The Influence of Cultural Orientation on Electronic Word-of-Mouth in Online Communities

Seongho Park* · Pansoo Kim**†

*GALEB & COMPANY
**School of Business Administration, Kyungpook National University

온라인커뮤니티에서 문화적 성향이 구전에 미치는 영향

박성호 · 김판수**†

*갈렙앤컴퍼니
**경북대학교 경영학부

The importance of eWOM (electronic word-of-mouth) communication through online communities is increasing on a daily basis. This study analyzed how the relationship between eWOM (electronic Word-Of-Mouth) factor and eWOM communication depends on the cultural orientation of users in the online community. The research model was developed based on four cultural orientations of individual affect Social tie and usefulness. The model consists of variables such as social tie and perceived usefulness as predecessors of eWOM, four dimensions of cultural orientation (Horizontal Individualism, Horizontal Collectivism, Vertical Individualism, Vertical Collectivism), and eWOM. The model was tested empirically using the PLS (partial least squares) structure equation model. Survey was conducted for online community users in South Korea. Data was statistically validated whether fits on research model. The study results reveal that Social Tie have a positive effect on Perceived Usefulness. Social Tie and Perceived Usefulness have a positive effect on eWOM. 3 of cultural orientations (HC, VI, VC) have a positive effect on Social Tie. Only one of cultural orientations (HC) have an negative effect on Perceived Usefulness. Especially, horizontal collectivism (HC) shows strong correlation with perceived usefulness, whereas vertical collectivism (VC) shows weak correlation with perceived usefulness andvertical individualism (VI) shows strongly correlation with social tie, whereas horizontal individualism (HI) shows weak correlation with social tie. Based on the study results, customized service strategy could be formulated according to the different vertical styles and various eWOM factors.

Keywords : Cultural Orientation, Word-of-Mouth, Marketing, Online Community

1. Introduction

The spread of the Internet, which began in the late 1990s, has made it easier for consumers to find information about the product or service they are interested in, or to inform others about their own consumption experience. At the time when the Internet was popular, there were many oral activities such as posting personal bulletin board (Bulletin Board System), also called electronic bulletin board [3]. Recently, a social live-streaming platform service has appeared, which allows the public to indirectly experience how an individual uses a product or service in real time [29]. Word of mouth

in the online environment has not been long in history. However, the speed of propagation is incomparably faster than word of mouth and the forms and methods are becoming diverse.

The word of mouth is a preview that is known before the appearance of a product or service and a review which is oral information about the experience of using the product or service. The experience of using platform (shopping mall, payment system, shipping service, etc) is also shared. In particular, the characteristics of the word of mouth are evident in online shopping, which a product cannot be directly viewed or used by customer. It has been proved through previous studies that these various types of word of mouth information have a significant influence on consumers' purchase decisions [10, 15, 26, 28].

It is advantageous for a product or a service provider to significantly reduce marketing costs by allowing consumers to produce and publicize high quality oral information. For this reason, strategies for establishing conditions for active word-of-mouth activities are very helpful to product or service providers [17, 32]. In a rapidly changing online service environment in a short time, it is necessary to continually verify whether the previous research results can be applied equally to the changed service environment.

There are a number of researches that have examined the factors affecting oral activity in online environment. However, there is not much research on the conditions under which these factors act strongly or weakly. This study considers the social ties and the perceived usefulness as a major factor to promote oral activity in online communities. We would like to confirm the relationship between these word of mouth factors and activities in the major online communities in Korea. As a factor influencing the activation or deactivation of these oral factors, we propose an individual's cultural orientation to be shaped by the environment in which a person is born and growing. This will provide a basis for a product or service provider to strategically utilize the online community.

Consumers can easily find information on their smartphone for products they are interested in. However, obtaining 'specific' and precise information through 'Googling' requires a lot of time and effort, and the amount and quality of information are also somewhat different. Online communities created with specific themes like digital cameras, smartphone, and musical instrument are helpful to earn information. Though the explosive growth of social networks such as Facebook and Twitter, online community is still the most active spaces that word-of-mouth effect occur.

Members of an online community voluntarily share their knowledge or experience of a particular product group or topic. The consumer may ask the seller or manufacturer for questions about the product, but may also want to get information through the online community. This is good for both business and consumer. On the technical support side of the seller or manufacturer, the online community can save a lot of people and time.

This study will define the cultural orientation of the individual in four stages and study the effects of each individual's cultural orientation on the community ties and perceived usefulness which will affect the eWOM. The purpose of this study is to investigate the effect of individual cultural orientation on the eWOM activity and its predisposing factors in the online community. The research model uses the causal relationship model of well-known word-of-mouth. Cultural orientations divided into individualism and collectivism, vertical and horizontal characteristics are also used to know relationships between cultural orientation and eWOM effect. PLS-SEM (Structural Equation Model) was used to verity research model. The contribution of this study is to suggest the cultural orientation of the individual as a factor affecting activation of the word of mouth factor so that the service provider can utilize the online community strategically.

The order of this paper is as follows. Section 1 is an introduction, briefly summarizing the background, purpose, method and composition of the study. Section 2 describes the theoretical background of variables and develops hypotheses. Section 3 describes the methodology of this study. In Section 3, the reliability of the sample collection and measurement data, the fitness of the research model, and the research hypothesis were statistically verified. Finally, based on the results of the study in Section 4, the conclusions and limitations of this study, the application point, and future research directions was described.

2. Literature Review

2.1 Electronic Word-of-Mouth (eWOM) in Online Community

Online communities are a purpose-built virtual group of individuals who are interested in common subject. In online community, interaction between each individuals are

supported by functions like BBS (bulletin board system), personal message, comments, etc. Although explosive growth of social media, online community is one of important virtual spaces gives economic and relational value to customers and businesses [8]. Members of online communities share their consumption experiences in forms of review, preview, rating, etc. Studies on knowledge sharing in social media or online communities can also be applied to eWOM. Lee et al. [16] studied about eWOM factors in automobile online community. Lee [18] suggested cosmetic brand online community as a eWOM environment and Liao et al. [20] studied eWOM role in online game online community. Existing studies related to knowledge sharing are focused on which individual characteristics which affect member's voluntary knowledge sharing in online community.

Subjective knowledge and innovativeness have a larger impact on knowledge sharing than e-service level [34]. Individual opinion leadership and trendsetting also considered factor of knowledge sharing in online community [11]. eWOM (electronic Word-of-mouth) is defined as any positive or negative statement made by potential, actual, or former customers about a particular product or company, which is made available to a multitude of people and instruments via the internet [10]. eWOM consists of Opinion Leadership (OL), Opinion Seeking (OS), Pass Along Behavior (PAB) [4, 12, 24]. In this study, however, the role of the eWOM is not distinguished, but the research will be conducted in a direction to measure the comprehensive word-of-mouth intention

2.2 Cultural Orientation

The cultural orientation of the individual is a concept that appears in the work of Triandis, Cham, Bhawuk, Iwao, and Sinha [31] and Triandis and Gelfand [30]. The concept of cultural orientation presented in the study of Triandis and Gelfand [30] classifies people as horizontal individualism, vertical individualism, horizontal collectivism, and vertical collectivism. Individualism and collectivism are divided according to whether they see themselves as independent beings or as members of my group. Vertical or horizontal cultural orientations depend on whether they desire achievement of power and success. Korean, Chinese, and Japanese tend to be collectivism, while Denish, Swedish, French and Americans generally tend to be individualism. But as in the study of Ma et al. [22], it may be difficult to categorize the cultural orientation of an individual into a country, since

the cultural orientation may be influenced by factors such as age, in addition to the country.

The response to a product or service can be different according to the cultural orientation of various individuals. So, the study of the consumer's cultural orientation in the eWOM, which is this paper's topic, was also continued [9, 12, 21]. In this study, the cultural orientation of consumers is not directly effect on eWOM. Instead of that, the cultural orientation of consumers indirectly through social tie and perceived usefulness, which are factors of eWOM, effect on eWOM.

The cultural orientation of various individuals can respond to the provision of goods or services according to their tendency. Therefore, research on analyzing consumer's cultural orientation in eWOM, which is the subject of this study, is going on [9, 12, 21]. In this study, the cultural orientation of consumers was indirectly influenced by eWOM through social tie and perceived usefulness rather than direct factor of eWOM.

2.3 Social Tie and eWOM

Social tie was defined as the amount of time spent together, the degree of intimacy, and the degree of emotion exchange. According to this definition, social tie in an online community is formed by posting articles, leaving answers or giving opinions on a bulletin board to exchange information.

2.4 Perceived Usefulness and eWOM

Perceived usefulness is one of factors of Technology Acceptance Model (TAM) [6]. Perceived usefulness is one of the most important, well-known eWOM factors in an online community that is based on anonymity. Since there is no information about the author of eWOM informations, the person viewing the eWOM information such as post, article, review will evaluate the eWOM information itself rather than who is the author. Many previous studies have shown that when a user sees eWOM information, he or she recognizes that it is useful, the word-of-mouth effect increases [1, 14, 19, 27]. Perceived usefulness and ease of use have significantly positive effect on customer experience in online retailing services [1]. Perceived usefulness used as eWOM factors also. Interaction service and reputation are considered its predecessor in online community. Ku [14] use website design and service quality as perceived ease of use and use-

fulness which are TAM factors. In his study, Traveler's online community is more activated when travelers share knowledge more when its design and service quality is good. Li and Liu [19] only use perceived usefulness except for ease of use. In contrast, Perceived ease of use and usefulness is not significant effect on knowledge sharing on blog [25]. Based on these theoretical considerations, the following hypotheses were set up. <Figure 1> shows research model.
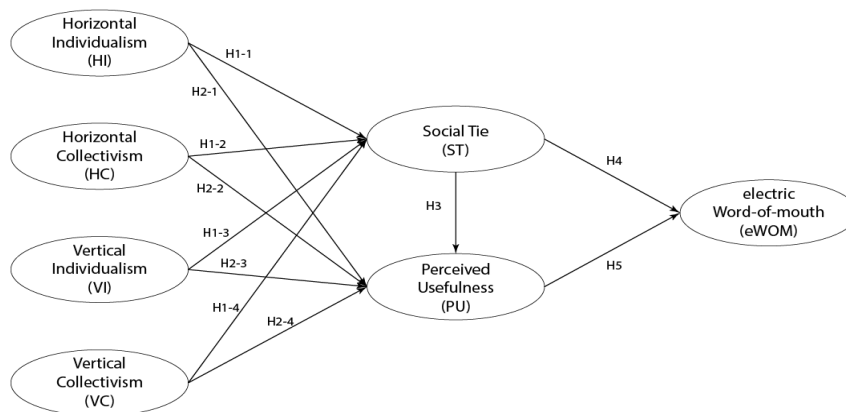
H1-1 : *Horizontal Individualism (HI) is positively related to Social Tie (ST) in an online community.*

H1-2 : *Horizontal Collectivism (HC) is positively related to Social Tie (ST) in an online community.*

H1-3 : *Vertical Individualism (VI) is positively related to Social Tie (ST) in an online community.*

H1-4 : *Vertical Collectivism (VC) is positively related to Social Tie (ST) in an online community.*

H2-1 : *Horizontal Individualsm (HI) is positively related to Perceived Usefulness (PU) in an online community.*

H2-2 : *Horizontal Collectivism (HC) is positively related to Perceived Usefulness (PU) in an online community.*

H2-3 : *Vertical Individualsm (VI) is positively related to Perceived Usefulness (PU) in an online community.*

H2-4 : *Vertical Collectivism (VC) is positively related to Perceived Usefulness (PU) in an online community.*

H3 : *Social tie (ST) is positively related to Perceived Usefulness (PU) in an online community.*

H4 : *Social tie (ST) is positively related to electronic Word-of-Mouth (eWOM) in an online community.*

H5 : *Perceived Usefulness (PU) is positively related to electronic Word-of-Mouth (eWOM) in an online community. The research model based on the above hypothesis is as follows.*

3. Methodology

The selection of the research subjects was made on the subject of hobby (camera, IT product, bicycle, musical instrument) among the online community of 100,000 members of the Republic of Korea. The reason for using the hobbies related community as a subject is that it can be influenced by oral information at the time of purchasing activity. We mainly collect data through bicycle expert community such as DOSSA (dossa.kr), Bikesell (bikesell.co.kr), a professional community for smartphones and IT devices ASAMO (café. naver.com/appleiphone), CLIEN (clien.net), a camera comunity SLRCLUB (slrclub.com), and musical instrument community MULE (mule.co.kr). The distribution of respondents by community is shown in <Table 1>. Bicycle community did not count separately because there were many users using both communities together.

<Table 1> Respondent Configuration Per Each Online Community

Genre	Name(URL)	Frequency	Percentage (%)
Bicycle	Bikesell (bikesell.com)	43	20.7
	DOSSA (corearoadbike.com)		
Mobile Devices	ASAMO (cafe.naver.com/appleiphone)	46	22.1
	CLIEN (clien.net)	23	11.1
	SLRCLUB (slrclub.com)	19	9.1
Musical Instruments	MULE (mule.co.kr)	39	18.7
	TNT (cafe.naver.com/tongandtong)		
ETC	DC inside(dcinside.com)	23	11.1
	Kakaostory, Band	15	7.2
TOTAL		208	100

<Figure 1> Research Model

The disadvantage of this study method is that the cultural characteristics of individuals do not differ greatly in particular countries, regions or ethnic group. However, one of the great advantages of this study is that it has attempted to distinguish different influences according to the cultural characteristics of people, which can be an important factor in word of mouth.

3.1 The Survey Procedure

The questionnaire was distributed to a free board on the electronic bulletin board of the surveyed online community in the form of Google Docs URL. Notified that some of the respondents presented a free coffee coupon through a drawing to prevent duplicate responses and to receive a good response. We also informed that the unanswered response could be excluded from the draw.

Questionnaires (Google Doc) were distributed as URLs through the free boards of each community from June to August 2016. Coffee coupons were presented to some randomly picked respondents. 225 filled questionnaires were returned. Incomplete, unfaithful questionnaire data from participant were removed from the study, then survey data of 208 participants were used in this study.

3.2 The Questionnaire

Participants rate their level of agreement using a 5-point Likert-type scale (1 = Strongly disagree to 5 = Strongly agree) to each questions. The number of questions and sources of each construct are found in <Table 2>. The questions were developed based on the idea of each sources. The number of questions were adjusted through factor analysis.

<Table 2> Construct

Construct		# of Questions	Sources
Cultural Orientation	Horizontal Individualism (HI)	2	[23, 29]
	Horizontal Collectivism (HC)	4	
	Vertical Individualism (VI)	3	
	Vertical Collectivism (VC)	3	
Social tie	Social tie (ST)	4	[17]
Perceived Usefulness	Perceived Usefulness	5	[16]
eWOM	Opinion Seeking (OS)	3	[2, 4, 5, 7, 12]

3.3 The Sample Demographics

It can be confirmed that the ratio of male is high due to characteristics of hobbies such as bicycle, musical instrument and camera. The proportion of those in their 20s was

the largest at 63%, and the proportion of those in their teens was the lowest at 6.3%. Most participants are using online community through smartphone rather than desktop. The demographics of sample are found in <Table 3>.

<Table 3> Profile of the Participants

Category	Sub-Category	Frequency	Percentage (%)
Gender	Male	125	60.1
	Female	83	39.9
Age	10 to 19	13	6.3
	20 to 24	92	44.2
	25 to 29	39	18.8
	30 to 34	13	6.3
	35 to 39	14	6.7
	40 and over	37	17.8
Education	Up to high school	38	18.3
	Bachelor degree	158	76
	Postgraduate degree above	12	5.8
Means of using online community	Desktop	12	5.8
	Smartphone	192	92.3
	Tablet	4	1.9
	total	208	100

4. Results

4.1 Measurement Model Analysis

Prior to verifying the research hypothesis of this study, the reliability and validity of the measurement model were verified. In the analysis of covariance-based structural equation model, Cronbach's Alpha value is used for verifying the reliability of measured item, but the use of CR (Composite Reliability) value is more appropriate for verification of PLS (Partial Least Square) [13]. A CR value of 0.7 or more is recommended. The AVE (Average Variance Extracted) value is recommended to be 0.5 or more. The CR and AVE values of the measurement items used in this study are shown in <Table 4> and all of them meet the recommendation criteria.

<Table 4> Reliability and Validity of the Model

	CR (recommended > 0.7)	AVE (recommended > 0.5)
HI	0.826	0.704
HC	0.836	0.567
VI	0.851	0.660
VC	0.787	0.560
Social Tie	0.856	0.598
Perceived Usefulness	0.926	0.716
eWOM	0.935	0.593

The discriminant validityof each variable, which indicates the degree to which the concept of each potential variable presented in the research model is clearly distinguished, can be seen by comparing the load value of each factor and the cross-loading value [13, 33]. In <Table 5>, we can see that the loading value of each factor is larger than the cross-loading value with other factors in other cells. Based on these result, we can see that the discriminant validity of each variables.

<Table 5> Factor Loadings and Cross Loadings

Construct		HI	HC	VI	VC	ST	PU	eWOM
HI	HI1	**0.874**	0.218	0.084	0.024	0.138	0.126	0.117
	HI2	**0.801**	0.176	0.172	0.086	0.127	0.083	0.093
HC	HC1	0.177	**0.790**	0.004	0.120	0.193	-0.026	0.156
	HC2	0.179	**0.844**	0.049	0.102	0.225	-0.025	0.098
	HC3	0.142	**0.517**	-0.015	0.055	0.068	-0.062	0.007
	HC4	0.219	**0.814**	-0.022	0.070	0.199	-0.013	0.087
VI	VI1	0.104	-0.064	**0.839**	0.006	0.134	0.090	0.250
	VI2	0.137	0.044	**0.917**	0.142	0.268	0.214	0.285
	VI3	0.110	0.010	**0.659**	0.158	0.105	0.118	0.212
VC	VC1	0.037	0.050	0.113	**0.884**	0.230	0.162	0.147
	VC2	0.062	0.051	0.148	**0.776**	0.152	0.088	0.111
	VC3	0.053	0.259	0.023	**0.547**	0.113	0.037	0.081
ST	ST1	0.090	0.057	0.194	0.147	**0.783**	0.174	0.297
	ST2	0.170	0.046	0.167	0.263	**0.787**	0.380	0.379
	ST3	0.076	0.194	0.112	0.075	**0.695**	0.165	0.322
	ST4	0.131	0.361	0.227	0.194	**0.824**	0.496	0.500
PU	PU1	0.150	-0.050	0.112	0.117	0.445	**0.862**	0.428
	PU2	0.091	-0.036	0.130	0.142	0.389	**0.894**	0.465
	PU3	0.093	-0.034	0.150	0.123	0.416	**0.868**	0.455
	PU4	0.072	-0.009	0.217	0.113	0.334	**0.858**	0.523
	PU5	0.135	-0.008	0.218	0.123	0.271	**0.741**	0.406
eWOM	OS1	0.046	0.029	0.230	0.060	0.367	0.454	**0.758**
	OS2	0.073	-0.006	0.173	0.131	0.347	0.513	**0.769**
	OS3	0.059	0.045	0.271	0.094	0.306	0.438	**0.693**
	OL1	0.093	0.054	0.246	0.205	0.375	0.430	**0.813**
	OL2	0.078	0.076	0.278	0.227	0.431	0.410	**0.795**
	OL3	0.105	0.060	0.317	0.271	0.440	0.370	**0.759**
	PAB1	0.183	0.197	0.212	-0.012	0.435	0.276	**0.647**
	PAB2	0.113	0.165	0.258	0.112	0.442	0.408	**0.835**
	PAB3	0.112	0.226	0.158	0.021	0.379	0.393	**0.784**
	PAB4	0.122	0.170	0.241	0.072	0.396	0.435	**0.825**

Notes : The boldface numbers in the diagonal are AVE(Average Variances Extracted);
HI = Horizontal Individualism, HC = Horizontal Collectivism, VI = Vertical Individualism, VC = Vertical Collectivism, ST = Social Tie, PU = Perceived Usefulness.

The discriminant validity can also be judged by comparing the square root of each potential variable with the correlation coefficient between each latent variable. If the squared value of all correlation coefficients is smaller than the AVE value of the corresponding variable, the corresponding measurement model can be said to have discriminant validity. As a result of the validation of the discriminant validity of the latent variables used in this study, it was confirmed that there is sufficient discriminant validity in this measurement model because the square root of AVE value of all variables is larger than the correlation coefficient with other latent variables. In <Table 6>, we can see that the boldface numbers in the diagonal are larger than the correlation coefficient values in other cells.

<Table 6> Discriminant Validity

	HI	HC	VI	VC	ST	PU	eWOM
HI	**0.839**						
HC	0.237	**0.753**					
VI	0.147	0.012	**0.812**				
VC	0.061	0.118	0.134	**0.748**			
ST	0.158	0.241	0.235	0.233	**0.775**		
PU	0.127	-0.033	0.193	0.146	0.440	**0.846**	
eWOM	0.143	0.179	0.299	0.145	0.511	0.467	**0.823**

4.2 Structural Model Analysis

SmartPLS v.3.2.4 was used to perform PLS-SEM analysis. 5,000 of sample set was created to perform bootstrapping. algorithm. To verify the measured data sets fit statistically with the research model, a GoF (Goodness of Fit) and F square (f^2) values were obtained according to Wetzels [35]. GoF(a global fit measure) is calculated with geometric mean of AVE and R^2. Its ranges from 0.00 to 1.00. Calculating GoF is as follows : $\sqrt{AVE \times \overline{R^2}}$. f^2 means effect sizes for R square. It is also calculated with geometric mean of R^2. Calculating f^2 of our model is as follows : $R^2 \div (1-R^2) = 0.341$. According to Wetzels [35], GoF criteria for each R^2 sizes (small = 0.02, medium = 0.13, large = 0.26) has been proposed : GoF$_{small}$ = 0.1, GoF$_{medium}$ = 0.25, GoF$_{large}$ = 0.36. In this PLS model, Geometric mean of R^2 is 0.254, then GoF is 0.400.<Table 7> provides goodness of fit of this model. We obtained f^2 value 0.341, so effect size of $R^2$is large. We obtained GoF value of 0.400, which exceeds the cut-off value of 0.36 for large effect size of R^2 and allow us to conclude that measured data set fit statistically with the proposed research model in this study.

<Table 7> Goodness of Fit of the Model

	Description	Size	Criteria	Model value
f^2	$f^2 = \overline{R^2} \div (1 - \overline{R^2})$	Small	0.02	**0.341**
		Medium	0.13	
		Large	0.26	
GoF	$GoF = \sqrt{\overline{AVE} \times \overline{R^2}}$	Small	0.1 or greater	**0.400**
		Medium	0.25 or greater	
		Large	0.36 or greater	
Average of R^2				**0.254**
Average of AVE				**0.628**

The results of the proposed structural model are summarized in <Figure 2> and<Figure 8>.

In <Table 8>, we can see the test results from SmartPLS. As we can observe in <Table 8>, most of proposed hypotheses are fully accepted at alpha value is 0.01, with the exception of H1-1, H2-1, H2-3 and H2-4. H2-2 shows negative relationships.
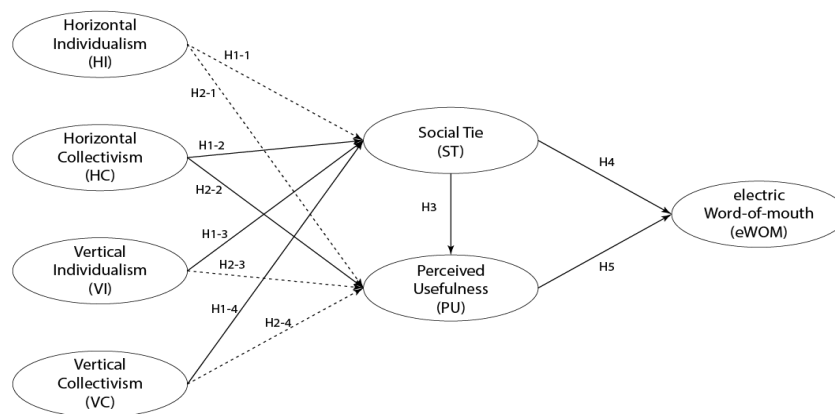
5 Discussion and Conclusion

5.1 Discussion

The results of the study are summarized as follows. First, horizontal collectivism (HC), vertical individualism (VI) and vertical collectivism (VC) appears to have a positive influence on social ties. Horizontal Individualism (HI) was found to have no statistically significant effect on social ties. This means that a large number of people in an online community live and feel a sense of belonging and bond while performing an online community activity, but a user with a horizontal

<Table 8> Hypothesis Testing Result

Hyp.		Path coefficient	Std. error	T value	Test results
H1-1	HI→ST	0.071	0.072	0.986	not accepted
H2-1	HI→PU	0.083	0.061	1.352	not accepted
H1-2	HC→ST	0.201	0.069	2.931	accepted(+***)
H2-2	HC→PU	-0.165	0.067	2.472	accepted(-***)
H1-3	VI→ST	0.198	0.063	3.148	accepted(+***)
H2-3	VI→PU	0.073	0.068	1.074	not accepted
H1-4	VC→ST	0.178	0.064	2.798	accepted(+***)
H2-4	VC→PU	0.048	0.063	0.771	not accepted
H3	ST→PU	0.439	0.060	7.349	accepted(+***)
H4	ST→eWOM	0.379	0.070	5.417	accepted(+***)
H5	PU→eWOM	0.301	0.073	4.109	accepted(+***)

*t = 1.645 is significant at 0.050, **t = 1.96 is significant at 0.025, ***t = 2.326 is significant at 0.010.

individualism may not feel a sense of belonging and bond in the online community. Especially, vertical individualism (VI) shows strongly correlation with social tie, whereas horizontal individualism (HI) shows weak correlation with social tie. This result tells us different characteristics between horizontal and vertical individualism. Horizontal individualism (HI) tries to be distinct and separate from others and self-reliance but vertical individualism (VI) tries to improve individual status via competition and seek achievement or power through social ties.This can make differences toward social tie.

Second, the cultural orientation to perceived usefulness has a negative effect on the perceived usefulness of horizontal collectivism (HC). The remaining horizon individualism (HI), vertical individualism (VI) and vertical collectivism (VC) orientations did not have a statistically significant effect on perceived usefulness. This means that users whose cultural orientations are horizontal collectivism in the online

<Figure 2> Test Results

community may not regard the oral information handled by the online community as useful. In these cases, it can be inferred that you are not seeking help from external information about products or services you have not tried or experienced. Especially, horizontal collectivism (HC) shows strong correlation with perceived usefulness, whereas vertical collectivism (VC) shows weak correlation with perceived usefulness. This result tells us different characteristics between horizontal and vertical collectivism. Horizontal collectivism (HC)pursue common goals with others, but vertical collectivism (VC) try to maintain and protect in-group status, deference to authorities, conformity and harmony. It makes difficult to have perceived usefulness.

Third, although vertical individualism (VI) and vertical collectivism (VC) show strongly correlation with social tie, they show weak correlation with perceived usefulness. It shows vertical orientation makes social tie tight but weaken feeling of usefulness.

Fourth, social ties have a positive effect on perceived usefulness. This is because, as has been proved in many previous researches, the stronger the association among community members, the more equitable the community they are with, the trust and usefulness of the information in the community. This information can be inferred from reference.

Fifth, social ties and perceived usefulness have a high positive effect on eWOM. This is a key factor in promoting eWOM by members' sense of belonging and belonging within the community. It also promotes more active exchange of eWOM information through activities that encourage members' sense of belonging and belonging (offline meeting, interworking with SNS) Suggesting that it can happen. In addition, perceived usefulness is a key word of mouth if you have not experienced or used it yourself, but you can use it as a reference for your own purchasing decision. Online community service providers and business owners who want to use the online community as their primary marketing channel are encouraged to use a professional reviewer or systematic enhancement optimization of post editor such as improvement of photo and video attachment function to ensure that as many people as possible are available.

5.2 Contributions and Limitations

It is meaningful that this study attempted to study the activity and word of mouth in the community with individual cultural orientation. The result of this study is different from the original intention. Such as, horizontal collectivism has negative result on perceived usefulness. The results of this study can be attributed to various marketing attempts by spreading the concept to countries and peoples with different cultural characteristics around the world. This study suggests the following suggestions.

First, this study has a contribution to show that factors of eWOMsuch as cultural orientations are applied not only in SNS but also in online community. In this way, it is necessary to study periodically and continuously whether it is applied to current online community environment or currently active SNS environment in case of a word-of-mouth test that has been sufficiently verified in the past.

Second, this study limited the online community users in Korea in analyzing the cultural orientation, so we could not find out about the unique tendency of those who enjoy online community activities. In the future, it is necessary to analyze the tendency of people who are immersed in online community by analyzing the difference of cultural orientation between those who enjoy online community activities and those who do not.

Third, in the case of cultural orientation, research is often conducted on people from different countries living in different cultures. However, since this study limited the research subject to Korean people. There is a limit to make. In the future study, it is necessary to investigate what kind of results are obtained when the same model is studied in major online communities in other countries, and how they differ from Korea.

References

[1] Ahn, T., Ryu, S., and Han, I., The impact of Web quality and playfulness on user acceptance of online retailing, *Information & Management*, 2007, Vol. 44, No. 3, pp. 263-275.

[2] Bertrandias, L. and Goldsmith, R.E., Some psychological motivations for fashion opinion leadership and fashion opinion seeking, *Journal of fashion marketing and management : an international journal*, 2006, Vol. 10, No. 1, pp. 25-40.

[3] Cheung, C.M. and Lee, M.K., What drives consumers to spread electronic word of mouth in online consumer-opinion platforms, *Decision Support Systems*, 2012, Vol. 53, No. 1, pp. 218-225.

[4] Chu, S.-C. and Kim, Y., Determinants of consumer enga-

gement in electronic word-of-mouth (eWOM) in social networking sites, *International Journal of Advertising*, 2011, Vol. 30, No. 1, pp. 47-75.

[5] Cosmas, S.C. and Sheth, J.N., Identification of opinion leaders across cultures : An assessment for use in the diffusion of innovations and ideas, *Journal of International Business Studies*, 1980, Vol. 11, No. 1, pp. 66-72.

[6] Davis, F.D., Perceived usefulness, perceived ease of use, and user acceptance of information technology, *MIS Quarterly*, 1989, Vol. 13, No. 3, pp. 319-340.

[7] Eliashberg, J. and Shugan, S.M., Film critics : Influencers or predictors?,*The Journal of Marketing*, 1997, Vol. 61, No. 2, pp. 68-78.

[8] Faraj, S., von Krogh, G., Monteiro, E., and Lakhani, K.R., Special Section Introduction-Online Community as Space for Knowledge Flows, *Information Systems Research*, 2016, Vol. 27, No. 4, pp. 668-684.

[9] Fong, J. and Burton, S., A cross-cultural comparison of electronic word-of-mouth and country-of-origin effects, *Journal of Business Research*, 2008, Vol. 61, No. 3, pp. 233-242.

[10] Hennig-Thurau, T., Gwinner, K.P., Walsh, G., and Gremler, D.D., Electronic word-of-mouth via consumer-opinion platforms : What motivates consumers to articulate themselves on the Internet?, *Journal of Interactive Marketing*, 2004, Vol. 18, No. 1, pp. 38-52.

[11] Jadin, T., Gnambs, T. and Batinic, B., Personality traits and knowledge sharing in online communities, *Computers in Human Behavior*, 2013, Vol. 29, No. 1, pp. 210-216.

[12] Kim, P., The Effect of Cultural Dimension on Consumer's eWOM(electronic word-of-mouth) in Social Network Sites. [The Effect of Cultural Dimension on Consumer's eWOM(electronic word-of-mouth) in Social Network Sites, *Korean Journal of Business Administration*, 2013, Vol. 26, No. 11, pp. 2831-2849.

[13] Koo, D.-M. and Lee, J.-H., Inter-relationships among dominance, energetic and tense arousal, and pleasure, and differences in their impacts under online vs. offline environment, *Computers in Human Behavior*, 2011, Vol. 27, No. 5, pp. 1740-1750.

[14] Ku, E., Distributed fascinating knowledge over an online travel community, *International Journal of Tourism Research*, 2014, Vol. 16, No. 1, pp. 33-43.

[15] Lee, J. and Baek, D., The effect of Smartphone Purchasing Determinants on Repurchase Intention, *Journal of*

Society of Korea Industrial and Systems Engineering, 2017, Vol. 40, No. 2, pp. 1-12.

[16] Lee, J., Park, S.Y., Lee, H.S., and Kang, M., The Effects of On-line Community Activities and Relationship Building on Word-of-Mouth and Purchase Behavior, *Journal of Distribution Research*, 2009, Vol. 14, No. 4, pp. 23-47.

[17] Lee, J., Ryu, J., Lee, S., Oh, H., and Cho, J., The Influence of After-Sales Service Quality on Customer Satisfaction and Loyalty in Mobile Phone, *Journal of Society of Korea Industrial and Systems Engineering*, 2017, Vol. 40, No. 4, pp. 87-95.

[18] Lee, S., A Study about the Impacts of on-line Community Behaviors and Individual Characteristics on WOM Effects, *Korean Management Review*, 2008, Vol. 37, No. 4, pp. 957-988.

[19] Li, H. and Liu, Y., Understanding post-adoption behaviors of e-service users in the context of online travel services, *Information and Management*, 2014, Vol. 51, No. 8, pp. 1043-1052.

[20] Liao, S.H., Wu, C.C., Widowati, R., and Chen, M.Y., Relationships between brand awareness and online word-of-mouth : an example of online gaming community, *International Journal of Web Based Communities*, 2012,Vol. 8, No. 2, pp. 177-195.

[21] Luo, C., Wu, J., Shi, Y. and Xu, Y., The effects of individualism–collectivism cultural orientation on eWOM information, *International Journal of Information Management*, 2014, Vol. 34, No. 4, pp. 446-456.

[22] Ma, J., Hu, Z., and Gocłowska, M.A., Cultural orientation in China : Differences across five generations of employees, *Social Behavior and Personality : an international journal*, 2016, Vol. 44, No. 4, pp. 529-540.

[23] Nelson, M.R. and Shavitt, S., Horizontal and vertical individualism and achievement values : A multimethod examination of Denmark and the United States, *Journal of Cross-Cultural Psychology*, 2002, Vol. 33, No. 5, pp. 439-458.

[24] Norman, A.T. and Russell, C.A., The pass-along effect : Investigating word-of-mouth effects on online survey procedures, *Journal of Computer-Mediated Communication*, 2006, Vol. 11, No. 4, pp. 1085-1103.

[25] Papadopoulos, T., Stamati, T., and Nopparuch, P., Exploring the determinants of knowledge sharing via employee weblogs, *International Journal of Information Management*, 2013, Vol. 33, No. 1, pp. 133-146.

[26] Richins, M.L., Negative Word-of-Mouth by Dissatisfied Consumers : A Pilot Study, *Journal of Marketing*, 1983, Vol. 47, No. 1, pp. 68-78.

[27] Serra Cantallops, A. and Salvi, F., New consumer behavior : A review of research on eWOM and hotels, *International Journal of Hospitality Management*, 2014, Vol. 36(Supplement C), pp. 41-51.

[28] Shin, S., Organizational commitment and organizational creativity : The moderating effect of training motivation, *Journal of the Korea Academia-Industrial Cooperation Society*, 2018, Vol. 19, No. 10, pp. 206-213.

[29] Sohn, J. and Kim, J., Attributes of Social Networking Services : A Classification and Comparison, *Journal of Society of Korea Industrial and Systems Engineering*, 2018, Vol. 41, No. 1, pp. 24-38.

[31] Triandis, H.C. and Gelfand, M.J., Converging measurement of horizontal and vertical individualism and collectivism, *Journal of Personality and Social Psychology*, 1998, Vol. 74, No. 1, pp. 118-128.

[30] Triandis, H.C., Chan, D.K.-S., Bhawuk, D.P., Iwao, S., and Sinha, J.B., Multimethod probes of allocentrism and idiocentrism, *International Journal of Psychology*, 1995, Vol. 30, No. 4, pp. 461-480.

[32] Villanueva, J., Yoo, S., and Hanssens, D. M., The impact of marketing-induced versus word-of-mouth customer acquisition on customer equity growth, *Journal of marketing Research*, 2008, Vol. 45, No. 1, pp. 48-59.

[33] Wetzels, M., Odekerken-Schröder, G., and Oppen, C.V., Using PLS Path Modeling for Assessing Hierarchical Construct Models : Guidelines and Empirical Illustration, *MIS quarterly*, 2009, Vol. 33, No. 1, pp. 177-195.

[34] Yuan, D., Lin, Z., and Zhuo, R., What drives consumer knowledge sharing in online travel communities? : Personal attributes or e-service factors?,*Computers in Human Behavior*, 2016, Vol. 63, pp. 68-74.

ORCID

Seongho Park | http://orcid.org/0000-0002-0847-9023
Pansoo Kim | http://orcid.org/0000-0003-3424-1497