

EXPLORING WAR TOURISM THROUGH THE USE OF VIRTUAL REALITY IN THE CONTEXT OF CONFLICT SITUATIONS

Remus-Ion Hornoiu^{1*}, Delia Popescu², Ionut-Andrei Militaru³

¹ Bucharest University of Economic Studies, Bucharest, Romania, remus.hornoiu@com.ase.ro

² Bucharest University of Economic Studies, Bucharest, Romania, delia.popescu@com.ase.ro

³ Bucharest University of Economic Studies, Bucharest, Romania, militaruionut21@stud.ase.ro

Abstract*The ongoing conflict in Ukraine has had a significant impact on the country's tourism industry, with many regions becoming inaccessible or unattractive due to safety concerns. VR tourism in war zones, a form of tourism that involves visiting areas affected by conflict, disaster, or civil unrest, has become a topic of interest in the context of the war in Ukraine. To investigate the intention to use VR tourism in the war zone, an integrated framework was proposed by combining key elements such as interest in VR tourism in the war zone and the technology acceptance model (TAM). A sample of 121 respondents was collected in January 2021, and hypotheses were tested using a PLS-SEM model. This research tested a conceptual model that showed that the intention to use VR tourism in the war zone was influenced by perceived ease of use, perceived usefulness, and attitude toward the use of VR tourism in the war zone, all partially or fully mediated by people's interest in VR tourism in the war zone. This paper has theoretical and managerial implications.*

Keywords: War tourism; Virtual reality (VR); travel interests; attitude to use technology; Technology Acceptance Model (TAM)

JEL Classification: L15, L83, Q20, Q50

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1. Introduction

Tourism is a vital sector for the economy of many countries, and Ukraine is no exception. However, since the beginning of the conflict in Ukraine in 2022, the country's tourism industry has been significantly affected. The war, as a result of geopolitical risks, had a profound impact on infrastructure and tourist attractions, with many regions that were previously popular among tourists now becoming inaccessible or unattractive due to safety concerns. The number of international visitors to Ukraine has dropped sharply, as tourists are unlikely to visit regions where their safety is threatened (Morakabati, Fletcher and Beavis, 2017).

The impact of geopolitical risks on tourism is visible on several levels, such as: deteriorating tourist heritage, which can go as far as the disappearance of world heritage resources or objectives, some of which are on the UNESCO list (Nisbett, 2007); resizing tourism flows (diplomatic crises, terrorist attacks, growing conflicts, territorial secessions, and others that have these effects); reproduction of a specific form of tourism, namely war tourism.

War tourism refers to tourism in areas that have suffered or are still suffering conflicts, disasters, or civil unrest (Mahrouse, 2016). This type of tourism is often seen as controversial and has been the subject of much debate among scholars, decision-makers, and tourism professionals. Some researchers argue that war tourism can contribute to post-conflict recovery by generating income and creating jobs for local people (Reddy et al., 2020). It can also raise awareness of the impact of war and conflict on local communities. However, there are critics who argue that war-torn tourism can be exploitative, disrespectful, and insensitive to the suffering of local communities (Coles, 2000; Strange and Kempa, 2003). The dominant academic discourse is that tourists need to feel safe when traveling abroad, they want to spend their money in a place that can offer them peace and tranquility. Safety, security, mental comfort, and stability are therefore considered vital prerequisites for the choice of tourists of a

* contact author

destination and for the development of much-needed tourism infrastructure (Hall, 1994; Pizam and Mansfeld, 1996; Hall, Timothy and Duval, 2003; Henderson, 2007, Theodoru and Schiopu, 2022). For example, the Ukrainian authorities have done so recently, with foreign tourists being urged not to visit the country at this time. Ukraine's State Agency for Tourism Development noted that the "once safe country" cannot currently guarantee the safety of tourists (Williams et al., 2023).

Virtual Reality (VR) technology has the potential to revolutionise the way people experience and understand the destinations affected by war. It allows users to immerse themselves in a virtual environment, providing a unique opportunity to explore and learn about a place without being physically there (Dwivedi et al., 2022). In the context of war zone travel, VR technology can provide a sense of safety for travellers who may be hesitant to visit these destinations in person (Schaeffer et al., 2018).

The premise of this research was that in the new context of the war in Ukraine, people would prefer less risky experiences and see virtual reality (VR) as a safe and informative alternative, as well as a substitute for conventional travel (Sarkady, 2020). The research focuses on the perceptions and attitudes of individuals towards the use of VR technology for war tourism. Specifically, the study examines the perception of the ease of use of VR technology, the usefulness of VR for gathering information, the potential to learn about history and culture through the use of VR, and the impact of the attitude to use VR technology on the acquisition of knowledge.

In addition, research also examines the interests of travel to war zones using virtual reality (VR). Research explores whether individuals use VR technology to learn about geopolitics and geostrategy, to differentiate themselves from other tourists, to get to know new and different places, for peace of mind, or in search of danger. Finally, the study investigates the likelihood of individuals buying VR travel packages, reviewing conflict zone tourist destinations using VR, and using VR technology as often as possible.

The intention to use VR technology to travel to a war zone is influenced by factors such as the interests of the traveler, the perceived risk of the destination, and the level of perception of the usefulness of virtual reality (VR). Some travelers may be interested in using VR out of a desire to learn about the history / geopolitics / geostrategy of existing conflicts in the areas visited or out of curiosity about danger, while others want to find peace of mind.

Thus, this research aims to investigate different aspects of VR tourism in war zones, focusing on the use and determinants in the context of the war in Ukraine. The study will use the TAM model to examine the use of VR in tourism in war zones. The specific objectives of the study are as follows:

1. To empirically examine how the war in Ukraine affects the intention to use VR tourism in war zones and associated factors.
2. To explore the relationships between perceived ease of use, perceived usefulness, attitude, and interest in VR tourism in war zones.

2. Literature review

2.1 Using VR for war zone travel

Virtual reality (VR) technology has emerged as a potential tool to improve tourist experiences, providing a simulated environment for visitors. Virtual reality (VR) encompasses a series of interactive 3D technologies that stimulate one or more senses to create a synthetic environment that surpasses reality, fully plunging users into a simulated world (Berg and Vance, 2017). In this context, Kim et al. (2020) define tourism through VR as the process of creating or replicating a digital tourism environment based on real-life scenes, using digital tools to store and collect tourist resources, and using 3D visual simulation of tourist landscapes, all to provide visitors with an immersive and interactive experience in real time. In recent years, there has been a growing interest in the use of VR in tourism and its potential to improve tourism planning (Shao et al., 2020), heritage protection (Caciora et al., 2021), entertainment (Beck et al., 2019), accessibility (Marasco and Balbi, 2019), marketing (Huang et al., 2016), education (Chiao et al., 2018) and policy-making, and to provide visitors with a safe and accessible way to explore historical sites, natural environments, and cultural attractions (Guttentag, 2010). A specific area of

interest is the use of VR for travel to war zones, where visitors can interact with a simulated environment and experience what it is like to be in an active war zone without the danger or cost of traveling to the real location. In addition, the use of VR for war zone travel can provide visitors with an educational and cultural experience. Visitors can learn about the history of the war zone, the impact on local communities, and the cultural significance of the area. This can help promote intercultural understanding and appreciation. Despite the potential benefits, research into using the use of VR for wartime travel is almost non-existent. The existing literature focuses primarily on the use of virtual reality in tourism in general, without specifically taking into account war zones. In this context, we have hypothesised that these areas, which are often dangerous and difficult to visit, will make VR a potential tool to provide visitors with a safe and accessible way to learn about these environments.

The Technology Acceptance Model (TAM) is a widely recognised framework for examining factors affecting users' adoption of new technologies or information systems (Davis, 1985). TAM is rooted in the Theory of Reasoned Action (TRA), which proposes that people's attitudes toward a particular behavior are influenced by their beliefs about the outcomes associated with that behavior (Davis et al., 1989). Perceived usefulness and perceived ease of use are two factors that TAM focuses on to understand user behavior. Perceived utility refers to the user's belief that technology will be beneficial in some way, while perceived ease of use refers to the user's belief that the technology is easy to use and easy to learn (Davis, 1989).

Although TAM has some limitations, its simplicity and ease of application make it a popular tool for researching the adoption of technology. However, some critics have pointed out that the explanatory power of THE TAM is limited, as it may not consider all the relevant factors influencing the adoption and behavior of users. Therefore, in the context of our study, it is important to consider the interest in using VR for wartime travel as a potential factor that can affect user behavior. By doing so, a more comprehensive understanding of the acceptance and adoption of the technology can be achieved.

2.2 Development of hypotheses and the proposed research model

Perceived utility (PU) constructs and perceived ease of use (PE) are important factors influencing user behavior in relation to VR tourism (Schiopu et al., 2021). Perceived utility refers to the user's perception of how much VR tourism can improve their utility and overall tourist experience. Perceived ease of use, on the other hand, refers to the user's perception of how easy it is to use VR travel devices and services. Previous research has investigated the correlation between perceived ease of use (PE) and perceived utility (PU) and their influence on behavioral intent (BI) and consumer acceptance of VR in tourism (Disztinger et al., 2017). This suggests that BI is influenced by both PE and PU, which means that people are more likely to form their intentions to engage in a certain behavior if they have a positive attitude towards it (Davis, 1989). Therefore, these two constructs are important in the context of this study and form the basis of the following hypotheses:

Hypothesis 1 (H1): Perceived ease of use (PE) positively influences behavioral intent (BI).

Hypothesis 2 (H2): Perceived utility (PU) positively influences behavioral intent (BI).

Based on previous research, high usability has been shown to not only affect the behavioral intent to use VR, but also influence the perception of its usefulness (Hubert et al., 2019). In addition, previous studies have confirmed the positive relationship between perceived utility (PU) and perceived ease of use (PE) (Venkatesh and Davis, 2000). Therefore, in the context of this study, it is assumed that individuals perceive the use of VR for travel to war zones as more useful if the difficulty of operating is low:

Hypothesis 3 (H3): Perceived ease of use positively influences perceived usefulness.

The attitude towards VR tourism is the general assessment of the user regarding the desirability of using this technology for his travel interests. Previous research has shown that perceived usefulness and perceived ease of use are closely related to attitude (Venkatesh et al., 2003). When users perceive that a technology is useful, they are more likely to have a positive attitude towards using it (Kanchanatane et al., 2014). It is reasonable to assume that users are more likely to have a positive attitude towards VR

tourism in the war zone when they perceive it as a useful tool that improves their performance or usefulness (PU). As a result, the following hypothesis is proposed:

Hypothesis 4 (H4): Perceived utility has a positive impact on attitudes towards the use of VR tourism.

Attitudes towards VR tourism have a significant impact on the intention to use this form of travel (Shen et al., 2022). If a VR travel service does not meet customers' expectations about the utility, it can lead to a negative attitude towards it, which could lead to a complete interruption of the use of the service or technology. Conversely, a favorable attitude toward VR tourism can lead to widespread acceptance and intent to use (Chiao et al., 2018). Therefore, in the context of this study, it is assumed that: it is important to consider the role of attitude in promoting the adoption and sustained use of VR tourism services:

Hypothesis 5 (H5): Attitude towards VR tourism in the war zone positively influences behavioral intent (BI).

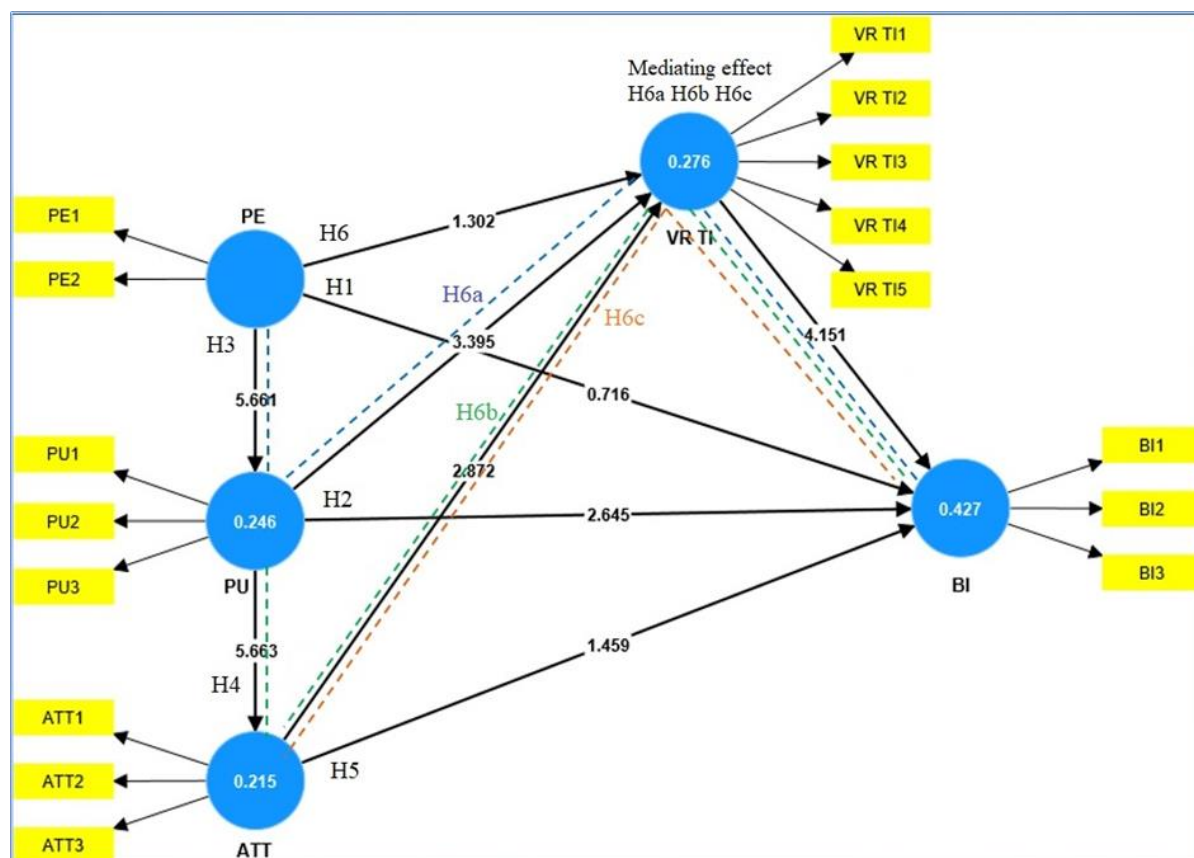


Fig. no. 1. Proposed research model

Source: Developed by the author

Interest in VR tourism is characterised by the curiosity or attraction of individuals to external information and media advertising related to this mode of travel (Hong et al., 2021). The study conducted by Schipou et al. (2021) investigated the relationship between interest in VR tourism, perceived ease of use, perceived utility, perceived substitutability, and behavioral intent to use VR in tourism. The findings of the study showed that interest in VR tourism mediated the relationship between the aforementioned constructs and the behavioral intent to use VR in tourism. Specifically, the high interest in the use of VR in tourism has increased the positive effect of the perceived ease of use, perceived usefulness, and perceived substitutability of VR on the behavioral intention to use VR in tourism. In this context, we propose the interest for VR tourism in the war zone as a mediator between the perceived ease of use of VR, the perceived usefulness, attitude, and behavioral intention to use VR in tourism:

H6a. Interest in VR tourism in war zones mediates the relationship between perceived ease of use and behavioral intent to use VR in tourism.

H6b. Interest in VR tourism in war zones mediates the relationship between perceived utility and behavioral intent to use VR in H7b tourism.

H6c. Interest in VR tourism in war zones mediates the relationship between attitude and behavioral intent to use VR tourism in war zones.

3. Methodology

3.1 Data collection

An extensive study in the literature has led to a preliminary list of measurement variables on the effects of conflict on the perception of risk and travel intention of young tourists, the behavior of international tourists then using technology, theories of human behavior and information about the conflict in Ukraine (Williams et al., 2023; Giddy, 2018, Bagozzi, Baumgartner and Pieters, 1989; The Economist Intelligence Unit, 2022; Mahrouse, 2016; Montoya and Ruiz-Molina, 2019; Lim et al., 2022; Weaver et al., 2018).

Together with the advancement of digitalisation, some specialists in the hotel and tourism field use online questionnaires to successfully reach a greater number of interested people. (Kim et al., 2008). This research used information collected from an online survey platform (Google Forms), being aimed at bachelor's and master's level students studying tourism. Through this method, 121 questionnaires were collected, the information being collected between January 10, 2023 and February 15, 2023. The questionnaire used a seven-point Likert scale, ranging from "1" for "total disagreement" to "7" for "totally agree".

The Constructs Ease of Perceived Use (PE), Perceived Utility (PU), Intention to Use VR (BI), and Attitude to Use VR (ATT) were adopted after Li, 2022.

The attitude of subjects towards the use of VR for war zone travel was outlined with 3 items, as suggested by previous research (Davis et al., 1989; Geng et al., 2022). Perceived ease of use (PE) has been analysed using items such as: Interacting with the VR app is clear and understandable, and Ifind it easy to operate the VR app and experience the virtual tour. The Perceived Utility (PU) variable is constructed of 3 items. The intention to use VR to travel to conflict zones (BI) is composed of 3 elements taken from Geng et al. (2022). The Travel Interests using VR was taken after the model of Mohsin, 2016 and consists of 5 items such as: Travel to conflict zones using VR to learn about the history / geopolitics / geostrategy of conflicts existing in the areas visited, Travel to conflict zones using VR to know new and different places, and Travel to war zones using VR in search of danger.

At the initial stage of the measurement model assessment, an exploratory factorial analysis was performed which identified the structure of the factors and variables systematically measured in the underlying constructions. This approach had the effect of reducing multi-linearity or correlations of error variance between indicators. (Yoon and Uysal, 2005). To model the structural equations, a hybrid technique was used, which involved two stages: the first consisted of specifying a measurement model in the analysis of confirmatory factors, and the second stage involved the testing of a latent structural model, developed from the measurement model. (Anderson and Gerbing, 1988; Hatcher, 1994; Kline, 2005).

3.2 Respondent profile and measurement model

The proportion of male and female respondents was 39.7% and 60.3%, respectively, with the average age of 21 years, with students with no work experience predominating (56.2%). Confirmatory factorial analysis was performed on the model using SmartPLS 4.0.9.1 to determine the level of reliability and validity.

4. Data analysis and results

4.1 Measurement model

Research suggests that PLS-SEM requires two phases (Cegarra-Navarro et. al., 2016). First of all, we need to assess the measurement model, including the reliability of the construct (internal coherence), the convergent and discriminatory validity for the indicators of latent variables, and the fit of the proposed structural model. To do this, the values α Cronbach, composite reliability (CR) and extracted mean variance (AVE) were checked. The desirable limit value for composite reliability is 0.60 (Ringle et al., 2018). Accordingly, all latent constructs of the model possess composite reliability (Table 1).

Table 1. Factor loadings, reliability and validity

	Δ	Cronbach's alpha	CR (rho_a)	AVE
Attitude towards using VR		0.876	0.901	0,800
ATT 1	0.914			
ATT 2	0.922			
ATT 3	0.847			
Intention to use VR to travel to war zones		0.787	0.791	0.703
BI1	0.792			
BI2	0.883			
BI3	0.836			
Perceived ease of use		0.802	0.862	0.831
PE1	0.940			
PE2	0.882			
Perceived Usefulness		0.803	0.804	0.718
PU1	0.881			
PU2	0.851			
PU3	0.809			
Travel interests in war zones using VR		0.826	0.870	0,579
VR TI1	0.832			
VR TI2	0.749			
VR TI3	0.830			
VR TI4	0.737			
VR TI5	0.641			

Source: Developed by author based on SmartPLS calculations

We tested the discriminatory validity of the scale by examining whether the HTMT (heterotrait-monotrait) correlation ratios are less than 0.85 (Kline, 2005; Henseler et. al., 2016). In this research, all HTMT values are below the threshold of 0.85 (see Table 2).

Table 2. Discriminant validity using HTMT

	ATT	BI	PE	PU	VR TI
ATT					
BI	0,535				
PE	0,463	0,394			
PU	0,543	0,655	0,601		
VR TI	0,438	0,684	0,213	0,503	

Source: Developed by author based on SmartPLS calculations

As a general rule, the R2 values can describe the level of predictive accuracy: values of 0.25 and lower are weak, values between 0.25 and 0.75 are moderate and values exceeding 0.75 are strong (Hair et al., 2011; Henseler et al., 2009), which means that our model with an R2 of 0.427 has a moderate level of predictive accuracy for these five variables.

4.2 The structural model

The structural model displays the relationships (paths) between the constructs in the proposed study model. H1 analyses if PE has a significant impact on the BI ($\beta=0.064$, $t=0.716$, $p>0.05$). In view of the results, H1 was rejected. H2 assesses whether PU has a significant impact on BI. The results showed that PU has a significant impact on BI ($\beta=0.259$, $t=2.645$, $p=0.008$). Consequently, H2 was accepted.

Following the analysis of H3, PE has a significant impact on PU ($\beta=0.496$, $t=5.661$, $p<0.05$). Therefore, H3 was accepted.

H4 assesses whether PU is positively related to ATT. The results showed that PU has a strong significant impact on ATT ($\beta=0.464$, $t=5.663$, $p=0.000$). Consequently, H4 is accepted. Analysing H5, the results demonstrated that ATT does not have a significant impact on BI ($\beta=0.148$, $t=1.459$, $p=0.145$), so H5 is rejected. Also, PE does not have a significant impact on VR TI; the results indicated that H6 is also rejected ($\beta=0.442$, $t=2.544$, $p<0.05$). PU is positively related to VR TI ($\beta=0.364$, $t=3.395$, $p=0.001$), so H7 is supported. ATT has a positive semi-effective impact on VR TI ($\beta=0.309$, $t=2.872$, $p=0.004$); in this case H8 is accepted. VR TI also has a positive semi-effective impact on BI ($\beta=0.365$, $t=4.151$, $p<0.001$); in this case H9 is accepted. (See Table 3).

Table 3. Hypothesis testing

Hypotheses	Path Coeff	Standard Deviation	T Statistics	P Values
H1 PE -> BI	0,064	0,090	0,716	0,474
H2 PU -> BI	0,259	0,098	2,645	0,008
H3 PE -> PU	0,496	0,088	5,661	0
H4 PU -> ATT	0,464	0,082	5,663	0
H5 ATT -> BI	0,148	0,101	1,459	0,145

Source: Developed by author based on SmartPLS calculations

4.3 Mediation analysis

To test the indirect effect of hypothetical pathways, the bootstrapping method was applied, which ensures adequate results in measuring the confidence interval of indirect relationships.

H6a assesses whether PU and VR TI mediate the relationship between PE and BI. The results show that the total effect (H1) was found positive and significant ($\beta=0.277$, $t=2.973$, $p<0.05$). When the mediators were integrated into the model, the direct effect decreased, the relationship becoming insignificant ($\beta=0.064$, $t=0.716$, $p=0.474$), while the indirect effect, with the inclusion of mediators in the analysis, was found significant ($\beta = 0.066$, $t = 2.325$, $p= 0.020$). Therefore, the results reveal a total serial mediation. This shows that PE directly influences the BI variable through PU and VR TI. Consequently, H6a is accepted.

We evaluated whether the variables Attitude to the use of VR (ATT) and Things to travel to war zones using VR (VR TI) mediate the relationship between PU and BI. The results show that the total effect was found positive and significant ($\beta=0.513$, $t=5.654$, $p=0.000$). When the two mediators were also included in the model, the direct effect remained significant ($\beta=0.259$, $t=2.645$, $p<0.05$), while the indirect effect with the inclusion of the mediator in the analysis was found significant ($\beta = 0.052$, $t = 2.135$, $p < 0.05$). Therefore, the results reveal a partial serial mediation. This shows that the effect of PU on BI partially passes through ATT and VR TI. Consequently, H6b is accepted.

H6c assesses whether VR TI mediates in the ATT and BI relation and the results reveal that the total effect is positive and significant ($\beta = 0.260$, $t = 2.680$, $p < 0.05$). After including VR TI as mediator, the direct effect was found insignificant ($\beta = 0.146$, $t = 1.459$, $p=0.145$) and the indirect effect significant ($\beta = 0.114$, $t = 2.319$, $p=0.020$). Based on the results, we conclude that H6c is accepted.

Table 4. Mediation analysis

Hypothesis	Total Effects		Direct Effect		Hypothesis	Indirect Effects			
	Coeff.	t-value	Coeff.	t-value		Coeff.	t-value	p value	
PE -> BI	0.277	2.973	0.064	0.716	H6a	PE -> PU -> VR TI -> BI	0.066	2.325	0.020
PU -> BI	0.513	5.654	0.259	2.645	H6b	PU -> ATT -> VR TI -> BI	0.052	2.135	0.033
ATT -> BI	0.260	2.680	0.146	1.459	H6c	ATT -> VR TI -> BI	0.114	2.319	0.020

Source: Developed by author based on SmartPLS calculations

5. Conclusions

5.1 Theoretical implications

The scientific paper is an innovative study on how technology can be used to allow people to better explore and understand tourist experiences related to war and conflict through virtual reality.

The interest in travel using VR is a strong predictor of consumers' use of specific travel patterns and is in line with related research (Davis, 1989; Davis et al., 1992). The current study demonstrates that the interest in traveling to war zones using VR has positive and direct effects on the behavioral intention of tourists to use VR technology to travel, but also indirect through the role of a series of mediations.

Unlike previous studies (Schiopu, 2021), in our study, we did not find that the perceived ease of use has a significant direct effect on the intention to use VR. It has sometimes been suggested that, although perceived ease of use does not have a direct effect on the intention to use it, it can still have an indirect effect mediated by perceived utility (Davis, 1989; Davis et al., 1992). In our study, we identified a significant and indirect effect of perceived ease of use on users' acceptance of VR through perceived utility. By default, it suggests that VR technology must be useful to be considered easy to use and for users to plan to use it. Studies from the virtual environment or virtual reality have identified a significant effect of perceived ease of use on intention and perceived usefulness (Manis and Choi, 2019; Tokel and Isler, 2013; Yeh and Lin, 2019).

Confirmation of the assumptions that the usefulness and perceived interest in VR travel in war zones act as total mediators between the perceived ease of use and the intention to use VR for war zone travel has significant theoretical implications and is consistent with previous research (Geng et al., 2022) on the acceptance of technology, which stressed the importance of perceived ease of use in shaping individuals' intentions towards new technologies. It suggests that the perception of VR tourism as a useful tool for learning and experiencing history and culture in conflict zones, as well as the interest in using VR to meet various motivations, are essential to determine whether it is possible for individuals to use VR to travel to war zones. Furthermore, the result suggests that perceived ease of use may not directly influence the intention to use VR for war zone travel, but rather through its impact on the utility and perceived interest in VR travel in war zones. The results also underscore the importance of taking into account the psychological factors that cause individuals to engage in VR tourism. Specifically, the results suggest that the motivation to learn about history and geopolitics, to differentiate oneself from other tourists, to explore new places, to seek peace of mind, and to look for dangers are essential factors of interest in VR travel to war zones. These findings provide insight into the psychological needs that VR tourism can meet and suggest that VR tourism can be a unique and valuable tool for meeting these needs.

The theoretical implications of the fact that the attitude toward the use of VR for war zone travel and the interest in VR travel in the war zone are both partial mediators and between the perceived utility and the intention to use VR for war zone travel suggest that both variables play an important role in shaping the intention to use VR technology for traveling to war zones. Perceived utility is an important predictor of the intention to use VR technology for war zone travel, as it increases the perceived value of the use of this technology and aligns with previous research on technology acceptance, which has found that perceived utility is a key factor in shaping individuals' intentions towards virtual reality in tourism (Li et al., 2022). When individuals perceive VR technology as useful for gathering information and learning about history and culture, they are more likely to develop a positive attitude towards using

VR for wartime travel. On the other hand, the interest in VR travel in war zones is also an important predictor of the intention to use VR technology for war zone travel, as it reflects the curiosity and desire of individuals to explore different and unique experiences. When individuals are interested in using VR technology to travel to war zones, they are more likely to perceive the value of this technology and develop a positive attitude towards its use.

The theoretical implications of interest in VR travel in war zones, being a full mediator between attitudes towards using VR for war zone travel and the behavioral intent to use VR for war zone travel suggest that interest in using VR for war zone travel significantly influences the intention to use VR to travel to war zones. In this case, the attitude towards using VR for war zone travel does not have a direct effect on behavioral intent, but the effect is mediated by interest in VR travel in war zones. This implies that managers need to focus on developing strategies to generate interest in VR travel in war zones to increase the behavioral intent to use VR for war zone travel. The results suggest that managers should pay attention to the potential of VR as a substitute for real travel experiences in war zones. People who are interested in using VR to travel to war zones may be motivated to do so because they perceive it as a safer alternative to visiting these destinations in person. Therefore, managers can highlight the safety aspects of using VR for wartime travel and highlight the immersive experience that VR offers to attract potential users.

5.2 Managerial implications

The managerial implication of the finding that perceived utility and interest in VR travel in war zones mediates the relationship between perceived ease of use and the intention to use VR for wartime travel is that travel firms and VR developers should focus on highlighting the potential usefulness of tourism VR to learn about history, geopolitics, and culture. It should also highlight the different reasons why people might be interested in using VR to travel to war zones, such as for differentiating themselves from other tourists, peace of mind, or searching for thrills. To increase the intent to use VR for wartime travel, companies and developers should also focus on improving the perceived ease of use of their VR apps. This could involve improving the clarity and understanding of interactions, as well as facilitating navigation and experimenting with virtual tours for users. By doing so, they can help reduce perceived barriers to the use of VR for tourism in conflict zones and increase adoption rates.

The results suggest that both attitudes toward using VR for war zone travel and interest in VR travel in war zones partially mediate the relationship between perceived utility and the intent to use VR for war zone travel. Therefore, to increase the intention to use VR for war zone travel, managers should focus on improving the perceived usefulness of VR tourism, and also highlight the benefits of using VR to learn the history, geopolitics, and culture of the visited site. In addition, it is important to address the safety concerns of potential customers, emphasising that using VR can provide a safer way to explore conflict zones. Moreover, managers can capitalise on the various reasons why customers are interested in VR travel in war zones, such as learning about the history, geopolitics, and culture of conflict zones, differentiating from other tourists, and seeking adventure and danger. By highlighting these different reasons, managers can target different customer segments and create personalised marketing strategies to increase the intent to use VR for wartime travel. Finally, providing high-quality and easy-to-use VR applications can enhance perceived ease of use, which is a total mediator between perceived utility and the intention to use VR for wartime travel, and therefore increase the likelihood of customers buying VR travel packages.

An important managerial implication of the finding that interest in VR travel in war zones fully mediates the relationship between attitudes toward the use of VR for war zone travel and the behavioral intent to use it is that promoting the benefits and attractiveness of VR travel in war zones can be an effective way to increase the likelihood of potential travelers using this technology. Companies can focus on marketing campaigns that highlight the various motivations individuals may have for using VR travel, such as learning about history or geopolitics, differentiating themselves from other tourists, or searching for adventure and danger. In addition, companies can work to improve the ease of use and usefulness of VR travel apps to make them more attractive and accessible to potential customers. Another important managerial implication is that companies can use the results to develop marketing strategies targeted at different segments of potential VR travel customers. For example, companies can tailor their

marketing efforts for people who are motivated to learn about history or geopolitics, highlighting the educational benefits of using VR to visit war zones. Similarly, companies can target those who are motivated by the search for adventure and danger, highlighting the excitement and excitement of experiencing a conflict zone in a safe and controlled environment. By understanding the motivations and attitudes of potential VR travel customers, companies can create targeted and effective marketing strategies that resonate better with their target audience.

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