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EXPLORING THE IMPACT OF VIRTUAL REALITY QUALITY ON TRAVEL INTENTION FROM THE PERSPECTIVE OF DESTINATION MARKETING

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Abstract

Virtual Reality (VR) has been receiving growing attention. It has been utilized in tourism to increase consumer engagement and marketing. Based on the IS success model, this research examined how different aspects of VR quality affected consumers' intention to future travel. This study designed a VR framework, focused on quality and patterned the proposed hypotheses about customers' future travel intentions. A conceptual framework utilized PLS-SEM-3 Software for Structural Equation Modeling, to evaluate the proposed model. The

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findings suggested that VR quality constructs, including content quality, vividness, and system quality, significantly and positively influenced the flow experience and satisfaction. Moreover, flow experience and satisfaction significantly and positively did impact future travel intention. The results provided helpful information and knowledge for academia, tourism industry professionals, VR developers, and tourism destination policymakers toward better designing VR platforms for destination marketing.

Keywords: *Virtual Reality, Flow experience, Satisfaction, Future Travel Intention and Destination Marketing*

JEL Code : *L15,R41 and M31*

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1. Introduction

In the modern era, traveling plans by tourists have been entirely transformed by technological advancements **(Johnson, 2022; Tao et al., 2021)**. Nowadays, travelers' travel plans and methods of obtaining destination information, are changing due to digital technologies **(Novianti et al., 2022)**. While researching potential destinations before making a trip, customers are not restricted by geographical or temporal limitations. Like Virtual Reality (VR), various artificial intelligence technologies have supplanted conventional ways of traveling and discovering future destinations. In addition, VR allows travelers to experience, before purchasing services, products and destinations, in a digitally-advanced environment **(Ying et al., 2022)**. Virtual Reality is a software-created artificial three-dimensional (3D) environment, that the user accepts as a natural environment **(Bardi, 2022)**. Online travelers can use VR, with the help of any technological device (touchscreen device or a mouse to browse) and engage with the virtual environment **(Zhang et al., 2022)**. Travelers can navigate the surroundings, discover the virtual place, arrange and select objects based on their needs. Virtual Reality is a real-world feeling, that promotes responders' active participation in all components accessible within the virtual environment **(Zhang et al., 2022)**. Through advanced technology, travelers can get a sense of their future experiences, through the mediated features of a website or online travel agency platforms **(Tao et al., 2021)**.

VR has been extensively adopted in hospitality and tourism industries, including hotels **(Wynn & Jones, 2022)**, museums **(Fernandez-Lores et al., 2022)**, destination marketing **(Zheng et al., 2022)**, and theme parks **(Oh & Kong, 2022)**, and it is considered one of the most digitalized marketing tools. The experience of VR travel and discovering a destination, can positively impact actual visitors to the destination. Travelers can create a realistic portrayal of their possible experiences related to future travel plans and develop reasonable strategies by immersing themselves in their future places before leaving home **(Wei, 2019)**. This study investigates a critical research question, that will assist in designing a better VR travel experience. The findings will fill the highlighted research gaps, by quantitatively analyzing the relationships between the quality of VR constructs, flow experiences, satisfaction, and tourist future travel intention.

2. Review of Literature

2.1 Virtual Reality for Tourism Destination Promotion

Tourism marketers, who devise new and creative advertising methods to increase destination visitation **(Sudhahar & Raja, 2010**). **Bonetti et al. (2018**), discovered that VR could improve hospitality and tourism experiences by encouraging immersion through interacting with virtual environments. Using findings from previous VR research, this study investigated, within the marketing framework of tourist destinations, the role of VR quality (as measured by content quality, vividness, and system quality) on flow experiences and satisfaction to lead future travel intention.

2.2 Virtual Reality Quality Aspects

2.2.1 Content, Vividness, and System Quality

The literature shows three aspects of content: accuracy, relevance, and completeness **(Doll & Torkzadeh, 1988)**. This study mostly adheres to the definition provided by **De Wulf et al. (2006)**, who compiled numerous ideas from a broader perspective and argued that content is the user's perception of information in terms of its trustworthiness, completeness and relevancy. According to the findings of several studies, content quality has a favorable impact on website satisfaction, the perceived success of websites, end-user computing satisfaction, and the user adoption of mobile **(Doll & Torkzadeh, 1988; Kannadas & Anand, 2013)**. The concept of "vividness" was defined in terms of a mediated environment's "sensory breadth" as well as its "sensory depth." The sensory range is proportional to the amount of sensory aspects offered simultaneously (for instance, users watch as scenes unfold in a Manhattan venue, complete with the noise of a motorbike and the acrid scent of vehicle exhaust). While discussing internet-based retailing, vividness is most often connected with the level of product display **(Jiang & Benbasat, 2007)**. The system quality is a component of the information system, that has been known about the system's easiness. The decision to utilize or not to use an information system is based on several variables, including responsiveness, convenience of use, accessibility of the equipment, and reliability of the equipment **(Kanagaraj & Sudhahar, 2014)**.

2.3 Virtual Reality, Flow Experiences, and Satisfaction

Flow experience is an essential customer experience factor and a predictor of visitor behavior to comprehend VR travel's influence on destination marketing. **Hoffman & Novak (1996)** identified flow as a key feature of CMEs, that enhances user-computer interactions and user experience. The capacity to offer opportunities for customers to experience flow is critical to the success of online marketing (**Hsu et al., 2012)**. Consumers' perceptions of satisfaction are based on their individual experiences, with cognitive and affective judgments of their purchased services and items **(Selvam, 2005)**. While using a product or service, customer satisfaction is explained as an overall experience assessment **(Vukmir, 2006)**. Under their prior expectations, consumers would have either a favorable or a negative emotional reaction **(Wu et al., 2018)**.

3. Statement of the Problem

With the industry's increasing acceptance of VR for consumer interaction and marketing activities, VR research in the context of tourism is still in its infancy, regarding the role of VR, its quality, and user satisfaction for travel intention. However, VR is a vital tool for tourism

businesses, helping to increase productivity and improve business operations. This research proposed that when users enjoy VR content, their flow experience affects their satisfaction with tourism destinations and, as a result, their attitudes toward the destination **(Figure-1)**.

4. Need of the Study

In this study, researchers employed the necessity of VR to generate realistic and navigable virtual environments for Chinese travelers. VR experiences have considerable potential as promotional tools that motivate users to visit tourist destinations. VR is particularly attractive for the tourism industry because it offers a conduit through which intangible tourism experiences may be communicated to a larger audience. The tourism industry has historically relied on visual imagery while advertising destinations to communicate with and influence consumers.

5. Objectives of the Study

The following are the objectives of this research:

a. To evaluate the influence of VR quality (measured by content, system quality, and vividness) on flow experiences and satisfaction toward future travel intention.

b. To test how the VR travel quality, through flow experience and satisfaction, influences future travel intention.

6. Hypotheses of the Study

H1a and H1b: Content quality positively influences flow experiences and satisfaction.

H2a and H2b: Vividness positively influences flow experiences and satisfaction.

H3a and H3b: System quality positively influences flow experiences and satisfaction.

H4a: Flow experiences have a positive effect on satisfaction.

H4b: Flow experience has a positive effect on future travel intention.

H5: Satisfaction has a positive effect on future travel intention.

7. Research Methodology

7.1 Sample Selection

This study's sample size consisted of individuals, who reported some basic to advanced knowledge of technology usage but have not yet traveled to the study's destination, stated in the survey. The data collection effort involved a self-administered survey, administered to Chinese participants, who browsed a VR-based destination website before answering an online VR-related survey.This study employed snowball sampling, to distribute an online questionnaire targeting Chinese users. A sufficient sample size of 347 responses was collected and analyzed.

7.2 Sources of Data

Snowball sampling method was used to perform an online self-administered survey. Except for vividness, assessed through a 5-point differential semantic scale, other measurement variables were operationally defined by employing multiple items on a 5-point Likert-type scale, with one, rating "strongly disagree" and five, rating "strongly agree." Each study instrument was modified from prior studies to meet the virtual reality context. Data were collected from individuals who had yet to travel to the destinations indicated in the survey, using Chinese social media platforms (WeChat, QQ, etc.).

7.3 Period of Study

The data from the 347 total respondents, who participated in the survey, were collected between March and July 2022.

7.4 Tools Used in this Study

The PLS-SEM method approach was employed for the data analysis because the PLS-SEM method is suitable for exploratory research and has high statistical inference power.

8. Data Analysis of the Impact Virtual Reality Quality on Travel Intention

8.1 Demographics

Regarding gender, 157 (45%) males and 190 (55%) females participated in the study. The respondents ranged from as young as 20 to above 30 years. The majority of participants were under 24 years old, indicating that young people were interested in participating in the research **(Table-1).**

8.2 Measurement Model

8.2.1 Internal Consistency

Internal consistency was evaluated, by employing Cronbach's alpha, composite reliability, and rho A. **(Hair et al., 2019)**. From the results, reliability values for internal consistency ranged from 0.70 to 0.90. All the values in this study were above 0.70 and proved the model's internal consistency **(Table-2).**

8.2.2 Construct Validity

Discriminant validity and convergent values were used to examine validity. The minimum value for AVE was greater than or equivalent to 0.50 **(Hair et al., 2019),** suggesting that it was under control. Discriminant validity describes how much one variable is empirically different from another in the model **(Hair et al., 2019)**. The Heterotrait-Monotrait (HTMT) ratio was used to measure it **(Voorhees et al., 2016)**. In **Table-3**, all the construct HTMT values were less than the threshold value, which suggested the existence of discriminant validity.

8.2.3 Multicollinearity & Common Method Bias

It is possible that common method bias (CMB) exists since the predictor variables in the present study are presented, by employing the same responding method **(Podsakoff et al., 2003)**. **Kock et al. 2021** suggested different CMB precautions, such as ensuring the anonymity of participants, attempting to steer clear of unclear research questions, and providing extensive survey guidance to prevent bias and errors. Based on the results, the CMB posed no concern while examining the structural model. Also, the VIF values were less than 5. Hence CMB was not an issue.

8.3 Structural Model

8.3.1 Model Fit

SmartPLS3 demonstrates essential values for the model fit. According to **Table-4,** the SRMR and NFI values were 0.72 and 0.96 respectively **(Dash & Paul, 2021)**. All values offered adequate results, demonstrating that the proposed model was appropriate for research. The value of goodness of fit (GOF) was also examined for the proposed framework to ensure overall quality **(Tenenhaus et al., 2005)**. The obtained GOF value of 0.419 exceeded the minimum required value of 0.36.**(Wetzels et al., 2009)**

8.3.2 Coefficient of determination (R^2), effect size (f^2), predictive analytics (Q2)

The study model's explanatory power was evaluated through the effect size (f^2), coefficient of determination (R^2), and predictive relevance (Q2). The effect size was measured, based on the size of the path coefficients, with values of

0.02, 0.15, and 0.35 in f^2, being classified as small, medium, and large **(Cohen, 2013)**. According to **Shmueli & Koppius, 2011,** the R^2 is used to determine the variation of every endogenous variable, with a value of 0.75, 0.50, and 0.25 being regarded as good, normal, and weak subsequently **(Henseler et al., 2009)**. The Q^2 also has threshold values the same as R^2. However, all the values in this analysis met the threshold criteria.

8.4 Path Coefficients

The structural model included an analysis of the statistical significance and relevance of the path coefficient values **(Hair et al., 2019)**. **Table-5 and Figure-2** reveal that CQ positively and substantially affected the FE and SA, supporting hypotheses **H1a** and **H1b** ($\beta = 0.372, p = 0.000; \beta = 0.049, p = 0.001$). VI exercised positive and substantial effect on FE and SA, supporting the hypothesis **H2a** and **H2b** ($\beta = 0.375, p = 0.001; \beta = 0.396, p = 0.000$). SQ positively and substantially influenced FE and SA, supporting hypotheses **H3a** and **H3b** (β = 0.11, p = 00.014; β = 0.178 p = 0.001). FE positively and substantially influenced SA and FTI ($\beta = 0.209, p = 0.001; \beta = 0.08, p = 0.002$), supporting the hypotheses **H4a** and **H4b**. SA positively and significantly influenced FTI, supporting the hypothesis **H5** (β = 0.567, $p = 0.000$).

9. Findings of the Study

Using the ISS model as a framework, this study provides a VR quality framework, to ascertain the effect of VR quality on Chinese consumers' behavioral responses (flow experience) and psychological perceptions (satisfaction). Then customers' behavioral and attitudinal responses ultimately lead to their future travel intention toward the destination. Firstly, this research revealed the primary quality, of VR attributes and their effects on consumers' 'attitudinal and behavioral intentions to travel to the destination. According to **Lee et al. (2020)**, vividness enhanced flow experiences, leading to customer satisfaction. According to **Zhou (2013)**, the system quality determines the flow experience, which affects user satisfaction and loyalty. These findings were consistent with customers' behavioral response flow experience and psychological perception satisfaction. Secondly, the highlighted quality-related variables influenced respondents' VR usage, to improve their experience and enhance their motivation, to visit the destination in the future. The quality of the VR might be a significant factor that would cause consumers to experience the virtual destination and have positive satisfaction towards the VR, which would lead to future travel intention **(Gunasekaran et al., 2011)**. This necessitates professionals in the tourism industry to incorporate better features into the VR design, such as travel-specific information, bird view of the destination and customized tour choices. Thirdly, the user-friendly, vivid, and interactive rich content should also be designed for VR, to motivate consumers to feel like they are at the destination and build a better VR experience. Customers' positive attitudinal responses (satisfaction) and behavioral responses (flow experience) to the VR, subsequently led to their willingness to visit the place. Finally, our outcomes add to the expanding accumulation of evidence that supports the notion of a link between VR design and future travel intentions. Our findings revealed that VR in the tourism industry produces positive outcomes for future travelers.

10. Suggestions

Findings suggested that practitioners in the tourism industry should be aware of what VR quality attributes should have and provide their

customers with practical use for marketing the destination. Tourism destination organizers and marketers should concentrate on developing destination content that includes, among other things, a complete perspective of the destination, including surrounding tourist spots, customer-specific destination details, and easy access to those details via the navigation, which are all essential factors in VR quality. Our study suggested that tourism sector practitioners should insist on the visualization of VR to be clarified, vivid, and bright for visitors to create an accurate view of a future destination.

11. Conclusion

This study aimed to concentrate on the quality of the VR conceptual model, by determining critical VR quality elements and the impact those characteristics have on consumers' future travel intentions. The quality of VR attributes (content quality, vividness, and system quality) had considerable and positive impact on both consumers' behavior (flow experience) and attitudes (satisfaction), which led to their intention to travel in the future. The current study demonstrated that the VR quality attributes represented primary motivation, influencing customers' choice to use VR to enhance their experience and encourage their desire to travel in the future.

12. Limitation of the Study

Several limitations were present in this study. First, it was not possible to generalize the results regarding the VR quality and the behavioral and psychological responses of Chinese consumers since the experience of a virtual tour can change, based on the device being utilized to see the virtual tour. Second, this research assessed the relationships between VR tour functions and consumers' responses using the survey method. Other methods could have been applied. Third, the role that VR can play in customer engagement, can differ on the customers' familiarity and their previously acquired experience with the destination.

13. Scope for Further Research

Future research can control the tools utilized for the virtual tour and match the effects of these devices on the consumers' perceptions of the quality of the VR experience. Additionally, customers may already know the destination and hence researchers, interested in this topic, need to analyze the efficacy of customer perceptions of VR utilization, by incorporating various tourist sites. Moreover, future studies can also take an experimental approach to explore the causal influence of VR features on VR use, by examining the impact of VR components on customers' responses.

Conflict of Interest

The authors declare that there was no conflict of interest.

14. References

Bardi, J. (2022, May 13). *Virtual Reality Defined & Use Cases | 3D Cloud by Marxent*. https://www.marxentlabs.com/what-is-virtual-reality/

Bonetti, F., Warnaby, G., & Quinn, L. (2018). Augmented Reality and Virtual Reality in Physical and Online Retailing: A Review, Synthesis and Research Agenda. In *Augmented reality and virtual reality* (pp. 119–132). Springer.

Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Routledge.

Dash, G., & Paul, J. (2021). CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting. *Technological Forecasting and Social Change*, *173*, 121092.

De Wulf, K., Schillewaert, N., Muylle, S., & Rangarajan, D. (2006). The role of pleasure in web site success. *Information & Management*, *43*(4), 434–446.

Doll, W. J., & Torkzadeh, G. (1988). The measurement of end-user computing satisfaction. *MIS Quarterly*, 259–274.

Fernandez-Lores, S., Crespo-Tejero, N., & Fernández-Hernández, R. (2022). Driving traffic to the museum: The role of the digital communication tools. *Technological Forecasting and Social Change*, *174*, 121273. https://doi.org/10.1016/j.techfore.2021.121273

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research,*18(1), 39-50.

Gunasekaran, I., Selvam, M., & Babu, M. M. (2011). Measuring the Satisfaction Level of Tourists: A Study with Reference to Tiruchirappalli District, Tamil Nadu, India (May 9, 2011).

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (second edi). Sage publications.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*.

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing*. Emerald

Hoffman, D. L., & Novak, T. P. (1996). Marketing in hypermedia computer-mediated environments: Conceptual foundations. *Journal of Marketing*, *60*(3), 50–68.

Hsu, C., Chang, K., & Chen, M. (2012). Flow Experience and Internet Shopping Behavior: Investigating the Moderating Effect of Consumer Characteristics. *Systems Research and Behavioral Science*, *29*(3), 317–332. https://doi.org/10.1002/sres.1101

Jiang, Z., & Benbasat, I. (2007). Research note—investigating the influence of the functional mechanisms of online product presentations. *Information Systems Research*, *18*(4), 454–470.

Johnson, A.-G. (2022). Why are smart destinations not all technology-oriented? Examining the development of smart tourism initiatives based on path dependence. *Current Issues in Tourism*, 1–13. https://doi.org/10.1080/13683500.2022.2053071

Kanagaraj, D. J., & Sudhahar, J. C. (2014). Determinants Influencing usage intensity of the B2B Web Marketing. *SMART Journal of Business Management Studies,* 10(1), 43-50.

Kannadas, P., & Anand, V. A. (2013). Linkage between information systems in smes and the performance of firms: A causal path analysis. *SMART Journal of Business Management Studies,* 9(2), 44-52.

Kock, F., Berbekova, A., & Assaf, A. G. (2021). Understanding and managing the threat of common method bias: Detection, prevention and control. *Tourism Management*, *86*, 104330.

Lee, M., Lee, S. A., Jeong, M., & Oh, H. (2020). Quality of virtual Reality and its impacts on behavioral intention. *International Journal of Hospitality Management*, *90*, 102595.

Novianti, S., Susanto, E., & Rafdinal, W. (2022). Predicting Tourists' Behaviour Towards Smart Tourism: The Case in Emerging Smart Destinations. *Journal of Tourism Sustainability*, *2*(1), 19–30. https://doi.org/10.35313/jtospolban.v2i1.30

Oh, J.-E., & Kong, A. (2022). VR and Nostalgia: Using Animation in Theme Parks to Enhance Visitor Engagement. *Journal of Promotion Management*, *28*(2), 113–127.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common

method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879.

Selvam, M., Gayathri, J., Vasanth, V., Lingaraja, K., & Marxiaoli, S. (2016). Determinants of firm performance: A subjective model. *Int'l J. Soc. Sci. Stud.,* 4, 90.

Shmueli, G., Ray, S., Estrada, J. M. V., & Chatla, S. B. (2016). The elephant in the room: Predictive performance of PLS models. *Journal of Business Research,* 69(10), 4552-4564.

Sudhahar, J. C., & Raja, M. (2010). Effectiveness of internet product marketing: A cognitive mapping evaluation method. *SMART Journal of Business Management Studies,* 6(1), 70-77.

Tao, M., Alam, F., Nawaz, M. Z., & Khan, J. (2021). The Role of Cultural Intelligence in the Relationship Between Platform Trust and Loyalty: The Perspective From OTA Platforms. *International Journal of Online Marketing (IJOM)*, *11*(2), 17–31.

Tenenhaus, M., Vinzi, V. E., Chatelin, Y.-M., & Lauro, C. (2005). PLS path modeling. *Computational Statistics & Data Analysis*, *48*(1), 159–205.

Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies. *Journal of the Academy of Marketing Science*, *44*(1), 119–134.

Vukmir, R. B. (2006). Customer satisfaction. *International Journal of Health Care Quality Assurance,*19(1), 8-31.

Wei, W. (2019). Research progress on virtual Reality (VR) and augmented Reality (AR) in tourism and hospitality. *Journal of Hospitality and Tourism Technology*, *10*(4), 539–570.

Wetzels, M., Odekerken-Schröder, G., & Van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly*, 177–195.

Wu, C., Sundiman, D., Kao, S. C., & Chen, C. H. (2018). Emotion induction in click intention of picture advertisement: a field examination. *Journal of Internet Commerce,* 17(4), 356-382.

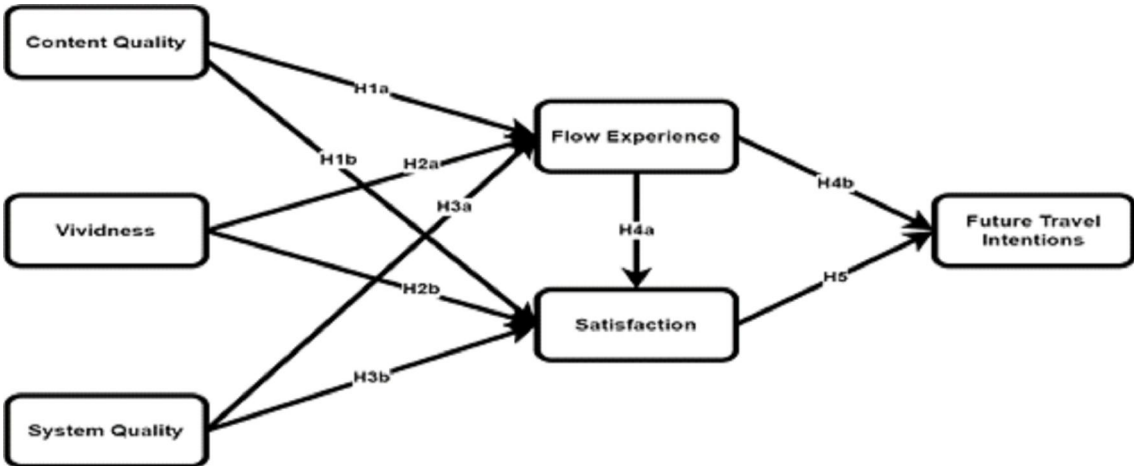
Wynn, M., & Jones, P. (2022). IT Strategy in the Hotel Industry in the Digital Era. *Sustainability*, *14*(17), 10705. https://doi.org/10.3390/su141710705

Ying, T., Tang, J., Ye, S., Tan, X., & Wei, W. (2022). Virtual Reality in Destination Marketing: Telepresence, Social Presence, and Tourists' Visit Intentions. *Journal of Travel Research*, *61*(8), 1738–1756. https://doi.org/10.1177/00472875211047273

Zhang, S.-N., Li, Y.-Q., Ruan, W.-Q., & Liu, C.-H. (2022). Would you enjoy virtual travel? The characteristics and causes of virtual tourists' sentiment under the influence of the COVID-19 pandemic. *Tourism Management*, *88*, 104429.

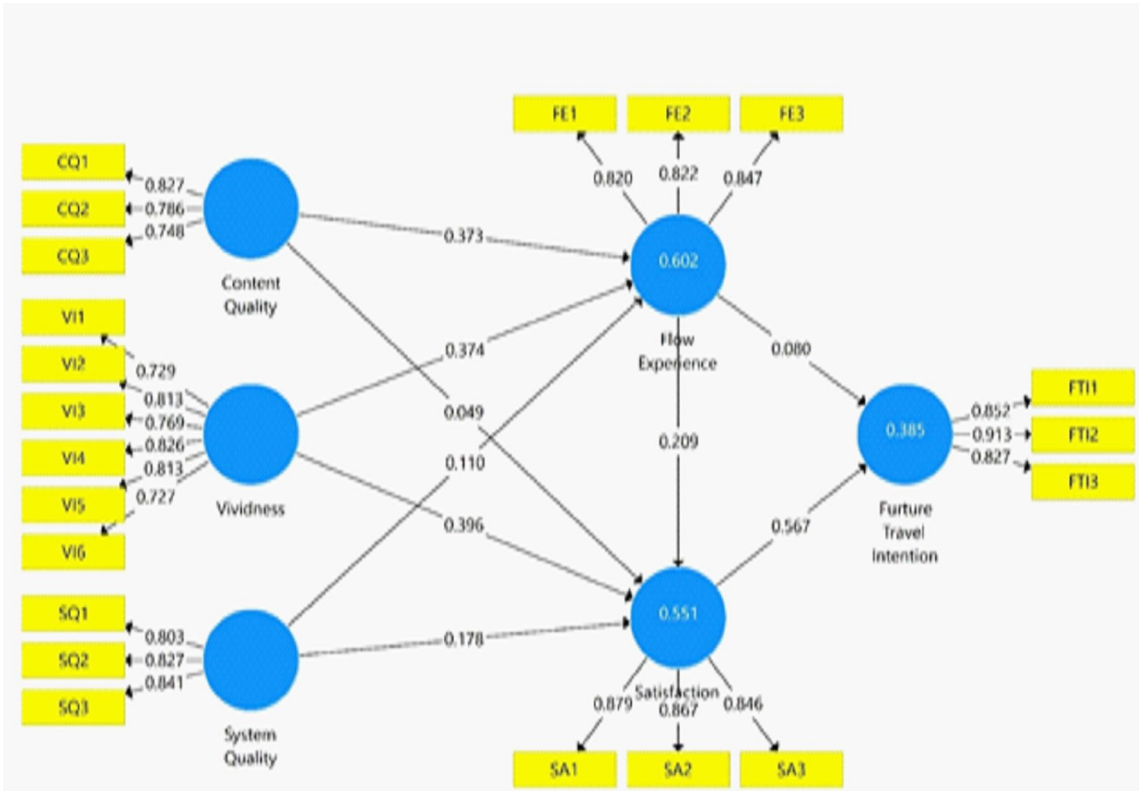
Zheng, C., Chen, Z., Zhang, Y., & Guo, Y. (2022). Does vivid imagination deter visitation? The role of mental imagery processing in virtual tourism on tourists' behavior. *Journal of Travel Research,* 61(7), 1528-1541.

Figure-1: Conceptual framework of Exploring the Impact of Virtual Reality Quality on Travel Intention from the Perspective of Destination Marketing



Source: (Authors)

Figure-2: Path Coefficient of the Proposed Conceptual Framework



Source: Primary Data Computed from SMART PLS-SEM 3.9 Software

Table - 1 : Demographics Profile of the Proposed Research Participants

Demographic variables	Frequency	Cumulative frequency	Percentage
Gender			
Male	157	157	45%
Female	190	347	55%
Age			
Below 20	65	65	18%
21 to 24	159	224	46%
25 to 29	106	330	31%
30 and above	17	347	5%
Education			
Bachelor's Degree	199	199	57%
Master's Degree	126	325	37%
Doctorate Degree	22	347	6%

Source: Primary Data Computed Using SPSS

Table-2:Reliabilities and Validities of the Proposed Study Regarding the Impact of Virtual Reality Quality on Travel Intention

Construct Items	α	rho_A	CR	AVE
Content Quality (CQ)	**0.70**	**0.70**	**0.83**	**0.62**
Vividness (VI)	**0.87**	**0.87**	**0.90**	**0.61**
System Quality (SQ)	**0.76**	**0.76**	**0.86**	**0.67**
Flow Experience (FE)	**0.77**	**0.78**	**0.86**	**0.68**
Future Travel Intention (FTI)	**0.831**	**0.84**	**0.89**	**0.74**
Satisfaction (SA)	**0.83**	**0.83**	**0.89**	**0.74**

Note 1: α=Cronbach Alpha; CR=Composite Reliability; AVE=Average Variance Extracted;

Note 2: All the construct item's factor loading is greater than 0.60, and VIF is less than 5.

Source: Computed from SMART PLS-SEM 3.9 Software

Table-3:Convergent and Discriminant Validities of the Proposed Study Regarding the Impact of Virtual Reality Quality on Travel Intention

Constructs	CQ	FE	FTI	SA	SQ	VI
Heterotrait-Monotrait (HTMT) Method						
Content Quality (CQ)						
Flow Experience (FE)	0.89					
Future Travel Intention (FTI)	0.64	0.53				
Satisfaction (SA)	0.77	0.78	0.73			
System Quality (SQ)	0.72	0.76	0.51	0.76		
Vividness (VI)	0.72	0.76	0.64	0.72	0.78	

Source: Computed from SMART PLS-SEM 3.9 Software

Table-4: Coefficient of Determination (R^2), Effect Size (f^2), Predictive Analytics (Q^2), and Model Fit of the Proposed Study

Constructs	FE	FTI	SA
R^2	0.59	0.38	0.54
Q^2	0.38	0.26	0.38
f^2			
Content Quality (CQ)	0.15		0.002
Flow Experience (FE)		0.006	
Satisfaction (SA)		0.31	
System Quality (SQ)	0.01		0.03
Vividness (VI)	0.13		0.11
Model Fit			
SRMR	0.07		
NFI	0.79		
GOF = $\sqrt{\text{Avg. AVE}} * \bar{R}^2$	0.41		

Source: Computed from SMART PLS-SEM 3.9 Software

Table-5: Structural Model Analysis of the Proposed Study Regarding the Impact of Virtual Reality Quality on Travel Intention

Hypothesis Relationship	Beta (β)	T Value	P Value	Decision
H1a Content Quality -> Flow Experience	0.37	5.68	0.000	Supported
H1b Content Quality -> Satisfaction	0.04	2.78	0.001	Supported
H2a Vividness-> Flow Experience	0.37	6.59	0.000	Supported
H2b Vividness-> Satisfaction	0.39	5.40	0.000	Supported
H3a System Quality-> Flow Experience	0.11	2.51	0.014	Supported
H3b System Quality-> Satisfaction	0.17	3.33	0.001	Supported
H4a Flow Experience-> Satisfaction	0.20	3.40	0.001	Supported
H4b Flow Experience-> Future Travel Intention	0.08	2.60	0.002	Supported
H5 Satisfaction -> Future Travel Intention	0.56	9.72	0.000	Supported

Source : Computed from SMART PLS-SEM 3.9 Software