

IBインカレ2022 準優勝

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How e-WOM moderates the relationship between brand image and willingness to purchase products from emerging country

Abstract

The purpose of this study is to discuss the consumer attitude in developed countries toward electronic brand from emerging countries and clarify the effect of electronic word-of-mouth (e-WOM) for enhancing purchase intentions (PI) of products from emerging countries. Therefore, e-WOM was grouped by reference attitude of e-WOM, and each group's differences were examined. The study investigates the purchasing process of how emerging country of origin (COO) images influence PI through brand image (BI) and how moderation effect of e-WOM works. The results of this study indicate that for consumers who refer to e-WOM, emerging COO image positively enhance PI through BI. Interestingly, the direct negative effect of COO on PI for consumer referring e-WOM. A new view of the irradiation perspective in COO studies is presented in this study.

Keywords: country of origin, benefit-based brand image, electronic word-of-mouth, purchase intention, irradiation perspective

6,943words

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1. Introduction

According to World Trade Organization (2020), the volume of goods trade in the world doubled between 2000 and 2019. Despite the hit of COVID-19, it is expected to see a gradual recovery after 2020. In addition, many multinational companies are aggressively expanding their business overseas (Osaki, 2018). Companies in emerging economies such as China and India, as well as other developing countries, are also globalizing (Yonezawa, 2018). As a result of the globalization of firms and markets, consumers have more frequent opportunities to purchase and evaluate foreign products. Therefore, the country of origin (COO) effect is an important driver of consumer purchasing decisions (Dharmadasa and Chanka, 2019).

Previous studies have investigated the impact of COO effects on purchase intention (PI) and product evaluations (Dharmadasa and Chanka, 2019; Diamantopoulos et al., 2011; Yong, 1997). For example, products produced in developed countries are rated better than those in emerging countries (Wang and Lamb, 1983). In other words, consumers evaluate foreign products based on their COO image. Therefore, to promote their products, companies in emerging countries need to be concerned about the unfavorable COO image.

In fact, Chinese smartphone brands, including Huawei, Xiaomi and so on, have larger market share in the world (Statcounter GlobalStats, 2022). However, in developed countries such as Japan, the U.S. and the U.K., Chinese-made smartphones are not very

popular (Statcounter GlobalStats, 2022). One possible reason for this is that consumers in developed countries do not have a good COO image of emerging countries. This study will clarify how products from emerging countries can be evaluated in developed markets and examine how mitigate poor COO image of emerging country. Even if the parts and designs originate in developed countries, the finished products may be assembled overseas and deployed as brands in emerging countries. In addition, retailers in developed countries may handle products from emerging countries. Therefore, this study is important not only for firms in emerging countries but also for multi-national firms from developed countries.

Nowadays, in addition to globalization, digitalization and the internet usage is also progressing. Therefore, companies need to pay attention to how word-of-mouth (WOM) influence the image of the country. The global e-commerce market volume is rising every year and is expected to continue to grow due to internet penetration and COVID-19 (Ministry of Economy, Trade and Industry, 2021). Electronic word-of-mouth (e-WOM) exists on e-commerce sites, and more than half of consumers rely on e-WOM when purchasing products (MyVoice, 2020). e-WOM is a form of online WOM. It has a powerful influence in forming consumers attitude and PI (Sen and Lerman, 2007). Consumers are also increasingly seeking out e-WOM when they explore products (Zhu and Zhang, 2010). Therefore, management of e-WOM should be considered when companies sell their products online.

In this context, we will clarify how e-WOM and emerging COO images influence consumer behavior. Since both COO and e-WOM are used by consumers to make purchase decisions of foreign products, it can offer meaningful implications toward academic/practical COO and e-WOM research. Specifically, this study aims to clarify the following three points based on the literature review described below.

1. The moderate effect of e-WOM on the relationships between COO image and PI.
2. The relationship between the irradiation perspective of COO image and e-WOM.
3. Differences in PI based on consumers' e-WOM reference styles.

2. Literature review

2-1. Country of origin

COO is the image, reputation, and stereotypes about products from a particular country that consumers have (Nagashima, 1970). This effect is generated by country's history, national identity, and economy, and this strongly influences consumer behavior in international markets (Nagashima, 1970).

Research on COO began in the 1960s in the U.S. (Schooler, 1965). Schooler (1965) investigated how Guatemalan students evaluate products from Guatemala, Mexico, Costa Rica, and El Salvador. The results demonstrated that students rated Mexican and home country products particularly better and that the same product was

rated differently depending on COO. Chao (1993) states that COO is not a one-dimensional concept and that COO may include concepts such as made in, designed in, and assembled in. In other words, COO does not simply represent the country of production but is a multidimensional concept. Lillis and Narayana (1974) considered COO as “made in” and examined the product image among five countries, including Japan and the U.S. Lim et al. (1994) investigated country of production influences consumers’ perceived value, product evaluation, and PI. Chao (1993) conducted an examination of COO image from two dimensions: country of assembly (COA) and country of design (COD). In addition, other dimensions have been investigated in literatures such as country of brand (COB), country of parts (COP), and country of manufacture (COM) (Chao, 2001; Hui and Zhou, 2003; Hulland, 1999). There are various ways of perceiving COO image in literatures.

Chao (1993) notes that companies’ international strategies have made it increasingly difficult for consumers to recognize COO. Osaki (2018) points out that the composition that one company has one production country is no longer valid in many product areas in globalized era, and that even within the same brand, each product is produced in a different country. Thus, consumers may be less aware of the country of manufacture, design, and parts. Considering these literatures and the complexity of the manufacturing process due to globalization, we mainly consider the brand country where the company is based (country of headquarters) as COO. Hereafter, COO is shown as

COB in this study.

2-2. Orthogonality perspective and irradiation perspective

Recently, it has been supported that cognitive factor of COO doesn't always directly influence product judgments and PI (Zolfagharian et al., 2014). COO is a kind of cue information (Johansson et al., 1985; Zolfagharian et al., 2014).

It is problematic that literatures on COO examine models that measure the direct impact of COO on PI. The research investigating indirect effect of COO on PI via benefit-based brand image (BI) of products have paying attention (Diamantopoulos et al., 2011).

The direct influence of both COO and BI on PI is called the orthogonality perspective, and indirect influence of COO on PI via BI is called the irradiation perspective (Diamantopoulos et al., 2011). The orthogonality perspective is considered the mainstream of COO research model before 2011 (Diamantopoulos et al., 2011; Magnusson et al., 2011). On the other hand, the irradiation perspective has also revealed that COO influence BI related to brand attributes, and then BI influences PI (Diamantopoulos et al., 2011; Furukawa and Terasaki, 2018; Keller, 1993). The impact of COO can be mediated by brand and influence consumers' quality perceptions (Han and Terpstra, 1988). The irradiation perspective is recognized to have higher

explanatory power of the model than the orthogonality perspective recently (Furukawa and Terasaki, 2018).

BI captures “consumers’ perceptions of a brand’s characteristics” (De Chernatony and McDonald, 2003: 444). Brand image assumed in the irradiation perspective is similar to BI (Furukawa and Terasaki, 2018). Studies of BI have ever been conducted (Park et al., 1986). There are three aspects of consumers’ images of the benefits: functional, experiential, and symbolic factors (Park et al., 1986).

Functional value (FV) relates to the functionality of a product, such as price and quality (Furukawa and Terasaki, 2018: Park et al., 1986). Symbolic value (SV) relates to the social status of an individual as a desirable group, role, or self-image (Park et al., 1986). Experiential value is those associated with intrinsic stimuli and emotional images (Furukawa and Terasaki, 2018: Park et al., 1986).

COO is used as an extrinsic cue for product evaluation. Therefore, we focus on FV and SV as main key components. In fact, some studies have analyzed the relationship between COO and BI, and the components of BI is focused in FV and SV (Ahmed and d’Astous, 1996: Leclerc et al., 1994). In order to examine consumer behavior in COO, this study also follows to literature, so we focused on FV and SV in this analysis.

2-3. e-WOM

In recent years, with the spread of the internet and the development of e-

commerce sites, the influence of e-WOM has grown.

Consumer conversations, known as WOM, have become one of the most influential sources of information for consumer purchasing decisions (Aoki et al., 2019). Mangold and Faulds (2009) show huge impact of WOM on various aspects of consumer behavior including awareness, information acquisition, opinions, attitudes, purchase behavior, and post-purchase communication and evaluation.

With the development of the internet in recent years, “WOM” has begun to reconsider as e-WOM, which means e-WOM (Sun et al., 2021). e-WOM is positive or negative statements about a company or product made by potential, actual or former customers on the internet (Henning-Thurau et al., 2004). When consumers perceive information about a company or product deeply, they share information by WOM on the internet for acquiring empathy (Mangold and Faulds, 2009).

2-4. Hypothesis development

In this study, we examine how e-WOM affects the orthogonality perspective and the irradiation perspective in COO by dividing the groups based on consumers' e-WOM reference attitudes. We will also test hypotheses based on a mediation analysis of different degrees of e-WOM references.

Kudeshia and Kumar (2017) validate the important role of positive e-WOM in influencing consumers' attitudes toward brand and PI. Positive e-WOM also has the

effect of promoting product sales (Bickart and Schindler, 2001). Thus, when referring to positive e-WOM, it is expected to positively affect BI from COO and, PI from COO.

A study focusing on the percentage of e-WOM on a website revealed that a certain number of negative e-WOM among positive e-WOM is more trustworthy (Doh and Hwang, 2009). Also, it is rather beneficial if there is negative e-WOM among positive e-WOM, which positively affects product sales (Cui and Lui, 2010). Thus, when referring to both positive and negative e-WOM, it is expected to positively affect BI from COO and, PI from COO.

On the other hand, negative e-WOM decreases product sales (Chevalier and Mayzlin, 2006). The presence of negative e-WOM leads to negative attitudes toward the brand (Elseidi and EI-Baz, 2016). Thus, when referring to negative e-WOM, it is predicted to negatively affect BI from COO and, PI from COO.

Previous study has proposed the perspective that COO has a direct impact on PI. Hong and Kang (2006) discussed the direct impact of COO on product evaluations and PI. Lim et al. (1994) examined the direct impact of COO on consumers' direct influence on product evaluations, PI, and perceived quality. Thus, previous studies confirm that COO directly influences PI.

Diamantopoulos et al. (2011) summarized this direct perspective as the "orthogonality perspective" and found it to be less convincing than the irradiation perspective. The "orthogonality perspective" is less persuasive than the irradiation

perspective. However, this study uses e-WOM as a moderated variable in COO model, which is not found in other studies. Therefore, we consider e-WOM to function effectively in PI and attitude formation (Sen and Lerman, 2007). Thus, for consumers referring to positive e-WOM or both positive/negative e-WOM, there may be a positive effect on PI even in the orthogonality perspective, which has been questioned by previous studies. On the other hand, negative e-WOM is predicted to have a negative impact. Therefore, we predict the following hypothesis H1.

H1a: COO have a positive impact on PI in group referring to both positive/negative e-WOM.

H1b: COO have a positive impact on PI in group referring only to positive e-WOM.

H1c: COO have a negative impact on PI in group referring only to negative e-WOM.

Magnusson et al. (2011) clarified that COO influences not only product evaluation but also PI. They used BI as a dependent variable and did not clarify the effect on PI. Diamantopoulos et al. (2011) used the irradiation perspective of COO to determine the impact of COO on BI. Based on these previous studies, Furukawa and Terasaki (2018) stated that BI in the irradiation perspective includes factors such as symbolic value, fashion, quality, and prices, which means SV and FV.

Therefore, for consumers referring to positive e-WOM or both positive/negative

e-WOM, COO is likely to have a positive impact on SV and FV, considering these previous studies and reference attitudes toward e-WOM. On the other hand, negative e-WOM is likely to have a negative impact on the relationships between COO and BI. Given them, we supposed H2 and H3.

H2a: COO have a positive impact on FV in group referring to both positive/negative e-WOM.

H2b: COO have a positive impact on FV in group referring only to positive e-WOM.

H2c: COO have a negative impact on FV in group referring only to negative e-WOM.

H3a: COO have a positive impact on SV in group referring to both positive/negative e-WOM.

H3b: COO have a positive impact on SV in group referring only to positive e-WOM.

H3c: COO have a negative impact on SV in group referring only to negative e-WOM.

Considering the irradiation perspective, the relationship between COO and PI can be mediated by BI (Diamantopoulos et al., 2011). Pancanto et al. (2019) have also pointed out COO can affect PI via BI. Therefore, it is possible that BI has a positive influence on PI in the irradiation perspective. In other words, it is predicted that PI will increase as consumer's perception about SV and FV increase. Also, in terms of e-WOM, a certain number of negative e-WOM among positive e-WOM is more reliable

and increases the number of purchases. Therefore, we thought that group referring to both positive/negative e-WOM may have a higher mediation effect than group referring only to positive e-WOM. When referring only to negative e-WOM, it has a negative impact on product sales and brand attitudes (Chevalier and Mayzlin, 2006; Elseidi and EI-Baz, 2016). Given them, we supposed hypotheses H4~H7. Our conceptual model is shown in figure 1.

H4a: FV have a positive impact on PI in group referring to both positive/negative e-WOM.

H4b: FV have a positive impact on PI in group referring only to positive e-WOM.

H4c: FV have a negative impact on PI in group referring only to negative e-WOM.

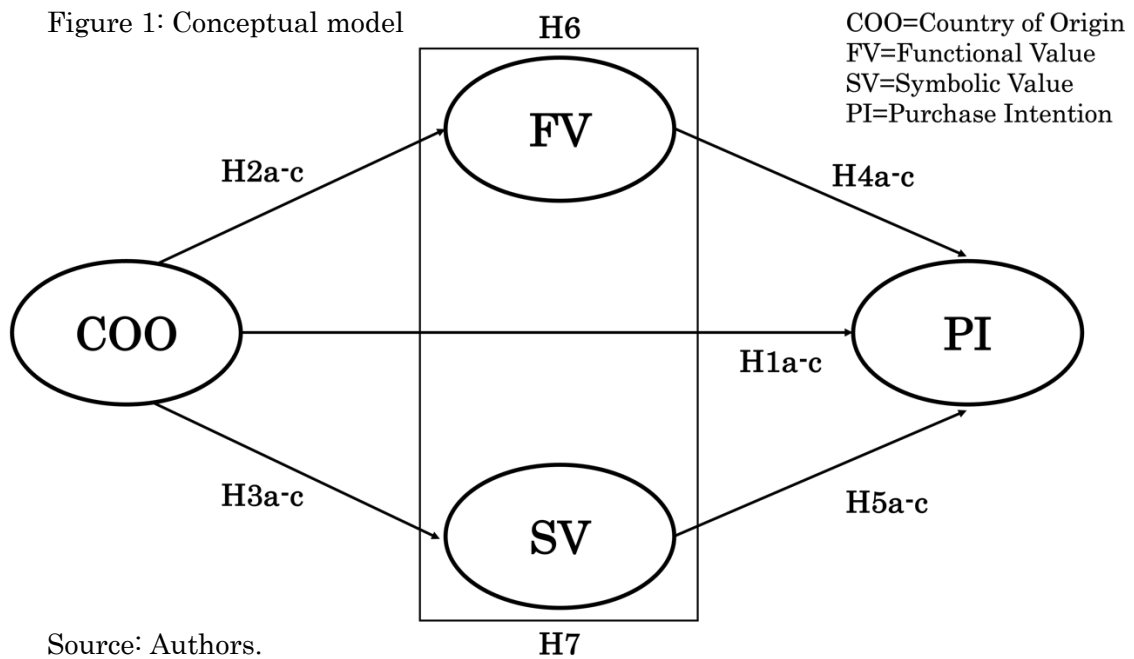
H5a: SV have a positive impact on PI in group referring to both positive/negative e-WOM.

H5b: SV have a positive impact on PI in group referring only to positive e-WOM.

H5c: SV have a negative impact on PI in group referring only to negative e-WOM.

H6: The mediating effect via FV is higher in group referring to both positive/negative e-WOM than in than group referring only to positive e-WOM.

H7: The mediating effect via SV is higher in group referring to both positive/negative e-WOM than in than group referring only to positive e-WOM.



3. Methodology

3-1. Country and product selection

A quantitative survey was conducted to understand how COO image influences consumer behavior and PI. For purchasing electronics, consumers tend to rely on online reviews due to the complicated attributes of electronics (Jung and Kim, 2012). Thus, these goods were found to be appropriate to use to measure consumers' information behavior (Jung and Kim, 2012). Smartphone ownership in 64 countries from 2018 to 2022 was more than 90% of the population (International Telecommunication Union). Smartphones were examined in terms of product ownership and the degree of influence of WOM on consumers' information behavior.

According to Statcounter GlobalStats website, “mobile vendor market share

worldwide (2022)", smartphones branded from China have the highest market share in the world. Given these data, we selected Chinese-made smartphones. China is defined as an emerging country in COO context (Boris, 2019). Thus, this study follow literatures and regarded China as an emerging country.

Japan, the U.S. and South Korea have smartphone manufacturers originating from own countries. Especially, in the U.S. and South Korea, domestic products have the largest market share in their countries (Statcounter GlobalStats, 2022). In Japan, however, smartphones branded from other countries have a larger share than domestic smartphones. Moreover, products brand from emerging countries have a low share. Generally, PI for products brand from emerging countries is lower than products brand from developed countries (Wang and Lamb, 1983). Therefore, we investigate how Japanese consumers react to smartphone branded from Chinese for examining e-WOM effect that suppresses unfavorable image.

3-2. Sampling

We sent questionnaires to 800 Japanese men and women of all ages by using the same allocation sampling method. For measuring constructs, a 7-point Likert scale was used, with "1": very much disagree" and "7": very much agree. The survey was conducted on all Chinese smartphones (Xiaomi, Huawei, Oppo, etc.). We screened sample using the attention check item and used only subjects who responded appropriately in

the analysis. Thus, 609 respondents are used for analysis. The response rate in the survey was 76%. The sample description is shown in table 1. We used 4 measurement scales. The scale of COO by Xiao et al. (2016), BI (FV/SV) by Tsai (2005), PI by Fujiwara and Moriguchi (2021) and e-WOM by Sun et al. (2021) were used.

For translating English scale into Japanese, we used the parallel translation method (Usunier and Lee, 2009). Two native bilinguals translated measurement items and they checked two times following the parallel translation method. This study aims to examine how e-WOM moderates the impact of COO image on PI. For considering the patterns that people refer mainly to positive e-WOM, negative e-WOM or both positive and negative e-WOM, we divided our sample into three groups by using cluster analysis with ward's estimation method. Through this process, 30 respondents who do not refer to e-WOM were removed, and we acquired 579 samples. In previous analysis, we tested measurement reliability and validity. Then, we tested hypotheses by using structural equation modeling (SEM), and mediation analysis. HAD (Version 17.00), Amos (Version: 26.0.0.0) and SPSS (Version: 26.0.0.0) were used to analyze our model. In addition, we controlled age, gender, and income in our model.

Table1: Sample description

	Classification	Number of people	%
Age	15–19	84	13.8
	20–29	89	14.6
	30–39	97	15.9
	40–49	113	18.5
	50–59	114	18.7
	60–69	60	9.9
	70–	52	8.6
Gender	Male	294	48.3
	Female	315	51.7
Material States	Marriage	268	44
	Single	341	56

Source: Authors

3-3. Assessing measurement reliability and validity

It is suggested that the validity of measurements tests in two stages as a pretreatment: 1. exploratory factor analysis and 2. confirmatory factor analysis (Anderson and Gerbing, 1988). An exploratory factor analysis with Promax rotation and maximum likelihood estimation was conducted. Some items showed unstable and extremely low factor loadings. Following to Hair et al. (2014) suggestion, these items were removed from our analysis. Then, we assessed the model's validity using confirmatory factor analysis. The model fit was good: $X^2=125.908$, $df=71$, $p<.01$, $CFI=0.99$, $SRMR=0.03$, $RMSEA=0.04$.

Table2: Convergent validity

Construct	Items	Mean	SD	Factor loading	Item-to-total	cronbach's alpha(α)	composite reliability (CR)	Omega value(ω)	Average variance extracted (AVE)
Country of Origin	COO1	3.38	1.40	0.70	0.78	0.87	0.87	0.87	0.57
	COO2	3.44	1.37	0.78	0.83				
	COO3	3.53	1.33	0.74	0.80				
	COO4	3.32	1.39	0.78	0.81				
	COO6	3.51	1.33	0.81	0.83				
Functional Value	FV1	3.33	1.25	0.81	0.89	0.86	0.86	0.86	0.67
	FV3	3.38	1.34	0.82	0.90				
	FV5	3.34	1.25	0.81	0.87				
Symbolic Value	SV1	2.74	1.32	0.78	0.85	0.84	0.84	0.84	0.64
	SV3	2.90	1.40	0.81	0.88				
	SV4	2.92	1.35	0.83	0.88				
Purchase Intention	PI1	2.42	1.45	0.90	0.93	0.90	0.90	0.90	0.75
	PI2	2.50	1.48	0.81	0.90				
n=579	PI3	2.66	1.49	0.87	0.91				

Source: Authors

It is recommended that the values of AVEs and item-to-total should be greater than 0.50 (Hair et al., 2014). AVEs and item-to-total of our sample were greater than 0.50, exceeding the recommended values for all values. Next, convergent validity was tested using the factor loadings, Cronbach's alpha, ω coefficients, and composite reliability. The values for Cronbach's alpha, ω coefficients and composite reliability (CR) should be greater than 0.70 (Hair et al., 2014). Our sample showed all items met the criterion suggested by Hair et al. (2014). Therefore, the convergent validity was

supported.

We tested discriminant validity among constructs by using the Heterotrait-monotrait (HTMT) correlations. The score of HTMTs across all factors should be less than 0.90 for supporting the discriminant validity (Gold et al., 2001). The score of HTMT in our sample is in table 3. We confirmed discriminant validity because all HTMT values in our sample are less than 0.90.

Table3: Heterotrait-monotrait (HTMT) correlation

	1	2	3	4
1.Country of Origin (COO)				
2.Functional Value (FV)	0.85			
3.Symbolic Value (SV)	0.74	0.85		
4.Purchase Intention (PI)	0.58	0.72	0.88	

Source: Authors.

4. Results

4-1. Result of structural equation model

The results of the SEM are in table 4. The model fit shows good: $X^2=653.579$, $df=339$, $p.<01$, $CFI=0.92$, $TLI=0.90$, $SRMR=0.08$, $RMSEA=0.04$.

Table4: Structural equation modeling

				Standard β	β	Standard Error	p-Value
Positive and Negative (n=285)	COO	→	FV	0.79	0.70	0.08	<01
	COO	→	SV	0.67	0.77	0.09	<01
	FV	→	PI	0.56	0.92	0.23	<01
	SV	→	PI	0.81	1.03	0.12	<01
	COO	→	PI	-0.49	-0.71	0.22	<01
Positive (n=153)	COO	→	FV	0.83	0.96	0.14	<01
	COO	→	SV	0.69	0.78	0.14	<01
	FV	→	PI	-0.20	-0.23	0.21	n.s.
	SV	→	PI	0.73	0.85	0.20	<01
	COO	→	PI	0.28	0.38	0.30	n.s.
Negative (n=141)	COO	→	FV	0.85	0.77	0.09	<01
	COO	→	SV	0.79	0.51	0.07	<01
	FV	→	PI	0.04	0.03	0.13	n.s.
	SV	→	PI	1.16	1.09	0.25	<01
	COO	→	PI	-0.53	-0.32	0.18	n.s.

$X^2=653.579$, $df=339$, $p.<01$, $CFI=.92$, $TLI=.09$, $SRMR=.08$, $RMSEA=.04$

*Positive and Negative (group): consumers who refer to both positive and negative e-WOM, Positive (group): consumers who refer only to positive e-WOM, Negative (groups): consumers who refer only negative e-WOM.

Source: Authors.

Significant positive relationships were observed between COO and FV (Positive and Negative: $\beta=0.70$, $p.<01$, Positive: $\beta=0.96$, $p.<01$, Negative: $\beta=0.77$, $p.<01$), COO and SV (Positive and Negative: $\beta=0.77$, $p.<01$, Positive: $\beta=0.78$, $p.<01$, Negative: $\beta=0.51$,

$p < .01$), and SV and PI (Positive and Negative: $\beta = 1.03$, $p < .01$, Positive: $\beta = 0.85$, $p < .01$, Negative: $\beta = 1.09$, $p < .01$) in all groups. To sum up, H2a-b, H3a-b and H5a-b were supported, while H2c, H3c and H5c were not supported. Significant positive relationships between FV and PI ($\beta = 0.92$, $p < .01$), and negative relationships between COO and PI ($\beta = -0.71$, $p < .01$), were found in the group referring to both positive and negative e-WOM. In the other groups, we could not find significant relationships between FV and PI, COO and PI. Thus, H4a was supported, and H1a-c and H4b-c were not supported.

4-2. Result of mediation analysis

The results of the mediation analysis are shown in table 5. Results showed that the positive effects of COO on PI through FV or SV are confirmed in the groups referring to both positive and negative e-WOM (through FV: $\beta = 0.65$, $p < .01$, through SV: $\beta = 0.79$, $p < .01$). In the groups referring either positive or negative e-WOM, significant COO effect on PI via SV is confirmed (Positive: $\beta = 0.66$, $p < .01$, Negative: $\beta = 0.56$, $p < .01$), whereas mediation effect via FV is not confirmed (Positive: $\beta = -0.22$, $p = n.s.$, Negative: $\beta = 0.02$, $p = n.s.$).

Our data indicate that COO influence on PI via SV is stronger than via FV. Significant mediating effects via SV were observed in all three groups, and the mediating

effect via FV is confirmed only by the group referring to both positive and negative e-WOM. The results of mediation analysis were not supported H6, while supported H7.

Table 5: The effect of mediation

						β	Standard Error	95%CI (Lower)	95%CI (Upper)	p-Value
Positive and Negative (n=285)	COO	→	FV	→	PI	0.65	0.74	0.23	2.28	<01
	COO	→	SV	→	PI	0.79	0.24	0.44	1.35	<01
Positive (n=153)	COO	→	FV	→	PI	-0.22	0.68	-1.55	0.30	<i>n.s.</i>
	COO	→	SV	→	PI	0.66	0.30	0.27	1.59	<01
Negative (n=141)	COO	→	FV	→	PI	0.02	0.16	-0.29	0.31	<i>n.s.</i>
	COO	→	SV	→	PI	0.56	0.29	0.25	1.35	<01

$X^2=653.579$, $df=339$, $p.<01$, $CFI=.92$, $TLI=.09$, $SRMR=.08$, $RMSEA=.04$

*Positive and Negative (group): consumers who refer to both positive and negative e-WOM, Positive (group): consumers who refer only to positive e-WOM, Negative (groups): consumers who refer only negative e-WOM.

Source: Authors.

5. Discussion

This study examined how e-WOM works on the irradiation perspective. Rather than the orthogonality perspective recent studies support the irradiation perspective, in which COO has an indirect impact on PI through BI (Diamantopoulos et al., 2011; Furukawa and Terasaki, 2018; Keller, 1993). e-WOM was validated to mitigate negative product evaluation due to emerging COO. In doing so, this study provides new empirical results developing e-WOM and traditional COO literature.

First, H1a was not supported. On the other hand, H2a, H3a, H4a and H5a were

supported. COO affects consumer product evaluation, and if consumers are not familiar with foreign products, COO has a negative effect on their PI (Ahmed and d'Astous, 1996). In addition, if consumers do not have information about product attributes, their BI is likely to be not important for them. Foreign products are evaluated by concerning COO, such as the country's reputation and stereotypes (Bilkey and Nes, 1982; Meyer, 1981).

Thus, PI of foreign products can be explained by differences in the economic, political, and cultural environment of the product's COO (Bilkey and Nes, 1982). Products from emerging economies are frequently rated as inferior to those from developed countries, according to their COO and degree of economic development (Wang and Lamb, 1983).

Consumers in developed countries are unaware of developments in emerging economies, which contributes to their stereotypes about them (Ahmed and d'Astous, 1996; Johansson and Nebenzhal, 1986). Indeed, consumers in developed countries perceive workers in emerging economies as relatively unsophisticated and incapable of producing high-quality products (Ahmed and d'Astous, 1996). Thus, the negative impact of COO on PI may suggest that Japanese consumers are unfamiliar with Chinese products and evaluate products based on stereotypes about Chinese products. In particular, consumers who refer to both positive and negative e-WOM are likely to be seeking information that provides clues about Chinese products, which means that many Japanese consumers are not familiar with Chinese products. Japanese consumers who

can accurately capture information from a lot of e-WOM and are familiar with Chinese products are likely to perceive FV and SV based on the general COO, suggesting that the irradiation perspective is valid. Furthermore, SV showed a higher mediating effect than FV.

Second, H3b and H5b were supported, but H3c and H5c were not supported. We found even if consumers refer only to negative e-WOM, COO has a positive effect on SV and PI. The presence of a certain percentage of negative e-WOM among positive e-WOM is rather beneficial and has a positive impact on product sales and trust (Cui and Lui, 2010; Doh and Hwang, 2009; Lee et al, 2008). For example, it is predicted that only positive e-WOM will make people rather suspicious of the product and that they will not be able to hedge their risk against the bad aspects of the product. Therefore, the presence of negative e-WOM may improve the credibility of product evaluations during information gathering. It is also suggested that such consumers will have a positive attitude toward the evaluation of emerging country products.

It is expected that these consumers know relatively well about Chinese products. Also, they tend to sort out the necessary information about Chinese products among them.

In general, people who are familiar with the product are also more likely to recognize the difference between COO and BI (Ahmed and d'Astous, 1996; Xiao et al., 2016). It is suggested that consumers referring only to positive or negative e-WOM can

recognize social status based on lifestyle and social life that can be recalled from COO and link this information to product evaluation. Hence, COO can influence PI by mediating SV relating individuals to desirable groups, roles, and self-images. These individuals are already aware of the quality and value of the product itself and likely have a product evaluation from COO. Therefore, mediating FV does not influence PI for them.

Third, H6 was not supported, but H7 was supported. The impact of COO on PI is more effective via SV than via FV. e-WOM is based on consumers' experience of using the product, which helps to gain trust and improve product evaluation (Sugitani, 2009). e-WOM is a social position that includes self, social group, and culture (Tsai, 2005). e-WOM forms identity through evaluation by others, suggesting that consumers referring to e-WOM are effective in mediating SV. Therefore, e-WOM and SV have something in common in terms of third-party evaluation. These findings suggest that consumers who have high trust in e-WOM and refer to e-WOM are stimulated by SV and influence PI when purchasing emerging country products.

6. Conclusion

6-1. Academic implications

This study's findings show academic significance in two ways. First, we were able to identify the impact of COO on PI through FV and SV. In this study, we found

that COO is strongly linked to PI when it is mediated by SV. By considering the mediating effects of FV and SV, and the moderating effect of e-WOM, the specific mechanism of the irradiation perspective was clarified.

Second, we examined COO effect on PI from a psychographic perspective which means e-WOM referencing attitudes. For consumer referring to both positive and negative e-WOM, COO had a direct negative impact on PI. Previous studies have shown that PI for foreign products is affected differently when one is familiar or unfamiliar with the product (Ahmed and d'Astous, 1996; Bilkey and Nes, 1982). In addition, the social credibility of e-WOM is easily formed by the presence of a certain number of negative e-WOM based on the mediating effect of e-WOM by reference attitude (Cui and Lui, 2010; Doh and Hwang, 2009; Lee et al, 2008).

6-2. Practical implication

Considering the results of this study, the following two points are particularly important for practical implications. First, it is important to increase the awareness of emerging country products among consumers in developed countries. It has been found that consumers who are unfamiliar with emerging country products will lower PI even as their appreciation of the emerging country improves (Wang and Lamb, 1983). e-WOM is an effective means of improving credibility of emerging country products, especially a certain number of negative e-WOM providing information to improve PI (Cui and Lui,

2010: Doh and Hwang, 2009: Lee et al., 2008).

Second, it is important to establish appropriate brand positioning of emerging country products by e-WOM. In fact, the reason why improvement in COO does not lead to PI is that brands in emerging countries tend to have low brand positioning, including rival brands. It is necessary to improve BI of emerging country products through e-WOM for the product brand position consumers in developed countries possess. Thus, this enables the existing brand position to change and the brand position of emerging country products to gain the advantage.

Specifically, among smartphone brands such as iPhone, Xperia, and Galaxy, products of emerging country brands need to establish their brand position by using BI. In particular, it is clear that SV have a relatively bigger impact on PI. When e-WOM increases PI for emerging country products, SV effectively works in this process.

6-3. Further research

Although this study has a lot of academical and practical implications, this study also has limitations. First, this study is limited to investigate electronic products from China. In the future, it is necessary to conduct surveys in other countries to make this study more generalized. For instance, it would be interesting to see the difference in the irradiation perspective impact of Indian and Chinese products as emerging economies on Japanese consumers as developed economies.

Second, other product categories should also be investigated. In this study, we examined smartphones, the most generalized of the electronic products and susceptible to influential product in the purchasing process in terms of e-WOM. Therefore, future research should be conducted on other product categories that are more susceptible to the influence of e-WOM in order to make this study more generalized.

Third, this study was limited to consumers referring to e-WOM and did not examine other consumer behaviors about e-WOM. For example, it is necessary to consider diverse attitudes toward the use of e-WOM, such as consumers who transmit e-WOM.

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Construct	Items	Source
General country attribute	GCA1: Koreans are well educated	Xiao et al. (2016)
	GCA2: Koreans emphasize technical/vocational training	
	GCA3: Koreans are hardworking	
	GCA4: Koreans are creative	
	GCA6: Technical skills of the Korean workforce are high	
	FV1: This branded product functions as it has promised	
Perceived quality	FV3: The design of this branded product makes it perform well	Tsai (2005)
	FV5: A speedy and competent service is provided for this branded product	
	SV1: Usage of this branded product will indicate that I am a person with taste	
Symbolic value	SV3: This branded product enhances the perception that I have a desirable lifestyle	Tsai (2005)
	SV4: This product will help me to better fit into my social setting	
Purchase Intention	PI1: I want to purchase a smartphone made in China	Fujiwara (2020)
	PI2: If given the opportunity to purchase a smartphone, I would consider a smartphone made in China	
	PI3: If I purchase a smartphone, I would most likely choose a smartphone made in China	
Positive e-WOM	pWOM1: I seek information about this mobile brand from both the Internet and social media from people who have positive opinions	Sun et al. (2021)
	pWOM2: I believe the Internet and social media are the easiest ways to get positive information about this mobile brand	
	pWOM3: I believe that others have spoken favorably of this mobile brand to me	
	pWOM4: I believe that positive information about this mobile brand is more important to me	
Negative e-WOM	nWOM1: I seek information about this mobile brand from both the Internet and social media from people who have negative opinions	Sun et al. (2021)
	nWOM2: I believe the Internet and social media are the easiest ways to get negative information about this mobile brand	
	nWOM3: I believe that others have spoken unflatteringly of this mobile brand to me	
	nWOM4: I believe that negative information about this mobile brand is more important to me	

Some items showed unstable and extremely low factor loadings, so were removed from our analysis.