

## **Determinants of Positive Word of Mouth for a Contemporary Art Exhibition on Web-based Virtual Reality<sup>1</sup>**

Jingyi Han<sup>1</sup>, Zong-Yi Zhu<sup>2</sup>, Hyeon-Cheol Kim<sup>3†</sup>

<sup>1</sup>*Master, Department of Arts and Cultural Management, Graduate School,  
Chung-Ang University, Seoul, South Korea  
hanjingyi000@naver.com*

<sup>2</sup>*Doctoral Student, Department of Arts and Cultural Management, Graduate School,  
Chung-Ang University, Seoul, South Korea  
vampirenylon@cau.ac.kr*

<sup>3†</sup>*Professor of Marketing, School of Business Administration, College of Business and Economics,  
Chung-Ang University, Seoul, South Korea  
hckim@cau.ac.kr*

### **Abstract**

*We aims to examine the determinants of visitors' positive word-of-mouth (WOM) in a web-based virtual reality contemporary art exhibition. We also examines the effects of 3 realms of experience (entertainment, esthetic, escapist) on emotional arousal, how this emotional arousal affects memory and positive word-of-mouth, how memory affects positive word-of-mouth and how age moderate all of the paths. We examined a total of 297 visitors and was conducted through an online survey focusing on Chinese users of ages 20-49. The analysis results showed that entertainment and esthetic have an effect on emotional arousal, but escapist did not. The results also showed emotional arousal has an effect on memory and positive WOM. Memory did not affect positive word-of-mouth. Finally, age has a moderate effect on all the paths, except for the path from escape towards emotional arousal and memory to positive word-of-mouth. The theoretical implications of this study are meaningful exhibition research. While, it also will be helpful to segment the web-based virtual reality art exhibition visitors by dividing into 3 groups (20s, 30s, 40s) and to provide marketing and operation strategies.*

**Keywords:** *Web-Based Virtual Reality, Modern Art Exhibition, Experience Economy, Emotional Arousal, Memory, Positive Word-of-Mouth*

### **1. Introduction**

Art Exhibitions are increasing and becoming more popular in public culture. All-ages of the public enjoyed the visit to the art exhibition. Many of the people started to visit the art exhibition and post their visiting experience on their personal social network service, such as Instagram, Facebook or Wechat moment. With

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Corresponding Author: hckim@cau.ac.kr

Tel: +82-2-820-5440, Fax: +82-2-815-7001

Professor, School of Business Administration, College of Business and Economics, Chung-Ang University, Seoul, South Korea

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the development of technology, exhibitions also started to provide web-based or online virtual reality modern art exhibitions. Especially, as COVID-19 spread all around world, the public were required to stay at home to keep social distance. This has promoted web-based exhibition. Suddenly, the number of web-based exhibitions increased. Meanwhile, with the intense competition, art exhibitions became more visitor-oriented, better at meeting visitors' needs, and enhanced visitors' experience to be more important than before [1]. In order to keep and sustain the visitors, it is important to enhance visitors' various experiences to affect their positive engagement, WOM to ensure future sustainability.

As mentioned above, art exhibitions could explore mobile technologies to enhance visitors positive experience to build loyalty with the technology development, who might show a high level of positive word-of-mouth to another potential visitor segment [2]. Based on the results of a 2013 exhibition association survey, it revealed that 19% of exhibitions were planning to improve their technologies for providing the visitor a more mobile experience [3]. According to this statistical result, in order to enhance consumer positive loyalty behavior, it is important to provide them a more positive experience. However, most of the exhibitions have focused on the mobile equipment technology factors, little studies have determined the most critical factors of visitors needs and wants when they are visiting web-based art exhibitions.

Experience economy theory was used to understand the consumer online experience. As the previous study states, experiential economy model (4Es) including entertainment, education, esthetic and escapism and these experience positive impact consumer positive attitudes and behaviors [4]. This model is used experience economy to illustrate the effect of these new technologies, such as AR service [5]. Moreover, recent experience economy relative research has determined that the consumer experience can positively enhance consumer satisfaction, revisit intention, immersion, and emotional arousal [6-8]. Also, it has been found that consumer experience positively enhances consumer engagement behavior [9]. However, lots of studies have applied the experience model on tourism, but not specifically towards the web-based art experience. And how these dimensions affect their states and positive behavior.

In addition, it remains questionable that different age visitor segments may want different experiences. It has been discussed that web-based reality exhibitions should provide for all-aged visitors and be enjoyable. But different age segment consumers want and need different experiences. Recent studies revealed that old consumers and young consumers present different technology acceptance and different experiences were required by them [10, 11]. However, previous studies have drawn little attention on explaining the different experience.

Firstly, this study intends to adopt the experience economy on web-based reality art exhibitions to determine the experience dimensions. Second, this study intends to investigate the influence of experience on consumer emotional arousal, which then positively influences visitor memory and positive word-of-mouth. Thirdly, this study is going to find out the difference in visitors' experiences following consumer age segments. This study results could provide theoretical implications for web-based reality art exhibitions, while it also could offer managerial implications for web-based exhibition marketing strategies and differential strategies for different consumer.

## **2. Theoretical Background and Hypotheses Development**

### **2.1 Theoretical Background**

#### **2.1.1 Experience Economy**

Businesses must an orchestrate unforgettable memory for their customers, and that memory itself becomes the product: the "experience" [4]. They suggested the 4Es including entertainment factor, education factor,

esthetic factor and escapism factor. Based on the customer's active or passive participation will vary their experience and immersion of the experience [4].

Many tourism studies have been carried out using Pine and Gimore's experience dimension paradigm [12, 13] However these four experience constructs are not directly applicable to tourism experience studies, as they change depending on the types or characteristics of the experiences [14]. For instance, in study of visitors' experiences in the context of a nature-based destination, two experience dimensions, entertainment and escapism, are derived from the tourism experience [15]. Moreover, from the perspective of the tourism experience in a virtual world, educational and escapist experiences did not have an influence on visitor arousal in the context of online shopping [16].

In the current study, as the state of immersion in the virtual environment is very important [17], the esthetic and escapism were investigated, and as the combination of information and entertainment is important because museums are in competition for visitors with other leisure pursuits and mass media [2], the entertainment was investigated. Thus, in the current study, based on 4Es, entertainment, esthetic, escapism were investigated.

## **2.2 Hypotheses Development**

### **2.2.1 Experience Economy and Emotional Arousal**

Entertainment experiences, which involve observation of performances, lead to positive consumer responses [18]. Tourists are spending their time out of the hotel on tour to entertain and verify their holiday time. If the entertainment dimensions act during the tour, emotional arousal and then the post-experience behavior could be affected positively [6].

In an esthetic experience, the physical environment of attractions plays an important role in determining visitors' attitudes, future patronage intentions and willingness to recommend [19]. Also, people elicit pleasure and arousal toward physical environment and website designs [20, 21].

For the escape experience, escapism is an important predictor after the tour experience as being an important motivator [22]. During the visiting, people could feel themselves being in different worlds and times, completely escaped from reality, or imagined being someone else and totally forgetting about their daily routine.

We therefore formulate the following hypotheses:

Hypothesis 1: Web-based virtual reality entertainment experiences positively impacts consumer emotional arousal

Hypothesis 2: Web-based virtual reality esthetic experiences positively impacts consumer emotional arousal

Hypothesis 3: Web-based virtual reality escapist experiences positively impacts consumer emotional arousal

### **2.2.2 Emotional Arousal and Memory**

For humans, emotional information is more likely to be remembered than neutral information [23]. The vividness of memory for emotional information also increases. Researchers have argued that arousal significantly affects memory formation [24]. As the previous study found that traumatic scenes or events were stored more effectively in memory than non-shocking scenes [25]. From this theory, we formulate the following hypothesis:

Hypothesis 4: Emotional Arousal positively impacts consumer memory

### 2.2.3 Emotional Arousal and Positive Word-of-Mouth

In a study related to positive word-of-mouth intention, the role of emotional arousal was verified. For example, regarding online gaming, Huang et al., verified that user experience functional, hedonistic, social had a significant effect on positive word of mouth intention through the mediating role of emotions [26]. Previous study also found that pleasure and emotional arousal affect satisfaction and positive word of mouth intention [27]. It also found that pleasure and emotional arousal in virtual environments influence word-of-mouth intention [28]. This research proposes the following hypothesis:

Hypothesis 5: Emotional arousal positively impacts consumer positive word-of-mouth

### 2.2.4 Memory and Positive Word-of-Mouth

Memorable experiences are associated with strong emotions that occurred at the time [29]. This memory affects attachment to a place, intention to revisit, intention to recommend a destination, or sharing experiences with family and friends [30]. Other studies have also found that entertainment and escape experiences are the strongest determinants of intention to recommend to others through memory, emotional arousal, and satisfaction [31]. Therefore, we propose the following hypothesis:

Hypothesis 6: Memory positively impacts consumer positive word-of-mouth

### 2.2.5 Age moderation effect

In a virtual space such as an online environment, it was found that age had an effect from online experience to positive behaviors [10]. In previous studies, age was regarded as an important demographic variable that moderates effect between technology acceptance and behavioral [10, 11]. Therefore, we could argue the following hypotheses:

Hypothesis 8: Age has a moderation effect.

Based on the previous studies, we developed research model through the experience economy. As shown in Figure 1, we aim to investigate the effect of experience factors on visitors' emotional arousal. Then we will analysis emotional arousal influence on visitors' memory and positive e-wom. Lastly, we intent to illustrate difference experience needs following the age segments.

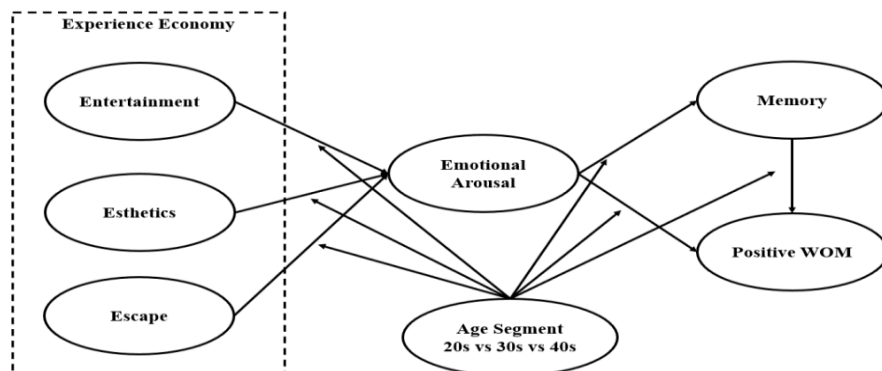


Figure 1. Research Model

## 3. Method

### 3.1 Measurement Development

We deployed the following measures to gauge the constructs included in our model. Table 1 presented the questionnaire of this study. All of the constructs and the corresponding measure items were adapted from the

previous studies. First, we measured the experience by adapting [9, 31, 32] scale, which included entertainment, esthetics, escapism dimensions. A total of 12 items were used. Then, emotional arousal was measured by employing the [31] 4-item scale. Memory was gauged based on a [33] 5-items instrument. Lastly, word-of-Mouth was gauged based on [33] 4-items instrument.

**Table 1. Measurement development**

Measures (Strongly disagree (1) – Strongly agree (5))	Source
Experience economy: Escapism	[9, 31, 32]
The visit to the exhibition made me completely escaped from reality	
The visit to the made me totally forgot about my daily routine	
The visit to the exhibition let me imagine being someone else	
The visit to the exhibition made me feel being in a different world or time	
Experience economy: Esthetics	[9, 31, 32]
The setting of exhibition was well assembled in harmony.	
The setting of the exhibition provided pleasure to my senses	
The setting of the exhibition really showed attention to design detail	
The setting of the exhibition was attractive in many ways	
Experience economy: Entertainment	[9, 31, 32]
The visit to the exhibition was entertaining to me	
The visit to the exhibition was fun	
The visit to the was amusing	
The visit to the exhibition was captivating	
Emotional Arousal	[31]
The visit to the exhibition was interesting	
The visit to the exhibition was stimulating	
The visit to the exhibition was exciting	
The visit to the exhibition was enjoyable	
Memory	[33]
I have wonderful memories about this exhibition	
I can remember many positive things about this exhibition	
I can relive my experiences about this exhibition	
I can feel the emotions about this exhibition now that I experienced	
I can remember the setting of this exhibition	
Positive Word-of-Mouth	[33]
I would recommend this on exhibition to other people	
I would tell other people positive things about this exhibition	
I would tell more people about this exhibition than other similar experiences	
When I tell others about this exhibition, I tend to talk about it in great detail	

**3.2 Data collection and Sample Characteristics**

Data collection was conducted through an online survey. This study focused on those individuals who have experience visiting Contemporary Art Exhibition on Web-based Virtual Reality Environment within the last 6 months and they have recommended this type of exhibition to others. Only the target individual was used for statistical analysis. Contemporary Art Exhibition on Web-based Virtual Reality Environment started in ....., and this service received more attention than before, after the break of COVID-19. This pandemic restricted consumer has to stay at home and keep social distance with others. All the services have moved to an online environment from an off-line environment. Hence, the Contemporary Art Exhibition on Web-based Virtual

Reality Environment became more competitive than before. Exhibitions have to offer the consumer more positive experiences to enhance their positive behavior.

## 4. Results

### 4.1 Measurement Model

Both an exploratory factor analysis and a confirmatory factor analysis were used in this study to analyze the data. First, this study performed the exploratory factor analysis based on the method of maximum likelihood extraction and varimax rotation. All of the items were analyzed for 6 factors. The significant Keiser-Meyer-Olkin (KMO) value lesser than 0.001. and we have removed the items, which loading value was shorter than 0.5. Then this study evaluated the measurement model by analyzing internal consistency reliability, convergent validity and discriminant validity following the guideline of offered by [34]. As shown in Table 2, factor loading of each item was higher than 0.6. and Cronbach's alpha and composite reliability values are higher than the criteria of 0.7. and AVE of all reflective constructs was higher than 0.5. All of these results supported good reliability and convergent validity.

**Table 2. Reliability, Convergent Validity**

Construct	Items	Cronbach's Alpha	Rho_A	CR	AVE
ENT	4	0.728	0.807	0.886	0.721
EST	4	0.825	0.766	0.842	0.640
ESC	4	0.773	0.805	0.850	0.586
ARO	3	0.806	0.807	0.886	0.721
MEM	4	0.776	0.766	0.842	0.639
WOM	2	0.783	0.805	0.850	0.586

Note<sup>1</sup>: CR = Composite Reliability; AVE = Average Variance Extracted

Note<sup>2</sup>: ENT = Entertainment ; EST = Esthetics; ESC = Escape; ARO = Emotional Arousal; MEM = Memory; Word-of-Mouth = WOM

Fornell-Larcker criterion was used to assess discriminant validity. As Fornell & Larcker (1981) argued that the square root of AVE is higher than the value of correlations values, this revealed a good discriminant validity [35]. Table 3 presented the results of discriminant validity, the square root of AVE is higher than the value of correlations values.

**Table 3. Results of correlation and discriminant validity**

	ARO	ENT	ESC	EST	WOM	MEM
ARO	0.849					
ENT	0.323	0.800				
ESC	0.157	0.158	0.766			
EST	0.243	0.401	0.224	0.810		
WOM	0.095	0.230	0.212	0.435	0.900	
MEM	0.364	0.117	0.047	0.051	0.027	0.773

Note<sup>1</sup>: ENT = Entertainment ; EST = Esthetics; ESC = Escape; ARO = Emotional Arousal; MEM = Memory; Word-of-Mouth = WOM

### 4.2 Structural Model

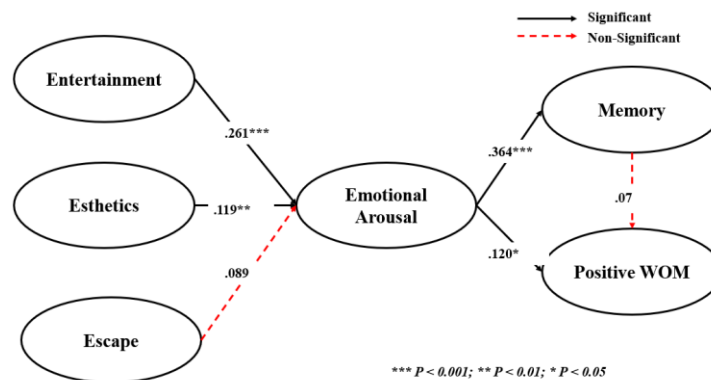
The structural equation modeling was used to test the hypotheses [36]. Table 4 shown the structural modeling analysis results and the specific results have been discussed as followed. Hypothesis 1,3 predicts that only entertainment experience ( $\beta = 0.261, P < 0.001$ )and hypothesis 2 esthetics experience ( $\beta = 0.119, P < 0.01$ )have positive relationship with consumer emotional arousal. But escape experience ( $\beta = 0.089, P > 0.05$ ) does not significantly impact consumer emotional arousal. Our results supported H1,3. Hypothesis 4,5 revealed that consumer emotional arousal has a positive effect on consumer memory ( $\beta = 0.364, P < 0.001$ )and positive word-of-mouth ( $\beta = 0.120, P < 0.001$ ), which were supported H4, and H5. However, Hypothesis 6 was not supported, that memory did not have significant effect on positive word-of-mouth ( $\beta = 0.070, P > 0.05$ ). As shown in Figure 2, the significance of each hypotheses and the  $\beta$  value have been presented.

**Table 4. Results of Structural Model**

Hypothesis	Path	$\beta$	Standard Deviation	T Statistics	P Values	Result
H1-1	ENT $\rightarrow$ ARO	0.261***	0.059	4.433	0.000	Accept
H1-3	ESC $\rightarrow$ ARO	0.089	0.055	1.627	0.104	Reject
H1-2	EST $\rightarrow$ ARO	0.119**	0.048	2.502	0.013	Accept
H2	ARO $\rightarrow$ MEM	0.364***	0.070	5.224	0.000	Accept
H3	ARO $\rightarrow$ WOM	0.120*	0.061	1.991	0.047	Accept
H4	MEM $\rightarrow$ WOM	0.070	0.067	1.055	0.292	Reject

Note<sup>1</sup>: ENT = Entertainment ; EST = Esthetics; ESC = Escape; ARO = Emotional Arousal; MEM = Memory; Word-of-Mouth = WOM

Note<sup>2</sup>: \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$



**Figure 2. Results of the proposed model**

### 4.3 Moderation Analysis

The moderation effect of consumer age was assessed in the following way. Consumer age segment has a significant moderation effect. As presented in Table 5 the moderation effect and the path analysis of each age segment have been conducted. And the results of moderation effect and the path analysis of each age segment

have been presented. As the results show that the path from consumer entertainment experience ( $\beta = -0.179, P < 0.001$ ) and esthetics experience ( $\beta = -0.113, P < 0.01$ ) to consumer emotional arousal have a significant difference following the consumer age segment. But the path from escape experience ( $\beta = 0.03, P > 0.05$ ) to consumer emotional arousal did not have a significant difference following consumer age segment. And the path from consumer emotional arousal to consumer memory ( $\beta = -0.116, P < 0.05$ ) and positive word-of-mouth ( $\beta = -0.117, P < 0.05$ ) also have significant difference among consumer age segments, while consumer memory did not significantly influence positive word-of-mouth ( $\beta = 0.025, P > 0.001$ ). Hence, Hypothesis 7 is partly supported.

**Table 5. Results of moderation effect**

Hypothesis	Path	$\beta$	Standard Deviation	T Statistics	P Values	Result
H1-1	ENT → ARO	-0.179***	0.052	3.419	0.001	Accept
H1-3	ESC → ARO	0.030	0.070	0.437	0.662	Reject
H1-2	EST → ARO	-0.113***	0.054	2.084	0.038	Accept
H2	ARO → MEM	-0.116***	0.052	2.210	0.028	Accept
H3	ARO → WOM	-0.117***	0.056	2.097	0.037	Accept
H4	MEM → WOM	0.025	0.049	0.512	0.609	Reject

Path	Group 1 (N = 125)			Group 2 (N = 116)			Group 3 (N = 56)		
	$\beta$	T Value	p	$\beta$	T value	p	$\beta$	T value	P
ENT → ARO	0.390***	4.679	0.000	0.284***	3.429	0.001	0.423	1.678	0.094
ESC → ARO	0.242***	3.154	0.002	0.168	1.058	0.290	0.262	1.310	0.191
EST → ARO	0.150	1.944	0.052	0.291***	4.524	0.000	-0.135	0.687	0.492
ARO → MEM	0.399***	3.886	0.000	0.339***	2.880	0.004	0.368***	2.334	0.020
ARO → WOM	0.353***	4.298	0.000	0.131	1.409	0.160	0.104	0.487	0.626
MEM → WOM	-0.058	0.581	0.562	-0.192	1.508	0.132	-0.098	0.336	0.737

Note<sup>1</sup>: ENT = Entertainment ; EST = Esthetics; ESC = Escape; ARO = Emotional Arousal; MEM = Memory; Word-of-Mouth = WOM

Note<sup>2</sup>: \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$

## 5. Discussion

With technological developments, web-based reality exhibitions have become more popular. All-ages of the public enjoy visiting this kind of exhibition. However, previous studies have applied experience models on tourism, even though there are not many studies that determine the web-based art experience. And how this experience positively impacts visitors' emotional arousal and their positive behavior and attitude. Moreover, only a few studies have revealed the differential experiences following visitor age segment. This study applies the experience economy model on web-based art exhibition to provide strategy for web-based reality art exhibition markers on ensuring future sustainability.

This study collected data from 20-40 visitors who had visited web-based reality art exhibitions and have experienced sharing their positive experience with others. The results determined that a web-based reality art exhibition consist of entertainment, escape and esthetics experience. And the experience positive impact consumer emotional arousal, which has also been determined in the previous studies [6, 22]. Consumer emotional arousal then positively influences consumer positive memory and positive word-of-mouth. Prior studies have also revealed these same results [24, 26]. However, memory did not significantly influence a



visitor's positive word-of-mouth. This path is not significant, because memories were in the deep brain. In addition, this study found that 20s, 30s, 40s required different experiences and the path showed different influences. The results of this study provide theoretical implications for further art exhibition research and managerial implications for art exhibition development.

## 6. Conclusion

Information technology development assists web-based exhibitions. The spread of COVID-19 impacted the speed of this type exhibition development. We provides theoretical and managerial implications for web-based exhibitions. We focuses on web-based reality art exhibitions to reveal their positive behaviors. Previous studies have applied the experience economy model on tourism research to reveal the relationship between experience, consumer attitude, and consumer behavior. We applies experience economy model on web-based reality exhibitions and determined how these experiences influence visitors' emotional arousal and then influence visitor memory and positive word-of-mouth, not just an analysis of visitor satisfaction, and revision. Moreover, we analyzed the age segment as a moderator to investigate differential marketing strategies. This implication is as follows. First, we developed the experience dimensions on web-based reality exhibitions. Second, we explains the factors that influence visitors' emotional arousal, memory and positive word-of-behavior.

## References

- [1] Han, H., and Hyun, S. S., "Key factors maximizing art museum visitors' satisfaction, commitment, and post-purchase intentions," *Asia Pacific Journal of Tourism Research*, Vol. 22, No. 8, pp. 834-849, Jul 2017. DOI: <https://doi.org/10.1080/10941665.2017.1345771>
- [2] Kang, J. H., Jang, J. C., and Jeong, C., "Understanding museum visitor satisfaction and revisit intentions through mobile guide system: moderating role of age in museum mobile guide adoption," *Asia Pacific Journal of Tourism Research*, Vol. 23, No. 2, pp. 95-108, Dec 2017. DOI: <https://doi.org/10.1080/10941665.2017.1410190>
- [3] Tesoriero, R., Gallud, J. A., Lozano, M., and Penichet, V. M. R., "Enhancing visitors' experience in art museums using mobile technologies," *Information Systems Frontiers*, Vol. 16, No. 2, pp. 303-327, Jun 2014. DOI: <https://doi.org/10.1007/s10796-012-9345-1>
- [4] Pine, B. J., and Gilmore, J. H., *The experience economy*. Harvard Business Review, pp. 18-23, 1998.
- [5] Han, J. W., "A Study on Effects of AR and VR Assisted Lessons on Immersion in Learning and Academic Stress," *International Journal of Internet, Broadcasting and Communication*, Vol. 10, No. 2, pp. 19-24, Aug 2018. DOI: <https://doi.org/10.7236/IJIBC.2018.10.2.4>
- [6] Güzel, F. Ö., "The dimensions of tour experience, emotional arousal, and post-experience behaviors: a research on Pamukkale in Turkey," *Procedia-Social and Behavioral Sciences*, Vol. 150, pp. 521-530, 2014. DOI: <https://doi.org/10.1016/j.sbspro.2014.09.069>
- [7] Song, H., Kim, M., and Choe, Y., "Structural relationships among mega-event experiences, emotional responses, and satisfaction: Focused on the 2014 Incheon Asian Games," *Current Issues in Tourism*, Vol. 22, No. 5, pp. 575-581, Apr 2018. DOI: <https://doi.org/10.1080/13683500.2018.1462310>
- [8] Kastenzholz, E., Carneiro, M. J., Marques, C. P., and Loureiro, S. M. C., "The dimensions of rural tourism experience: Impacts on arousal, memory, and satisfaction," *Journal of Travel & Tourism Marketing*, Vol. 35, No. 2, pp. 189-201, Jul 2017. DOI: <https://doi.org/10.1080/10548408.2017.1350617>
- [9] Jung T., tom Dieck M.C., Lee H., and Chung N., "Effects of Virtual Reality and Augmented Reality on Visitor Experiences in Museum," In: Inversini A., Schegg R. (eds) *Information and Communication Technologies in Tourism*." Springer, Cham. 2016. DOI: [https://doi.org/10.1007/978-3-319-28231-2\\_45](https://doi.org/10.1007/978-3-319-28231-2_45)
- [10] Mosteller, J., Donthu, N., and Eroglu, S., "The fluent online shopping experience," *Journal of Business Research*,

- Vol. 67, No. 11, pp. 2486-2493, Nov 2014. DOI: <https://doi.org/10.1016/j.jbusres.2014.03.009>
- [11] Tarhini, A., Hone, K., Liu, X., and Tarhini, T., "Examining the moderating effect of individual-level cultural values on users' acceptance of E-learning in developing countries: a structural equation modeling of an extended technology acceptance model," *Interactive Learning Environments*, Vol. 25, No. 3, pp. 306-328, Jan 2016. DOI: <https://doi.org/10.1080/10494820.2015.1122635>
- [12] Lee, H., Jung, T. H., tom Dieck, M. C., and Chung, N., "Experiencing immersive virtual reality in museums," *Information & Management*, Vol. 57, No. 5, pp.103229, July 2020. DOI: <https://doi.org/10.1016/j.im.2019.103229>
- [13] Song, H. J., Lee, C.-K., Park, J. A., Hwang, Y. H., and Reisinger, Y., "The influence of tourist experience on perceived value and satisfaction with temple stays: The experience economy theory," *Journal of Travel & Tourism Marketing*, Vol. 32, No. 4, pp. 401-415, Nov 2014. DOI: <https://doi.org/10.1080/10548408.2014.898606>
- [14] Anderson, D., and Shimizu, H, "Factors shaping vividness of memory episodes: Visitors' long-term memories of the 1970 Japan World Exposition," *Memory*, Vol.15, No. 2, pp. 177-191, Feb 2007. DOI: <https://doi.org/10.1080/09658210701201312>
- [15] Tan, W.-K., "The relationship between smartphone usage, tourist experience and trip satisfaction in the context of a nature-based destination," *Telematics and Informatics*, Vol. 34, No. 2, pp. 614-627, May 2017. DOI: <https://doi.org/10.1016/j.tele.2016.10.004>
- [16] Jeong, S. W., Fiore, A. M., Niehm, L. S., & Lorenz, F. O., "The role of experiential value in online shopping," *Internet Research*, Vol. 19, No. 1, pp. 105-124. Oct 2009. DOI: <https://doi.org/10.1108/10662240910927858>
- [17] Teng, C.-I., "Customization, immersion satisfaction, and online gamer loyalty," *Computers in Human Behavior*, Vol. 26, No. 6, pp. 1547-1554, Nov 2010. DOI: <https://doi.org/10.1016/j.chb.2010.05.029>
- [18] Fiore, A. M., and Ogle, J. P., "Facilitating students' integration of textiles and clothing subject matter part one: Dimensions of a model and a taxonomy," *Clothing and Textiles Research Journal*, Vol. 18, No. 1, pp. 31-45, 2000.
- [19] Bonn, M. A., Joseph-Mathews, S. M., Dai, M., Hayes, S., and Cave, J., "Heritage/cultural attraction atmospherics: Creating the right environment for the heritage/cultural visitor," *Journal of Travel Research*, Vol. 45, No. 3, pp. 345-354, Feb 2007. DOI: <https://doi.org/10.1177/0047287506295947>
- [20] Arnold, M. J., and Reynolds, K. E., "Hedonic shopping motivations," *Journal of retailing*, Vol. 79, No. 2, pp. 77-95, Feb 2003. DOI: [https://doi.org/10.1016/S0022-4359\(03\)00007-1](https://doi.org/10.1016/S0022-4359(03)00007-1)
- [21] Baker, J., Parasuraman, A., Grewal, D., and Voss, G. B., "The influence of multiple store environment cues on perceived merchandise value and patronage intentions," *Journal of marketing*, Vol. 66, No. 2, pp. 120-141, Apr 2002. DOI: <https://doi.org/10.1509/jmkg.66.2.120.18470>
- [22] Güzel, F., "The effects of sensory based positive emotions and feelings on post-purchasing behaviour: a research on German tourists," *Anatolia: Turizm Arastirmalari Dergisi*, Vol. 24, No. 2, pp. 226-236, 2013.
- [23] Kensinger, E. A., and Schacter, D. L., "Processing emotional pictures and words: Effects of valence and arousal," *Cognitive, Affective, & Behavioral Neuroscience*, Vol. 6, No. 2, pp. 110-126, 2006.
- [24] Dolcos, F., and Cabeza, R., "Event-related potentials of emotional memory: encoding pleasant, unpleasant, and neutral pictures," *Cognitive, Affective, & Behavioral Neuroscience*, Vol. 2, No. 3, pp. 252-263, Sep 2002.
- [25] Christianson, S. Å., and Loftus, E. F., "Memory for traumatic events," *Applied cognitive psychology*, Vol. 1, No. 4, pp. 225-239, Mar 1987.
- [26] Huang, M., Ali, R., and Liao, J., "The effect of user experience in online games on word of mouth: A pleasure-arousal-dominance (PAD) model perspective," *Computers in Human Behavior*, Vol. 75, pp. 329-338, Oct 2017. DOI: <https://doi.org/10.1016/j.chb.2017.05.015>
- [27] Ladhari, R., "The effect of consumption emotions on satisfaction and word-of-mouth communications," *Psychology & Marketing*, Vol. 24, No. 12, pp.1085-1108, Dec 2007. DOI: <https://doi.org/10.1002/mar.20195>
- [28] Loureiro, S. M. C., and Ribeiro, L., "Virtual atmosphere: The effect of pleasure, arousal, and delight on word-of-mouth," *Journal of Promotion Management*, Vol. 20, No. 4, pp. 452-469. Aug 2014. DOI: <https://doi.org/10.1080/10496491.2014.930283>
- [29] Ballantyne, R., Packer, J., and Falk, J., "Visitors' learning for environmental sustainability: Testing short-and long-term impacts of wildlife tourism experiences using structural equation modelling," *Tourism management*, Vol. 32, No. 6, pp. 1243-1252, Dec 2011. DOI: <https://doi.org/10.1016/j.tourman.2010.11.003>

- [30] Martin, D, "Uncovering unconscious memories and myths for understanding international tourism behavior," *Journal of Business Research*, Vol. 63, No. 4, pp. 372-383, Apr 2010. DOI: <https://doi.org/10.1016/j.jbusres.2009.04.020>
- [31] Hosany, S., and Witham, M, "Dimensions of cruisers' experiences, satisfaction, and intention to recommend," *Journal of Travel Research*, Vol. 49, No. 3, pp. 351-364, May 2010. DOI: <https://doi.org/10.1177/0047287509346859>
- [32] Oh, H., Fiore, A. M., and Jeoung, M, "Measuring experience economy concepts: Tourism applications," *Journal of Travel Research*, Vol. 46, No. 2, pp. 119-132, Nov 2007. DOI: <https://doi.org/10.1177/0047287507304039>
- [33] Park, S. (2016). Tourist experiences and word-of-mouth: The mediating effect of memory (Doctoral dissertation, Kansas State University).
- [34] Hair, J. F., Thomas, G., Hult, M., Ringle, C. M., and Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling* (2nd ed.). Thousand Oakes, CA: Sage.
- [35] Fornell, C. G., and Larcker, D. F., "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research*, Vol. 18, No. 1, pp. 39–50, 1981.
- [36] Sarstedt, M., Ringle, C. M., Henseler, J., & Hair, J. F., "On the emancipation of PLS-SEM: A commentary on Rigdon (2012)," *Long range planning*, Vol. 47, No. 3, pp. 154-160, June 2014. DOI: <https://doi.org/10.1016/j.lrp.2014.02.007>