Research Paper

The Linkage between Virtual Reality Experience, Visiting Experience, and Destination Loyalty: Perspective of Muslim Tourists from the West

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Abstract: This study examines the loyalty of Muslim tourists based in Western countries by incorporating their experiences visiting the destination in person and via virtual reality (VR). Data was gathered using an online survey from 330 Muslim tourists who have experience of actually visiting tourism destinations and via VR. This study employed partial least square (PLS) to examine the proposed destination loyalty model. Data analysis reveals that Muslim tourists' loyalty toward a tourism destination is driven mainly by perceived experience quality from visiting the destination and experience with VR content with halal experiences demonstrating an insignificant effect on their loyalty.

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Introduction

Halal tourism, a subcategory of general tourism that caters to the faith-based needs of Muslim travellers, has grown rapidly in recent years (Battour, Salaheldeen, & Mady, 2021), with many halal tourism-focused destinations, in both Muslim and non-Muslim countries, competing for business (Han et al., 2019; Jia & Chaozhi, 2020). In this promising but competitive tourism sector, understanding how tourist experience impacts loyalty is imperative (Al-Ansi & Han, 2019; Rahman, Moghavvemi, Thirumoorthi, & Rahman, 2020), and while studies on tourist loyalty in halal tourism have been steadily increasing, the focus has been mainly on Muslim tourists from Muslim countries. There is, therefore, a significant lack of understanding of Muslim tourists from non-Muslim countries, specifically from the Western world. Further, although Western-based Muslims are a relatively small segment compared to the Muslim tourist market, Muslim tourists from non-Muslim countries form a significant market (Preko, Mohammed, & Allaberganov, 2021; Preko, Mohammed, Gyepi-Garbrah Theophilus, & Allaberganov, 2020). Indeed, Pew Research Centre (2010) estimated that by 2021, about 5% to 10% of the Western European population (approximately 196 million people) will be Muslims. Given this potential growth, along with their relatively high purchasing power, understanding western-based Muslim tourist behaviour is deemed necessary.

The importance of tourist loyalty and its drivers has an established research base, and past studies tend to agree that tourist experience with the destination is the key driver of destination loyalty (Liu, Hultman, Eisingerich, & Wei, 2020). However, unlike other tourists, Muslim tourists have unique requirements for products and services (Amalia, Sosianika, & Suhartanto, 2020; Suhartanto, Marwansyah, Muflih, Najib, & Faturohman, 2020). While travelling, Muslim tourists not only expect quality tourism products and services that satisfy their leisure needs, but they must also not contradict with their religion (Eid & El-Gohary, 2015; Suhartanto et al., 2020). Satisfying these needs is vital for the success of halal tourism businesses and the development of favourable Muslim tourist behaviours (Al-Ansi & Han, 2019; Jia & Chaozhi, 2020). Recent studies have examined loyalty in halal tourism, but scholars (Han, Al-Ansi, Olya, & Kim, 2019; Rahman et al., 2020) contend that how Muslim tourists develop their loyalty is not entirely understood. Further, due to differences across tourist segments, it may be difficult to generalise the findings of a study of one segment on another segment (Gursoy, Chen, & Chi, 2014; Hussein, Hapsari, & Yulianti, 2018). As no past studies on tourist loyalty have been dedicated to assessing loyalty among Muslim tourists from the West, conducting such a study will expand our comprehension of tourist loyalty in halal tourism.

In the current COVID-19 pandemic, tourists are often restricted from visiting or have limited access to tourism destinations for safety reasons. However, the

availability of virtual reality (VR) technology enables tourists to visit virtually and enjoy the destinations without travel anxiety due to COVID-19 risks (Kwok & Koh, 2020; Rauscher, Humpe, & Brehm, 2020; Yung, Khoo-Lattimore, & Potter, 2020). Thus, VR tourism played a vital role in the tourism industry during COVID-19, and continues to do so in post-pandemic times (Battour et al., 2021; Bogicevic, Liu, Seo, Kandampully, & Rudd, 2021; UNWTO, 2020). With VR's ability to provide a virtual experience of visiting a destination, the experience can influence tourist loyalty behaviour toward the destination (Wei, 2019; Wu, Ai, & Cheng, 2019). Therefore, arguably, the loyalty determinants among Muslim tourists who visited the destination personally as well as via VR are not only tourism attractions, but also halal products or services in the destination (Eid & El-Gohary, 2015; Suhartanto et al., 2020). While literature confirms the important role of these three experiences, none of the existing studies in halal tourism has examined how these experiences impact loyalty behaviour among Muslim tourists. Integrating those experiences in a single study, disputably, will extend our understanding of loyalty formation.

Thus, these research gaps require further examination of destination loyalty among Muslim tourists from the Western world. Specifically, this study is designed to measure the role of VR experiences and past visiting experiences in determining loyalty among Muslim tourists from Western countries. From a theoretical perspective, this study expands our understanding of tourist loyalty formation among Muslim tourists from the West. At a practical level, this study helps tourism destination operators develop appropriate strategies to gain and maintain tourist loyalty in the niche market of halal tourism for Western-based Muslim tourists.

Literature Review and Hypotheses Development

Muslims in Western Countries and Tourism

The introduction of Islam to the West began when Muslims arrived more than a century ago; but, studies on Western-based Muslims suggest that such community establishments only started in the 1970s (Shadid & van Koningsveld, 2002). At that time, large numbers of Muslims started to arrive in Western countries, and it is believed to coincide with the shifting multicultural policies in the West; thus, most western-based Muslims are now second and third generations of the 1970 influx. Although the precise number of Muslims living in Western countries is difficult to establish, it is estimated that by 2030, about 58 million Muslims will be living in Europe and around 10 million Muslims in the USA (Pew Research Center, 2010). Although this segment is relatively small compared to the overall tourism population, they are an important market considering their relatively high income from a tourism perspective.

Compared to other religious communities, Muslims are considered a group with less success in assimilating into Western cultures (Palmer & Gallab, 2001). It is suggested that they face challenges in not knowing how to integrate into the Western culture without adversely affecting their deeply-held religious beliefs and traditions (Palmer & Gallab, 2001). Other challenges include difficulties in practising religious duties compared to Muslim-majority countries due to psychological, social, political, and legal reasons (Mawardi, 2020), such as slaughtering of animals for sacrifice. However, these issues of adjusting traditional Islamic norms to Western contexts do not occur with less-practicing Muslims as they are deemed to be more tolerant and readily accepting of the Western culture (Milligan, Andersen, & Brym, 2014; Norris & Inglehart, 2012). Further, Pettersson (2007) concluded that immigrants who migrated to more secularised European countries tend to be less involved with their religion.

Tourist behaviour is based on their country of origin and varies depending on their evaluation of tourism products and service and their level of satisfaction with the destination (Forgas-Coll, Palau-Saumell, Sánchez-García, & Callarisa-Fiol, 2012). However, Li, Zhang, and Cai (2016) argued that using the country of origin as the primary influencer in determining consumer behaviour is insufficient as it disregards other important factors, such as religion. As tourists have different lifestyles, different tourism environments can result in different preferences and selection of tourism attractions (Li et al., 2016). Although Islamic beliefs and behavioural practices influence Muslim tourists, other cultural values (from non-Muslim countries) can also impact their behaviour due to the assimilation process (Milligan et al., 2014; Pettersson, 2007). Therefore, arguably Muslim tourists from non-Muslim majority countries will be expected to behave differently from Muslim tourists from Muslim countries as in the West.

Destination Loyalty in Halal Tourism

Tourist loyalty has been identified as a critical indicator for evaluating business success in the tourism industry (Hendriks, Mohi, & Kusdibyo, 2021). However, only a few studies have focused specifically on examining tourist loyalty towards a destination from a halal perspective. Research by Mohamed, Taheri, Farmaki, Olya, and Gannon (2020) on loyalty among Muslim tourists presents a complex theory suggesting that while customer satisfaction and loyalty are desired, they can be influenced by religiosity and destination image. In other studies, the term loyalty is not clearly mentioned; instead, terms such as behavioural intention (Al-Ansi & Han, 2019; Han et al., 2019) and tourist retention (Han et al., 2019) are used to examine the willingness to visit a halal-friendly destination. In a more recent study on Muslim Millennial's intention, Juliana, Putri, Wulandari, Saripudin, and Marlina (2021) used the term revisit intention to refer to tourist loyalty, leading to

behavioural closeness. Pahlevi and Suhartanto (2020) argued that the concept of loyalty could not be adequately understood without measuring individuals' attitudes towards a brand. Taking this into account and in keeping with past research, tourist loyalty in this study is described as a tourist's emotional manifestation towards a destination, demonstrated by a psychological expression such as their intention to revisit and advocate for the destination.

Many models have been developed to explain tourist loyalty, and the experience quality-loyalty intention model has been extensively adopted to explain tourist loyalty for various tourism segments (Chen & Chen, 2010). Studies found that customer experience with a product or service are significant antecedents of their loyalty, grounded on the cognitive-rational approach (Cronin, Brady, & Hult, 2000; Malik, Akhtar, Raziq, & Ahmad, 2020; Suhartanto, 2019). Therefore, it is expected that the experience quality-loyalty model might provide a holistic perspective in understanding Western-based Muslim tourist loyalty. As Kuppelwieser and Klaus (2021) mentioned, this model is the most commonly used model in measuring customer experience and can measure direct and indirect interactions between customers and the other party. Previous studies posit that this model is more comprehensive as it measures customers' cognitive and emotional evaluation of service experience and measures the behavioural and intentional concerns of the customers (Klaus & Maklan, 2013; Kuppelwieser, Klaus, Manthiou, & Hollebeek, 2021). Therefore, this model can benefit from the addition of experience quality management on Muslim tourists who demonstrate an experience visiting the destination in two ways: physically and via VR.

Tourist Experience in Halal Tourism

Tourist experience refers to the subjective mental state felt by tourists through the entire tourism consumption process and results from their response to the tourism attraction stimulus (Altunel & Koçak, 2017). Throughout the trip, as in general tourists, Muslim tourists also seek out high-quality experiences, that is, unique and enjoyable experiences (Han et al., 2019). Quality experience consists of rational and emotional responses and involvement in the attraction, which assists tourists to remember the journey and indirectly influence a tourist's intentions. Nonetheless, Muslim tourists not only seek a hedonic experience, but they also need to consume or utilise products and services that comply with Islamic values (Jia & Chaozhi, 2020; Preko et al., 2021).

Experience quality

Experience quality in a tourism destination pertains to the worth of an experience to a tourist when visiting a tourism destination (Suhartanto et al., 2020). This experience

is an affective response based on an entire trip and comprises complex elements such as peace of mind, escape, involvement, and learning (Altunel & Koçak, 2017; Chen & Chen, 2010). In other words, tourists' minds are stimulated by various feelings such as culture, nature, and other attractions encouraging them to revisit the destination (Preko et al., 2020). These events should be so distinct so as to provide the tourist with a favourable and memorable encountered experience, resulting in increased satisfaction (Rahman et al., 2020). A study on Muslim millennials in a Muslim-friendly city suggests that perceived experience quality is vital in creating tourist loyalty (Juliana et al., 2021). This reiterates the proposition from a previous study by Suhartanto et al. (2020), where experience quality significantly influences loyalty among Muslim tourists.

The above leads to the first hypothesis H1, as shown below.

H1: Experience quality has a positive effect on destination loyalty.

Halal experience

In tourism, halal experience refers to a tourist's encounter with products and services that comply with Islamic values (Preko et al., 2021). Generally, faith governs Muslims' decisions and, thus, the availability of these religion-related products and services is critical in shaping their visiting experience. A positive tourist experience as a response to halal product and service availability will positively impact future intentions. For instance, Rahman et al. (2020)'s study emphasizes the importance of governments improving halal-related services or facilities in tourist destinations, which can affect tourist motivation to revisit the destination. Supported by previous studies, scholars (Battour, Battor, & Bhatti, 2014; Eid & El-Gohary, 2015) agree that in the context of halal tourism, the capability of a destination to improve its Islamic features will encourage Muslim tourists to visit the destination, resulting in higher visitor satisfaction and loyalty. A more recent study (Dabphet, 2021) reported a significant relationship between tourist experience of halal attributes such as halal accommodation and halal food on satisfaction and loyalty towards the destination.

Based on the discussion above, hypothesis H2 is formulated as follows.

H2: Halal experience has a positive effect on destination loyalty.

Tourist Experience with VR

VR technology in tourism can create a powerful marketing experience by engaging customers at every stage of the virtual customer journey (Bogicevic et al., 2021) and can enhance tourism experiences (Lee, Lee, Jeong, & Oh, 2020). However,

experiencing tourism attractions in a destination using VR is complex, as it requires experience with both the attraction and the system or application simultaneously (Kim, Lee, & Jung, 2020; Wu et al., 2019).

VR systems involve a network that ensures all parts of the experience are interconnected and feature the characteristics of imagination, interaction, and immersion (Wu et al., 2019). Lee et al. (2020) emphasised that a successful VR system should be easy and convenient to access as well as be reliable, flexible, and responsive. The importance of having a quality system has been discussed in various disciplines, including e-commerce, intelligent transportation, as well as augmented and virtual reality (Battour et al., 2021; Jung, tom Dieck, Lee, & Chung, 2016). Beck, Rainoldi, and Egger (2019) analysed tourism VR and emphasised the need for a quality VR system to ensure an enjoyable visitor experience at the destination. Hence, consideration should be given by the destination provider to put in place a quality VR system for an impactful medium that enables interactions between the host and tourists.

VR content, in addition to technological hardware, must be of quality standard as VR tourism is a human experience, using the concept of the tourist being present at the destination (Wu et al., 2019). VR content includes words, images, graphics, and activities that tells a story/stories about a tourism destination to the targeted audience. Despite many studies highlighting the difficulty of duplicating the natural environment into a VR presentation convincingly (Guttentag, 2010; Tussyadiah, Wang, Jung, & tom Dieck, 2018), if correctly managed, VR tourism content can create a valuable, distinctive and remarkable tourist experience that can be enjoyed on-demand from anywhere (Guttentag, 2010; Wei, 2019). The enhancement of tourism experiences can induce a positive attitude towards the destination (Tussyadiah et al., 2018) and encourage tourists to spread positive words about the tourism destination portrayed in VR to others (Wu et al., 2019).

The tourism consumption system theory (TCS) (Woodside & Dubelaar, 2002) postulates that travellers' motives, opinions, choices, and travel behaviour are interconnected. Based on this theory, tourists' assessment of their experience in a destination impacts their experience with visiting the destination via VR, which subsequently impacts their revisit and recommendation of the destination. Past studies in various tourism contexts provide evidence on the suitability of this theory to explain tourists' travel behaviour. For instance, Li, Li, and Hudson (2013) applied TCS to examine American tourists' behaviour and confirmed that criteria such as preference, evaluation criteria, and activity preference impact tourists' choice. Recent studies in halal tourism (Leo et al., 2020; Suhartanto et al., 2020) that tested the link between tourist experience with tourism products and services and the overall experience with the visit also offered support for TCS. For this reason, it is expected

that tourist experience with past visits, and experiences with the VR as well as their future behaviour will interact with each other. Therefore, as reported in past VR tourism studies (An, Choi, & Lee, 2021; Wu et al., 2019), tourists experience visiting the destination in person via VR, and their future loyalty interacts with each other as a tourist consumption system. As such, it is expected that tourist experience with VR system and VR content will impact VR satisfaction and, subsequently, loyalty. This discussion leads to the following hypotheses.

> H3: Experience with the VR system has a direct effect on satisfaction with VR.
> H4: Experience with the VR content has a direct effect on satisfaction with VR.
> H5: VR satisfaction has a direct effect on destination loyalty.

The Link between Experience Visiting a Destination and Satisfaction with VR

Despite the reliable association between tourists' perceived experience quality and experience with halal product and service on tourist satisfaction, previous studies have not examined the impact of perceived experience quality and halal experience on tourist satisfaction with VR experience. A theory that best describes such a relationship is the spillover theory, postulating that life's experiences in a particular area will spill over to other areas (Sirgy, Efraty, Siegel, & Lee, 2001). In the leisure domain, Chen and Li (2018) applied this theory to explain that leisure experience and satisfaction impact tourist emotions and memories from their travelling. In other words, an experience with a part of their visit could spill into experiences with other parts of the visit. This study postulates that both experiences (VR and visiting the destination) are considered a part of the travelling process; therefore, a tourist's experience with their past visit to a destination may spill over to their feelings towards the experience visiting the destination via VR. Thus, related to the association between perceived experience quality and halal experience on tourist satisfaction with VR, this study proposes the following hypotheses.

> H6: Experience quality has a direct effect on VR satisfaction.
> H7: Halal experience has a direct effect on VR satisfaction.

Based on the relationships with the proposed hypotheses, a theoretical model of loyalty is presented in Figure 1.
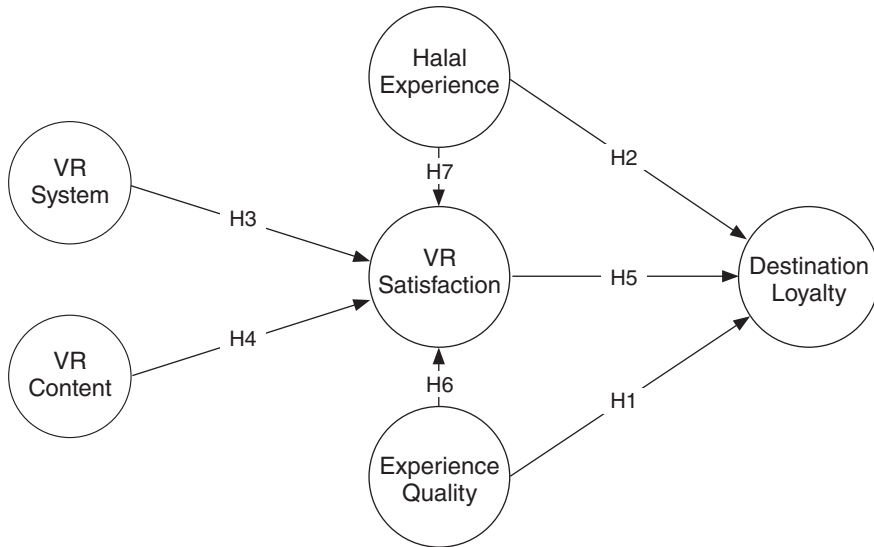
Figure 1. The proposed model of the link between VR experience,
visit experience, and destination loyalty

Research Methodology

Many studies have examined the construct variables used in this study, as depicted in Table 1, and in terms of measuring construct indicators, a five-point Likert scale, with values ranging from 1: 'strongly disagree' to 5: 'strongly agree', was applied. To ensure validity, three marketing professors who specialise in tourism examined the survey items. Next, before data collection, the questionnaire (in English) was pretested on 20 Muslim tourists to check for clarity of the instructions and questions. This process resulted in a minor adjustment to the wordings of the instructions and questions.

Table 1. Construct variable and its sources

Construct (Indicator)	Sources
1. Experience quality (5)	(Hussein et al., 2018; Pine & Gilmore, 1998)
2. Halal experience (5)	(Eid & El-Gohary, 2015; Han et al., 2019)
3. VR system (4)	(Lee et al., 2020; Wei, 2019).
4. VR content (5)	(Rauscher et al., 2020; Wu et al., 2019),
3. VR satisfaction (3)	(Hudson, Matson-Barkat, Pallamin, & Jegou, 2019; Wu et al., 2019).
4. Destination loyalty (3)	(Hudson et al., 2019; Wu et al., 2019).

This study focused on Muslim tourists from the West; thus, included Muslim tourists from Western Europe, North America, and Australia who had experience visiting various tourism destinations (nature, culture, city visits) in person and via VR. Due to the COVID-19 pandemic restrictions, an online survey using Amazon Mechanical Turk (AMT) was used to gather data from participants from December 2020 to January 2021. AMT can gather large amounts of human data (Kees, Berry, Burton, & Sheehan, 2017) and is a common method used in tourism studies (Denley et al., 2020; Macdonald & Wester, 2020). Of the 345 completed questionnaires, 330 responses were found fit for analysis, a suitable sample size for testing the proposed model using partial least squares (PLS) (Hair, Hult, Ringle, & Sarstedt, 2017).

The statistical software SPSS V.26 was used to analyse the respondents' characteristics, while PLS, using SmartPLS and WarpPLS, was employed to assess the validity and reliability of the constructs as well as the fitness of the destination loyalty model. PLS was employed because it is a non-parametric model and its flexibility in handling non-normal data (Chin, Peterson, & Brown, 2008), as is the case with this study data. Additionally, PLS is best used to examine a theoretical model (Hair et al., 2017) and the characteristics of the investigation. In this study, both measurement and the structural model of destination loyalty formation were analysed. Next, to examine the issues of common methods, this study employed full collinearity variance inflation factors (VIFs), as endorsed by Kock and Lynn (2012).

Data Analysis

Table 2 presents the respondents' demographic profile noting that the sample was dominated by 222 (67%) male and young tourists under 35 years old. Although an equal proportion of these demographic elements is preferable, the proportion of this demographic profile resembles that of past studies (Dabphet, 2021; Han et al., 2019; Preko et al., 2021).

Table 2. Respondents' demographic profile

Variable	Description	Frequency	Percentage (%)
Gender	Male	222	67
	Female	108	33
Age	18–25	30	9
	25–35	180	55
	36–40	70	21
	>40	50	15

Table 2 (con't)

Variable	Description	Frequency	Percentage (%)
	High school or lower	92	28
	College degree	112	34
	University degree	126	38
Education	Government employee	46	14
	Private employee	225	68
	Student	36	11
	Other	23	7
Occupation	Government employee	46	14
	Private employee	225	68
	Student	36	11
	Other	23	7
	Western Europe	132	40
Origin country	Northern America	172	52
	Australia	26	89

Measurement Model

Following the research by Kock and Lynn (2012), this study employed full collinearity VIFs to judge the common method variance issue. The data analysis reveals a VIF value of 2.351, which is less than the recommended value of 5 (Hair et al., 2017), specifying that common method variance bias does not exist. Next, to verify the reliability and validity of the constructs, this study evaluated the measurement model. The result shows that outer loadings, Cronbach's alpha (CA), composite reliability (CR), and average variance extracted (AVE) all have values more than the suggested level (Hair et al., 2017). Accordingly, the requirements for the constructs' reliability and validity are met.

Table 3. The measurement test results

Construct/Item	Loading**	CA/CR	AVE
VR content		0.816/0.867	0.561
– Felt totally captivated.	0.781		
– Felt time passed quickly.	0.760		
– Felt happy.	0.708		
– I had a unique experience.	0.721		
– I felt refreshed my mind.	0.773		

Table 3 (con't)

Construct/Item	Loading**	CA/CR	AVE
VR system		0.816/0.867	0.510
– The VR was user friendly.	0.739		
– The VR screen was highly vivid.	0.607		
– The VR screen was highly detailed.	0.693		
– The VR image was very realistic.	0.802		
VR satisfaction		0.7420.808	0.584
– Beyond my expectations	0.793		
– A worthwhile experience	0.703		
– A satisfying experience	0.794		
Attraction experience		0.706/0.820	0.532
– I felt occupied with the activity.	0.734		
– I had an exceptional experience.	0.730		
– The employees gave me excellent services.	0.692		
– I felt refreshed my mind.	0.760		
– It assisted me to get something new.	0.471		
Halal experience		0.802/0.862	0.556
– The halal accommodation products/services	0.825		
– Halal facilities (e.g., prayer rooms etc.)	0.730		
– The availability of halal food and beverage	0.735		
– The quality of halal food and beverage	0.702		
– Conformity of the services offered to Islamic law	0.732		
Destination loyalty		0.719/0.797	0.569
– I intent to visit the destination	0.785		
– I will communicate positively about the destination	0.684		
– I will endorse others to visit the destination	0.788		

**All significant at $p < 0.01$

Next, to evaluate discriminant validity, this study employed the heterotrait-monotrait ratio. Table 3 shows that since all the values derived are lower than 0.9, the discriminant validity requirement is met (Henseler, Ringle, & Sarstedt, 2015).

Table 4. Heterotrait-monotrait ratio

Variable	1	2	3	4	5
1. Destination loyalty					
2. Experience quality	0.582				
3. Halal experience	0.081	0.714			
4. VR satisfaction	0.716	0.106	0.654		
5. VR content	0.822	0.802	0.808	0.667	
6. VR system	0.636	0.896	0.087	0.782	0.148

Structural Model

The structural model was tested in accordance with Chin et al. (2008)'s suggestion by bootstrapping using 5,000 iterations to assess path coefficients and their significance. Testing the R^2 value reveals that all exogenous variables can explain 53.9% of destination loyalty variance. This R^2 value indicates that the model's explanatory power is relatively large (Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). Next, without experience with VR variables, the R^2 value generated for destination loyalty was 38.9%. This lower value of R^2 for destination loyalty without experience with VR variables indicates that the inclusion of the VR experience variable could increase the prediction of destination loyalty. Thus, the integration of both experiences (VR and directly visiting the destination) can improve the prediction of destination loyalty.

To test the proposed model, several assessments were conducted. First, the Q^2 test was employed to assess the model predictive power. The result shows that the Q^2 values of 0.358 (VR satisfaction) and 0.285 (destination loyalty), indicate that the model predictive power is appropriate (Chin et al., 2008; Hair et al., 2017). Next, the f^2 test generated values from 0.011 to 0.328, signifying that the influence of the determinant variables on R^2 values is substantial. Next, to confirm the proposed model, goodness-of-fit was evaluated as suggested by Tenenhaus et al. (2005). This test produced a value of 0.551, indicating a significant value of fitness. Further, the average block VIF (AVIF) test resulted in a value of 2.413 (less than the recommended value of 0.5). These model assessment results suggest that the requirements concerning the model fitness of the proposed model are satisfied (Hair et al., 2017).

Table 4 shows that experience quality significantly influences both destination loyalty (β: 0.227, $p < 0.05$) and VR satisfaction (β: 0.189, $p < 0.01$). Thus, hypotheses H1 and H6 are verified. Next, the impact of VR system and VR content on VR satisfaction (β: 0.251 and β: 0.465) is significant at $p < 0.01$; thus, hypotheses H3 and H4 are reinforced. The association between VR satisfaction and destination loyalty (β: 0.523) is significant at $p < 0.01$, supporting hypothesis H5. In contrast,

the impact of halal experience on both VR satisfaction and destination loyalty (β: 0.081 and β: 0.022) are not significant ($p > 0.05$), suggesting that both H2 and H7 are not supported. Finally, the total effect column suggests that destination loyalty is mainly influenced by VR satisfaction (β: 0.523, $p < 0.01$) and experience quality (β: 0.325, $p < 0.01$) but not by halal experience (β: 0.093, $p > 0.05$).

Table 5. Hypotheses and variables' effect test

Relationship (Hypothesis)	Direct effect		Indirect effect		Total effect	
	β	*t*-value	β	*t*-value	β	t-value
Experience quality → Destination loyalty (H1)	0.227	2.121*	0.099	2.362*	0.326	3.403**
Halal experience → Destination loyalty (H2)	0.081	1.719	0.012	0.653	0.093	1.917
VR system → VR satisfaction (H3)	0.251	4.885**			0.251	4.885**
VR content → VR satisfaction (H4)	0.465	7.162**			0.465	7.162**
VR satisfaction → Destination loyalty (H5)	0.523	5.180**			0.523	5.180**
Experience quality → VR satisfaction (H6)	0.189	2.680**			0.189	2.680**
Halal experience → VR satisfaction (H7)	0.022	0.683			0.022	0.683
VR system → Destination loyalty			0.133	3.789**	0.133	3.789**
VR content → Destination loyalty			0.241	3.817**	0.241	3.817**

*Significant at $p < 0.05$ **significant at $p < 0.01$
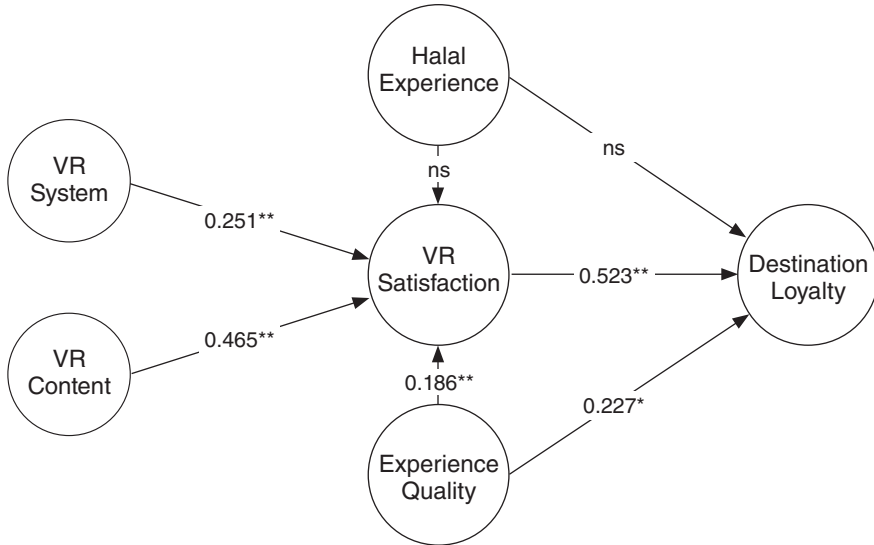
**Significant at $p < 0.01$; ns: not significant

Figure 2. Summary of the results

Discussion and Theoretical Implications

Firstly, this study assessed tourist loyalty among Muslim tourists from Western countries by integrating tourist experience visiting the destination via VR and in person as the determinant factors. Data analysis shows that the integrated model of tourist loyalty towards a tourism destination is fit, and the insertion of VR experiences in the experience quality-loyalty model increases the tourist loyalty model's explanatory power. Conceptually, the results of this study extend the experience quality-loyalty model (Chen & Chen, 2010; Cronin et al., 2000) for Muslim tourists from the Western world. This finding suggests that for Muslim tourists from the West, tourist experience visiting the destination can strengthen the influence of VR and, subsequently, increase their intention to visit and to endorse the destination. Thus, the loyalty model in halal tourism in Western countries is expanded conceptually by including VR tourism experience as a determinant of Muslim tourist loyalty. Specifically, quality experience with tourism destinations and satisfaction with visiting destinations via VR fosters Muslim tourists' intention to revisit, endorse, and make the destination the primary selection.

Secondly, the results highlight that while the effect of halal experience on destination loyalty and VR satisfaction is not important, the effect of experience quality on both loyalty and satisfaction is significant. Further, looking at the total effect of VR content on VR satisfaction and destination loyalty, this study signifies that the important role of experience with VR tourism content is a significant

determinant of destination loyalty. This finding implies that while the influence of experience with visit on destination loyalty and satisfaction is direct, the effect of VR content on destination loyalty is indirect by strengthening VR satisfaction. This finding reinforces the existing VR tourism literature, which states that technology can virtually represent a real tourism destination and not only introduces the destination before a visit but also prolongs and enhances the memory of an experience after the visit (Kim & Hall, 2019; Tussyadiah et al., 2018). Further, this finding also corroborates with past studies' findings in halal tourism, which reveals that the experience of visiting a destination is a key factor in influencing future behaviour (Suhartanto et al., 2020). Conceptually, this finding extends our understanding of destination loyalty formation by confirming Woodside and Dubelaar's (2002) tourism consumption system theory, suggesting that past experience of visiting, experience with VR tourism, and future tourist behaviour towards the destination is a sequential consumption system that interacts with each other.

Thirdly, this study reports some unique results on the insignificant influence of halal experience on tourist satisfaction with VR and destination loyalty. This finding suggests that, for Muslim tourists from Western countries, a halal experience is not an important driver of their satisfaction with VR and their loyalty toward the destination. Past studies of Muslim tourists from Muslim countries (Al-Ansi & Han, 2019; Jia & Chaozhi, 2020) claim that a halal experience is a critical determinant of their future behaviour towards a destination; this study, however, shows that this is not the case for Muslim tourists from Western countries. Next, while past studies (Al-Ansi & Han, 2019; Jia & Chaozhi, 2020) concluded that Muslim tourists from Muslim countries travelling to non-Muslim destinations tend to be more tolerant of differences and have lower expectations to basic halal needs, this study suggests that for Muslims from Western countries, halalness is not a serious issue in influencing their loyalty behaviour. A possible explanation for the insignificance of halal experience is related to the respondents of this study who were most likely born and raised in Western countries, have gradually absorbed much of the Western culture (Norris & Inglehart, 2012; Pettersson, 2007) and become more tolerant and less involved with religion (Milligan et al., 2014). Therefore, in deciding the future behaviour towards a destination, they do not perceive halal products or services available at the tourism destination as their primary consideration. Theoretically, this finding does not support the spillover theory in the context of the association between halal experience and destination loyalty among Muslim tourists from the West.

Managerial Implications

First, as the systemic and psychological impediments mount for the recovery of the tourism industry post-Covid-19 pandemic, this study provides an opportunity for operators of tourism destinations to develop loyalty among their Muslim tourist

clients from the West. This study highlights the importance of the VR experience; thus, destination managers should consider directing investments towards the flourishing VR tourism market in the post-Covid-19 landscape. However, the development of excellent VR tourism experiences is much more challenging. Tourism operators must create VR tourism content that can engage visitors with an immersive and compelling experience. To achieve this, tourism destination operators must design attractions that allow VR tourists to enjoy new and unique attractions. It is further suggested that destination operators create authentic tourism experiences and attractions with enjoyable elements by employing elements such as games to enable tourists to have leisurely experiences when visiting the destination via VR.

Second, this study suggests that a quality experience when visiting a destination is a key factor in influencing Muslim tourists from Western countries. This result suggests that destination managers need to dedicate their financial and non-financial resources, to improving the tourist experience with tourism attractions in the destination. Specifically, efforts should focus on the elements that drive experience quality, like peace of mind, involvement, escape, and learning. Further, it is imperative for the attractions to continuously innovate their offering and processes to meet tourist needs and surpass expectations. Creating a tourism attraction that helps visitors relax supported by competent and well-informed staff will help boost loyalty among western Muslim tourists. All these efforts should be integrated into the destination's business processes to guarantee a high-quality experience is delivered.

Finally, this study reveals that while offering and highlighting the availability of halal products and services is important to attract Muslim tourists from Muslim countries, this is not the case for attracting Muslims from Western countries. Therefore, destination managers need to differentiate their strategy when attracting tourists from Muslim and Western countries. To attract Muslim tourists from Western countries, destination managers need to emphasise the quality of the tourist attraction(s) in the destination rather than on the availability and quality of halal products and services. However, as halalness is essential for any Muslim, providing halal products and services in a tourism destination is necessary to boast an overall exceptional tourist experience.

Limitations and Future Research

This study adds substantially to our understanding of how visiting tourist destinations in person and via VR may influence Muslim tourist loyalty from Western countries. This research presents certain limitations that indicate future avenues of research. First, this study's sample incorporated Muslim tourists from Western countries, namely, Western Europe, North America, and Australia. Although Western countries are similar in many ways, each country has its own distinct cultures; thus, future research should consider samples from specific Western countries with a considerably

higher Muslim population, such as the UK or France. Also, identifying different demographic cohorts such as generation Z and millennials should be undertaken as those groups potentially have different motivations and expectations. At present, this research studied the loyalty behaviour of tourists in various tourism destination environments, such as nature, cultural and city visits. Future research could examine tourists who visited a specific destination environment to get better results and achieve a more precise understanding of the Muslim tourists in a specific tourism destination. Next, this study focused on tourist experience visiting in person and via VR and their impact on loyalty. Nevertheless, other factors such as image and motivation are potentially significant predictors of tourist loyalty, and future research should integrate those loyalty determinants when studying Muslim tourists from Western countries.

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