

A Test of the Psychological Distance Effect for Online Travel Reviews Based on Construal-Level Theory

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ABSTRACT

This study's objective is to use the construal-level theory (CLT) to explore the effect of the utility of online travel reviews on tourists' perception. To accomplish this goal, online travel reviews are divided into two different categories based on concreteness, and the usefulness of each review is compared with the temporal dimension of psychological distance. The results show that close future tourists are more influenced by concrete reviews than abstract reviews; however, the far future tourists are more influenced by abstract reviews than concrete reviews. Based on these results, theoretical and practical implications are discussed, and suggestions are made for future research.

Keywords: Online Travel Review, Review Usefulness, Construal-level Theory, Review Content Characteristics, Temporal Distance

I . Introduction

Online reviews alleviate consumers' concerns regarding the limitations of time and distance and allow them to find a huge quantity of reliable information (Wang et al., 2002). Thus, online reviews are considered crucial communication channels (Lim and Van Der Heide, 2015). Generally, the importance

of an online review is higher in the tourism industry because of the intangibility of the tourism product (Litvin et al., 2008). The prominence of online travel reviews facilitated the emergence of eMediary (Buhalis and Licata, 2002), which is an online review website that specializes in travel experiences (Vermeulen and Seegers, 2009). The review platform has become a gateway of travel-related information

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for potential tourists as well as an essential marketing channel for global destinations (Xiang and Gretzel, 2010). As the importance of online travel reviews is being recognized, a number of studies regarding online travel reviews have been conducted with a variety of purposes in various settings (Liu and Park, 2015; Mudambi and Schuff, 2010; Racherla and Friske, 2012; Vermeulen and Seegers, 2009; Ye et al., 2009). Although many studies have conducted research concerning online travel reviews, the influence of review usefulness on the traveler's perception has been not been thoroughly investigated. Several studies have found that useful online travel reviews increase travelers' expectations or intentions to visit, confirming the importance of online reviews in hospitality (Lee et al., 2011; Mudambi and Schuff, 2010). However, these cases simplify the online review usefulness concept by arguing that most individuals find online reviews useful regardless of their situation. According to several theories explaining individual information perception, even the same information can be interpreted and perceived differently by individuals depending on their present situation (Lieberman and Trope, 1998). The construal-level theory (CLT) argues that individuals' interpretation of and preferences about information vary according to psychological status (Dhar and Kim, 2007). Based on this theory, potential travelers who tend to read online travel reviews for their future trips, a few situational factors affect future travelers' recognition of information, such as, how far the destination is, how much time is left before departure, and how familiar they are with the destination (Lieberman and Trope, 1998). Actually, some studies verify the use of the CLT in the tourism context, but the application of CLT to the online travel review context has not yet been attempted to our knowledge (Walmsley and Jenkins, 1992; Young, 1999). Therefore, the purpose

of this study is to examine the impact of online travel review's usefulness using CLT. To accomplish this goal, this research separates online travel reviews into two different categories, concrete online travel reviews and abstract online travel reviews. Then, the review usefulness of each review is compared with the temporal distance, adopted from CLT. In the literature review, the previous research on online travel reviews and CLT is examined, and the hypotheses and research model are proposed. In the methodology, the research design, the measurement development and the data collection are explained, and research results are provided. After the interpretation of research results, theoretical and practical implications are discussed. Finally, research limitations and future research areas are suggested.

II. Literature Review

2.1. Online Review in Tourism

The influence of online reviews is increasing because customers tend to perceive information from actual buyers of the products as more reliable (Herr et al., 1991). As virtual communities and travel review websites are gaining popularity, more tourists describe, share, and relive their travel experiences through internet channels (Tussyadiah and Fesenmaier, 2009). In fact, Gretzel and Yoo (2008) found that online travel reviews significantly influence tourists' decisions, particularly regarding accommodations. This trend can be explained by the fact that intangible tourism products - in this case, the actual travel experience - that are difficult to evaluate before consumption (Litvin et al., 2008). Thus, the impact of online travel reviews are examined with a variety of research themes. Ye et al. (2009) found a positive

correlation between online hotel review and the business performance of hotels. Vermeulen and Seegers (2009) argued that the exposure to online reviews regarding a specific hotel increases the possibility that the hotel will be included in the consumer's consideration set. Recently, many studies have analyzed review usefulness to ascertain the significant traits of useful online reviews. Review usefulness is conceptualized to explain the influence of online reviews on the consumer's perception or behavior (Chen and Xie, 2008). Racherla and Friske (2012) compared the impact of messenger factors and message factors on online reviews to review usefulness. Liu and Park (2015) examined the influence of various traits included in online reviews (i.e., identity disclosure, expertise, reputation, review star rating, review length, customer perceived enjoyment, and review readability) to review usefulness in a restaurant setting. Mudambi and Schuff (2010) determined the effects of a customer review's review extremity and review depth to review helpfulness in online reviews for search goods and in online reviews for experience goods. Despite a number of studies on review usefulness, the research investigating the influence of review usefulness on the reader's perception or behavioral intention is rarely conducted in the tourism context. Therefore, this study will fill this gap by evaluating the impact of online travel review usefulness on tourists' expectations and visit intentions.

2.2. Construal-Level Theory

The CLT explains an individual's mental interpretation process (Dhar and Kim, 2007). CLT argues that people tend to have a low-level construal regarding the stimulus perceived as psychologically close; conversely, individuals are likely to have a high-level construal regarding psychologically far stimulus

(Dhar and Kim, 2007). In the theory, psychological distance is conceptualized as a subjective experience in which an object or event is close or far in temporal dimension, spatial dimension, or social dimension (Liberman and Trope, 1998). A few researchers have developed a theory through the integration of psychological distance with an individual's preference (Trope et al., 2007). These researchers argue that if an individual anticipates a close future event, he or she prefers concrete information because of his or her low-level construal regarding the event; however, if an individual anticipates a far future event, he or she prefers abstract information because of his or her high-level construal regarding the event (Liberman and Trope, 1998). Certain tourism studies demonstrate these propositions of CLT. Walmsley and Jenkins (1992) found that tourists are likely to use more abstract features than the destination's residents to perceive the destination attractions due to the visitor's high-level construal resulting from the far spatial distance. Similarly, Young (1999) confirmed that international travelers' preferences for abstract destination information are higher than those of domestic travelers because of the difference in spatial distance between the foreigners and local people.

Such propensities can be understood using the uncertainty reduction theory (URT) as well, which explains the human behavior of interpersonal communication (Berger and Calabrese, 1975). Among the seven axioms suggested in the URT, axiom 3 proposes that a high level of uncertainty triggers an increase in information search behavior (Berger and Calabrese, 1975). As the URT was being confirmed with the concept of motivation, Kellermann and Reynolds (1990) supplemented axiom 3 by indicating that the information seeking behavior is caused by how much an individual wants to know

<Table 1> Hospitality and Tourism Research Based on CLT

Authors	Type of Psychological Distance Used	Key Results
Chou and Lien (2012)	Spatial Distance	When the destination is spatially far, consumers prefer non-monetary incentives and promotion-framed appeals, but when the destination is spatially close, monetary incentives and prevention-framed appeals were preferred.
Kim et al. (2016)	Temporal Distance Spatial Distance	Tourists planning to travel in the far future to far destinations tend to focus more on abstract advertising messages, but those who plan to travel in the near future to close destinations preferred concrete ones.
Massara and Severino (2013)	Experiential Distance Spatial Distance Socio-Cultural Distance	Heritage travelers with high psychological distance perception tend to have general and abstract representations, but those with low psychological distance perception are likely to have concrete and contextual representations.
Walmsley and Jenkins (1992)	Spatial Distance	Inbound travelers tend to use more abstract features than the local residents to perceive the destination attractions
Young (1999)	Spatial Distance	International travelers prefer more abstract destination information than domestic travelers.
Zhang et al. (2012)	Temporal Distance Social Distance	Travelers who will visit hotels in far future and have far social distance from reviews are more likely to concentrate on online reviews that include identity benefit than those who will travel in the close future and are at a close social distance.
Zhang (2014)	Temporal Distance	Travelers making decisions in far future tend to rely on metacognitive information because of their abstract thinking and vice versa.

rather than by how much an individual knows. Moreover, people may demand different types of information depending on how much they want to know, i.e., how much they are involved (Kellermann and Reynolds, 1990). Consequently, according to CLT and URT, it is proposed that individuals' desire for different types of information depends on their particular situation. Tourism research using CLT is rarely conducted. Most of the few studies that discuss CLT in the tourism context primarily focus on the spatial dimension of psychological distance. <Table 1> shows the existing research in hospitality and tourism field that is based on CLT. Therefore, this study will apply the temporal dimension to the influence of online travel review helpfulness. Similar to other dimensions, temporal dimensions are difficult to subdivide into many categories because of their

inherent subjectivity. This is the reason why most studies categorizing temporal dimension as psychological distance divide the dimension simply into two categories, close future and far future, for clear differentiation (Lieberman et al., 2002; Peetz et al., 2009). Therefore, this research will separate future travelers into close and far future travelers.

III. Research Model and Hypotheses

3.1. Concrete Review Usefulness, Abstract Review Usefulness, and Expectation

Although the importance of an online travel review is widely recognized, the extent of an online review's impact can be different depending on the content

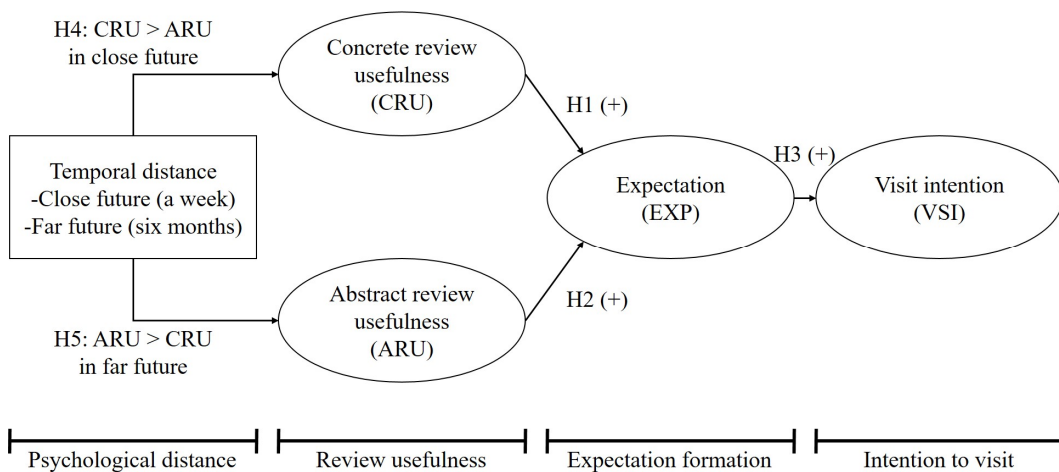
characteristics (Kuan et al., 2015; Mudambi and Schuff, 2010; Racherla and Friske, 2012). Concrete online reviews provide precise and detailed content that focus on exact facts and objective information; however, abstract online reviews provide abstract and emotional content that focus on individual experience and subjective information (Li et al., 2011; Scholz and Dorner, 2013). For example, a concrete review could explain that the ‘Observatory stands 123 meters high and is composed of two floors, and when you go up there...You can see the Tumon beach! And the Guam Island with sea!!! Since there is not any shade in there, a broad-brimmed hat and sunglasses are required.’; alternatively, an abstract review could say ‘I really want to go to two lovers point! I have heard that it is famous for colorful locks of love that look like Nam mountain in Seoul~ The sunset on the ocean was so romantic that it’s still fresh in my memory♡♡♡ It felt like in a scene in the film :)’ Mudambi and Schuff (2010) found that concrete online reviews that provide considerable information are more likely to influence online buyers’ choices. Additionally, Scholz and Dorner (2013) found that customers looking for utilitarian products

tended to prefer objective online reviews, while those searching for experiential products were persuaded by subjective reviews. By borrowing and modifying the operationalization of online reviews in the previous research (Li et al., 2011; Scholz and Dorner, 2013), a concrete online travel review (concrete review) and abstract online travel review (abstract review) are defined as follows.

A concrete review is an online review written by an actual traveler about a specific travel attraction, including the precise and detailed content with exact facts and objective information (Li et al., 2011, (p. 7); Scholz and Dorner, 2013, (p. 142)).

An abstract review is an online review written by an actual traveler about a specific travel attraction, including the abstract and emotional content with specific experience and subjective information (Li et al., 2011, (p. 7); Scholz and Dorner, 2013, (p. 142)).

According to the model that explains the nature and determinants of a customer’s expectations of service, word-of-mouth communication is an important determinant in shaping customer’s expect-



<Figure 1> Research Model

ations regarding service. This is because the personal or non-personal statements from the people who experienced the service inform future consumers of what they can expect by describing the service (Zeithaml et al., 1993). Because online travel reviews are written from tourists' perspectives, the reviews provide the readers with indirect travel experience, and this can make the online travel reviews influential in formulating travel expectations (Bickart and Schindler, 2001). CLT's assumption is that different kinds of information in messages can have a different effect, such as persuasiveness, on readers' perception. Therefore, the extent to which useful online reviews impact a consumer can differ in accordance with the consumers' status, but if the online reviews are useful for them, it can have a positive impact on their expectations. Based on the above-mentioned study results, the following hypotheses are presented:

H1: The concrete review usefulness has a positive impact on expectation.

H2: The abstract review usefulness has a positive impact on expectation.

3.2. Expectation and Visit Intention

The relationship between expectation and intention is verified in a variety of research studies. Prothero and Beach (1984) examined the expectation-intention-action chain in the context of the decision to retire, and concluded that the expectation is an effective predictive factor of intention. This study will confirm the expectation-intention relation in an online travel review context. Therefore, a hypothesis is proposed as follows:

H3: The expectation has a positive impact on the visit intention.

3.3. Different Influences of Online Travel Reviews based on Temporal Distance

According to research based on CLT with an individual's information preference, an individual is likely to prefer concrete information when he or she perceives a close future event and abstract information when he or she anticipates a far future event (Liberman and Trope, 1998). Additionally, URT argues that the type of information individuals want to obtain depends on their involvement or situation. Moore and Harris (1996) found that different types of information distinguished based on the content characteristic can be perceived differently depending on the information receiver's situation. The influence of different types of online reviews on the customer expectation has been proven in the hotel context, meaning that the expectation level of a potential visitor varies according to the hotel review's prevalence (Mauri and Minazzi, 2013). Thus, it is supposed that the different types of online travel reviews will be perceived differently, depending on the reader's different temporal distance. Therefore, this study hypothesizes the following:

H4: For the close future tourists (the travelers who will travel in a week), the influence of a concrete review on the expectation is more significant than that of abstract reviews.

H5: For the far future tourists (the travelers who will travel in six months), the influence of an abstract review on the expectation is more significant than that of concrete reviews.

IV. Research Methodology

4.1. Research Design

The main purpose of this study is to examine the two different types of online reviews' influence on the expectation with temporal distance. To accomplish this goal, this research conducts an experimental survey to compare the review usefulness of online travel reviews perceived by close and far future tourists. The survey participants are the potential tourists who already booked a Guam tour package. According to the travel agency that accommodated the potential travelers, there was a break time during the schedule that allowed the tourists to visit one of places near the destination during the break. Thus, the tourists could choose one place to visit during the break. A manipulated online review describing a place (Two Lovers Point) where the tourists could visit was created based on real online reviews about the place. The potential tourists are separated into close future tourists who will travel in a week and far future tourists who will travel in six months or more. The separation is performed based on the interval between participants' departure date of their tour and the survey date. Both future tourist groups are assigned to complete a questionnaire including both a concrete review and an abstract review that describes a specific destination in Guam, Two Lovers Point. The questionnaire asks participants about the usefulness of each review, their travel expectations, and whether they intend to visit the place.

4.2. Measurements

The concrete reviews and abstract reviews used for the survey are created based on the operational definition of each review by modifying the online

travel reviews, which were uploaded onto the most famous website in South Korea (www.naver.com). To ensure the validity of the different review's effect triggered by content characteristics, homogeneity is maintained by setting a similar number of words, number of pictures and frame of reviews for each type of review. To confirm the difference between abstract and concrete reviews, a preliminary survey was conducted in which 30 people rated the level of concreteness of each review with a 7-point Likert scale (1: Abstract, 7: Concrete); the results showed that the two different reviews are perceived significantly differently (t value = 4.659, $p < 0.001$). The measurements to evaluate the review usefulness are derived from the previous studies that investigate the information diagnosticity, which is a basic concept of review usefulness (Jiang and Benbasat, 2007). Thus, four questions ("This review improves my ability to make a decision whether or not to visit the destination," "This review gives me insight into whether or not I would like to visit the destination," "How helpful was this review?") are asked right after each online review. The questions regarding the expectation and visit intention are derived from the literature exploring the online review's influence in an e-commerce context (Gefen, 2000; Lee and Kim, 2012). Consequently, 10 questions are used for the survey: review usefulness (four questions), expectation (three questions), and visit intention (three questions). A 7-point Likert scale is used for all of the measurement items, meaning 1 = *not at all* and 7 = *absolutely*.

4.3. Data Collection

The paper survey is conducted with the assistance of Redcap Tour, one of the famous travel agency companies in South Korea. The questionnaires are distributed to the future tourists, who booked a pack-

<Table 2> Demographic Information of Close and Far Future Tourists

Demographic Variables		Close Future		Far Future	
		Frequency	%	Frequency	%
Gender	Male	63	48.1	74	51.4
	Female	68	51.9	70	48.6
Age	20s	53	40.5	53	36.8
	30s	50	38.2	62	43.1
	40s	22	16.8	23	16.0
	50s	6	4.6	5	3.5
Marital Status	Single	45	34.4	50	34.7
	Married	86	65.6	94	65.3
Education	High school	1	.8	1	.7
	2-year college	8	6.1	6	4.2
	University	107	81.7	119	82.6
	Graduate school	15	11.5	17	11.8
Monthly Income	Equal or less than KR ₩ 999,000	5	3.8	5	3.5
	KR ₩ 1,000,000-KR ₩ 1,999,000	35	26.7	39	27.1
	KR ₩ 2,000,000-KR ₩ 2,999,000	57	43.5	64	44.4
	KR ₩ 3,000,000-KR ₩ 3,999,000	19	14.5	22	15.3
	KR ₩ 4,000,000-KR ₩ 4,999,000	10	7.6	10	6.9
	Equal or more than KR ₩ 5,000,000	4	3.1	3	2.1
Occupation	Student	1	.8	1	.7
	Office worker	71	54.2	79	54.9
	Sales and service	44	33.6	50	34.7
	Technician	4	3.1	3	2.1
	Professional	6	4.6	6	4.2
	Civil servant	1	.8	0	0
	Homemaker	1	.8	0	0
	Other	3	2.3	5	3.5
Overseas Travel Experiences	Not at all	2	1.5	4	2.8
	1-3 times	30	22.9	35	24.3
	4-10 times	37	28.2	44	30.6
	10-20 times	35	26.7	33	22.9
	More than 20 times	27	20.6	28	19.4
Degree of Online Travel Review Usage	Not at all	3	2.3	3	2.1
	Occasionally	10	7.6	12	8.3
	Normal	27	20.6	40	27.8
	Often	68	51.9	57	39.6
	Very often	23	17.6	28	19.4
Total		131	100	144	100

Note: US \$ 1 = 1,183 Korean won according to Korea Exchange Bank in August 19, 2015

age tour in advance. Five tour operators of the company, one of whom is this study's researcher, perform the interview as a face-to-face survey. Because the respondents are recruited during the counselling time, the interviews are performed one-on-one or in groups at the company. Based on the departure date, the participants are divided into close future tourists and far future tourists. The survey was conducted for approximately one month, from April 1, 2015, to May 12, 2015, and 275 responses of 300 questionnaires were finally selected. For close future tourists, a total of 131 participants' answers are used; conversely, 144 answers are from far future tourists.

According to <Table 2>, there is no considerable gap between males and females in both groups. The percentages of participants in their twenties and thirties are approximately 80% in both groups. Regarding marital status, there are more married participants than single participants in both groups. Most of the participants graduated from a university in the close future group and far future group approximately half of participants in both groups earn over two million but under three million Korean won per month. The office workers represent the largest proportion in both data sets. In both groups, an even distribution is shown regarding past overseas travel experience excluding participants who have not been to foreign countries. Regarding the usage degree of online travel reviews, approximately 90% of participants respond that they read online travel reviews to prepare for their travel.

V. Data Analysis and Results

5.1. Analysis Method

Partial least squares (PLS) analysis is performed in this study. PLS is considered a casual modeling

technique used for theory testing (Kim et al., 2012). PLS is particularly appropriate for studies with small sample sizes. (Hulland, 1999). Therefore, this study conducts data analysis using a PLS technique with Smart PLS version 2.0.

5.2. Measurement Model

Because the data are derived from the different samples, the process for confirming the validity of measurements is executed separately for each group. To verify the absence of common method bias, exploratory factor analysis is conducted based on Harman's single-factor test (Podsakoff et al., 2003). As indicated in <Table 3>, four factors are aggregated separately with the eigenvalues higher than one in both groups; thus, the absence of common method bias is proved. The standardized factor loadings of each item are measured over 0.7, which is the threshold of loadings to be empirically significant (Nunnally et al., 1967); hence, it is confirmed that one of the requirements is met for verifying the convergent validity of the measurements.

To identify the other conditions for the measurements' convergent validity, the composite reliability (CR), Cronbach's α , and average variance extracted (AVE) of each construct are checked (Bagozzi and Yi, 1988). The CR, Cronbach's α , and AVE of each construct exceed 0.7 in both data sets; thus, the convergent validity of measurements is supported. Regarding the discriminant validity, the construct's loading on the construct of interest should be higher than the loadings on any other constructs, and the AVE's square root must be larger than each correlation coefficient (Bhattacharjee and Sanford, 2006). As indicated in <Table 4> and <Table 5>, the two requirements for the discriminant validity are met in both groups.

<Table 3> Exploratory Factor Analysis Results of Close- and Far Future Tourists

Constructs and Variables	Standardized Factor Loadings (close / far)
Expectation (EXP)	
1. I expect I will experience the destination the same way the online review describes.	.886 / .906 .313 / .396 .356 / .402 .295 / .325
2. I expect that traveling will be satisfying.	.909 / .925 .355 / .447 .368 / .367 .483 / .483
3. I expect that traveling will be pleasant.	.924 / .934 .432 / .469 .418 / .435 .430 / .462
Abstract review usefulness (ARU)	
1. This review improves my ability to make a decision on whether or not to visit the destination.	.276 / .463 .875 / .896 .523 / .575 .309 / .485
2. This review gives me insight into whether or not I would like to visit the destination.	.300 / .385 .935 / .907 .547 / .579 .313 / .467
3. This review contains useful information about the destination.	.329 / .448 .853 / .908 .494 / .592 .289 / .439
4. How helpful was this review?	.291 / .435 .950 / .934 .564 / .577 .358 / .442
Concrete review usefulness (CRU)	
1. This review improves my ability to make a decision on whether or not to visit the destination.	.403 / .389 .529 / .597 .924 / .916 .367 / .416
2. This review gives me insight into whether or not I would like to visit the destination.	.428 / .421 .565 / .565 .934 / .904 .367 / .430
3. This review contains useful information about the destination.	.292 / .359 .487 / .568 .845 / .887 .526 / .473
4. How helpful was this review?	.324 / .413 .546 / .592 .916 / .934 .520 / .509
Visit intention (VSI)	
1. I am likely to visit the destination introduced in the online review.	.408 / .430 .334 / .508 .474 / .485 .953 / .942
2. Given the opportunity, I intend to visit the destination in the online review.	.418 / .400 .348 / .444 .489 / .481 .950 / .944
3. It is likely that I will actually visit the destination in the online review.	.420 / .477 .312 / .467 .386 / .452 .929 / .936

<Table 4> Constructs' Correlations of Close and Far Future Tourists (close / far)

	CR	Cronbach's α	AVE
EXP	0.919 / 0.944	0.870 / 0.912	0.791 / 0.850
CRU	0.947 / 0.951	0.925 / 0.932	0.817 / 0.830
ARU	0.948 / 0.951	0.927 / 0.932	0.820 / 0.826
VSI	0.961 / 0.959	0.939 / 0.935	0.891 / 0.885

<Table 5> Confirmation of Discriminant Validity of Construct (close / far)

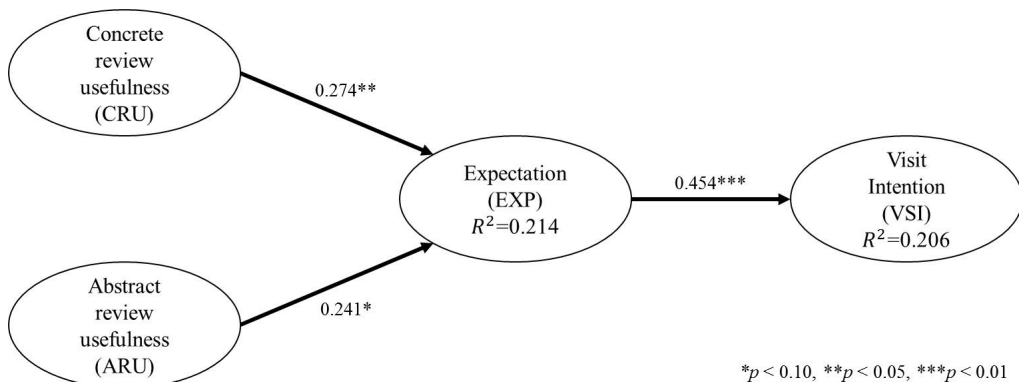
	Square Root of AVE	EXP	CRU	ARU	VSI
EXP	0.889 / 0.922	1.000 / 1.000			
CRU	0.904 / 0.911	0.333 / 0.477	1.000 / 1.000		
ARU	0.906 / 0.909	0.407 / 0.435	0.589 / 0.637	1.000 / 1.000	
VSI	0.944 / 0.941	0.440 / 0.466	0.351 / 0.503	0.477 / 0.502	1.000 / 1.000

5.3. Structural Model and Hypotheses Test

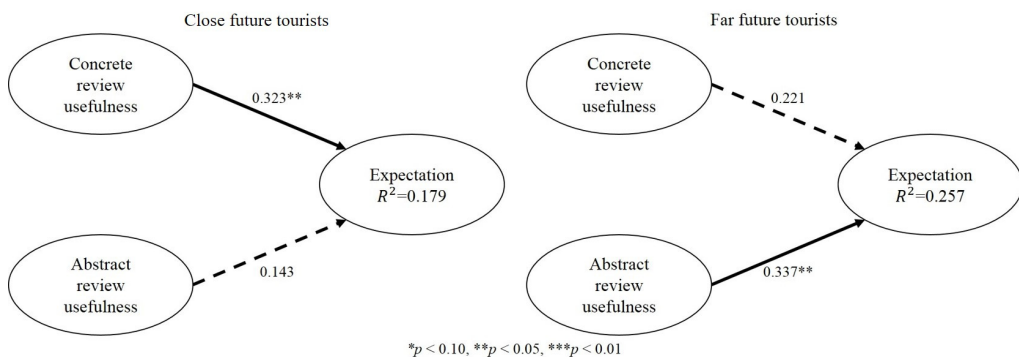
In total, three different models are analyzed in this study. All of the models are estimated based on a bootstrapping technique, and the sample size is 500. <Figure 2> shows the analysis results for confirming H1, H2, and H3 which are not directly related with close and far future separation. For the overall group, all of the hypotheses appeared empirically significant. The expectation is influenced positively by the concrete review usefulness ($\beta = 0.274$, t value = 2.063, $p < 0.05$) and abstract review usefulness ($\beta = 0.241$, t value = 1.838, $p < 0.1$). The expectation regarding the destination has a positive impact on the intention to visit the destination ($\beta = 0.454$,

t value = 4.147, $p < 0.01$). Therefore, H1, H2, and H3 are supported.

For the close future tourist group, the positive influence of concrete review usefulness ($\beta = 0.323$, t value = 2.557, $p < 0.05$) and expectation ($\beta = 0.440$, t value = 4.146, $p < 0.01$) is significantly confirmed except for the abstract review usefulness's influence on expectation ($\beta = 0.143$, t value = 1.107). The tourists who will travel in the close future tend to perceive concrete reviews as more useful: hence, the tourists' expectation is influenced by concrete reviews rather than by abstract reviews. Based on these results, H4 is supported. In the case of far future tourist group, the positive influence of abstract review usefulness is confirmed ($\beta = 0.337$, t value = 2.533,



<Figure 2> Hypotheses Test Results: Overall Model



<Figure 3> Hypotheses Test Results: Comparing Close and Far Future Tourists

$p < 0.05$) and that of expectation is also significantly proved ($\beta = 0.466$, t value = 4.515, $p < 0.01$). However, concrete review usefulness does not have any significant influence in far future tourist group ($\beta = 0.221$, t value = 1.720). The travelers who planned to travel in the far future tended to prefer abstract reviews, because abstract reviews are perceived more helpful for them. Far future tourist's expectations are likely to be affected by abstract and subjective online reviews rather than concrete ones. These results supported H5. All the hypotheses are re-analyzed with PLS multi group analysis in order to confirm the results again, and the results appeared similar to the results mentioned above.

VI. Discussion and Conclusion

6.1. Key Findings

This study verifies the relationship between the review usefulness of different types of online travel reviews and temporal distance. By adopting CLT, several hypotheses are suggested and investigated using separate samples. Because the review usefulness of the two different online travel reviews vary significantly depending on the temporal distance, the results of this research support CLT in the online travel review context. Consequently, the results are consistent with the arguments of CLT. Interestingly, abstract review usefulness had a very low impact on expectation in the overall group. According to the concept of information accessibility, conceptualized as a degree of how easily the information can be searched from memory to make a decision (Li et al., 2011), concrete information is more diagnostic than abstract information because the former is easier to store in the memory due to clear objective

boundaries for processing information (Wyer and Srull, 2014). Thus, concrete reviews can generally be perceived as more useful than abstract reviews.

6.2. Theoretical Implications

To our knowledge, this study is the first research to examine the influence of review usefulness on the information receiver's perception and behavioral intention. The major topic of this research is the exploration of online reviews' impact on the consumers' reactions or the investigation of review usefulness. Therefore, this study contributes to the online review research field by suggesting an emerging study topic: the relationship between review usefulness and consumer perception. Moreover, this research proves that temporal distance is important in the online travel review context. Although several studies investigate the psychological distance in tourism perspectives, the spatial dimension is solely researched. This research also provides theoretical grounds for separating online reviews based on concreteness. Some prior research dealt with this concept (Li et al., 2011; Scholz and Dorner, 2013), but it was not enough to provide a basis for future research. In this respect, this study reveals the significant difference between abstract and concrete reviews, which will be meaningful for future related research.

6.3. Practical Implications

The research results provide certain implications to destination marketers and travel agencies. Destination marketers can create more appealing information for their potential customers by providing certain types of information. This study reconfirms the effect of psychological distance on the tourist's information perception by proving a temporal di-

mension; thus, the foundation for differentiated information marketing depending on the customer's spatial distance or temporal distance is secured. By creating abstract information for customers who plan to travel to distant destinations in the far future or concrete information for customers who plan to travel to close destinations in the near future, marketers are able to efficiently increase the customer's expectation. This research will enable travel review websites to use differentiated interface strategies based on the users' situation if the website can know the user's information regarding his or her travel plans. Additionally, travel agencies can provide differentiated service to the customers longitudinally. For example, travel agencies can excite customers by showing the destination's abstract traits, such as the beautiful scenery, delicious food, and desirable attraction when there is a long period prior to travel. Conversely, if there is a short time before the travel, the customers can affect their tour through concrete information, such as the weather, ticket price, and exact location of hotels. Furthermore, the findings of this study can be a helpful guide to potential travelers to find effective and helpful reviews. A great number of online travel reviews are double-edged swords; on the one hand, they provide abundant information, but on the other hand, information-overload can occur. In this situation, if travelers are aware of which kinds of online reviews are really effective for their travel expectation, they can find a meaningful review for their situation.

6.4. Limitations and Future Research

A few limitations can be found in this study; accordingly, the following areas for future research are suggested. First, this study conducts a survey of tourists from South Korea who plan to visit Guam. The results of a single case study may have problems with external validity and generalization. In future research, the sample needs to be expanded to ensure the validity of the result and increase its generalization potential. Second, this study uses different data sets from different samples. Thus, the research results can be influenced by the difference in samples. Therefore, if future studies collect the data from a single sample based on a longitudinal designed survey, more reliable conclusions will result. Third, PLS is not a perfect answer for analyzing data with a small sample size. Although it is commonly believed that PLS is ideal for small sample data, some researchers have proven that even with the use of PLS, there is still a high possibility of issues related to accuracy, statistical power, and increased standard deviation (Goodhue et al., 2012). Thus, future research should develop alternatives.

Acknowledgements

This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2016S1A3A2925146).

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Submitted: July 14, 2017; 1st Revision: September 19, 2017; Accepted: November 18, 2017