



温州肯恩大学
WENZHOU-KEAN UNIVERSITY

**The content of online reviews and consumer purchase behavior: Comparison between
C2C and B2C in China**

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YE Zhuoyan

1025949

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Ye Zhuoyan

1025949

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Zhuoyan Ye

Wenzhou Kean University

ABSTRACT: The purpose of this study is to investigate the relationship between the content of online reviews and consumer purchase behavior in China's Consumer to Consumer (C2C) online market and China's Business to Consumer (B2C) online market, and compare if there is a significant difference between the relationship. The content of online reviews and monthly sales volume of experience goods on Taobao and Tmall are collected and analyzed by SPSS 23.0 software and Stata/SE 15.1 software. The statistical results show that shop reputation, including description star rating, service star rating, and logistic star rating, has a much higher significant relationship with monthly sales on the B2C online market than the C2C online market. This result suggests the incompleteness of trust and reputation systems in the C2C online market.

Keywords: *C2C and B2C in China; review content; consumer purchase behavior; comparison; shop reputation*

I. INTRODUCTION

Online reviews provide essential information which influences consumers' purchase decisions (Yaylı & Bayram 2012). In the previous study, the researchers examined the relationship between the content of online reviews and consumer purchase behavior on Chinese C2C shopping sites. The result supported that there is a significant relationship between review content and consumer purchase behavior (Mo et al. 2015). Also, previous researchers examined the relationship between shop reputation and sales volumes and concluded that shop reputation has a positive effect on sales volumes (Yao et al. 2014).

In recent years, the overall online market in China gained a significant increase from 2015 to 2018. Moreover, the B2C online market tends to account for a more substantial proportion in the overall online market than C2C. The B2C online market grew to 64.9% online retail market share in 2019 compared to 47.9% in 2015 (CIW Team 2019). However, to my best knowledge, there is no research examined whether there is a significant relationship between the content of online reviews and consumer purchase behavior in the B2C online market. Besides, with the development of online review systems, new functions are created, e.g., video reviews, questions & answer (Q & A) reviews. However, the influences of these new variables on consumer purchase behavior rarely been examined.

This paper verifies the relationship between the content of online reviews and consumer purchase behavior in the C2C online market based on previous studies by considering more comprehensive variables. Furthermore, it examines the relationship between these two variables in the B2C online market. Finally, it compares if there is any significant difference between the C2C online market and the B2C online market.

There is an essential difference between the C2C online market and the B2C online market. C2C online market is a website where intermediate buyers sell products to final

consumers (Dan 2014). However, B2C online market allows companies to directly sell products to consumers (Rose et al. 2011). Compared to the B2C online market, the trust and reputation system in the C2C online market is a challenge to consumers (Mäkeläinen 2006). Shop owners in the C2C online market manipulate the content of online reviews by paying to consumers (Peng et al. 2016). Based on this, this paper focus on if the weakness of the trust and reputation system in C2C causes any significant difference between the C2C online market and the B2C online market regards the relationship between shop reputation and monthly sales volume.

This paper chooses Shiseido Senka Perfect Whip Cleanser as the research subject. This product is Shiseido's most popular facial cleanser for all skin types (Amazon.com; JD.com). Cleanser belongs to experience goods, so consumers are more reliant on the content of online reviews to purchase it (Phillip Nelson 1974). Moreover, the products of Shiseido are now widespread in 120 countries (Matsuzaki 2016), and they are sold not only through physical stores but also through online shops on the C2C online market and the B2C online market. This paper collects the 30-days' content of online reviews records and transaction records. The regression result shows that additional reviews, picture reviews, video reviews, Q & A reviews, description star rating, service star rating, logistics star rating all have a significant relationship with monthly sales in the B2C online market. Whereas, the regression result shows that only the logistics star rating has a significant relationship with monthly sales in the C2C online market. Furthermore, the result of the study shows that description star rating, service star rating, and logistic star rating have a much higher significant relationship with monthly sales on the B2C online market than the C2C online market.

This paper contributes to the literature review. First, this paper adds two more variables, the number of video reviews and the number of Q & A reviews, so the overall variables of the content of online reviews can be more comprehensive, and the relationship between the content of online reviews and consumer purchase behavior can be better examined. Second, this paper compares this relationship in the C2C online market and the B2C online market, so the effect of the content of online reviews on consumer purchase behavior can be examined in overall e-commerce related to consumers in China. Furthermore, the differences between the C2C online market and the B2C online market regarding the relationship between the content of online reviews and consumer purchase behavior can be examined.

The remainder of the paper is organized as follows. The next section reviews the background and the literature and develops the hypothesis. In section 3, this paper shows the research method and empirical results. Moreover, the next section is the discussion. Then, the last is the conclusion.

II. BACKGROUND AND HYPOTHESIS DEVELOPMENT

The Pre-2019 E-Commence Market in China

The C2C online shopping market in 2017 accounted for 40% of overall China's online market. Furthermore, the GMV of 2018 had a decrease of 5% compared to 2017. The B2C online shopping market in 2017 accounted for 60% in the overall online market and had an increase of 4.8% from 2015. The total GMV (gross merchandise value) of the online shopping market in China gained a 29.6% rise from 2016 to 2017, which is about 6.1 trillion yuan (US\$953 billion) (CIW Team 2019).

Founded in 2003, Taobao dominates the C2C online market in China, exceeding eBay. Taobao becomes the digital winner in China's online C2C marketplace in the competition with eBay (Wu 2017). Tmall takes the lead of the B2C E-commerce platform measured by GMV in Q4 2018, which is 61.5%, followed by JD, 24.2%, Suning 6.7%, and Vipshop 3.7% (CIW Team 2019). Also, Tmall targets China's middle class and the consumers who pay attention to the product quantity and shopping experience. (Babington-Heina 2018)

Evaluating the trust and reputation of the store is essential in the consumers' purchase process. Compared to B2C, C2C relatively fails to build a reliable trust and reputation system. One of the tactics applied by fraudulent sellers to achieve a high reputation is to establish a new identity when the old one got a low reputation (Mäkeläinen 2006). Also, it has been reported that the content of online reviews on Taobao, China's equivalent of eBay, maybe fakes paid for by the Taobao store owners (Hu 2011).

C2C and B2C

C2C and B2C are specific terminologies to describe online retails, which involve the sale of tangible goods (Babington-Heina 2018). C2C online market stands for websites that offer free classified advertisements, auctions, forums, and personal pages for start-ups (Dan 2014). B2C means products or services exchanged from merchants to consumers (Rose et al. 2011).

Content of Online Reviews

Different scholars define online reviews differently. Park and Lee (2009) defined online reviews as positive and negative reviews given by consumers who bought and used the product. Mudambi and Schuff (2010) defined online reviews as evaluation information about the products or the service posted by consumers on third-party sites and retailers.

The content of online reviews be divided into two main categories, shop reputation and quantity of reviews (Meridian & Russell, 1974). Mo et al. (2015) classified the description star rating, service star rating, and logistic star rating into shop reputation, and the number of additional reviews and the number of pictures reviews into the quantity of reviews. Also, Shen et al. (2015) included additional reviews as significant factors in the consumers' purchase process.

Since 2016, Taobao and Tmall created two new functions regards the content of online reviews, video reviews, and Q & A reviews. Video reviews allow consumers to post

videos that reflect the real quantity of products, e.g., color, specification. Moreover, Q & A reviews enable users to ask questions that they concerned about to shop owners and others who have consumed it. Video reviews and Q & A reviews allow consumers to provide additional related comments to potential consumers and engage in electronic word of mouth (Yaylc & Bayram 2012).

Consumer Purchase Behavior

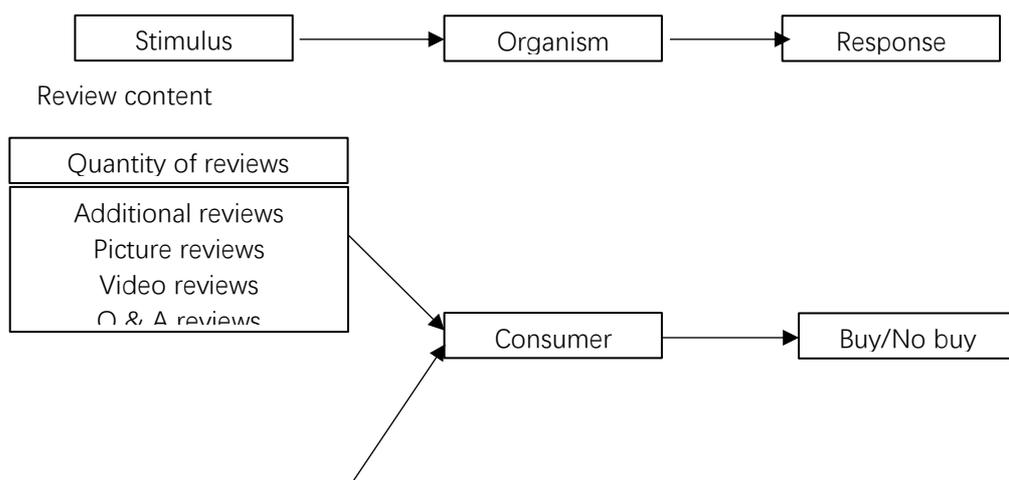
Researchers quantitatively measure consumer purchase behavior through commodity sales (Duan et al. 2008). Quantitative research on the relationship between consumer purchase behavior and the content of online reviews can be generally transformed into the relationship between commodity sales and the content of online reviews (Mo et al. 2015).

Theoretical Framework

John Broadus Watson (January 9, 1878 – September 25, 1958), the founder of behavioral psychology, proposed the "stimulus-response" model. This paper developed a similar model showed in Figure 1 based on the Stimulus-Organism-Response Model (SOR model) (Meridian & Russell, 1974). The review content can be divided into shop reputation and quantity of review. The shop reputation includes description rating, logistics rating, and service rating. Moreover, the quantity of reviews includes the number of pictures reviews, the number of additional reviews, the number of cumulative reviews, and the number of Q & A reviews. The sales of the shop measure the responses of consumers.

Phillip Nelson (1970, 1974) divided goods into two categories, search goods and experience goods. Search goods are goods that consumers can obtain accurate information before they purchase them, e.g., mobile phones and cameras. Experience goods are the goods that consumers cannot quickly get accurate information about the products before they buy them, e.g., cosmetics and food. Studies conducted in foreign countries showed that consumers more rely on the content of online reviews when they purchase experience good (Mehrabian & Russell 1974; Senecal & Nantel 2004). Hence, this paper focuses on the content of online reviews of experience good.

Figure 1
Revised SOR Model of Consumer Purchase



Shop reputation
Description star rating Service star rating Logistics star rating

Hypothesis Development

Review Content:

1) **Quantity of Reviews:** The additional reviews are posted by consumers when they have used a few days, or they want to provide more information about the experience. Besides, consumers can take pictures or videos to show more specific quantities about the product, for instance, the color. Q & A reviews users to ask relevant questions about the product to others who have consumed it. Hence, the number of additional reviews, picture reviews, video reviews, and Q & A reviews reflect the amount of information about the product available to the consumers. Studies showed that the quantity of the content of online reviews influences the willingness of consumers to buy the product (Matute et al. 2016).

Therefore, this paper has the following hypothesis:

H1a: Additional reviews positively influence consumer purchase behavior.

H1b: Picture reviews positively influence consumer purchase behavior.

H1c: Video reviews positively influence consumer purchase behavior.

H1d: Q & A reviews positively influence consumer purchase behavior.

2) **Shop Reputation:** The review content on C2C and B2C involve shop reputation, which refers to the star ratings. After purchasing, consumers give the description star rating, service star rating, and logistics star rating based on their evaluation of description, services, and logistics. Studies show that the score of star rating influences consumers' confidence in the store (Northwestern University 2015). Consumers are more likely to increase confidence when they see five stars, which stands for good quality, excellent service, and fast logistics and decrease confidence when they see the one star, which reflects the bad quality, bad service, and slow logistics. Compared to C2C, B2C developed a more reliable trust and reputation system (Mäkeläinen 2006). Hence, consumers may more depend on reputation reviews in B2C to decide the purchase behavior.

Therefore, this paper has the following hypothesis:

H2a: Description star rating has a higher significant relationship with consumer buying behavior in B2C online market than C2C online market.

H2b: Service star rating has a higher significant relationship with consumer buying behavior in B2C online market than C2C online market.

H2c: Logistics star rating has a higher significant relationship with consumer buying behavior in B2C online market than C2C online market.

III. RESEARCH METHOD AND EMPIRICAL RESULTS

Data Source and Sample Selection

According to market researches, Taobao is the leader in the C2C online market (Wu 2017), and Tmall is the leader in the B2C online market (CIW Team 2019). Hence, this paper chooses Taobao and Tmall as the representatives in China's C2C online market and B2C online market to examine the relationship between the content of online reviews and consumer purchase behavior.

This paper chooses cleanser as the research subject for the following reasons. First, cleanser belongs to cosmetics, which is one kind of experience goods. Consumers are more dependent on the content of online reviews when they make the purchase decision (Phillip Nelson 1974). Consumers buy it for personal use or as a gift to others, avoiding comparison and other emotional factors (Mo et al. 2015). Second, this product is for daily use. There are different experiences among consumers, excluding the influence of consumers' personal feelings on brand effect (Mo et al. 2015).

Established in 1872, Shiseido is the first Western-style pharmacy in Japan. Besides, now the products of Shiseido are popular in about 120 countries all over the world (Matsuzaki 2016). Therefore, this paper chooses Shiseido cleanser as representative of cleansers. Moreover, Shiseido Senka Perfect Whip Cleanser is Shiseido's most popular facial cleanser for all skin types (Amazon.com; JD.com).

On Tmall, the number of stores is limited, and some stores have no transaction records or no online review records. The total valid samples include 60 shops selling Shiseido Senka Perfect Whip Cleanser on Tmall. To better compare Tmall and Taobao, this paper also chooses 60 sets of valid online review records and transaction records on Taobao. Moreover, the stores are randomly selected without preference for high monthly sales volume or high review rating. Because Taobao and Tmall update the content of online reviews and sales volume monthly, this research collects 30 days sales of Shiseido cleanser from October 1, 2019, to October 31, 2019.

Also, this study did the correlation test and regression analysis using SPSS 23.0 software and VIF test using Stata/SE 15.1 to analyze the relationship between the content of online reviews and consumer purchase behavior.

Statistical Model

Based on the hypotheses developed in the previous section, the following generalized regression models can be stated:

$$V = \beta_0 + \beta_1 AR + \beta_2 PR + \beta_3 VR + \beta_4 QR + \beta_5 DSR + \beta_6 SSR + \beta_7 LSR + \varepsilon$$

TABLE 1
Variable Definition

Variable Name	Measures/Definition	Data Source
Volume (V)	The number of monthly sales transaction records. Measure the consumer purchase behavior, buy or not to buy.	Taobao & Tmall
Additional reviews (AR)	Consumers use the second chance to append reviews towards experience after purchase.	Taobao & Tmall
Picture reviews (PR)	Consumers post pictures to reflect the real quantity of products, e.g., color, specification.	Taobao & Tmall
Video reviews (VR)	Consumers post videos to reflect the real quantity of products, e.g., color, specification.	Taobao & Tmall
Q & A reviews (QR)	Potential consumers ask questions towards quantity, service, logistics, and other factors, and previous consumer or the sellers answer the questions	Taobao & Tmall
Description star rating (DSR)	Consumers give star ratings about description. One star indicates the bad quantity, and five stars indicate a good quantity.	Taobao & Tmall
Service star rating (SSR)	Consumers give star ratings about service. One star indicates the lousy service, and five stars indicate excellent service.	Taobao & Tmall
Logistics star rating (LSR)	Consumers give star ratings about logistics. One star indicates low logistics, and five stars indicate fast logistics.	Taobao & Tmall

The Model investigates the relationship between review content and consumer purchase behavior. In the model, monthly sales volume is the independent variable. Additional reviews, picture reviews, video reviews, Q & A reviews, description star rating, service star rating, and logistics star rating are dependent variables. Furthermore, additional reviews, picture reviews, video reviews, Q & A reviews are variables to measure the quantity of reviews. Description star rating, service star rating, and logistics star rating are variables to measure shop reputation.

Descriptive Analysis

TABLE 2 shows the descriptive statistics for all variables related to Taobao and Tmall. As for additional reviews, the maximum and mean value for stores on Tmall was three times that for stores on Taobao. The mean value of picture reviews for stores on Tmall was almost three times that for stores on Taobao. The mean of the number of video reviews was higher than four on Tmall. However, the mean of the number of video review was less than two on Taobao. Giving additional reviews, picture reviews, video reviews, and Q & A reviews usually costs consumers much time, so the result suggests that the consumer buying Shiseido cleanser on Tmall were more willing to spend time on giving reviews. The maximum of description star rating, service star rating, and the logistics star rating of stores on Taobao was 4.9 (out of 5), whereas on Tmall was 5 (out of 5). Moreover, the mean value of the logistic star rating of stores on Tmall was much larger than that on Taobao. However, the mean value of description star rating and the service star rating of stores on Tmall were less than that on Taobao.

TABLE 2
Descriptive Statistics for The Control Variables Used in The Multiple Regression Analysis

Variables	N	Minimum		Maximum		Mean		Standard Error		
		<i>Taobao</i>	<i>Tmall</i>	<i>Taobao</i>	<i>Tmall</i>	<i>Taobao</i>	<i>Tmall</i>	<i>Taobao</i>	<i>Tmall</i>	
<i>Additional reviews</i>	60	60	0	0	132	473	12.18	38.30	3.372	11.237
<i>Picture reviews</i>	60	60	0	0	472	2210	51.95	145.45	12.342	48.836
<i>Video reviews</i>	60	60	0	0	14	107	1.47	4.23	0.392	2.008
<i>Q & A reviews</i>	60	60	0	0	411	996	50.07	36.33	10.925	17.090
<i>Description star rating</i>	60	60	4.6	4.5	4.9	5	4.80	4.73	0.008	0.017
<i>Service star rating</i>	60	60	4.6	4	4.9	5	4.81	4.72	0.008	0.023
<i>Logistics star rating</i>	60	60	4.6	4.7	4.9	5	4.81	4.82	0.007	0.009

Correlation Tests

TABLE 3 shows the result of the correlation test for variables in Taobao. The result showed that additional reviews had a significant and positive relationship with picture reviews, video reviews, and Q & A reviews. Video reviews had a significant and positive relationship with Q & A reviews and significant and negative relationship with logistic review rating.

TABLE 3
Correlation Test for Variables in Taobao

Variables	AR	PR	VR	QR	DSR	SSR	LSR	V	
AR	Pearson Correlation	1	.967**	.676**	.566**	-.101	-.109	-.437**	.591**
	Sig. (2-tailed)		.000	.000	.000	.453	.421	.001	.000
PR	Pearson Correlation	.967**	1	.676**	.600**	-.089	-.161	-.477**	.499**
	Sig. (2-tailed)	.000		.000	.000	.498	.220	.000	.000
VR	Pearson Correlation	.676**	.676**	1	.340**	-.214	-.087	-.378**	.433**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.001
QR	Pearson Correlation	.566**	.600**	.340**	1	-.049	-.065	-.148	.255*
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.049

		Sig. (2-tailed)							
DSR	Pearson	-.101	-.089	-.214	-.049	1	.233	.484**	-.399**
	Correlation	.453	.498	.000	.000		.000	.000	.002
		Sig. (2-tailed)							
SSR	Pearson	-.109	-.161	-.087	-.065	.233	1	.482**	-.207
	Correlation	.421	.220	.001	.000	.000		.000	.113
		Sig. (2-tailed)							
LSR	Pearson	-.437**	-.477**	-.378**	-.148	.484**	.482**	1	-.583**
	Correlation	.001	.000	.000	.000	.000	.000		.000
		Sig. (2-tailed)							
V	Pearson	.591**	.499**	.433**	.255*	-.399**	-.207	-.583**	1
	Correlation	.000	.000	.001	.049	.002	.113	.000	
		Sig. (2-tailed)							

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

TABLE 4 shows the result of the correlation test for variables in Tmall. The result showed that additional reviews had a significant and positive relationship with picture reviews, video reviews, Q & A reviews, description review ratings, service review rating, and logistic review rating. Picture reviews had a significant and positive relationship with video reviews, Q & A reviews, description review ratings, service review rating, and logistic review rating. Video reviews had a significant and positive relationship with description review ratings, service review rating, and logistic review rating.

TABLE 4
Correlation Test for Variables in Tmall

Variables		AR	PR	VR	QR	DSR	SSR	LSR	V
AR	Pearson	1	.867**	.767**	.412**	.529**	.387**	.438**	.534**
	Correlation		.000	.000	.001	.000	.003	.000	.000
		Sig. (2-tailed)							
PR	Pearson	.867**	1	.614**	.308**	.531**	.389**	.496**	.727**
	Correlation	.000		.000	.017	.000	.002	.000	.000
		Sig. (2-tailed)							
VR	Pearson	.767**	.614**	1	.171	.430**	.293*	.389**	.647**
	Correlation	.000	.000		.191	.001	.023	.002	.000
		Sig. (2-tailed)							
QR	Pearson	.412**	.308**	.171	1	.112	.156	.075	.119
	Correlation	.000	.017	.191		.395	.234	.567	.36
		Sig. (2-tailed)							
DSR	Pearson	.529**	.531**	.430**	.112	1	.664**	.494**	.570**
	Correlation	.453	.498	.001	.395		.000	.000	.000
		Sig. (2-tailed)							
SSR	Pearson	.387**	.389**	.293*	.156	.664**	1	.418**	.449**
	Correlation	.421	.002	.023	.234	.000		.001	.000
		Sig. (2-tailed)							
LSR	Pearson	.438**	.496**	.389**	.07	.494**	.418**	1	.685**
	Correlation	.001	.000	.002	.5	.000	.001		.000
		Sig. (2-tailed)							

Taobao and Tmall, and the logistics star rating was significant on both Taobao and Tmall, but the p -values of these two variables for Tmall were smaller than for Taobao.

TABLE 6
Multiple Regression Analysis

	Unstandardized				Standard		T-		Sig.	
	Coefficients		Error		Coefficients		value			
	B									
	<i>Taobao</i>	<i>Tmall</i>	<i>Taobao</i>	<i>Tmall</i>	<i>Taobao</i>	<i>Tmall</i>	<i>Taobao</i>	<i>Tmall</i>	<i>Taobao</i>	<i>Tmall</i>
<i>(Constant)</i>	54123.204	-	12168.544	15064.034			4.448	-8.016	.000***	.000***
		120746.868								
<i>Additional reviews</i>	4.245	-57.569	15.727	5.776	.096	1.170	.270	-9.967	.788	.000***
<i>Picture reviews</i>	1.726	11.590	4.360	1.032	.150	1.024	.396	11.227	.694	.000***
<i>Video reviews</i>	49.504	191.306	46.672	19.372	.135	.695	1.061	9.875	.294	.000***
<i>Q & A reviews</i>	1.123	3.927	1.508	1.602	.086	.121	.745	2.451	.460	.018**
<i>Description star rating</i>	-2214.891	4964.760	2076.089	2100.388	-.112	.153	-1.067	2.364	.291	.022**
<i>Service star rating</i>	541.045	869.804	1930.592	1414.812	.028	.036	.280	.615	.780	.541
<i>Logistics star rating</i>	-9516.025	19522.318	2569.632	3217.770	-.478	.320	-3.703	6.067	.001***	.000***

** regression is significant at the 0.01 level (2-tailed)

*** regression is significant at the 0.05 level (2-tailed)

IV. DISCUSSION

For H1, the regression result showed that these four variables positively influenced the monthly sales volume of stores on Taobao and Tmall, so the H1a, H1b, H1c, H1d are supported. This result suggests that the quantity of reviews, including additional reviews, picture reviews, video reviews, and Q & A reviews, positively influences consumer purchase behavior on both C2C online market and the B2C online market.

For H2, the regression result showed that the p-values of the description star rating, service star rating, and logistics star rating were smaller for stores on Tmall than for stores on Taobao. Therefore, H2a, H2b, and H2c are supported. The result suggests that shop reputation, including description star rating, service star rating, and logistics star rating, has a higher significant relationship with consumer purchase behavior in the B2C online market than the C2C online market.

The regression result showed there was a significant difference between the C2C online market and the B2C online market. The three variables which measure the shop reputation all had higher significance with monthly sales volume on Tmall than Taobao. Hence, the unusual relationship between shop reputation and monthly sales volume suggested the weakness of the trust and reputation system of the C2C online market. Furthermore, the manager of the C2C online market must investigate that if the shop owners manipulate the online reviews. The result also suggests that the logistics star rating has a significant relationship with consumer purchase behavior in the C2C online market, so the store owners must pay attention to improve the logistics service. Furthermore, the description star rating and logistics star rating have a significant relationship with consumer purchase behavior in the B2C online market, so to improve sales volume, the store owners should improve the quality of the products and the logistics service.

The result of this study conflicted with previous studies. The previous studies supported that descriptive star rating has a significant relationship with monthly sales volume on Taobao (Mo et al. 2015). However, in this study, the regression result showed that descriptive star rating had no significant relationship with monthly sales volume on Taobao. This inconsistency can be possibly caused by the weakness of the trust and reputation system of the C2C online market, and store owners pay to consumers to remove the negative review and post positive reviews (Peng et al. 2016).

Limitations

There are two limitations to this study. First, Taobao and Tmall update data monthly, so this paper only collected 30-days information about the content of online reviews and sales volume and failed to examine the longitudinal influences of the content of online reviews on consumer purchase behavior. Second, the number of stores on Tmall is limited. Therefore, the sample size may be not large enough to entirely reflect the relationship between the content of online reviews and consumer purchase behavior.

Reliability and Validity

This study did the VIF test to establish reliability. TABLE 7 shows the result of the Variance Inflation Factor (VIF) statistic Test for Variables in Taobao. The VIF of video reviews, Q & A reviews, descriptive star rating, service star rating, and logistics star rating were all between 1 to 10, so these five independent variables were free from the multicollinearity.

Variable	VIF	1/VIF
AD	15.92	0.062796
PR	17.90	0.055859
VR	2.02	0.495738
QR	1.67	0.599604
DSR	1.38	0.723546
SSR	1.26	0.793422
LSR	2.08	0.479915

TABLE 8 shows the result of the Variance Inflation Factor (VIF) statistic Test for Variables in Tmall. The VIF of all seven independent variables were between 1 to 10. Hence, these variables were free from the multicollinearity.

Variable	VIF	1/VIF
AD	7.58	0.131884
PR	4.57	0.218639
VR	2.72	0.367169
QR	1.35	0.741061
DSR	2.29	0.436334
SSR	1.85	0.540960
LSR	1.53	0.655451

This paper establishes the internal validity. First, for the relationship between the number of reviews and consumer purchase behavior, the previous study suggested that the willingness to purchase online was influenced by the number of online reviews (Matute et al. 2016). Second, the number of additional reviews was showed to have a positive effect on monthly sales volume (Mo et al. 2015). Therefore, this paper assumes that the number of additional reviews, picture reviews, video reviews, and Q & A reviews positively influence the monthly sales volume. Online market. Hence, consumers may

more depend on reputation reviews in the B2C online market to decide the purchase behavior than the C2C online market. Therefore, this paper assumes that the description star rating, service star rating, and logistics star rating has a higher significant relationship with consumer buying behavior in the B2C online market than the C2C online market.

This paper also establishes the external validity. According to market researches, Taobao is the leader in the C2C online market (Wu 2017), and Tmall has the largest market share in China's B2C online market (CIW Team 2019). Therefore, the result of the relationship between the content of online reviews and consumer purchase behavior examined in the Taobao and Tmall can represent overall China's C2C online market and B2C online market. This study collected the online reviews records and transaction records of 60 stores from Taobao and of 60 stores from Tmall and randomly selected the stores without the preference for stores that has higher monthly sales volume. The mixture of stores that had high monthly sales volume and stores that had low monthly sales volume was a more representative sample.

Theoretical Contribution

This study focuses on exploring the relationship between the content of online reviews and consumer purchase behavior. In China's C2C online market and B2C online market, the newly developed system of online reviews has refined the functions regarding the content of online reviews. Based on these developments, this paper examines the variable of video reviews and the variable of Q & A reviews to measure the quantity of reviews. Hence, the overall quantity of reviews can be more accurate and comprehensive. Also, China's B2C online market has gained a rapid increase and has exceeded the market share of China's C2C online market since 2015. This paper examines if there is a significant relationship between the content of online reviews and consumer purchase behavior on the B2C online market and focuses on comparing the relationship between these two variables in the C2C online market and B2C online market. Therefore, this study examines the relationship between the content of online reviews and consumer purchase behavior in overall e-commerce related to consumers in China. Moreover, the different levels of significance of the relationship between shop reputation and monthly sales volume illustrate that China's C2C online market has a problem with the trust and reputation system.

V. CONCLUSION

This paper investigates the comparison between China's C2C online market and China's B2C online market regarding the relationship between the content of online reviews and consumer purchase behavior. This study collected the online reviews records and monthly sales records of cleanser both on Taobao and Tmall. The regression result of data collected on Tmall shows that additional reviews, picture reviews, video reviews, Q & A reviews, description star rating, and logistics star rating all have a significant relationship with consumer purchase behavior. Whereas, the regression result of data

collected on Taobao shows that only logistics star rating has a significant relationship with consumer purchase behavior. Therefore, to increase sales, the sellers on Taobao should pay attention to improve the quality of logistics service. The comparison between Taobao and Tmall shows that shop reputation, including description star rating, service star rating, and logistic star rating, has a much higher significant relationship with consumer purchase behavior in China's B2C online market than China's C2C online market. This difference illustrates the weakness of the trust and reputation system in the C2C online market. Hence, the manager of the C2C online market must investigate that if the shop owners manipulate the online reviews about the shop's reputation and improve the administration of the trust and reputation system. Besides, this study is a cross-section study and fails to examine the longitudinal relationship between the content of online reviews and consumer purchase behavior. Further research is needed to investigate the longitudinal effect.

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