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The influence of electronic word-of-mouth on consumers' purchase intention: Evidence from China

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The Influence of Electronic Word-of-mouth on Consumers' Purchase Intention: Evidence from China

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ABSTRACT: Online review creates important advice for potential consumers to get hidden information and reduce the risk of dissatisfaction. The purpose of this research seeks to measure and explain the different dimensions of electronic word-of-mouth (eWOM) which impact on Chinese consumers' purchase intention differently. Using questionnaire and SPSS as methodology to investigate a sample group from China with opinions Jingdong and Taobao, two leading Chinese comment-sharing platform. Results indicate that volume, emotional tendency and negative comments of goods, shopkeeper and delivery are major determinants of purchase intention. The results can provide a helpful reference for companies to develop marketing strategy and Chinese consumers to select commodities online with profound suggestion.

Keywords: *electronic word-of-mouth; Chinese; purchase intention*

Data Availability: *The data gathered through public participation of research questionnaire.*

I. INTRODUCTION

The Internet proffers a wide range of opportunities for consumers to satisfy their expectations of products or services. However, given limited information of products or services, it is difficult to do the final determination among various choices. Therefore, electronic word-of-mouth (eWOM) have become an important factor taken into consideration when consumers are doing purchase decisions (Engler et al. 2015). Word of Mouth (WOM) is advice retrieved from people about goods, services, and social issues (East et al. 2007). Goldsmith and Horowitz (2006) illustrated that online consumers habitually resort to these consumers' views to get hidden information and avoid the risk of unsatisfaction (Kirmani and Rao 2000). In recent years, independent opinion platforms which designed for different products have facilitated consumers to disseminate their opinions of products or services and eventually impacted on their purchase intention. (Zhang et al. 2010) Online environment which proffers an appropriate context to study WOM information itself and also, makes it more important. (Huang et al. 2011).

Previous researches have shown that consumers manifest a high level of reliance on eWOM and make responses to it (Henning-Thurau and Walsh 2004), which can promote sales of products (Chevalier and Mayzlin 2006). Although many researches have put forward models to examine the influence of eWOM on sales, most of them focus on certain category, i.e. travel product, restaurant, beer. (Davis and Khazanchi 2008; Liu and Park 2015; Zhang et al. 2010; Clemons et al. 2006). Examining a single type of product in one certain context, Esmark Jones et al. (2018) pointed out that further research could use another online platform to explore the total number of reviews, percentage of positive or negative reviews, and other factors which affect purchase intention. On the other hand, according to Zhai (2011), many scholars reckon compared to positive eWOM, negative one impact more profoundly on consumers. However, scarce research about negative eWOM acts on purchase intention. Also, exploration of emotions embedded review content is limited as well. (Ahmad and Laroche 2015)

Although many researches have examined and confirmed the significant influence of negative reviews (Esmark et al. 2018), study on how specific factors which constitute negative eWOM affect consumers' purchase intention is rather limited. Also, having a large number of Internet users, China can be a good target to do empirical research. In light of the increasing numbers and importance of eWOM, the motivation of this study is to assess the influence of eWOM on consumers' purchase intention.

Basically, this research focuses on two questions with the background of China. First, it focuses on what are the impacts of numbers, intensity and emotional tendency of eWOM on consumers' purchase intention; also, it investigates what is the effect of different negative eWOM elements on consumers' purchase intention.

Traditionally, many lines of research focus on comprehending the joint-separate of consumers' preference for a product or service with quantifiable features. While whether online eWOM including both qualitative and quantitative information would influence consumers' purchase intention over modes does not receive much concern from scholars (Tan et al. 2018). Compared to the similar previous research of Zhai (2011), which conducted eight years ago with significant changes of Chinese purchase pattern, it requires newest and real data to fill in the knowledge gap. And this research provides a conclusion based on a

general sight on random products from respondents reflected, not similar as other papers which mainly focus on one category, for example, Jalivand (2017) only concerns about eWOM on restaurants.

With investigation of questionnaire, gaining a sample of 247 participants in China, it sought to understand the factors influencing on purchase intention on Jingdong and Taobao in terms of four related key variables: number, intensity, emotional tendency and negative-side content. It concluded that number of eWOM and product is not consistent with description are most superlative factors within range of all variables this study concerned by using SPSS 23. Take a closer look into negative content of eWOM, Product is not consistent with description and goods damaged during logistics are the most concerned factor of consumers' purchase intention. As a consequence, it can help develop a better understanding about Chinese consumers' purchase pattern and form marketing strategies for companies which sell products online.

The contribution to existing literature is this study follows the recommendation of Esmark et al. (2018) via enriching online platforms to examine the properties and effects of eWOM. Hence, comprehending the impact of these factors by examining factors that determine consumers' purchase intention would be a rather meaningful research.

Section II illustrates background information and elaborates research questions of this study. The research methodology is included in Section III with pre-test related to the construct of this questionnaire. Section IV is results and discussion is in Section V. Finally, we summarize the conclusion of this study in Section VI.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Purchase intention

Purchase intention, refers to the possibility that consumers will buy certain products, can be defined as a consumer attitude, usually used as a proxy of actual consumer behavior (Esmark et al. 2018). Chevalier and Mayzlin (2003) pointed out that WOM from former consumers established a causal influence on purchase behavior of potential consumers. This intention relies on different circumstances and context, which can change with time and different purchases (Whitaker 1978). In a purchase activity, consumers' purchase intention is closely related to their final purchase decision (Zhai 2011). Mullet and Karson (1985) articulated that consumers' purchase intention for a product or a brand is determined by their subjective tendency to the product, which can be considered as a seminal indicator to predict consumer behavior. Yeon Kim and Chung (2011) concluded that specifically, when people assume, they have more resources, their senses of control boost which eventually lead to increase of their behavioral intentions. In accordance with the theory of Schiffman and Kanuk (2000) that purchase intention represents what consumers think they want to purchase.

Although different scholars have various opinions on purchase intention of consumers, they have the consistent view that purchase intention is a psychological activity and it's a probability of consumer's certain purchase behavior (Zhai 2011).

Take this concept into China, according to *The 44th China Statistical Report on Internet Development (2019)*[1], China had 854 million Internet users, using the Internet across different fields. This large population contains 696 million online shoppers. At present, the major shopping websites have attached importance to user reviews. User comments give users full voice, strengthen the interaction between users and the website, and help users increase purchase intention to buy goods. And according to the 2008 report of online shopping users by China Internet Network Information Center (CNNIC), nearly 80% of online shopping users will look at user comments before buying most of the goods. It means that consumers' purchase behavior is indeed influenced by online reviews.

Electronic word-of-mouth

Chat rooms, message board and other electronic platforms for consumers exchange their individual experiences and views online, which are related to products and services, are increasingly vital in today's society (Dwyer 2007). Due to information asymmetry (Pavlou and Dimoka 2006), consumers cannot conduct physically investigation of the product. Therefore, consumers are more likely involved with additional risk as a result of incomplete or inaccurate information provided. (Lee 1998). To reduce the impact of inability access information of the authentic product (Fung & Lee 1999), potential consumers prefer to use electronic word-of-mouth to get additional information (See-To and Ho 2014). Park et al. (2011) suggested that eWOM takes a much more important role around the value chain of China's Internet shopping. The characteristics of eWOM has been recognized, including number, review-embedded emotions (Park and Lee 2008), intensity of emotion (Mao et al. 2019).

Numbers of eWOM

The numbers of eWOM in the online shopping mall can be defined as the total volume of reviewer comments available for products. Although pure increase in volume of online comments does not have significant implications on sales (Davis and Khazanchi 2008), it still has profound effect. According to Liu (2006), the volume of WOM can provide explanatory power, for example, cognitive consequence of awareness can help increase aggregate and weekly revenue of tickets. According to Kwon (2007), when people select commodities online, their first choice is to check the quantity of members or reviews. Thus, the first hypothesis is demonstrated below:

H1: *The higher level of quantity of eWOM, the larger impact on purchase intention of consumers.*

Emotional tendency

Online platforms allow users to communicate emotionally with other users (Kramer, Guillory, & Hancock, 2014). In general, emotions expressed in reviews could be categorized

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[1] *The 44th China Statistical Report on Internet Development (2019):* Published by China Internet Network Information Center (CNNIC).
http://www.cnnic.net.cn/hlwfzyj/hlwxzbg/hlwtjbg/201908/P020190830356787490958.pdf

as positive and negative (Mao et al. 2019); however, it still remains a mystery that the influence of emotional tendency on the reader of the eWOM (Ahmad and Laroche 2015). The definition of eWOM communication is any positive or negative reviews provided as consideration for potential consumers, which are created by former consumers after purchasing product or service (Henning-Thurau et al. 2004). East and Lomax (2008) stated that positive WOM usually impact more significantly than negative WOM, as same as the statement concluded by Liu and Park (2015) that positive eWOM are weightier than negatives, are inconsistent with findings as stated by Kahneman and Tversky (1984) that in general, consumers pay more attention to negative than positive eWOM because the menace of potential loss is considered more influential than the desire of potential benefit (Martin 2017), which is also supported by Dellarocas (2003) and Chevalier and Mayzlinet (2006) that negative reviews often have more negative effects than positive ones. To sum up, positive or negative eWOM plays a more important role is difficult to determine via literature review; and emotional tendency does affect the purchase intention of consumers, while few studies focus on the how specific aspects of negative eWOM lead to discrepancies of purchase intention (Zhai 2011). Hence, the hypothesis can be assumed as the following:

H2*: The influence of Negative eWOM on consumers' purchase intention is greater than that of positive eWOM.*

H3*: Diverse elements of negative eWOM have different effects on consumers' purchase intention.*

Intensity of eWOM

The concept of Intensity of eWOM is different degrees of positivity or negativity have diverse effects in purchase intention. For example, happiness can be reckoned as more positive emotion than hope, and disgust is a stronger intensity than other negative eWOM. (Ahmad 2015) Therefore, expressive emotion can be regarded as an affective, representative and evaluative reactions of intensity (Fiske and Taylor 1991). The intensity of eWOM refers to the intensity of the attitude conveyed by the information, which will affect its effect directly (Zhai 2011). If it contains positive or negative eWOM, meaning that the strength of expression embedded in the WOM, can impress consumers, hence engender a strong impact on them (East and Lomax 2008). Based on this notion, intensity of eWOM are associated with purchase intention:

H4*: The greater the intensity of eWOM, the greater the impact on consumers' purchase intention.*

To sum up, the constructs of variables are summarized in the Table 1.

TABLE 1
Definition of the constructs

Construct	Definition
Numbers of eWOM (NUM)	The total volume of reviewer comments available for products
Intensity of eWOM (ITS)	The impact of different degrees of positivity or negativity
Emotional Tendency (PWOM)	Emotion-embedded in eWOM, generally can be categorized as positive and negative
Negative eWOM of goods (PG)	One aspect of negative content of eWOM
Negative eWOM of shopkeeper (SK)	One aspect of negative content of eWOM
Negative WOM of delivery (PD)	One aspect of negative content of eWOM
Purchase Intention (PI)	Possibility that consumers will buy certain products, usually used as a proxy of actual consumer behavior

The overall research model is listed in Figure 1 as below.

FIGURE 1
Hypothesis Model

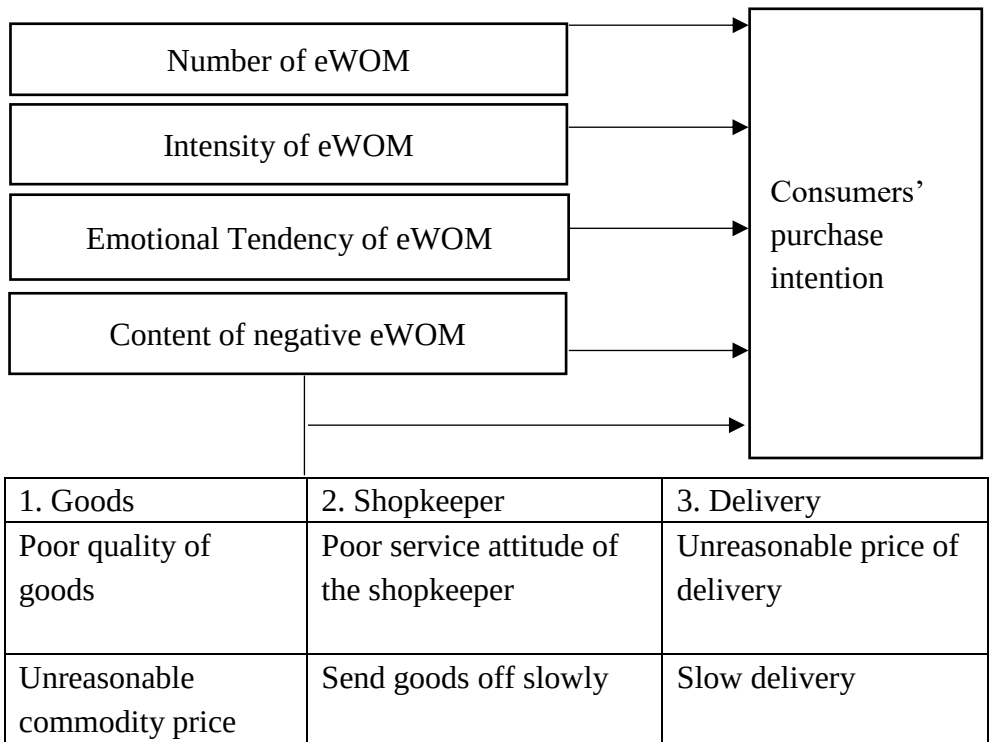

FIGURE 1 (continued)

Product is not consistent with description	The shopkeeper can't solve the problem effectively	Goods damaged during logistics

III. RESEARCH METHODOLOGY

Data Collection and Sample

Data used in this research were collected by using a questionnaire obtained from an earlier research made by Zhai (2011) and revised some contents in the questionnaire. It exerted a five-point Likert scale and measurement items were placed in the Appendix. The survey participants were people who had ability to use the Internet and used to purchase commodities or services online. Hence, prior to ask subsequent questions, participants who answered the question "Have you purchased commodities online?" with "no" will automatically stop for conducting the questionnaire. In addition, before using this questionnaire, major comment function of Chinese online shopping malls, Jingdong (https://www.jd.com) and Taobao (http://www.taobao.com), is examined. Consider some specific categories reviews were not listed on the website anymore, additionally, *Interim Regulation on Express Delivery* [2] implemented on March 2nd, 2018 (i.e. it enforces an enterprise engaged in express delivery business shall deliver the express to the agreed receiving address, the addressee or the collection agent designated by the addressee).Therefore, outmoded or rarity items like "The logistics company does not deliver the goods to the receiving place" were deleted.

Before applied the survey for the research, pretesting is required to identify errors and improve the questionnaire, ensuring its reliability and validity (Reynolds et al. 1993). To test the hypotheses in the context, reliability was measured by Cronbach's alpha (Table 2) with initial 33 samples collected. If Cronbach's alphas were all above the level of 0.7 (Nunnally 1978), the construct of the questionnaire is acceptable. As shown in Table 1, all alphas are above 0.7, thus, it can be concluded the model provided adequate reliability. Also, correlation analysis presented in Table 3, show that there were significant correlations among 25 motivations. Both tables show the questionnaire is reliable and valid to conduct further data collection.

TABLE 2

Cronbach's alpha (α) coefficients of survey statements with 33 samples.

Variables	Alpha	No. of related questions
Numbers of eWOM	0.948	4
Intensity of eWOM	0.962	5
Negative WOM of Goods	0.950	3

[2] *Interim Regulation on Express Delivery:* It has been adopted at the 198th executive meeting of the State Council on February 7, 2018 and shall come into force as of May 1, 2018. http://www.gov.cn/zhengce/content/2018-03/27/content_5277801.htm

TABLE 2 (continue)

Negative WOM of shopkeeper	0.897	3
Negative WOM of delivery	0.939	3
Purchase intention	0.983	8

TABLE 3

Pearson's correlations among the 25 motivations.

	NUM		ITS		PG
NUM1	.951**	ITS1	.913**	PG1	.962**
NUM2	.932**	ITS2	.920**	PG2	.924**
NUM3	.948**	ITS3	.950**	PG3	.975**
NUM4	.895**	ITS4	.959**		
		ITS5	.922**		
	SK		PD		SPI
SK1	.872**	PD1	.949**	SPI1	.961**
SK2	.909**	PD2	.939**	SPI2	.958**
SK3	.949**	PD3	.945**	SPI3	.968**
				SPI4	.906**
				SPI5	.944**
				SPI6	.945**
				SPI7	.945**
				SPI8	.939**

Note. *Correlation is significant at the .01 level (2-tailed).

NUM refer to number of eWOM; ITS refer to intensity of eWOM; PG refer to negative eWOM of goods; SK refer to negative eWOM of shopkeeper; PD refer to negative eWOM of delivery; SPI refer to purchase intention.

Regression model

A series of linear regressions were performed to examine the relationships between related motivations and purchase intention.

Y (Purchase Intention) = β0+β1 Number of eWOM + β2* Intensity of eWOM+ β3* Emotional tendency+ β4* Negative eWOM on goods+ β5* Negative eWOM on shopkeeper+ β6* Negative eWOM on delivery+ ε1* (1)

Y (Purchase Intention) = β0+β1 Poor quality of goods+β2* Unreasonable commodity price+β3* Product is not consistent with description + ε2* (2)

Y (Purchase Intention) = β0+β1 Poor service attitude of the shopkeeper+β2* Send goods off slowly+β3* The shopkeeper can't solve the problem effectively + ε3* (3)

Y (Purchase Intention) = β0+β1 Unreasonable price of delivery +β2* Slow delivery+β3* Goods damaged during logistics + ε4* (4)

The relationships among independents variables and dependent variables are tested via these equations.

IV. RESULTS

This study collected 251 questionnaires in total, 247 were valid and complete for an effective sample rate of 98.4%. Given 35 questions included, this effective sample rate satisfied the advice of Gorsuch (1983) that the volume of sample collected should be at least five times questions listed with a minimum standard of 100. After excluding four invalid and incomplete questionnaires, results were analyzed by SPSS Version 23.

Descriptive statistical analysis

As shown in Table 4, respondents of this research include approximately 35.63% male and the majority, 63.97% female. With the majority (70.04%) aged between 20 and 25 years old. Among these respondents, most of the samples are under 26 years old, which is consistent with the characteristics of the younger netizens. Additionally, most respondents have undergraduate or above, whose education level is relatively high.

TABLE 4
Profile of Respondents

Gender		Frequency	Percent (%)
	Male	88	35.63%
	Female	158	63.97%
	Total	247	100%
Age			
	<16	0	0.00%
	16-19	15	6.07%
	20-25	173	70.04%
	26-34	20	8.10%
	35-40	11	4.45%
	>40	28	11.34%
	Total	247	100%
Education			
	Junior high school or below	4	1.62%
	Senior middle school or technical secondary school	10	4.05%
	Undergraduate or college	217	87.85%
	Master or above	16	6.48%
	Total	247	100%

In addition, the questionnaire uses five-point Likert scale, listing the maximum value, minimum value, mean value and standard deviation of each question item in each variable, so as to better understand the specific situation of each index, as shown in the Table 5.

It is interesting to see that most respondents (BBR 91.87%) before purchase online, they read electronic comments from others, indicating that level of usage of eWOM is quite high. In turn, if there is a large number of user comments on a product online, it will attract

Chinese consumers' attention (NAA 83.33%). Compared with other variables, ITS2 ("I was impressed by these reviews" of intensity) shows the highest variance, indicating the data fluctuates greatly near the average. In other words, respondents are relatively inconsistent on this point of view.

TABLE 5
Descriptive Statistics

Variables	Minimum	Maximum	Mean	Std. Deviation
IBWOM	1	2	1.02	0.154
BBR	1	5	4.39	0.813
NAA	1	5	4.16	0.935
LST	1	3	1.28	0.523
NUM1	1	5	3.94	0.809
NUM2	1	5	3.9	0.79
NUM3	1	5	3.86	0.896
NUM4	1	5	3.94	0.843
ITS1	1	5	3.55	0.908
ITS2	1	5	3.49	0.958
ITS3	1	5	3.55	0.872
ITS4	1	5	3.65	0.836
ITS5	1	5	3.52	0.941
PWOM	1	5	3.67	0.847
PG1	1	5	4.49	0.77
PG2	1	5	4	0.89
PG3	1	5	4.47	0.758
SK1	1	5	4.07	0.901
SK2	1	5	3.89	0.867
SK3	1	5	4.26	0.84
PD1	1	5	3.97	0.855
PD2	1	5	3.84	0.914
PD3	1	5	4.34	0.785
SPI1	1	5	4.19	0.62
SPI2	1	5	3.96	0.795
SPI3	1	5	4.06	0.73
SPI4	1	5	4.18	0.64
SPI5	1	5	3.87	0.811
SPI6	1	5	4.17	0.64
SPI7	1	5	4.13	0.618
SPI8	1	5	4.09	0.702

Note: IBWOM refer to whether respondents have ever been influenced by comments from other users when shopping online; BBR refer to before purchase online, whether respondents will review comments from others; NAA refer to whether a large number of user comments on

a product online will attract respondents' attention; LST refer to the last time respondents went shopping online; PWOM refer to whether these reviews are positive.

Reliability and validity

As shown in Table 6, the Cronbach's α for each variable exceeded 0.7, suggesting a high level of reliability as asserted in the previous section.

TABLE 6

Cronbach's alpha (α) coefficients of survey statements with 247 samples.

Variables	Alpha	No. of related questions
Numbers of eWOM	0.854	4
Intensity of eWOM	0.883	5
Negative WOM of Goods	0.729	3
Negative WOM of shopkeeper	0.786	3
Negative WOM of delivery	0.786	3
Purchase intention	0.902	8

According to Table 7, the correlation between items of the same dimension has reached a significant level, which ensures the overall homogeneity of the questionnaire.

TABLE 7

Pearson's correlations among the 25 motivations

	NUM		ITS		PG
NUM1	.844**	ITS1	.811**	PG1	.833**
NUM2	.870**	ITS2	.814**	PG2	.797**
NUM3	.880**	ITS3	.857**	PG3	.842**
NUM4	.746**	ITS4	.837**		
		ITS5	.816**		
	SK		PD		SPI
SK1	.787**	PD1	.845**	SPI1	.771**
SK2	.813**	PD2	.879**	SPI2	.836**
SK3	.819**	PD3	.784**	SPI3	.821**
				SPI4	.730**
				SPI5	.707**
				SPI6	.757**
				SPI7	.751**
				SPI8	.807**

The Kaiser-Meyer-Olkin value is greater than 0.8. As stated by Hair et al. (2009), the recommended Kaiser-Meyer-Olkin value is 0.6. On the whole, the questionnaire used for the formal test has high structural validity.

TABLE 8
KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.893
Bartlett's Test of Sphericity	Approx. Chi-Square	3802.946
	df	325
	Sig.	.000

4.3 Regression analysis

The results of the Model 1 regression are shown in Table 9. As study proposed, demographic factors, intensity and shopkeeper content were not significant regarding purchase intention. Additionally, number of eWOM ($p < 0.001$), poor goods ($p < 0.001$) as well as poor delivery ($p < 0.01$) impacted the dependent variable positively. The variables explained approximately 40 percent of the purchase intention.

TABLE 9
Results of Model 1 regression analysis

	Coefficient	Std. Err.	Sig.	90.0% Confidence Interval for B	
				Lower Bound	Upper Bound
Constant	0.831	0.311	0.008***	0.318	1.344
Gender	0.039	0.055	0.472	-0.051	0.13
Age	0.012	0.025	0.628	-0.029	0.053
Education	0.091	0.064	0.156	-0.015	0.198
PWOM	0.109	0.058	0.048**	0.019	0.223
NUM	0.272	0.049	0***	0.191	0.353
ITS	0.073	0.06	0.225	-0.026	0.172
PG	0.206	0.048	0***	0.127	0.285
SK	0.009	0.057	0.868	-0.084	0.103
PD	0.114	0.056	0.041**	0.022	0.206
R Square	0.468				
Adjusted R Square	0.443				

Note: ±Significance: $p < 0.1$. *Significance: $p < 0.05$. **Significance: $p < 0.01$. ***Significance: $p < 0.001$.

Model 2 gave more specific explanation about goods-side negative content in Table 10. Poor quality of goods showed statistically insignificant while it has positive relationship with purchase intention. While unreasonable commodity price and product is not consistent with

description factors demonstrated statistically significant relationships with purchase intention. When taking coefficient values into consideration, all factors illustrated the positive relationship. In other words, all goods-side negative eWOM were vital elements influencing on purchase intention. The partial result (PG2 and PG3) was consistent with the research conducted by Zhai (2011).

TABLE 10
Results of Model 2 regression analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
	(Constant)	2.39	0.202		11.828	0	2.057	2.724
	PG1	0.082	0.053	0.118	1.562	0.12	-0.005	0.169
	PG2	0.078	0.039	0.129	1.987	0.048	0.013	0.143
	PG3	0.226	0.054	0.319	4.168	0	0.137	0.316

According to Table 11, Model 3 reflected that the attitude of the shopkeeper is not significant factor with regard to purchase intention, while send goods off slowly (b=0.09, p<0.05) and the shopkeeper can't solve the problem effectively (b=0.159, p<0.01) could be effective elements to the dependent variable.

TABLE 11
Results of Model 3 regression analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
	(Constant)	2.884	0.189		15.297	0	2.568	3.189
	SK1	0.044	0.041	0.073	1.07	0.286	-0.024	0.111
	SK2	0.09	0.045	0.145	2.006	0.046	0.016	0.164
	SK3	0.159	0.047	0.248	3.367	0.001	0.081	0.236

With regard to Table 12, Model 4 demonstrated that goods damaged during logistics (b=0.173, p<0.001) was the most statistically significant factor in the equation. Unreasonable price of delivery (b=0.061, p<0.1) was marginally significant as well. Whereas slow delivery (b=0.184) was insignificant but still kept positive relationship with the dependent variable.

TABLE 12
Results of Model 4 regression analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
	(Constant)	2.728	0.19		14.358	0	2.414	3.042
	PD1	0.091	0.048	0.145	1.881	0.061	0.011	0.171
	PD2	0.063	0.047	0.107	1.332	0.184	-0.015	0.141
	PD3	0.173	0.048	0.252	3.59	0	0.093	0.252

Hence, overall results of hypothesis test were listed in Table 13, with hypothesis 3 and 4(d) insignificant.

TABLE 13
Results of hypothesis test

Hypothesis	Results
H1: The higher level of quantity of eWOM, the larger impact on purchase intention of consumers.	Supported
H2: The influence of Negative eWOM on consumers' purchase intention is greater than that of positive eWOM.	Supported
H3: The greater the intensity of eWOM, the greater the impact on consumers' purchase intention.	Unsupported
H4: Diverse elements of negative eWOM have different effects on consumers' purchase intention	
(a) Poor quality of goods	Unsupported
(b) Unreasonable commodity price	Supported
(c) Product is not consistent with description	Supported
(d) Poor service attitude of the shopkeeper	Unsupported
(e) Send goods off slowly	Supported
(f) The shopkeeper can't solve the problem effectively	Supported
(g) Unreasonable price of delivery	Supported
(h) Slow delivery	Unsupported
(i) Goods damaged during logistics	Supported

V. DISCUSSION

Main results review

Based on the results mentioned in the previous section, hypothesis 3, 4(a), 4(d) and 4(h) are rejected by regression analysis. These results are unanimous with the initial purpose of this research. It can be concluded that Chinese consumers do care about intensity embedded in eWOM as well as the quality of goods, service attitude of shopkeepers and logistics speed. While they cannot be the top elements count in.

Unexpected results

The study reveals that number of eWOM as well as product is not consistent with description gain the most two superlative significant factors on Chinese purchase intention. This discovery is inconsistent with the paper of Zhai (2011), where poor goods and poor service attitude of the shopkeeper are top two items matter. However, this finding matches the paper of Xie et al. (2016) that volume of eWOM can affect products revenue and overall rating significantly, that is, from consumer-side, they put more trust into products with a greater number of reviews. As the reason why consistency of description would lead to decrease of purchase intention, this result can be attributed to a violation of the nature of online shopping. Online shopping is based on consumers' trust in merchants, so they can quickly and easily get what they really want to buy online. The intervention of an independent platform is better to help monitor the behavior of merchants and live up to the trust of consumers. But still, it is easy for consumers distrust online reviews, especially when they perceive to have very weak online social relationships (Pan and Chious 2011). Therefore, once there are relevant comments related to the immorality of the merchant's behavior, with the inconsistency of items and descriptions as typical, consumers' purchase intention can be greatly reduced.

One possible explanation for the insignificant poor quality of goods is that because of the serious homogeneity competition of Taobao products, the quality of many products is similar, meaning no other better choices available for similar price; another interesting explanation is that because some products are relatively cheap, consumers do not expect to have high product quality but just want to solve their immediate needs. Another possibility explains that each person has different expectations for product quality, so potential consumers would rather buy it by themselves, and if they are not satisfied with the quality afterwards, they can return it through convenient logistics. But in any case, be sure that consumers will still consider this factor when they buy products as it has positive relationship with purchase intention.

Regarding the reason that slow delivery does not greatly affect purchase intention, this finding was inconsistent with Garrouch et al. (2011), which pointed out that the sensitivity to logistics had a significant effect. Ten participants gave a possible explanation that because China's logistics speed is relatively fast and the services provided by Jingdong is famous for the next day delivery, the logistics speed of one week in China's express delivery industry can be possibly defined as "slow". However, in absolute terms, this is within their acceptance range. And if it is necessary, consumers will choose to add extra money to pay for faster logistics, so this does not affect whether they buy a product; another possible explanation is that the

merchant and logistics company are usually not one company in China, that is, most customers have product-oriented buying behaviors, and online eWOM generally revolve around the product itself. Even if the relevant delivery speed is not fast enough, consumers still can solve this problem by communicating with the store and changing the delivery company.

Moreover, poor service attitude of the shopkeeper is even an insignificant element. Conducting in-depth interviews with 10 random participants, one possible explanation for this inconsistency may account for in most circumstances, consumers choose to purchase commodities rather than services on Jingdong and Taobao platforms, and due to this product-oriented purchase, the behavior and attitude of shopkeeper will not directly affect the purchase intention of commodities. And the number of eWOM is in line with the research of Davis and Khazanchi (2008).

Furthermore, another unexpected result is that hypothesis 3 failed. On the one hand, it is likely that comments with strong positive emotions will lead to suspicion of consumers, especially on the identity of commenters. For example, it is common in Taobao that many people who were invited to leave good comments as they got incentives from shopkeepers, even without using products at all. As asserted in Mayzlin (2006), this practice by disguising good-side reviews as legitimate communication via online reviews so as to impact consumers' purchase intention, has made more and more consumers' awareness. Hence, due to circumspect attitude and lack of trust, consumers may filter and ignore such information without any effect on their purchase intention. On the other hand, reviews with strong negative emotions cause suspicion as well. Customers who read such comments may be alert and consider whether these commenters are too extreme due to their personal characters. It suggests that they may skip this kind of information and review others' comments instead, if exist, which are pertinent and mild. This phenomenon is consistent with statements of Amezcua and Quintanilla (2016) that consumers who are in a neutral position can admit to reasoning, meaning that they take mild eWOM as objective and fair and consider purchase or not via these opinions.

Limitation

This research cannot exclude all limitation. First, it was very likely that respondents bias exists. Respondents were asked to remember the latest online shopping experience. There was difficulty to recollect and recall the specific experience due to a long-time span and vague memory. However, the methodology itself cannot avoid this problem. In addition, there was the limitation of generalizing the study results to all Chinese people because the majority of the respondents were in their 20s and had relative high degree— undergraduate or college and above. As a result, there was a strong recommendation for future studies to get involved other groups of participants and supplement the study. Also, this research was conducted during a short time period. A more valuable research is probable by expanding time period or using time-series data for every variable. And the study conducted basically in Zhejiang Province of China, meaning that it may have bias on geographical factors and also, lack an international view. For future research, it was recommended that a wider range of regions to be tested. Finally, it can consider specifying more classification of negative eWOM to get more precise information and help both consumers and companies to understand the consumer psychology.

Reliability and validity

All in all, from Section IV, it has been explained that the construct of questionnaire is convincingly reliable and valid. With explanations of unexpected results which differs from the results of Zhai (2011). It emphasizes that poor quality of goods is most strong factor among all others tested. Further reasons can be recommended to investigate into and examine it.

Basically, due to questionnaire form conducted in this study followed Zhai (2011) with several outmoded questions excluded, the questionnaire itself can be more scientific and suitable for current circumstances in China. Also, pre-test conducted with higher reliability and validity compared with Zhai (2011). It is reasonable to believe in these newest results. So, after proposing explanations of data collected, explanations are more likely to be reliable.

However, due to different purchase patter shows in this study, especially for "poor quality of goods" is not significant, it may suggest more related future studies should investigate in this field. It is possible for sample bias due to the majority of respondents are women and highly educated people which cannot represent the whole groups of people and show in an expected direction.

Theoretical contribution

The crucial contribution of this research is that it uses newest and real data from consumer side with a wide range of products to amplify and validate the relationship of different characteristics of eWOM and purchase intention of consumers. Basically, the research was conducted in China, which represents the largest emerging market with a great many opportunities and handsome profit lie on. As a large number of international companies are targeting at Chinese market for provision of different types of products or services, it is of great importance that advertisers develop a good understanding of Chinese consumers' purchase intention to differentiate company strategies (Huang et al 2014).

Additionally, in this case, it makes a contribute to a better realization of online shopkeeper as we study the influence of eWOM, helping them know how effectively boost sales.

On the other hand, although many papers investigated the role of emotion embedded in the online reviews, this study can be seen as one of earliest studies exploring the role of each specific factor – it investigated factors that make up negative eWOM, divided into three aspects including commodity side, shopkeeper side and logistics side, and various degree of their impact on customers' purchase behavior. In addition, this paper filled the knowledge gap mentioned in the research paper of Esmark et al. (2018), enriching online platforms to examine the properties and effects of eWOM.

VI. Conclusion

Motivated by companies and consumers interest in the function of eWOM in China, I investigate this issue by solving (1)What are the impacts of numbers, intensity and emotional tendency of eWOM on Chinese consumers' purchase intention and (2) What is the effect of different negative eWOM elements on Chinese consumers' purchase intention. Based on facts collected from 247 sample, I document my discoveries. First, eWOM of goods itself and

volume of total eWOM are two most robust variables consumers consider, but they do not concern much about intensity of eWOM and shopkeeper. Second, with regard to negative content of eWOM, consumers attach great importance to descriptive integrity of commodities, shopkeepers' problem-solving skills and whether goods can be received without damaged. Although findings may be impacted by small sample size and other unavoidable problems, it still suggests a probable implication for marketing field and promote any companies who are interested in this concept. Also, if my research can be applied in other situations in which data is available, then it would seem that product managers can gain more profits with adjusted strategies they modified according to it.

APPENDIX A. QUESTIONNAIRE ITEMS

1. What's your gender

   [1] Male
   [2] Female

2. What's your age?

   [1] <16
   [2] 16-19
   [3] 20-25
   [4] 26-34
   [5] 35-40
   [6] >40

3. What's your highest degree?

   [1] Junior high school or below
   [2] Senior middle school or technical secondary school
   [3] Undergraduate or college
   [4] Master or above

4. Have you purchased commodities online?

   [1] Yes
   [2] No

5. Have you ever been influenced by comments from other users when shopping online?

   [1] Yes
   [2] No

- Number of customer online reviews for the product

  NUM1: Consumers create a large number of comments on the product
  NUM2: This product has received high attention
  NUM3: Many people on the website commented on the product
  NUM4: There are positive and negative comments on the product

- Customer online comment intensity of the product
  ITS1: These commentators are very emotional

ITS2: I was impressed by these reviews
ITS3: These reviews are very persuasive
ITS4: These customers are very firm in their comments
ITS5: These comments are very serious

- The emotional tendency of online reviews related to the product
  These reviews are positive
- The influence of the following negative review factors on your online purchase decision
  PG1: Poor quality of goods
  PG2: Unreasonable commodity price
  PG3: Product is not consistent with description
  SK1: Poor service attitude of the shopkeeper
  SK2: Send goods off slowly
  SK3: The shopkeeper can't solve the problem effectively
  PD1: Unreasonable price of delivery
  PD2: Slow delivery
  PD3: Goods damaged during logistics
- The influence of online reviews on your purchase intention
  SPI1: These reviews proffer new information
  SPI2: These reviews impact my purchase intention significantly
  SPI3: These reviews help me make a purchase decision
  SPI4: These reviews provide different perspectives on the product
  SPI5: These reviews have changed my original view of the product
  SPI6: These reviews enrich my understanding of its characteristics of the product
  SPI7: These reviews enrich my understanding of its services
  SPI8: These comments affect my purchase of the product

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