitive structure in product-trial attitude formation. *Journal of Advertising*, 36(1), 95-106.
- [15] Klein, L. (1998). Evaluating the potential of interactive media through a new lens: search versus experience goods. *Journal of Business Research*, 41 (3), 195-203.
- [16] Lin, S., Lü, X.Y., & Song, H.L. (2017). Is a picture worth a thousand words? The effect of pictorial reviews and verbal reviews on consumer purchase intention (in Chinese). *Business Economics and Management*, (8), 59-68.
- [17] Mintzberg, H. (1981). Organisation design: fashion or fit. *Harvard Business Review*, 59(1), 103-116.
- [18] Park, C, Lee, T M. (2009). Information direction, website reputation and e-WOM effect: A moderating role of product type. *Journal of Business Research*, 62(1), 61-67.
- [19] Qin, D. (2017). The fusion development path of mobile short video in UGC mode (in Chinese). *China Media Technology*, (3), 116-117
- [20] Rossiter, J.R. (1982). Visual imagery: Applications to advertising. *Advances in Consumer Research*, 9(1), 101-106
- [21] Smith R A. (1991). The effects of visual and verbal advertising information on consumers' inferences. *Journal of Advertising*, 20(4), 13-24.
- [22] Song Y.F. Wang X.Q. (2011). Analysis of the impact of negative word-of-mouth on purchase intention—based on the comparison between traditional word-of-mouth and e-WOM. *Studies in Financial and Economic Issues*, (12), 22-27.
- [23] Townsend C, Kahn B E. (2014). The “visual preference heuristic”: The influence of visual versus verbal depiction on

- assortment processing, perceived variety, and choice overload. *Journal of Consumer Research*, 40(5), 993-1015.
- [24] Wang X.H. Zhang Q.L., Dai, H.Z. (2015). Influencing factors of the usefulness of e-WOM: A literature review (in Chinese). *Journal of Beijing Technology and Business University (Social Science Edition)*, (2), 119-126.
- [25] Xu P, Chen L, Santhanam R. (2015). Will video be the next generation of e-commerce product reviews? Presentation format and the role of product type. *Decision Support Systems*, 73, 85-96.
- [26] Yoo J. & Kim M. (2014). The effects of online product presentation on consumer responses: A mental imagery perspective. *Journal of Business Research*, 67(11), 2464-2472.
- [27] Zhao M, Dahl D W, & Hoeffler S. (2014). Optimal visualization aids and temporal framing for new products. *Social Science Electronic Publishing*, 41(4), 1137-1151.