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DETERMINANTS OF BEHAVIOURAL INTENTION ON VIRTUAL TOURISM USAGE AMONG TOURIST IN MALAYSIA DURING COVID-19 LOCKDOWN

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DECLARATION

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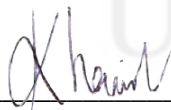
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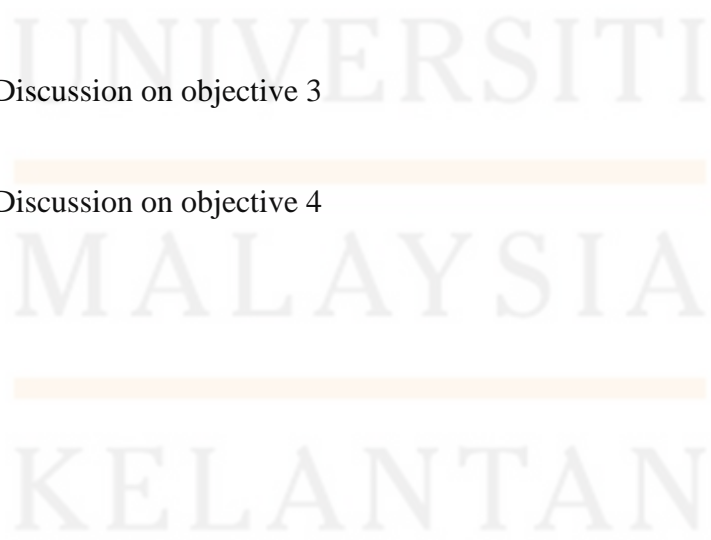
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LIST OF ABBREVIATIONS

Abbreviations

ICT	Information and Communications Technology
IV	Independent Variable
DV	Dependent Variable
MCO	Movement Control Order
SPSS	Statistical Package for Social Science
TAM	Technology Acceptance Model
TRA	Theory of Reasonable Action
VR	Virtual Reality
WHO	World Health Organization

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ABSTRACT

Ever since Movement Control Order (MCO) happens on 16th March 2020 in Malaysia due to COVID-19 pandemic, millions of tourists are unable to travel abroad due to restrictions to travel outside the country. Therefore, virtual tourism is a new concept for tourists to travel virtually without receiving any risk of contracting COVID-19. The purpose of this research is to determine the behavioural intention on virtual tourism usage among tourist in Malaysia during COVID-19 lockdown. Thus, this study aims to determine the behavioural intention on virtual tourism usage among tourist in Malaysia during COVID-19 lockdown by using Technology Acceptance Model (TAM). Online questionnaires were used to collect responses from 300 tourists from various virtual reality forums, travel forums, and virtual reality and travel Facebook groups. Data taken from respondents are performance expectancy, effort expectancy, social influence, and perceived security of virtual tourism. Results in this research indicated that performance expectancy, effort expectancy, social influence, and perceived security have positive influence towards the behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic. Hence, the authors believe this study will benefit those who have the intention to use virtual tourism as a second option to travel and implement virtual tourism in tourism industry as well as become a liable reference for future research study.

Keywords:

Behavioural Intention, COVID-19, Movement Control Order (MCO), Technology Acceptance Model (TAM), Virtual Tourism.

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ABSTRAK

Sejak Perintah Kawalan Pergerakan (MCO) berlaku pada 16 Mac 2020 di Malaysia kerana pandemik COVID-19, berjuta-juta pelancong tidak dapat melakukan perjalanan ke luar negara kerana sekatan untuk melakukan perjalanan ke luar negara. Oleh itu, pelancongan maya adalah konsep baru bagi pelancong untuk melancong secara maya tanpa menerima risiko dijangkiti COVID-19. Tujuan penyelidikan ini adalah untuk menentukan niat tingkah laku terhadap penggunaan pelancongan maya di kalangan pelancong di Malaysia semasa penutupan COVID-19. Oleh itu, kajian ini bertujuan untuk menentukan niat tingkah laku terhadap penggunaan pelancongan maya di kalangan pelancong di Malaysia semasa penutupan COVID-19 dengan menggunakan Model Penerimaan Teknologi (TAM). Soal selidik dalam talian digunakan untuk mengumpulkan respons dari 300 pelancong dari pelbagai forum realiti maya, forum pelancongan, dan kumpulan Facebook realiti maya dan perjalanan. Data yang diambil dari responden adalah jangkaan prestasi, jangkaan usaha, pengaruh sosial, dan keselamatan yang dirasakan dalam pelancongan maya. Hasil dalam penyelidikan ini menunjukkan bahawa jangkaan prestasi, jangkaan usaha, pengaruh sosial, dan keselamatan yang dirasakan memiliki pengaruh positif terhadap niat tingkah laku untuk menggunakan realiti maya di kalangan pengguna dalam pelancongan semasa pandemik COVID-19. Oleh itu, penulis yakin kajian ini akan memberi manfaat kepada mereka yang mempunyai niat untuk menggunakan pelancongan maya sebagai pilihan kedua untuk melakukan perjalanan dan melaksanakan pelancongan maya dalam industri pelancongan serta menjadi rujukan yang bertanggungjawab untuk kajian penyelidikan yang akan datang.

Kata Kunci:

Niat Tingkah Laku, COVID-19, Perintah Kawalan Pergerakan (MCO), Model Penerimaan Teknologi (TAM), Pelancongan Maya,

CHAPTER 1:
INTRODUCTION

1.1 INTRODUCTION

This research investigates the behavioural intention of using virtual reality tourism during the Coronavirus Disease 2019 (COVID-19) pandemic in terms of performance expectancy, effort expectancy, social influence, and perceived security. In this chapter, the background of the study, problem statement, research objectives, research questions, and significance of the study were discussed.

1.2 BACKGROUND OF STUDY

COVID-19 is a disease that was caused by a new strain of coronavirus. This disease had been specified officially as '2019 Novel Coronavirus' or '2019-nCoV' (World Health Organization [WHO], 2020). The COVID-19 virus was a new virus from the same genus of virus related with Severe Acute Respiratory Syndrome (SARS) and other cold or flu forms

(Elengoe, 2020). The SARS-CoV-2 virus that transmits between individual people, and even more so when an infected individual is in closer proximity with another individual, causes COVID-19 (Elengoe, 2020). The virus can be transmitted from an infected person's mouth or nose to tiny liquid molecules when they cough, sneeze, speak, sing, or breathe heavily (Kasson & Kamerlin, 2020). Such liquid molecules range from larger 'droplets in the air' to smaller 'aerosol particles' which differ in size (Kasson & Kamerlin, 2020). Other individuals can catch COVID-19 when the virus enters their mouth, nose, or eyes, which was far more likely to occur when individuals are in near or close contact with an infected person (less than 1 meter apart) (WHO, 2020).

On February 21, 2020, the first COVID-19 cases were found in Sungai Buloh, Malaysia, and started to spread badly all over the country in less than a month (Ministry of Health, 2020). Malaysia started enforcing the Movement Control Order (MCO) on March 18 (National Security Council [NSC], 2020). The Prime Minister declared on March 25 that the first continuation of the MCO would last until April 14 (NSC, 2020) through a live national broadcast. The Movement Control Order (MCO) was a cordon sanitaire that was introduced as a safety precaution by the Malaysian federal government in response to the COVID-19 pandemic in the country on March 18, 2020. In local and foreign newspapers, the order was widely known to as a "lockdown" or "partial lockdown".

The Movement Control Order (MCO) also forbids the entry into the country of all tourists and foreign visitors, which has a dramatic impact on Malaysia's transport and tourism

industry, with aircraft on the ground, hotels closed and travel restrictions imposed in literally all Malaysian states. The COVID-19 pandemic in the first quarter of 2020, in an unexpected blow to the tourism sector, reduced international visitors to a portion of what they've been a year previously. Malaysia welcomed a whopping 13.35 million international tourists on the basis of data from the tourism Malaysia corporate website. A year ago, it announced an improvement of 6.8 percent in tourist receipts, thereby adding RM41.69 billion during the first half of 2019 to the nation's revenues. The statistical number of international tourists dramatically decreased by **4,233,425** tourist arrivals in the first quarter of 2020 after the epidemic reached Malaysia. Compared to the same time in 2019, this marks a decline of **36.8%**.

Due to COVID-19, the government, and also the World Health Organization (WHO) recommended contact-less activity to prevent this outbreak from becoming worst and uncontrollable. As in the tourism industry, the usage of Virtual reality are the other options to attract tourist in this pandemic era (Minucciani, & Garnero, 2013). Virtual reality (VR) tourism offers tourists the possibility to visit a VR destination (Hashim, & Jusof, 2010). This could play an important role in promoting visitation and participating in unique activities and actions for travel.

Virtual reality (VR) had many useful tourism applications that need more recognition from tourism scholars and practitioners (Minucciani, & Garnero, 2013). The number and importance of such applications will inevitably increase as VR technology continues to

develop. Planning and analysis, advertising, entertainment, education, accessibility and sustainability of heritage are six fields of tourism in which VR can be find extremely useful (Guttentag, 2009). There was little reason to believe that, as VR technology continues to evolve, it would be much more prominent in society at large and in the tourism industry in particular (Guttentag, 2009). Thus, this study research was designed to examine behavioural intention determinants on virtual tourism usage among tourists in Malaysia during the COVID-19 lockdown.

1.3 PROBLEM STATEMENT

Many analysts have noted that the COVID-19 pandemic poses a disruptive event or chance that might transform the world (Davies, 2020; Gills, 2020; Mair, 2020; Politico, 2020). According to Mckinsey and Company (2020), the disease outbreak is "not just an unprecedented health epidemic," but it is "also an inevitable transformation of the international economic system". Things will improve for the better, however, or economic growth, such as tourism, will become more stable, not a neglected inference (Kozul-Wright & Barbosa, 2020; Mair, 2020). Tourism and travel are seen as critical factors in the transmission of disease and disease vectors (Brown et al., 2016), and given the role of no pharmaceutical interventions (NPI), such as quarantine and border control, pandemics have major effects on tourism (Ryu et al., 2020).

Tourism destinations and international businesses have stepped up its efforts under lockdown conditions to place themselves on the screens of millions of consumers, showcasing the delights of their environments, attractions and tourism activities which can encourage tourists to their cities and regions once the crisis subsides (Crevathy & Balaji, 2020). The COVID-19 lockdown made the customers use virtual tourism rather than traditional tourism (Agostino, 2020).

Restricted to their homes, new technologies can allow users to enjoy 'virtual tourism' as a way of substituting real trips – for a while – and to dream or plan for the next vacation (Digital News Asia, 2020). Virtual tours offer 360-degree interactive experiences to inspire globetrotters to visit Malaysia when travel restrictions are lifted. Integrated with stories, videos, audio, and other elements, travellers can learn more about Malaysia's beautiful place from any device, wherever they are in the world. (Digital News Asia, 2020). Virtual reality is one immersive technology during the coronavirus outbreak that could accelerate the comeback of the travel and tourism industry. (Digital News Asia, 2020). For individuals to start enjoying travel and millions of jobs and companies worldwide that have experienced a tremendous impact, a rapid return is crucial. (Digital News Asia, 2020). The COVID-19 global pandemic, including travel, was changing the way we see the world. MyVXp or Malaysia Virtual Experience for Virtual Tourism in Malaysia. With the support of Malaysia Productivity Corporation (MPC), MyVXp was funded by the Tourism Productivity Nexus (TPN), which aims to bring a whole new experience to the 'new standard' of local tourism. You may "visit" some of the local attractions, destinations or experience the country's tourism products under MyVXp (New Straits Times, 2020).

Due to the pandemic, demand to travel has become less as people decide to travel less often, if at all, and virtual tourism provides a risk-free option to travel (Moorhouse, 2020). Individuals that have health problems, this could be seen like the right option. Virtual reality would become much more significant as tourists become more climate-conscious, as a way of finding something new without the carbon footprint, noise, and overpopulation (Moorhouse, 2020).

VR holidays, however, have undoubted drawbacks, such as the lack of "real experience", especially given the social nature of tourism, which, as opposed to mere passive observation, may help engage with local culture and heritage. In addition, the reliance of developing countries on their tourism revenues, which would impact as many destinations, both underdeveloped and remote from the world's larger tourism consuming areas (Sussman & Vanhegan, 1997). Other than that, VR Tourism could affect the health risks described by some authors as a result of immersion or the use of VR equipment and restricted reminiscence, curtailing the documenting and reliving the collection of physical mementos for the holiday experience. Finally, social contact is one of the most popular drawbacks of virtual tourism. Such social effects would build a generation of future VR addicts who are unable or unable to engage with fellow human beings (Sussman & Vanhegan, 1997).

Also, as innovations in VR technology can lead to numerous, if counterproductive, perceived security concerns, the issue is that VR data is often stored in formats that can easily become redundant, making the data unobtainable. Moreover, sophisticated VR technologies

can demonstrate highly 'innovative' that they do not efficiently execute their operations. For example, like-minded individuals might be convinced by the innovativeness of a VR technologies and not the excellence of its presenting proposition in participatory tourism planning. Virtually, an Austrian hotel was re-created in Second Life (SL) virtual world video game by Stangl and Weismayer (2008) and found that people that are foreign with SL regarded the re-creation in SL more favorably because of a 'novelty effect' than the hotel's website, although users of SL does not display such an attitude difference. Therefore, VR technology can also be used purposefully to convince group members to support a particular concept (Heldal, 2007).

The existing body of knowledge shows that there were not many studies that had been conducted on virtual tourism usage determinants and intentions with the awareness of the technology, usability, and time commitment (Yung, 2019). In order to fulfil the research gap above, the current research is conducted to understand the influence of performance expectancy, effort expectancy, social influence, and perceived security on behavioural intentions to use virtual tourism in the midst of COVID-19 lockdown.

1.4 RESEARCH OBJECTIVE

In this study, the researcher will explore the behavioural intention of virtual tourism usage in amid of COVID-19. There are a few objectives that were identified in this study.

The objectives are:

- i) To identify the relationship between performance expectancy and behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic.
- ii) To identify the relationship between effort expectancy and behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic.
- iii) To identify the relationship between social influence and behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic.
- iv) To identify the relationship between perceived security and behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic.

1.5 RESEARCH QUESTION

Research questions must be accurately and clearly defined to obtain the relevant information required to fulfil the objectives. The proposed questions to be answered in this research are as follows:

- i) What are the performance expectancy related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?
- ii) What are the effort expectancy related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?
- iii) What are the social influence related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?
- iv) What are the perceived security related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?

1.6 SIGNIFICANCE OF THE STUDY

The significant of this study can divided into three aspects. The first aspect on practicality in the industry. The second aspect is on academic knowledge and the third aspect is on business sector. This study create a better understanding of the usage of virtual reality in several sectors. This study helps to measure the market situation of tourists towards the usage of virtual reality. The findings that are to be revealed may give advantages to certain parties and may be able to gain.

In practicality in the industry, this study could view virtual reality multi-purpose use within the industry. The advancement and significance of virtual reality in the field of Information and Communications Technology (ICT) can be progressively used in a wide variety of tourism industries such as hotels, entertainment, restaurants, museums, virtual tours, architecture, simulation training, and cultural heritage (Rosario, Carmen, & Pino-Mejías, 2020). Therefore, this study can help industry players to better understand the opportunity of virtual reality usage in various industries.

In the business sector, virtual reality was gaining popularity in the entertainment sector as it is a trending topic in the business world. Sarawak Chief Minister Datuk Patinggi Abang Johari Tun Openg has endorsed the creation of the D-Virtual Park in Sarawak as the park could enable the younger generation to adopt the modern advancements on the

technological field (Chua, 2020). The theme park of virtual reality was also backed by Sarawak State Minister of Tourism, Arts and Culture Youth and Sports Datuk Abdul Karim Rahman Hamzah, who said the park of virtual reality could serve as the latest tourism destination to be offered to people (Chua, 2020). It was possible to improve the potential of virtual reality in industries as it can increase job efficiency, training, product design, medical or scientific, and industrial technology, and innovative interactive entertainment types (Patel & Cardinali, 1994). Therefore, this research would benefit the virtual reality business stakeholders who plan to grow a business to improve the experience of both consumers and business owners, provided that virtual reality is developing rapidly.

This study shows that virtual reality could benefit scholars or researchers in the education system in the academic sector. Virtual reality has an impact within the education system, especially in science and technology, and can also be an opportunity for entrepreneurship students to design an innovative virtual reality software or device. In the particular case within the academic, it could assist scholars in practicing their theoretical knowledge with the use of these technologies. This study could also provide scholars with the ability to manage and develop new knowledge in a sustainable and environmentally sustainable way to solve social and economic problems (López, 2020). Therefore, this study could become an accountable point of reference for scholars to learn more about the usage of virtual reality in various fields.

1.7 DEFINITION OF TERMS

1.7.1 VIRTUAL REALITY

As described by Aukstakalnis and Blatner (1992), virtual reality was "a way of visualizing, manipulating and interacting with computers and extremely complex data for humans".

1.7.2 VIRTUAL TOURISM

Virtual tourism refers to, visiting other places of the world without needing to fly physically (Ibrahim, Mohamed, Yusof, Mat, & Zulkifli, 2007). Virtual tourism uses the ability of virtual reality to offer a virtual tour of destination of choice from the comfort of the user's home or at a tourism company that offer a virtual tourism.

1.7.3 CORONAVIRUS (COVID-19)

Coronavirus disease 2019 (COVID-19) was recognized as a novel coronavirus disease currently recognized as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; previously known as 2019-nCoV), which was originally detected in Wuhan City, Hubei Province, China in the midst of an outbreak of respiratory disease cases (Cennimo, 2020).

1.7.4 BEHAVIOURAL INTENTION

The motivating elements that impact a certain behaviour are referred to as behavioural intention, and the stronger the intention to conduct the behaviour, the more likely the activity will be performed (LaMorte, 2019).

1.8 CONCLUSION

In conclusion, virtual reality can become an option for individuals who want to travel cost-effectively. The virtual world created within the virtual reality device would give a new and safer experience for tourists when they travel virtually as it is done in a controlled environment such as being inside of their house or a virtual reality purposed room set up by a travel company. However, virtual reality had brought in a lot of disadvantages such as the functionality issues as like any programmed devices, health risks and quite expensive for someone that has a low income.

Furthermore, there was a lack of research conducted to explore the usage intention on virtual reality. Thus, this research is intended to study the behavioural intention of virtual reality tourism among tourists in Malaysia during a COVID-19 lockdown. This study would hope to benefit in practicality in the industry, business, and academic sector.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter explained a review of literature in relation to the research questions being analyzed. This chapter discussed on virtual reality development throughout the year in section 2.2. Then followed by underpinning theory in section 2.3. Next, this study determines the hypothesis statement of what the researchers predict will be the end-result of the study in section 2.4. The hypothesis considers the relationship between two variables: the independent variable (performance expectancy, effort expectancy, social influence, and perceived security) and the dependent variable (the behavioural intention of using virtual reality tourism during a COVID-19 pandemic). This chapter also illustrates the conceptual framework of what the researchers expect to find through this research. It defines the relevant variables for this study and maps out how they might relate to each other, and build a conceptual framework before begin collecting data.

2.2 LITERATURE REVIEW

2.2.1 Virtual Reality

Virtual reality (VR) was not an entirely new notion; since the late 1960s, it had existed in different ways. Until VR was finally adopted, names such as synthetic world, cyberspace, artificial reality, simulator technology and so on and so forth were known (Eze & Moses, 2011). Lee and Oh (2007) found that VR tourism decreases the perceived fear or risk of customers by familiarizing them with new destinations as technology has advanced.

The growth of virtual reality became much stormier at the beginning of the 1990s, and the term Virtual Reality became highly popular. Nearly in all media, we will learn about Virtual Reality, people use this word very frequently and, in many cases, misuse it. The explanation was that this fresh, popular and intriguing technology captures greater interest from individuals than, for instance, computer graphics. The result of this condition was that the distinction between three-dimensional (3D) computer graphics and virtual reality today becomes blurred (Gervautz & Mazuryk, 1996).

Virtual reality (VR) was arguably one of the late 20th century's most significant technical breakthroughs. It would allow the use of computer-mediated imaging and graphical environments to construct a multitude of different real and unreal experiences. As such, it

had gained significant coverage in the media. In essence, VR technology is designed to construct virtual versions of actual encounters that are so convincing that you can imagine that you are participating in the real one.

Within the tourism industry, VR already has different applications, according to Guttentag (2010). There was hardly any reason to assume that it would become more common in society, in general, and the tourism sector in particular, as VR technology continues to evolve. For the tourism industry, there were different applications for VR and its benefits for the sector are significant, so tourism scholars and practitioners should understand the context of VR in order to better prepare for the challenges and take advantage of the opportunities offered by VR.

As such, the tourism industry had seen many well-publicized attempts to use VR to attract consumer interest, ranging from Marriott "teleporting" users to secluded virtual beaches through custom-built sensory experience booths and providing a "Vroom Service," the Australian tourism website that provides interactive 360-degree footage of the Great Barrier Reef, Sydney Opera House and Harbour Bridge. The attention of destinations, companies and organisations responsible for promoting tourist spaces is gradually turning towards enabling potential tourists to experience a small part of what it would be like to be there (Guttentag, 2010).

2.3 UNDERPINNING THEORY

This study seeks to analyze virtual reality usage's behavioural intention among tourists during the COVID-19 pandemic in Malaysia. To get the result of this study, the researcher was using the Technology Acceptance Model (concept) as the underpinning theory. TAM has many factors, but the researchers only focus on 4 elements of TAM which were performance expectancy, effort expectancy, social influence, and perceived security. Virtual reality could be useful for the tourism industry. Virtual reality was a synthetic environment that can be equivalent to the physical world or totally different from it. According to Masrom (2007), TAM was invented by Davis in 1989 on view of the Theory of Reasoned Action (TRA). TRA argued that the attitude of an individual motivated by intention is the function of a person's assertiveness towards standard of behaviour and subjective surround behavioural enactment (Fishbein & Ajzen, 1975). In other words, individual behaviour and intentions were to behave individual attitudes towards their behaviour and perceptions of behaviour. Therefore, the behaviour was a component of attitude and belief.

Meanwhile, Hu, Chau, Sheng, and Tam (1999), they reveal that this intention model which was TAM has developed particularly to describe and guess the acceptance of computer technology users. Experiments has made on whether the determination of behavioural intention were performance expectancy, effort expectancy, social influence and perceived

security has a connection to the behavioural intention of using virtual reality tourism during COVID-19 pandemic. TAM has a difficult structure of behaviour, assuming that when a person forms a desire to doing, they will be free to turn without restraint. Selecting TAM is based on tranquillity and analytical influence that makes it laid-back to use in dissimilar facts system devices (Guriting & Ndubisi, 2006).

2.3.1 Behavioural Intention

Behavioural intention was a subject often discussed in tourism studies, as behavioural intentions have been seen as the deciding factor in the success of the destination (Jeong, Kim & Yu, 2019). In general, the purpose of advising and revisiting would capture behavioural intention. The aim was clearly described as how hard people are willing to try and how much determination they intend to use to carry out a certain action. Behavioural purpose (BI) refers to the "subjective probability of a person that he will carry out some behaviour" (Fishbein & Ajzen, 1975). Three independent precedents are a feature of behavioural intention: customer mood, subjective norm, and perceived behavioural influence.

The positive behavioural intention of visitors was a significant target in the tourism industry as it directly related with their happiness and repeat visitation. Therefore, for the

prediction of future actions, behavioural intention would be a logical dimension. Understanding the determinants of behavioural intention may also provide service providers with information about their intentions to say positive or negative things and recommend places for service quality (Gnanapala & Ekanayake, 2016).

2.3.2 Performance Expectancy

Performance expectancy (PE) can be defined as "the degree to which the user expects that using the system will help him or her achieve job performance gains" (Venkatesh, Morris, Davis & Davis, 2003). More precisely, this means that when they think that this will help them perform their job, people are more likely to implement new technologies.

Several studies have shown that there are individuals convinced that the use of technology would improve their working efficiency (Chao, 2019; Thomas, Singh, & Gaffar, 2013). Performance expectancy was the primary predictor of behaviour intent to use technology, according to Alwahaishi and Snasel (2013). The study by Onaolapo and Oyewole (2018) claimed that performance expectancy was a major element in technology adoption and the use of technological developments. Moreover, in many studies, this variable is significant, with many researchers exploring this variable in their work related to the

acceptance and use of different technologies (Chao, 2019; Im, Kim, & Han, 2008; Lee & Song, 2013; Liu, et al., 2019; Thomas, et al., 2013).

2.3.3 Effort Expectancy

The effort expectancy is described as "the degree of ease associated with the system's use" (Venkatesh et al., 2003). The effort expectancy refers to the individual's expectation that the virtual reality experiences they are involved in will be easy to use (Chao, 2019; Thomas, et al., 2013). This aspect is one of the main variables influencing the acceptance and use of virtual reality. The research by Bervell and Umar (2017) found that the effort expectancy had a substantial influence on the behavioural goal of using virtual reality. The important effect of effort expectancy on behavioural intention to use was discovered by Catherine, Geoffrey, Moya, and Aballo (2017). According to Lwoga and Lwoga (2017) and Shafinah, Sahari, Sulaiman, Yusoff, and Ikram (2013), it was found that effort expectancy had a positive impact on expected results. Lee and Song (2013) supported this result, showing that the effort expectancy positively influenced the performance expectancy. The research by Catherine, et al. (2017), however, showed no association between performance expectancy and effort expectancy.

2.3.4 Social Influence

The degree to which a person perceives that significant others think he or she should use the new system is defined as social influence (Venkatesh et al., 2003) is the third and final direct determinant of the behavioural intention to use a technique or technology (Venkatesh et al., 2003). According to Thomas, et al. (2013) and Tan (2013), social influence is the result of the persuasion of individuals who believe that technology is beneficial. In addition, in many research contexts, social influence has been regarded as the key indicator of technology adoption.

In social influence, there are three definitions that are included: subjective norm, social variables and image. Each of these principles refers to the notion that the social environment greatly affects how individuals behave (Venkatesh, et al., 2003). In the TRA, the subjective norm was enforced by Ajzen & Fishbein (1977). The idea can be clarified by one's interpretation of how important others feel they should behave. Social factors refer to the internalization of community and social agreements that individuals share with others as a second term incorporated into social influence (Venkatesh et al., 2003). Social factors are a central construction of the PC Usage Model by (Thompson, 1991). In the Innovation Diffusion Theory (IDT) by Rogers (1995), the third definition, image, is introduced and can be interpreted as the belief that the use of a new technique or technology would upgrade the image or social status of an individual.

Researchers also want to test the hypothesis that social influence has a beneficial effect on the behavioural intention to use, based on Trybou (2016). Some of the researchers found that the most important indicator was social influence, while the others found that the impact was only slightly significant (Chang, 2007).

2.3.5 Perceived Security

Security is characterized as a danger that creates situations, conditions or events with the possibility of causing economic uncertainty in the form of disruption, disclosure, data alteration, denial of service and/or fraud, waste and abuse of data or network resources (Kalakota & Whinston, 1997). Perceived security is characterized as the degree of consumers security from such "threats" (Yousafzai, & Pallister, 2003). Shin (2009) describes perceived security as the extent to which an individual assumes that it would be safe to use a virtual reality procedure.

VR risks to consumers fall generally into three categories: data collection and inferences, physical injury and immersive experience manipulation and infringement (O'Brolchain et al., 2015). Prior research has shown that new user data such as body and

facial muscle movements are obtained by VR systems, which can be used to distinguish user feelings or health quality (O'Brolchain et al., 2015). In addition, even when the user thinks the device is off, some information can be gathered since many headsets are still on, allowing developers to gain data without user awareness (Roesner, 2014). This information can then be sold or leaked through known vulnerabilities to third parties, which may impact the quality and price of user-advertised products or services.

VR also makes cyber-crimes such as physical assaults on virtual characters and theft of digital items that have been found to produce strong emotional reactions similar to real-world crimes (Kerr, 2008). Early work has examined protections for VR, including specialist authentication schemes, to defend against such attacks (George, 2017). While this prior work starts to analyze VR threats, little work has addressed the awareness and expectations of these threats by users or developers and, as yet, there is little legislation or regulation to build meaningful security and match incentives for developers and users. (George, 2017).

2.4 HYPOTHESIS DEVELOPMENT

2.4.1 Relationship between performance expectancy and behavioural intention.

Several studies had shown that performance expectancy is an important element to determine the behavioural intention to use technology in a variety of contexts, including tourist mapping application software (Gupta & Arora, 2017), travelling application software (Gupta, Dogra & George, 2018), rural areas accommodation websites (San Martin & Herrero, 2012), low-cost airline websites (Escobar-Rodriguez & Carvajal Trujillo, 2014) and mobile payments (Slade, Williams, Dwivedi & Piercy, 2014). Based on the discussion above, the authors suggest the following hypothesis:

Hypothesis 1: There is relationship between performance expectancy and behavioural intentions to use Virtual tourism

2.4.2 Relationship between effort expectancy and behavioural intentions

Previous study by Kim, Chan and Gupta (2007), the value-based adoption model (VAM) had been efficaciously employed for examining individual behaviour mostly in the areas of Internet shopping (Gupta & Kim, 2010), tourism (Chung & Koo, 2015), and hospitality (Kim, Bae, & Jeon, 2019). A recent study by Lau, Chui, and Au (2019) adopted the VAM to test the adoption of augmented reality (AR) technology in the context of hospitality and tourism. The authors considered usefulness and enjoyment in using AR to be perceived benefits, and technicality and captivating and found these elements to be significant predictors of adoption intention.

Davis (1989) described effort expectancy as the extent to which the individual expects that it will be effortless to use a particular method. Therefore, the perceived ease of use is also equivalent to decision-making efforts; if an application is too difficult to use, the effort to use it outweighs any benefits of using the application. DeLone and McLean (1992) clarified that one factor in determining device quality is ease of use, which could influence the perception of users. Research from Carlsson et al. (2006), shown that the effort expectancy has a significant influence towards intention to use technology. Based on the above discussion, the following hypothesis is formulated:

Hypothesis 2: There is positive relationship between effort expectancy and behavioural intentions.

2.4.3 Relationship between social influence and behavioural intentions

According to the previous report, social influence has had a positive impact on behavioural intentions, as VR has also provided easy access to potential audiences, broadened global connections between customers and enriched consumer enjoyment (Huang, 2011). Customers could enjoy enjoyable and hedonistic entertainment while searching for details (Healy, 2016). In terms of user opinions and views, social impact is expressed in the social climate. In terms of technology adoption, consumers are also affected by the actions of other users. They have a positive habit of regulating the technologies they have embraced. Most of the previous studies examined it (Smetana, 2006). It is supported in another previous study that both habits and social factors have become essential variables in the sense of the knowledge system (Woisetschläger, 2011). Habit may be a high frequency activity as it immediately responds to the context (Limayem, 2007). As a consequence, a social community or individuals with common experiences will typically be enacted (Quan-Haase & Young, 2010). Based on the above discussion, the following hypothesis is formulated:

Hypothesis 3: There is positive relationship between social influence and behavioural intention.

2.4.4 Relationship between perceived security and behavioural intentions

Perceived security is described as to the extent of which it is assumed that VR is safe from the transmission of confidential information, such as customer information. In the case of VR technologies, the security of VR devices and the transmission of wireless data are one of the key factors that which affect the acceptance of these technologies (Arpaci, Yardimci Cetin, & Turetken, 2015). The perception of a low level of security will increase the technological risk that organizations will implement these technologies (Arpaci, et al., 2015). On the contrary, high technical risk tolerance organizations will advance the acceptance of these technologies (Arpaci, et al., 2015).

Prior literature discussed the relationship between perceived security and behavioural intention. For example, there is a positive impact on behavioural intentions in terms of perceived security and trust (Shin, 2009). Security is a primary determinant of confidence in online shopping and e-commerce studies (Flavián & Guinalú, 2006; Kim, Chung, & Lee, 2011). Security can also be used as a precedent for attitude and behavioural intention, because

trust is subjective and security is objective (Zhou, 2011). The following hypothesis is suggested based on the above theoretical context and previous empirical validations:

Hypothesis 4: There is relationship between perceive security and behavioural intentions.

2.5 CONCEPTUAL FRAMEWORK

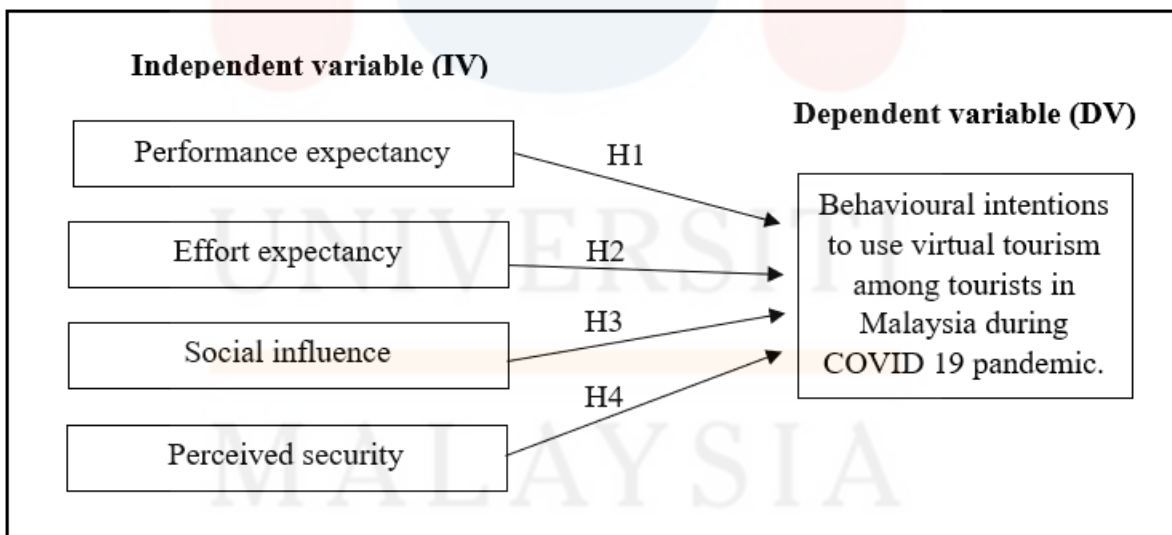


Figure 2.1 shows the conceptual framework adapted from Chayomchai (2020) and Arpaci, Cetin, and Turetken (2015).

Figure 2.1 illustrates the independent variable (IV) and dependent variable (DV) of this research. The independent variables are the factors that could affect the behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic. On the other hand, the dependent variable is the behavioural intentions to use virtual reality among users in tourism during COVID-19 pandemic. There are three independent variables (IV) determined for this study: performance expectancy, effort expectancy, social influence, and perceived security. The figure shows the relationship between performance expectancy, effort expectancy, social influence, and perceived security and behavioural intentions to use virtual reality among tourism users in Malaysia during the COVID-19 pandemic.

This study focuses on behavioural intention determinants on virtual tourism usage among tourists in Malaysia during COVID-19 lockdown. Any questions were posed in this analysis to ensure that all the gathered information was correct and genuine. Based on Ibrahim et al. (2007), there is a very strong opportunity for VR technologies to be used as one of the media for interactive tourism. This is because VR features and characteristics can serve as effective tool to boost tourism in Malaysia. This research focus on performance expectancy, effort expectancy, social influence, and perceived security as independence variable (IV). Performance expectancy refers to an individual's degree of awareness of using something that can lead to working or living more effectively (Chayomchai, 2020). The effort expectancy defined as the expectation of a user's effort in using the technology in which they are involved. (Chao, 2019; Thomas, et al., 2013). The effect of people being persuaded by other individuals feel that technology is beneficial defined as social influence (Thomas, et

al., 2013; Tan, 2013). Perceived security as defined by Shin (2009) is “the extent to which an individual assumes that using virtual reality approach will be safer”.

Dependent variable (DV) would be focus on behavioural intentions to use virtual reality among users in tourism during COVID-19 pandemic. Virtual reality (VR) can be seen as one such technology that can radically change the way Destination Management Offices (DMO) advertise their area. Head Mounted Displays (HMD) carry the wearer to a 'artificial world' where it is possible to communicate with and absorb digital knowledge at a particular degree of immersion (Fox, Arena, & Bailenson, 2009).

Based on the research framework above (Figure 2.1), this research would investigate the fundamental relationship between performance expectancy, effort expectancy, social influence and perceived security with behavioural intentions to use virtual reality among users in tourism during COVID-19 pandemic. The purpose will be measured by means of four key hypothesis:

- H1: There is significant connection between performance expectancy and behavioural intentions to use virtual reality among users in tourism during COVID-19 pandemic.

- H2: There is significant connection between effort expectancy and behavioural intentions to use virtual reality among users in tourism during COVID-19 pandemic.
- H3: There is significant connection between social influence and behavioural intentions to use virtual reality among users in tourism during COVID-19 pandemic.
- H4: There is significant connection between perceived security and behavioural intentions to use virtual reality among users in tourism during COVID-19 pandemic.

2.6 CONCLUSION

In conclusion, this chapter explored existing literature on factors for behavioural intention to use virtual reality among tourists in Malaysia. Researchers discussed the reviews of the variables: Technology Acceptance Model, performance expectancy, effort expectancy, social influence, perceived security, and behavioural intentions. Elaboration of the relationship between performance expectancy, effort expectancy, social influence, perceived security and behavioural intentions has also been discussed. The researcher has constructed

a conceptual framework for this study to see the relationship between independent variables and dependent variables. The summary of these research questions and the hypotheses are presented in table 2.1 below. The following chapter will discuss the methodology that will be applied in this study.

Table 2.1 shows the summary of research questions and hypothesis in this study.

Research Question	Description	Hypotheses
RQ1	What are performance expectancy related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?	There is a significant connection between performance expectancy and behavioural intentions to use virtual reality among users in tourism during COVID-19 pandemic.
RQ2	What are effort expectancy related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?	There is a significant connection between effort expectancy and behavioural intentions to use virtual reality among users in tourism during COVID-19 pandemic

RQ3	What are social influence related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?	There is a significant connection between social influence and behavioural intentions to use virtual reality among users in tourism during COVID-19 pandemic.
RQ4	What are perceived security related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?	There is a significant connection between perceived security and behavioural intentions to use virtual reality among users in tourism during COVID-19 pandemic.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter describes the methodology used in this study. The target population and sample size of this study in the aspect of whom, where and how to be studied were explained. Then, further explanations of what types of sampling method used and how data collection been conducted. This study also describes how and where the questionnaires been distributed. Lastly, data analysis is also highlighted.

3.2 RESEARCH DESIGN

In general, a research design refers to a structure to plan and perform a certain design. Once a decision is made to proceed with the research, a plan to gather the data are needed to

carry out in order to address the research objectives (Aaker, Kumar, & George, 2000). In this study, **quantitative research** was used as the research design.

Quantitative research refers to a structured way to collect and analyze the data collected from various sources. Quantitative research includes the use of mathematical, statistical and computational tools to obtain results. Therefore, it can be defined as a structured cause-and-effect relationship between the problems and factors. A large-scale survey of research helps in generate statistics in quantitative research using method through a questionnaire or structured interviews (Stanat, 1984).

The relationship between performance expectancy, effort expectancy, social influence and perceived security as an independent variable and behavioural intention of using virtual reality tourism during COVID-19 pandemic as a dependent variable was examined in this research.

3.3 POPULATION

According to Rafeedalic (2017), the population is a group of people or artefacts that share one or more features from which data can be obtained and analyzed. The common

characteristics of the groups distinguish them from other individual, organizations, objects and so forth. It is possible to refer to any value defined or determined by the characteristics of the entire population as a parameter. The method of conducting a survey to collect information from the entire population is known as a census (Rafeedalic, 2017).

The target population of this study was the tourist who has the intention to use Virtual Tourism in Malaysia and responded to a series of simple selection criteria. In this study, researchers aimed **to identify tourist who has the intention of using VR tourism**. The researchers decided to capture this population as the researcher believe that this population would be able to provide the information required in answering the research question objectives of the study. Moreover, the population were seen as the potential respondent of the study as this group of people were aware of virtual reality and augmented reality technology applied and offered in the tourism industry.

3.4 SAMPLING

Previous research by Reinhard (2010) and Barr, Noble and Biddle (2007) suggested the need for a combined approach to data collection to clarify the perception of virtual worlds. Likewise, Choi, Kim, and Kim (2007) proposed that researchers obtain data from a

diversified sample in order to minimize bias and boost the generalizability of the findings. Sampling is selecting a group of subjects to study and representing a large group of individuals who have been selected. This study is using a non-probability sampling technique that is convenience sampling.

Sampling is a procedure used in statistical research where a predetermined number of perceptions are taken from a larger population. The general approach to sampling, which is non-probability sampling, was used in research. In this research, non-probability sampling such as the convenience sampling technique was used. **Non-probability** is utilizing where the sampling frame is cannot be achieved 25 in this study. This sampling technique is useful because of this because this study requires descriptive reviews. When distributing questionnaires to respondents' targets, the convenience sampling method is easy to use in this study (Research Methods for the Social Sciences, 2018).

According to Lund Research Ltd (2012) **convenience sampling** is influenced by the collection of data from a number of the population that is readily accessible to join in the study. Convenience sampling with few rules governing how the sample should be obtained is very easy to do. In contrast to probability sampling methods, the relative cost and time needed for a convenience sample are minimal. This enables the researchers to achieve the sample size they need in a relatively easy and inexpensive manner. Researchers can use the convenience sample to gather valuable information and data that would not have been possible using probability sampling approaches that require more formal access to population

lists. Researchers have provided random questionnaires to tourists in Malaysia who have the intention to use VR tourism. Next, researchers aimed for tourist who have the intention of using VR tourism.

3.4.1 SAMPLE SIZE

The sample is the part of the population that allows one to draw population inferences. It is not achievable to collect research on full population data because it would be costly and time-consuming. This study had determined sample sizes using **Roscoe rule of thumb**. **Roscoe (1975)** offers the 'rule of thumb' for deciding sample size according to Essential Academic English (2017); as it is stated that for most studies, sample size greater than 30 and smaller than 500 is acceptable. It is not recommended to use statistical analysis of samples of less than 10. In most laboratory study, samples of 30 or more are recommended. In behavioural research, sample sizes of less than 30 or greater than 500 are seldom justified. Within these limits (30 to 500), the use of a sample about 10% size of the parent population is recommended.

A total of 400 (four hundred only) questionnaires were distributed among tourists who visited Virtual Tourism in Assam, India, based on previous studies. This paper was

created using data from both secondary sources such as E-books, journals, and blogs, as well as partial primary data collected from tourists as part of the first author's ongoing study (Rahman & Bhowal, 2017). According to Polimeris and Calfoglou (2015) VR discourse, as expressed in the choices made by 36 respondents with regard to possible cultural tourism destinations. Both adults, ranging in age from 18-55, were respondents. Their cultural standard was also anticipated to vary as their level of education also varied. By completing a questionnaire composed of 10 questions, the data was gathered. 6 of the questions required respondents to select one out of three destinations. Therefore, the results of previous studies have decided to use **300 respondents in this research**. Researchers took a total of 300 respondents because the number was approximately the same as the number of previous studies such as the studies made by Ahmed and Phin (2016) used 300 respondents, Tuffour and Matey (2019) used 300 respondents in their study, and Titus (2017) used 310 respondents. The purpose of using VR tourism during the COVID-19 lockdown among tourists in Malaysia can be identified by this.

3.5 SAMPLING METHOD

In statistical analysis, sampling is a process in which a predetermined number of perceptions are taken from a larger population. In research, there are two general approaches to sampling, which are probability sampling and non-probability sampling. Non-probability

sampling such as convenience sampling technique is utilized in this study. This sampling technique is useful because this study requires descriptive reviews. When distributing questionnaires to respondents' targets, the convenience sampling method was used as it is easy to use in this study and it is readily accessible to join in the study.

Convenience sampling is a sampling type where the chief data source were used without setting any supplementary necessities. In other words, this sampling method involves participants to get any researchers to find the respondents everywhere easily. In convenience sampling, no additional criteria are identified before selecting the subject. Researchers had randomly given out the questionnaires to random people who like to travel. According to Co, Thomas, Lunsford, & Rae (1995), many researchers have choose convenience sampling because it's luxury of access for the researchers. This sampling is essentially preferred because it is the laid-back technique to get answers in this study. Convenience sampling technique is stress-free, minus time overshadowing and reasonable.

3.6 DATA COLLECTION

Data collection is the process of accumulating the useful information carefully to ensure that the analysis will provide logic answers (Sapsford & Jupp, 2006). For the purposes

of this study, primary data and secondary data collection method were used. Primary data collection involves data collection directly from subjects by the researcher or taught data collector. Quantitative data are gathered to arrange and portray characteristics, behaviours of populations (Parahoo, 2014). As claimed by Robson (2007), a researcher should utilize the least complex way of gathering information finding the answers to the research questions and is supposed to collect more extent information than required. Among the primary data collection method, survey method was being chosen for this study. Researchers also had chosen questionnaire as data collection instrument to achieve the objectives in this study.

Due to COVID-19 and MCO online method to collect primary data were used, we were focused by handing out questionnaires through social media such as Facebook page of tourism in Malaysia to get respondents. The questionnaires were created using google form, the reason why we chose this method was the data that we received was easier to analyses and more accurate by using this method. The cover letter was shown first to the respondent's amplification the reason and the importance of this study. In addition, the subjects of the covering should be succinct, rapid the importance of the study, the willingness to share the results, the names of the respondents will be kept trustworthy, the acknowledgment to be responded honestly, retained, reinforced by the research supervisor and committed with the questionnaire. Next, the survey questions were given out to the target respondents. Respondents who have experiences in virtual tourism and respondents who have intentions of using virtual tourism to gain an accurate response that is useful for the study were randomly selected. The questionnaires were handed out for 24 hours for the respondent to

respond and close after 24 hours. Finally, the gathered data were analysed with the selected method.

Meanwhile, secondary data was collected from accessible sources that had been accumulated. Secondary data were utilized to support findings and analysis. The secondary data utilized in this study were literature, journal report, article, books and World Wide Web (www).

3.7 RESEARCH INSTRUMENT

To achieve the objective in this study, a research instrument was used. Research instrument could influence the general idea to conclude the study in the end. This study used a **questionnaire** to collect data and information from the respondent. The questionnaire consisted of two parts which was Part A and Part B in response to the research objectives. The questionnaire was distributed online in various virtual reality forums, travel forums, and virtual reality and travel Facebook groups by **Google Forms**. The questionnaire was designed based on the instruments which published by Amin (2007), Holzmann, Schwarz, and Audretsch (2020), Chayomchai (2020), Arpaci et al. (2015), Chua, Rezaei, Man-Li, Oh,

and Manimekalai (2018) and Reyes-Mercado (2018). Each of the components were abridged in table 3.1 and further clarification of each segment is in the accompanying segments.

Part A was designed to identify the respondents’ demographic profiles. This part contained six demographic elements such as gender, age, nationality, marital status, education, and income. Furthermore, Part A was measured by nominal scale. Meanwhile, in Part B, there were four sections and measured by five-point Likert scale from “strongly disagree” pointed as 1 until “strongly agree” pointed as 5. Most of the researchers on the previous studies used the five-point Likert scale. Therefore, researchers had decided to apply the same instrument in this study.

Table 3.1 Questionnaire Design

PART	ITEMS	NUMBER OF ITEMS	SUPPORTING REFERENCES
PART A	Demographic data	6	Amin (2007)
PART B	Section 1: Behavioural intentions	5	Holzmann et al. (2020)
	Section 2:	5	Chua et al. (2018)

Performance expectancy		
Section 3:	5	Chayomchai (2020)
Effort expectancy		
Section 4:	5	Reyes-Mercado (2018)
Social influence		
Section 5:	5	Arpaci et al. (2015)
Perceived security		

Table 3.2 Likert scale

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5



3.7.1 Questionnaire

To respond the research questions, this study had used questionnaires to gather information. Questionnaire is a technique of data collection that offers written or oral answers to a series of written questions by the respondents of the interview (Parahoo, 2014). According to Babin and Zikmund (2015), questionnaire is a method that pleasantly gathers social affair information mainly when it is simple and brisk from a large number of respondents in a brief period. The researcher is able to collect a wide variety of data by integrating multiple questioning methods within the questionnaire (Wilson, 2014). It is an accurate, cost-effective, and reliable method of gathering relevant data (Wilson, 2014). In this study, standardized written questionnaires used quantitative self-report approaches, as portrayed by Polit and Beck (2009), to collect data.

3.7.2 Questions Used in Part A of the Questionnaire

Part A was created to identify about the demographic profiles of respondents. There were six elements developed such as gender, age, nationality, marital status, education, and income. All of the elements are shown in Table 3.3.

Table 3.3: Part A – Demographic Data

Elements		Supporting References
1.	Gender	Amin (2007)
2.	Age	Amin (2007)
3.	Nationality	Amin (2007)
4.	Marital status	Amin (2007)
5.	Education	Amin (2007)
6.	Income	Amin (2007)

3.7.3 Question Used in Part B (Section 1) of the Questionnaire

Section 1 in Part B was created to analyze the behavioural intention towards Virtual Tourism. Five elements relevant to this section were established, and respondents were asked to tick their agreement level on a Likert five-point scale ranging from one (1) with "strongly disagree" to five (5) with "strongly agree". The elements were highlighted in Table 3.4.

Table 3.4: Section 1 – Behavioural Intention towards Virtual Tourism.

Elements		Supporting Reference
1.	Virtual tourism seems fun to tourists.	Holzmann et al. (2020)
2.	I have the desire to do virtual tourism in my home.	Holzmann et al. (2020)
3.	I believe I can save money by doing virtual tourism.	Holzmann et al. (2020)
4.	I hope that more tourism companies utilize virtual tourism.	Holzmann et al. (2020)
5.	Doing virtual tourism will beneficial for me.	Holzmann et al. (2020)

3.7.4 Questions Used in Part B (Section 2) of the Questionnaire

Section 2 was created to analyze how performance expectancy was related to behavioural intention on virtual tourism usage among tourist in Malaysia during COVID-19 lockdown. Five elements relevant to this section were established and respondents were asked to tick their agreement level on a Likert five-point scale ranging from one (1) with "strongly disagree" to five (5) with "strongly agree". The elements were shown in table 3.5.

Table 3.5: Section 2 – Users Performance Expectancy of Virtual Tourism

Elements		Supporting References
1.	Virtual Tourism is more convenient than traditional tourism.	Chua et al. (2018)
2.	Virtual tourism could save my money.	Chua et al. (2018)
3.	Virtual tourism could enhance my travel experience.	Chua et al. (2018)
4.	I find virtual reality device to be useful for virtual tourism.	Chua et al. (2018)
5.	Virtual tourism will improve my passion to travel.	Chua et al. (2018)

3.7.5 Questions Used in Part B (Section 3) of the Questionnaire

Section 3 was created to analyze how effort expectancy was related to behavioural intention on virtual tourism usage among tourist in Malaysia during COVID-19 lockdown. Five elements relevant to this section were established, and respondents were asked to tick their agreement level on a Likert five-point scale ranging from one (1) with "strongly disagree" to five (5) with "strongly agree". The elements were shown in table 3.6.

Table 3.6: Section 3 – Users Effort Expectancy of Virtual Tourism.

Elements		Supporting References
1.	Using virtual reality device for virtual tourism would be easy for me.	Chayomchai (2020)
2.	It is easy to access virtual tourism.	Chayomchai (2020)
3.	I found that traveling in virtual tourism is hassle free.	Chayomchai (2020)
4.	I would found myself to travel anywhere easily with virtual tourism.	Chayomchai (2020)
5.	My interaction in virtual tourism is clear and understandable.	Chayomchai (2020)

3.7.6 Questions Used in Part B (Section 4) of the Questionnaire

Section 4 was created to analyze how social influence was related to behavioural intention on virtual tourism usage among tourist in Malaysia during COVID-19 lockdown. Five elements relevant to this section were established, and respondents were asked to tick their agreement level on a Likert five-point scale ranging from one (1) with "strongly disagree" to five (5) with "strongly agree". The elements were shown in table 3.7.

Table 3.7: Section 4 – Users Social Influence of Virtual Tourism

Elements		Supporting Reference
1.	I think it is important to have virtual tourism in the tourism industry.	Reyes-Mercado (2018)
2.	Virtual tourism would be useful in the tourism industry.	Reyes-Mercado (2018)
3.	Virtual tourism would be a good substitute for traditional tourism.	Reyes-Mercado (2018)
4.	Virtual tourism would be good to have during a pandemic or lockdown.	Reyes-Mercado (2018)
5.	I would rather use virtual tourism as it is cost-effective rather than the expensive traditional tourism.	Reyes-Mercado (2018)

3.7.7 Questions Used in Part B (Section 5) of the Questionnaire

Section 5 was created to analyze how perceived security was related to behavioural intention on virtual tourism usage among tourist in Malaysia during COVID-19 lockdown. Five elements relevant to this section were established and respondents are asked to tick their

agreement level on a Likert five-point scale ranging from one (1) with "strongly disagree" to five (5) with "strongly agree". The elements were shown in table 3.8.

Table 3.8: Section 5 – Users Perceived Security on Virtual Tourism

Elements		Supporting Reference
1.	I do not need to worry about my safety when traveling virtually.	Arpaci et al. (2015)
2.	My personal information and identity are safely hidden when travel virtually.	Arpaci et al. (2015)
3.	Virtual tourism tourists can travel anywhere safely without worrying about physical threats.	Arpaci et al. (2015)
4.	Risk of threats in virtual tourism is non-existent compare to traditional tourism.	Arpaci et al. (2015)
5.	My personal data is safe because virtual tourism does not need any online connection.	Arpaci et al. (2015)

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3.8 DATA ANALYSIS

Data analysis was steered after process of gather the data. Data analysis is a systematic process using statistical and technical logic to explain illustrates and evaluate the data obtained. Shamoo, Resnik, and Masters (2007) stated that there are several analytical procedures that provide a method of drawing inductive conclusions from the information and recognizing the signs of the sounds present in the data. The researchers were using a computer program called the Statistical Package for Social Science (SPSS) to analyze closed questions. **Data was evaluated by using statistical descriptive, reliability test and Spearman correlation analysis.**

3.8.1 Descriptive Analysis

The data collected was supported out by descriptive statistic analysis. Descriptive statistics outline the whole esteem that makes up the component and explains it into a descriptive message (Eiselen, Uys, & Porgieter, 2005). Frequency distribution, rate distribution and calculating mean are some trivial inquiry utilized by the researcher. The outcomes were shown in table form in our research.

3.8.2 Reliability Test

Reliability test alludes to how much a test is steady and stable in estimating what it is proposed to gauge. The purpose of the leading reliability test is to search for the research data's constancy and immovability (Malhotra & Peterson, 2006). Reliability analysis is determined by attaining intentional variations in scale, which may be conceivable by dividing the scores attained from various scale administrators. In this way, if the association in the reliability analysis is high, the scale can create predictable and reliable results. Concerning of analysis of the reliability, we utilized Cronbach's Alpha Coefficient as estimation instrument. Matkar (2012) stated the principles of Cronbach's Alpha Coefficient as table underneath.

Table 3.9: Rule of Thumb Cronbach's Alpha

Cronbach's Alpha	Internal Consistency
$0.9 \leq \alpha$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable

$0.5 \leq \alpha < 0.6$

Poor

$\alpha < 0.5$

Unacceptable

Source: Matkar (2012)

3.8.3 Spearman Correlation

The researchers chose the Spearman Correlation to analyse the data that have been obtained. Spearman's correlation can be definite as nonparametric tests to measure the level of difference between two variables (Bonett, 2008). Spearman's rank correlation test does not bring any potential about data distribution and is an appropriate correlation analysis when variables are measured at least ordinal scale. In terms of relationship strength, the value of the correlation coefficient varies between 1 and -1.

According to Chen and Popovich (2002), the statement of data must be at least ordinal and the score on one variable must be monotonic with other variables. An approach to assessment whether the detected value p is dissimilar from zero (r will always maintain $-1 \leq r \leq 1$) is to compute the probability that it will be grander or equal to the detected r , given the null hypothesis, using the test version (Lehman, 2005).

One advantage of this approach is that it spontaneously takes into account the number of data-bound values in the sample, and how they are pickled in computation of rank correlations. In this research, Spearman's Correlation was chosen to find out the significant relationship and validity between IV and DV.

Table 3.10: Rule of Thumb of Correlation Coefficient Size

Coefficient Range (r)	Strength of Correlation
± 0.90 until ± 1.0	Very high positive/negative correlation
± 0.70 until ± 0.90	High positive/negative correlation
± 0.50 until ± 0.70	Moderate positive/negative correlation
± 0.30 until ± 0.50	Low positive/negative correlation
± 0.00 until ± 0.30	Negligible correlation

Source: Bonnet (2008)

3.9 CONCLUSION

In conclusion, this chapter explains how many research methodologies for the research by hand over the method of accumulating the data used. Researchers have defined research methodologies, including population, samples, and data collection instruments used in the study, and strategies used to ensure ethical standards and reliability in this study. The target population for this research was tourists who use or have the intention of using virtual tourism. The researchers of this study have decided to chose 300 tourists as respondents to collect the data and information of tourists who use or have the intention of doing virtual tourism. In this study, non-probability sampling such as convenience sampling technique was used to edge data assortment researchers. The data were gathered as the key data compilation of two parts by surveys using questionnaires. Descriptive statistics, reliability tests, and Spearman correlation analysis was used in the next chapter after data collection to analyze the collected data. Following are a summary of research questions and data analysis that were used in the study:

Table 3.11 shows the summary of research questions and data analysis that will be used in the study.

Research Question	Data Analysis
RQ1: What are performance expectancy related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?	Spearman correlation
RQ2: What are effort expectancy related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?	Spearman correlation
RQ3: What are social influence related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?	Spearman correlation
RQ4: What are perceived security related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?	Spearman correlation



CHAPTER 4

ANALYSIS AND RESULTS

4.1 INTRODUCTION

This chapter focuses on the data analysis, including the response rate, respondent demographic, reability test (Cronbach's alpha), descriptive analysis and Spearman's correlation. Data collected from the 304 respondents on the survey administered. Every inquiry will decipher and resolute the research questions, while the descriptive analysis will portray the respondents' demographic profile. Reliability are essential to assess whether the samples gathered are legitimate and predictable. Hence, the Cronbach's alpha method will be utilized for the reliability test. Spearman's correlation test will be used for additionally analyses and explore the relationship between the variables

4.2 RESPONSE RATE

A whole amount 310 questionnaires were distributed online. From 310 questionnaires collected from the targeted respondents, there remained only 304 returned questionnaire that were useable. There all amount 353 useable questionnaires collected from online.

The research survey founded on a sample relatively a survey can give well response rates and better accurateness is less clear. The response rate which is, the proportion of the number of survey respondents to the quality tested, is often occupied as an amount of how well the survey consequences can be widespread.

Table 4.1: Total Number of Questionnaire

Number of questionnaires distributed	310
Questionnaire returned and useable to be analysed	304
Response rate	98.06%
Questionnaire used for analysis	304

Sources: Fieldwork (2021)

4.3 RESPONDENT'S DEMOGRAPHIC

The online platform had assigned a total of 304 sets of questionnaires. The contextual profiles of the respondents existed in this segment. This segment is about the respondent demographic profile and their background: gender, age, nationality, marital, education, and income.

Table 4.2: Respondent Demographic Profile – Gender

Respondent's Profile	Frequency N= 304	Percentage (%)
Male	128	42.1%
Female	176	57.9%
Total	304	100 %

Source: Fieldwork Study (2021)

Figure 4.1: Percentage of Respondent's Gender

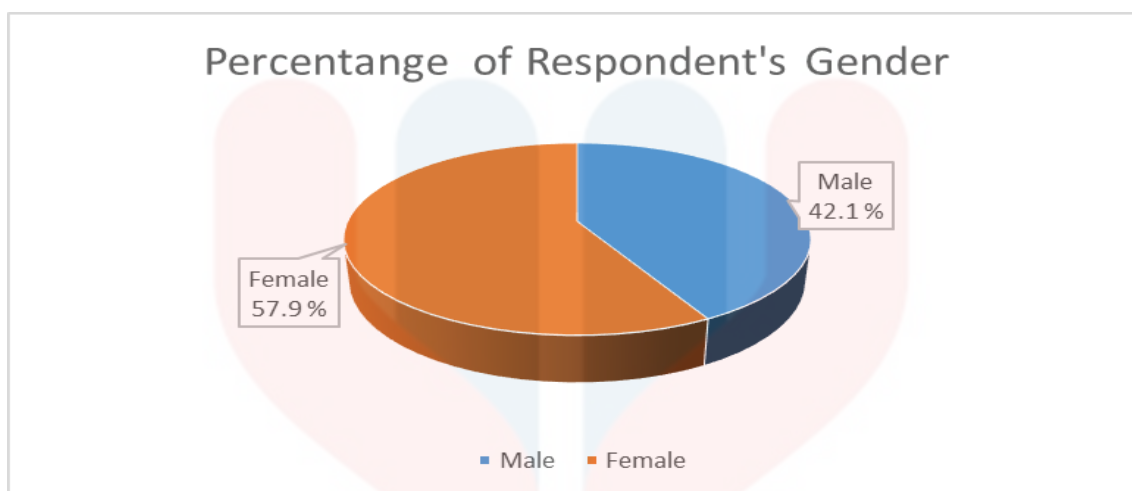


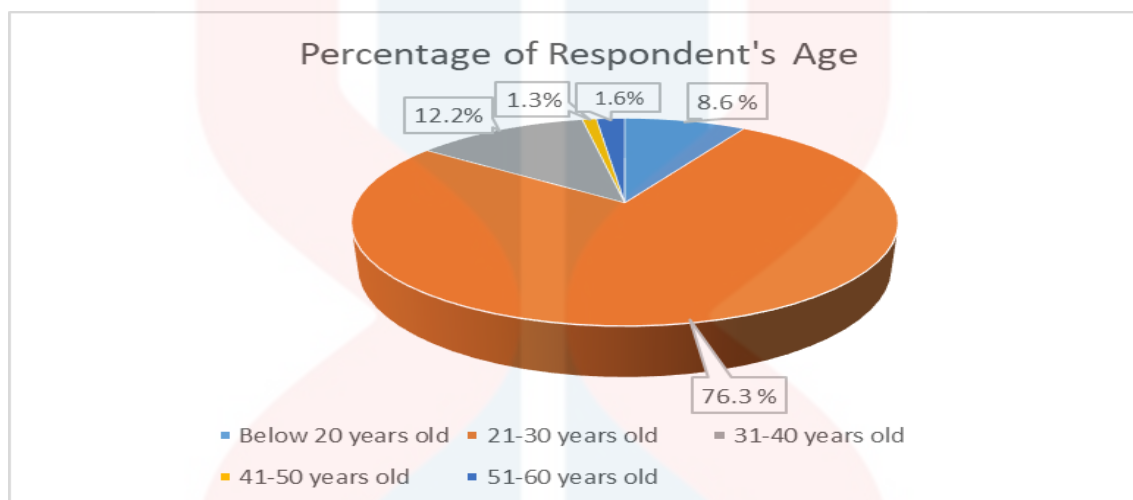
Table 4.2 below displays common of the respondents are female with 57.9 % (n=176) related to 42.1 % (n=128) are male.

Table 4.3: Respondent Demographic Profile – Age

Respondent's Age	Frequency N= 304	Percentage (%)
Below 20 years old	26	8.9 %
21- 30 years old	232	76.3 %
31- 40 years old	37	12.2%
41- 50 years old	4	1.3 %
51- 60 years old	5	1.6 %
Total	304	100 %

Source: Fieldwork Study (2021)

Figure 4.2: Percentage of Respondent's Age



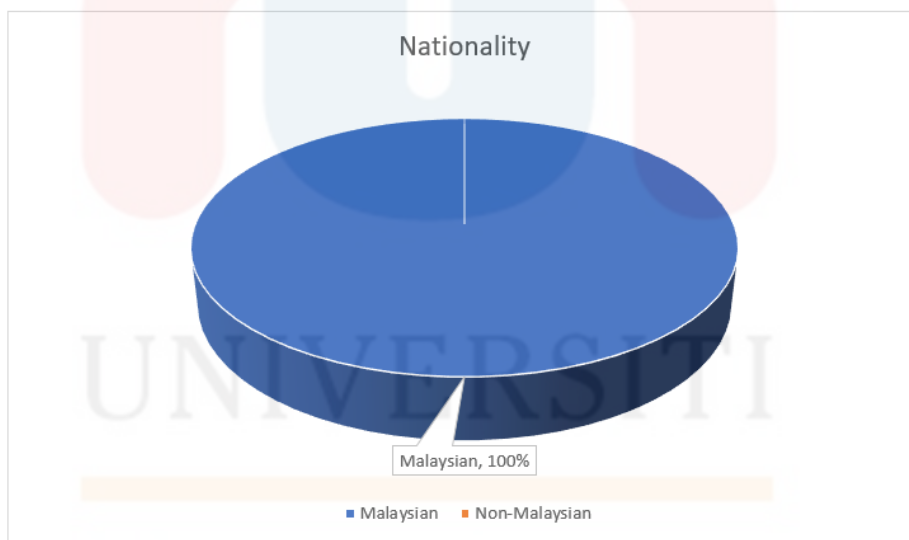
In table 4.3, respondents who responded to this survey are speciously aged below 20 years old with the frequency of 26 respondents (8.6 %). This is tracked by 21-30 years old with 232 respondents (76.3 %), 31-40 years old with 37 respondents (12.2 %). Among the lowest respondents the age is above 41-50 years old 4 respondents (1.3 %) and age above 51 years old with 5 respondents (1.6 %).

Table 4.4: Respondent Demographic Profile – Nationality

Respondent's nationality	Frequency	Percentage
	N = 304	
Malaysian	304	100%
Non-Malaysian	0	0
Total	304	100%

Source: Fieldwork Study (2021)

Figure 4.3: Percentage of Respondent's Nationality



The table 4.4 show all respondents nationality are from Malaysia with the frequency of 304 respondents (100 %).

Table 4.5: Respondent Demographic Profile – Marital

Respondent's Marital	Frequency N= 304	Percentage (%)
Single	276	90.8 %
Married	28	9.2 %
Total	304	100 %

Source: Fieldwork Study (2021)

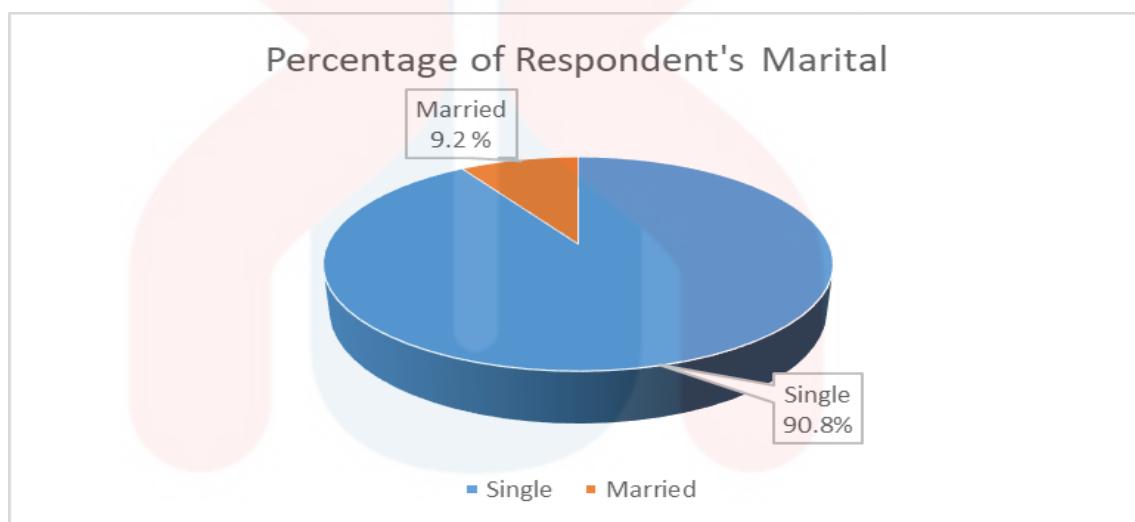


Figure 4.4: Percentage of Respondent's Marital

According to the results survey, it shows that most respondents marital from single respondent with the frequency of 276 respondents (90.8 %) and the lowest respondents marital from married respondent with frequency of 28 respondents (9.2 %).

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Table 4.6: Respondent Demographic Profile – Education

Respondent's Education	Frequency N= 304	Percentage (%)
Master Degree	18	5.9 %
Bachelor's Degree	241	79.3 %
Honours Degree or STPM	24	7.9 %
Graduate Diploma	12	3.9 %
SPM	9	3.0 %
Total	304	100%

Source: Fieldwork Study (2021)

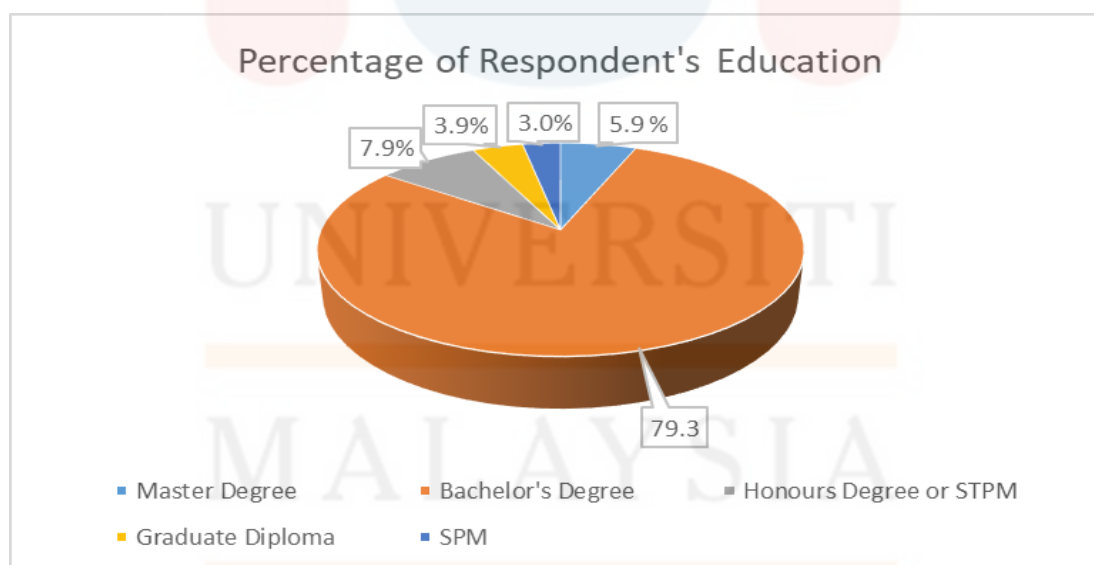


Figure 4.5: Percentage of Respondent's Education

The table 4.6 indicated that most of the respondents have a Bachelor’s Degree (79.3 %, n=241). This followed by 24 of the respondents (7.9 %) has Honours Degree or STPM, 18 of the respondents (5.9 %) has Master degree, 12 of the respondents (3.9 %) has Graduate Diploma 12, and the lowest respondent education is SPM with the frequency of 9 respondents (3.0 %).

Table 4.7: Respondent Demographic Profile – Income

Respondent’s Income	Frequency N= 304	Percentage (%)
Below RM 2000	166	54.6 %
RM 2001- 3000	119	39.1 %
RM 3001- 4000	9	3.0 %
RM 4001- 5000	6	2.0 %
Above RM 5000	4	1.3 %
Total	304	100 %

Source: Fieldwork Study (2021)



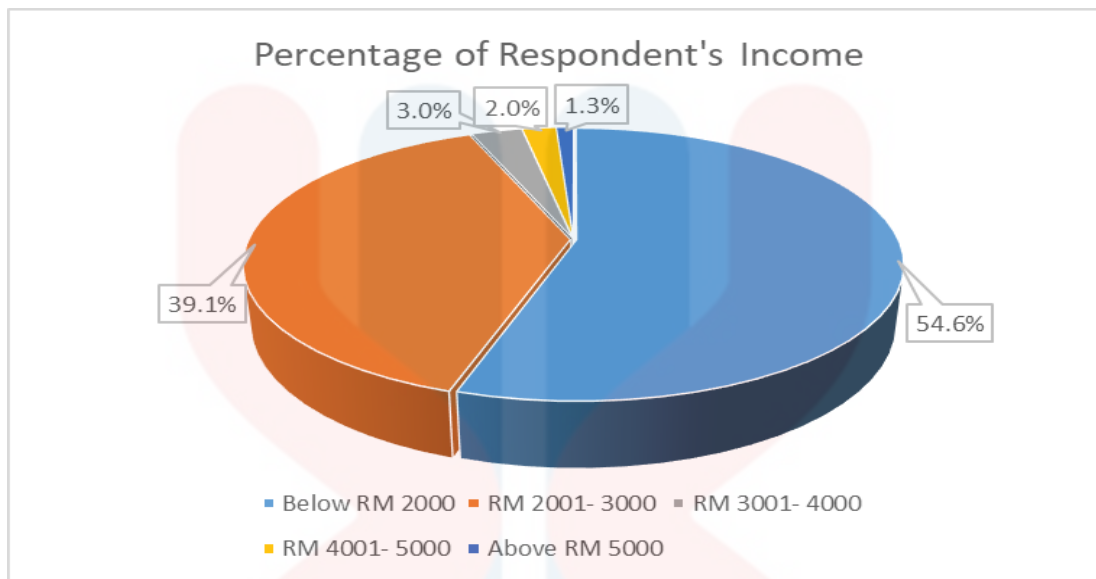


Figure 4.6: Percentage of Respondent's Income

Based on table 4.7, the highest income of respondents is below RM2000 with 166 respondents (54.6 %), RM2001-RM3000 tracks this with 119 respondents (39.1 %), followed by income RM3001-RM4000 with 9 respondents (3.0 %), income from RM4001-RM5000 has 6 respondents (2.0 %), and the balance of 4 respondents (1.3%) has income RM5000 and above.

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4.4 CRONBACH'S ALPHA RELIABILITY ANALYSIS

The reliability coefficient is a technique for determining the internal accuracy of a scale. Measurements are precise to the extent that they yield observable results. While reliability is an important component of validity, it is not a sufficient prerequisite. A simple example of a weighing instrument will illustrate the relationship between reliability and validity. If the weighing method determines the weight correctly, it is both correct and true. The apparatus is not right and cannot be reliable if it measures erratically from time to time. The stability and precision with which the instrument measures the term and thus helps achieve the measure's goodness is indicated by the calculation's reliability. As a result, the data was examined using the Cronbach's Alpha analysis as a guide to determine the degree of accuracy. Cronbach's Alpha must be greater than 0.7 for all variables. Table 4.8 below shows the Rules of Thumb of Cronbach's Alpha Coefficient according to Matkar (2012).

Table 4.8: Rule of Thumb Cronbach's Alpha

Cronbach's Alpha	Internal Consistency
$0.9 \leq \alpha$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable

$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Source: Matkar (2012)

Table 4.9 below shows the result of Cronbach's Alpha Reliability Coefficient for the Dependent Variable and Independent Variable.

Table 4.9: Result of Cronbach's Alpha Reliability Coefficient For The Dependent Variable And Independent Variable

Variables	Number of items	Cronbach's Alpha	Comment
Behavioural Intention	5	0.916	Excellent
Performance Expectancy	5	0.939	Excellent
Effort Expectancy	5	0.957	Excellent
Social Influence	5	0.917	Excellent
Perceived security	5	0.965	Excellent

Source: Fieldwork (2021)

Table 4.2 of the result of Cronbach's Alpha Reliability Analysis for the independent and dependent variables shows that these variables are important. According to Table 4.2, all variables were over 0.9. The Cronbach's Alpha result for behavioural intention that was using five questions is 0.916 and has been proven as excellent. Then, for measuring the performance expectancy towards virtual tourism usage among tourists in Malaysia during COVID-19 lockdown, five questions were used, and the Cronbach's Alpha result is 0.939, that indicated as excellent and reliable. Besides that, five questions were also used for measuring the effort expectancy towards virtual tourism usage among tourists in Malaysia during COVID-19 lockdown, and the Cronbach's Alpha result for this is excellent, which is 0.957. Five questions were used for measuring social influence towards virtual tourism usage among tourists in Malaysia during COVID-19 lockdown and the Cronbach's Alpha result for this variable is 0.917, which is proved to be excellent and reliable. Next, five questions were used to measure the perceived security towards virtual tourism among tourists in Malaysia during COVID-19 lockdown, and the Cronbach's Alpha result for this variable is 0.965, which can be interpreted as excellent and reliable.

4.5 DESCRIPTIVE ANALYSIS

Descriptive statistics outline the whole esteem that makes up the component and explains it into a descriptive message (Eiselen, Uys, & Porgieter, 2005). According to Hayes

(2021), a data set can be a representation of the entire population or a sample of it, and descriptive statistics are a series of short descriptive coefficients that summarise it. Descriptive statistics include measures of central tendency and measures of variability (spread). Central tendency measures include the mean, median, and mode, while variability measures include standard deviation, variance, minimum and maximum variables, kurtosis, and skewness.

4.5.1 Overall Mean Score for Variables

This section shows the means score attained as descriptive analysis. Overall mean score and standard deviation of variables and sub-variables were designed based on 5 points Likert scale (1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, and 5= Strongly agree). This research uses Nunnally and Berstein’s (1994) Table of Mean Score Interpretation to assess the degree of mean score, as shown in table 4.10 below.

Table 4.10: Table of Mean Score Interpretation

Mean	Level
4.01 – 5.00	High

3.01 – 4.00	Medium High
2.01 – 3.00	Medium Low
1.00 – 2.00	Low

Source: Nunnally and Berstein (1994)

The overall mean (M) and standard deviation (SD) for each variable and measurement are interpreted, as shown in table 4.4. Table 4.11 below shows that behavioural intention mean score is high mean score of (M= 4.186, SD= 0.173). While the rest of the variables also scored a high mean score where performance expectancy is (M= 4.391, SD= 0.671), effort expectancy (M= 4.306, SD=0.754), social influence (M= 4.210, SD= 0.705), and perceived security (M= 4.130, SD= 0.736)

Table 4.11: The Overall Mean Score on Each Variable and Standard Deviation

Variables	N	M	SD
Behavioural intention	304	4.186	0.713
Performance expectancy	304	4.391	0.671
Effort expectancy	304	4.306	0.754
Social Influence	304	4.210	0.705
Perceived security	304	4.130	0.736

Source: Fieldwork (2021)

4.5.2 Descriptive Analysis for Dependent Variable (DV) Behavioural Intention on Virtual Tourism

Table 4.12: Descriptive Analysis for Dependent Variable – Behavioural Intention

Behavioural Intention	N	M	SD
Virtual tourism seems fun to tourists.	304	4.039	0.786
I have the desire to do virtual tourism in my home.	304	4.013	0.744
I believe I can save money by doing virtual tourism.	304	4.003	0.764
I hope that more tourism companies utilize virtual tourism.	304	4.477	0.855
Doing virtual tourism will be beneficial for me.	304	4.398	0.952

Source: Fieldwork (2021)

Based on Table 4.12, there are five (5) items under behavioural intention. The mean score of the five elements ranges from 4.00 to 4.47. The highest to lowest mean score was

stated as ‘I hope that more tourism companies utilize virtual tourism’ (M= 4.477, SD= 0.855), ‘Doing virtual tourism will beneficial for me’ (M= 4.398, SD= 0.952), ‘Virtual tourism seems fun to tourists’ (M=4.039, SD= 0.786), ‘I have the desire to do virtual tourism in my home’ (M= 4.013, SD= 0.744), and ‘I believe I can save money by doing virtual tourism’ (M= 4.003, SD= 0.764).

4.5.3 Descriptive Analysis for Independent Variable (IV) Performance Expectancy on Virtual Tourism.

Table 4.13: Descriptive Analysis for Independent Variable – Performance Expectancy

Performance expectancy	N	M	SD
Virtual Tourism is more convenient than traditional tourism.	304	4.345	0.746
Virtual tourism could save my money.	304	4.440	0.705
Virtual tourism could enhance my travel experience.	304	4.345	0.755

I find virtual reality device to be useful for virtual tourism.	304	4.447	0.794
Virtual tourism will improve my passion to travel.	304	4.378	0.743

Source: Fieldwork (2021)

As shown in Table 4.13, there are five (5) items under performance expectancy. The highest mean score was ‘I find virtual reality device to be useful for virtual tourism’ which mean scored (M= 4.447, SD= 0.794) followed by ‘Virtual tourism could save my money’ which scored a mean of (M= 4.440, SD= 0.705). Then, ‘Virtual tourism will improve my passion to travel’ that scored a mean of (M= 4.378, SD= 0.743). Next, the mean score for ‘Virtual Tourism is more convenient than traditional tourism’ is (M= 4.345, SD=0.746). Lastly, the mean score for ‘Virtual tourism could enhance my travel experience’ is (M= 4.345, SD= 0.755).

4.5.4 Descriptive Analysis for Independent Variable (IV) Effort Expectancy on Virtual Tourism

Table 4.14: Descriptive Analysis for Independent Variable – Effort Expectancy

Effort expectancy	N	M	SD
Using virtual reality device for virtual tourism would be easy for me.	304	4.309	0.793
It is easy to access virtual tourism.	304	4.305	0.793
I found that traveling in virtual tourism is hassle free.	304	4.365	0.788
I would found myself to travel anywhere easily with virtual tourism.	304	4.319	0.783
My interaction in virtual tourism is clear and understandable.	304	4.233	0.916

Source: Fieldwork (2021)

Referring to Table 4.14, there are five (5) items under effort expectancy. The highest mean score is ‘I found that traveling in virtual tourism is hassle free’ with a mean score of (M= 4.365, SD= 0.788) followed by ‘I would found myself to travel anywhere easily with virtual tourism’ (M= 4.319, SD= 0.783), ‘Using virtual reality device for virtual tourism would be easy for me’ (M= 4.309, SD= 0.793), ‘It is easy to access virtual tourism’ (M= 4.305, SD= 0.793), and ‘My interaction in virtual tourism is clear and understandable’ (M= 4.233, SD= 0.916).

4.5.5 Descriptive Analysis for Independent Variable (IV) Social Influence on Virtual Tourism

Table 4.15: Descriptive Analysis for Independent Variable – Social Influence

Social Influence	N	M	SD
I think it is important to have virtual tourism in the tourism industry.	304	4.125	0.831
Virtual tourism would be useful in the tourism industry.	304	4.118	0.831

Virtual tourism would be a good substitute for traditional tourism.	304	4.342	0.780
Virtual tourism would be good to have during a pandemic or lockdown.	304	4.355	0.743
I would rather use virtual tourism as it is cost-effective rather than the expensive traditional tourism.	304	4.111	0.879

Source: Fieldwork (2021)

There are five (5) items for social influence. The mean score of the five items ranges from 4.11 to 4.35. The highest to lowest score was stated as ‘Virtual tourism would be good to have during a pandemic or lockdown’ with a mean score of (M= 4.355, SD= 0.743), ‘Virtual tourism would be a good substitute for traditional tourism’ (M= 4.342, SD= 0.780), ‘I think it is important to have virtual tourism in the tourism industry’ (M= 4.125, SD= 0.831), ‘Virtual tourism would be useful in the tourism industry’ (M= 4.118, SD= 0.831), and ‘I would rather use virtual tourism as it is cost-effective rather than the expensive traditional tourism’ (M= 4.118, SD= 0.831).

4.5.6 Descriptive Analysis for Independent Variable (IV) Perceived Security on Virtual Tourism

Table 4.16: Descriptive Analysis for Independent Variable – Perceived Security

Perceived Security	N	M	SD
I do not need to worry about my safety when traveling virtually.	304	4.161	0.733
My personal information and identity are safely hidden when travel virtually.	304	4.157	0.754
Virtual tourism tourists can travel anywhere safely without worrying about physical threats.	304	4.095	0.844
Risk of threats in virtual tourism is non-existent compare to traditional tourism.	304	4.098	0.802
My personal data is safe because virtual tourism does not need any online connection.	304	4.138	0.796

Source: Fieldwork (2021)

According to Table 4.16, perceived security have five (5) items. The mean score of the five items ranges from 4.09 to 4.16. The highest to lowest mean score was stated as ‘I do not need to worry about my safety when traveling virtually’ with a mean score of (M= 4.161, SD= 0.733), ‘My personal information and identity are safely hidden when travel virtually’ (M= 4.157, SD= 0.754), ‘My personal data is safe because virtual tourism does not need any online connection’ (M= 4.138, SD= 0.796), ‘Risk of threats in virtual tourism is non-existent compare to traditional tourism’ (M= 4.098, SD= 0.802), and ‘Virtual tourism tourists can travel anywhere safely without worrying about physical threats’ (M= 4.095, SD= 0.844).

4.6 SPEARMAN’S CORRELATION

Spearman correlation coefficient method are employed in order to evaluate the relationship between the independent variables and the dependent variables. Correlation coefficients capable to require a numerical review of the heading and the qualities of the direct connection among IVs and DVs. Spearman an give a numerical review of the heading and the qualities of the direct connection among IVs and DVs. Spearman’s correlation coefficients (r) range from -1 to +1 for the indication of positive or negative correlation.

4.6.1 Relationship Between Performance Expectancy and Behavioural Intentions To Use Virtual Tourism

H1: There is relationship between performance expectancy and behavioural intentions to use Virtual tourism

In this hypothesis, performance expectancy and behavioural intentions are as independent and dependent variables respectively. Results of relationship between these two variables are presented in the table 4.17.

Table 4.17: Correlation between Performance Expectancy and Behavioural Intentions

			Performance Expectancy	Behavioural Intention
Spearman's rho	Performance Expectancy	Correlation Coefficient	1.000	.575**
		Sig. (2-tailed)		.000
		N	304	304

Behavioural Intention	Correlation	.575**	1.000
	Coefficient		
	Sig. (2-tailed)	.000	
	N	304	304

According to the table 4.17, it shows that the relationship between performance expectancy and behavioural intentions indicated at 0.574, which indirectly augment the relatively strong relationship between variables. It shows that there is a significant, strong and high positive (negative) correlation between performance expectancy and behavioural intentions. Hence, H1 which is to measure the relationship between performance expectancy and behavioural intentions is accepted.

4.6.2 Relationship Between Effort Expectancy and Behavioural Intentions To Use Virtual Tourism

H2: There is relationship between effort expectancy and behavioural intentions to use Virtual tourism

In this hypothesis, effort expectancy and behavioural intentions is as independent and dependent variables respectively. Results of relationship between these two variables are shown in the table 4.18.

Table 4.18: Correlation between Effort Expectancy and Behavioural Intentions

			Effort Expectancy	Behavioural Intention
Spearman's rho	Effort Expectancy	Correlation Coefficient	1.000	.607**
		Sig. (2-tailed)		.000
		N	304	304
	Behavioural Intention	Correlation Coefficient	.607**	1.000
		Sig. (2-tailed)	.000	
		N	304	304

In table 4.18, it shows that the results of the correlation between effort expectancy and behavioural intentions is 0.607. The consequence proved that there is a relationship

between the variables. The positive value of correlation coefficient 0.607 indicated that their relationship is moderate positive (negative). Hence, the H2 which is to measure the relationship between effort expectancy and behavioural intentions is accepted.

4.6.3 Relationship Between Social Influence and Behavioural Intentions To Use Virtual Tourism.

H3: There is positive relationship between social influence and behavioural intentions to use Virtual Tourism.

In this hypothesis, social influence and behavioural intentions are as independent and dependent variables respectively. Results of relationship between these two variables are shown in the table 4.19.

Table 4.19: Correlation between Social Influence and Behavioural Intentions

			Social Influence	Behavioural Intention
Spearman's rho	Social Influence	Correlation Coefficient	1.000	.621**
		Sig. (2-tailed)		.000
		N	304	304
	Behavioural Intention	Correlation Coefficient	.621**	1.000
		Sig. (2-tailed)	.000	
		N	304	304

Based on the table 4.19, it established that the relationship between social influence and behavioural intentions stated as 0.621. This end result exposes the existence of the relationship between the variables. The positive value of correlation coefficient 0.621 indicated that their relationship is moderate positive (negative). Hence, H3 which designated to assess the relationship between social influence and behavioural intentions is accepted.

4.6.4 Relationship Between Perceive Security and Behavioural Intentions To Use Virtual Tourism

H4: There is relationship between perceive security and behavioural intentions to use Virtual Tourism

In this hypothesis, perceive security and behavioural intentions is as independent and dependent variables respectively. Results of relationship between these two variables are shown in the table 4.20.

Table 4.20: Correlation between Perceive Security and Behavioural Intentions

			Perceive Security	Behavioural Intention
Spearman's rho	Perceive Security	Correlation Coefficient	1.000	.571**
		Sig. (2-tailed)		.000
		N	304	304
	Behavioural Intention	Correlation Coefficient	.571**	1.000

	Sig. (2-tailed)	.000	
	N	304	304

According to the table 4.20 it shows that the relationship between perceive security and behavioural intentions indicated at 0.571, which indirectly augment the relatively strong relationship between variables. It shows that there is a significant, strong and high positive (negative) correlation between perceive security and behavioural intentions. Hence, H1 which is to measure the relationship between perceive security and behavioural intentions is accepted.

Table 4.21: Summary result of Spearman Correlation Coefficient

Hypothesis	Result	Finding of Data analysis
H1: There is relationship between performance expectancy and behavioural intentions to use virtual tourism	r = 0.575, p = 0.000 Moderate positive (negative)	H1: Accepted

H2: There is relationship between effort expectancy and behavioural intentions to use virtual tourism	$r = 0.607, p = 0.000$ Moderate positive (negative)	H2: Accepted
H3: There is relationship between social influence and behavioural intentions to use virtual tourism	$r = 0.621, p = 0.000$ Moderate positive (negative)	H3: Accepted
H4: There is relationship between perceive security and behavioural intentions to use virtual tourism.	$r = 0.571, p = 0.000$ Moderate positive (negative)	H4: Accepted

4.7 CONCLUSION

The study found that all of the hypothesis in this study is accepted. The correlation coefficient of all independent variables shows different value which is 0.575 for performance expectancy, 0.607 for effort expectancy, 0.621 for social influence, and 0.571 perceive security. The results of the correlations answered the research questions whether there is a relationship between the independent variables and dependent variable. To conclude, there is a significant relationship between performance expectancy, effort expectancy, social influence and perceive security.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

This chapter discusses the three parts of the statistical analysis from the results in chapter 4. The first part discusses and highlights the results that support the main objective of the study. The second part includes recommendations of virtual tourism in tourism industry, especially to the technology developer and the last portion of this chapter makes the summary of the research.

5.2 RECAPITULATION OF THE FINDINGS

This chapter summarises the study's key findings. The study's goal was mentioned in the previous chapter. The results are summarised below in accordance with the study's objectives.

5.2.1 DISCUSSION ON OBJECTIVE 1

Table 5.1: Discussion on objective 1.

Objective 1:	To examine the relationship between performance expectancy and behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic.
Research question 1:	What are performance expectancy related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?
Hypothesis 1:	There is relationship between performance expectancy and behavioural intentions to use Virtual tourism

As discussed in Chapter 1, the first objective of the study is to examine the relationship between performance expectancy and behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic. From the data analysis outcomes in Chapter 4, it shows that there is a moderate positive relationship between performance expectancy and behavioural intention to use virtual reality among users in tourism in Malaysia with result $r = 0.575$ (moderate positive), which makes H1 accepted. The result on

the relationship of independent variable and dependent variable is reflected by H1. Tourist performance expectancy on virtual tourism affects their decision on using virtual reality tourism as another option for traveling during COVID-19 lockdown. Result shows that performance expectancy of virtual tourism could enhance their traveling experience when traveling virtually. The outcomes come out consistent with foregoing researches (Chao, 2019; Im, Kim, & Han, 2008; Lee & Song, 2013; Liu, et al., 2019; Thomas, et al., 2013) which pointed out performance expectancy is a variable that significantly influence the behavioural intention in TAM which is the user thinks that the new system will help them to perform their job more, which in this case travelling, people are more likely to implement new technologies.

5.2.2 DISCUSSION ON OBJECTIVE 2

Table 5.2: Discussion on objective 2

Objective 2:	To examine the relationship between effort expectancy and behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic.
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Research question 2:	What are effort expectancy related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?
Hypothesis 2:	There is positive relationship between effort expectancy and behavioural intentions.

The second objective of the study is to examine the relationship between effort expectancy and behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic. Based on the results of the data that have been analyzed in Chapter 4, it is clear that effort expectancy has a significant relationship with the behavioural intention to use virtual reality among users in tourism in Malaysia with a result of $r = 0.607$ (moderate positive) which makes H2 accepted. The result on the relationship of independent variable and dependent variable is reflected by H2. Most of the respondents agree that the perceived effort expectancy of virtual tourism will affect their behavioural intention to use virtual reality as another option to travel during COVID-19 due to the effort expectancy of the individual's expectation that the virtual reality experiences they are involved in will be easy to use. This result prove that tourists have assess his or her ability to use the virtual reality effectively as an option to travel virtually. The recent studies made by Razif et al. (2020), Catherine et al. (2017), Lwoga and Lwoga (2017), Shafinah et al. (2013), and Lee and Song (2013) have also supported this result.

5.2.3 DISCUSSION ON OBJECTIVE 3

Table 5.3: Discussion on objective 3

Objective 3:	To examine the relationship between social influence and behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic.
Research question 3:	What are social influence related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?
Hypothesis 3:	There is positive relationship between social influence and behavioural intention.

The third objective of the study aimed to examine the relationship between social influence and behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic. From the data collected from the questionnaire and the result given in Chapter 4, there is a medium positive relationship between social influence and the behavioural intention of virtual reality usage among users in tourism in Malaysia with a result of $r = 0.621$ (moderate positive) which makes H3 accepted. The result on the relationship

between independent variable and dependent variable are reflected by H3. Most of the respondents agree that the social influence affects their behavioural intention to use virtual tourism as an option to travel during COVID-19. This result proof that virtual tourism users who believe the technology is beneficial due to the new technique or technology can improve an individual’s travelling experience therefore, influence others to use the new system. This result support Razif et al. (2020), Trybou (2016), Venkatesh et al., (2003) and Chang (2007) studies that found a significant relationship between social influence and behavioural intentions for the usage of new technologies, that includes the usage of virtual reality for the purpose in tourism.

5.2.4 DISCUSSION ON OBJECTIVE 4

Table 5.4: Discussion on objective 4

<p>Objective 4:</p>	<p>To examine the relationship between perceived security and behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic.</p>
<p>Research question 4:</p>	<p>What are perceived security related to behavioural intention to use virtual reality among tourism users during the COVID-19 pandemic?</p>

Hypothesis 4:	There is relationship between perceived security and behavioural intentions
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The fourth objective of the study aimed to examine the relationship between perceived security and behavioural intention to use virtual reality among users in tourism during COVID-19 pandemic. Based on the data that have been analyzed in Chapter 4, it is clear that perceived risk has a significant relationship with the behavioural intention of virtual reality usage among users in tourism in Malaysia with a result of $r = 0.571$ (moderate positive) which makes H4 accepted. The result on the relationship of independent variable and dependent variable is reflected by H4. Most of the respondents agree that the perceived risk of virtual tourism will affect their usage intention to use virtual tourism as an option to travel during COVID-19. This result proves that the security of virtual tourism technology affects the tourist's confidence in using the virtual tourism to travel virtually as VR is safe from the transmission of confidential information, such as the user's personal data. The recent studies by Yang et al. (2021), Shin (2009), Flavian and Guinaliu (2006), Kim et al. (2011), and Zhou (2011) support this result.

5.3 LIMITATIONS

The researcher recognizes that there were three limitations to their study. The first limitation is related to the sample size. The relatively limited sample of this study confines generalization of the study results. In order to overcome this limitation, the future related study has to escalate the sample size and testing this research model more extensively to get more refined study results.

For the second limitation, the researcher only focuses on Malaysia's respondent through Google and Facebook virtual tourism pages. Due to lack of immediate feedback, the researcher was unable to assess respondents' understanding about the research during the online survey. However, the researcher finds that this is the best way to get respondent due to COVID-19 outbreak and MCO that prevent the researcher from getting respondent through a face-to-face survey.

For the third limitation, the lack of reliable data is likely required the researcher to limit the scope of research analysis, the size of the research sample. It can be a significant obstacle in finding a trend on virtual tourism usage among tourist during COVID-19 lockdown. Future researchers should take a view from a more global perspective that will provide a more realistic indication of the potential of virtual vacations in the current global tourism market.

5.4 RECOMMENDATION

Based on the previous chapter, some empirical factors that determine the behavioural intention on virtual tourism usage among tourist in Malaysia during covid-19 lockdown have been determined. As a result, there is some recommendations improving the research for future study. This study generates a range of recommendations for future studies, the majority of which are related to the limitations already mentioned.

Future studies can be made based on a more diverse sample comprised of more diverse cultural backgrounds to gain a better understanding of virtual experiences in the context of travel and tourism. Next, future studies could be based on a larger sample to validate the scale used in this study.

Besides that, future research may examine other predictors that potentially affect virtual tourist experience and behavioural intentions in the context of travel and tourism; such as, social, cultural or psychological factors could be examined to assess the effect of the virtual experience on the tourist decision making process.

In addition, future researchers should take a view from a more global perspective will provide a more realistic indication of the potential of virtual vacations, in the current global

tourism market. Moreover, there was no effort to see individuals taking leave at home due to the COVID-19 lockdown and for a shorter period. There is a potential that a virtual vacation will completely replace it with short breaks, avoiding the need to travel for short stays. The future related study have to escalate the sample size and testing this research model more extensively, to get a more refine study results. This is also so that future researchers can differentiate data from each country and be able to study more widely.

Next, future researchers can expand their field of research by adding respondent demographic background. Examples of respondents from community representatives with disabilities because it is very relevant to obtain the results of behavioural surveys on the use of virtual tourism.

The researcher also can develop an approach and conduct a full cost-benefit analysis of re-participation in research events will be beneficial. Although methodologically challenging, it would be helpful to conduct some long-term studies to measure the behavioural intention on virtual tourism usage among tourist in Malaysia during COVID-19 lockdown.

5.5 CONCLUSION

This study applied the revised TAM model in examine the relationship between the four independent variables-performance expectancy, effort expectancy, social influence and perceived security with the dependent variable-behavioural intention towards virtual tourism. The outcome gives an outline on the influence level of independent variables to dependent variable. Findings of this research give proof that TAM is an appropriate model in investigating factors usage intention of using new technology like Virtual Tourism among tourist in Malaysia during COVID-19 lockdown.

In summary of the liable knowledge, the whole objective of this research has been answered. It is clear that the four independent variables have a substantial relationship with users' intentions to use virtual reality in Malaysian tourism. Tourist performance expectancy on virtual tourism affects their decision on using virtual reality tourism as another option for traveling during COVID-19 lockdown and virtual tourism could enhance their traveling experience when traveling virtually. In terms of effort expectancy, the result prove that tourists have assess his or her ability to use the virtual reality effectively as an option to travel virtually.

Other than that, social influence result proof that virtual tourism users who believe the technology is beneficial can influence others to use the new system. Lastly, for the

perceived security it shown that the security of virtual tourism technology affects the tourist's confidence in using the virtual tourism to travel virtually. The majority of respondents believe that the perceived danger of virtual tourism would influence their decision to use it as a mode of transportation during COVID-19.

Convenience will remain the most important concern for tourists to choose the way of travel they like. In the tourism and hospitality industry, open global solutions are winner. This is what can be offered to users from all over the world most facilities.

REFERENCES

- Aaker, A. Kumar, V.D., & George, S. (2000). *Marketing Research*. New York: John Wiley and Sons, Inc.
- Hayes, A. (2021). Descriptive Statistics. Retrieved from https://www.investopedia.com/terms/d/descriptive_statistics.asp
- Ahmed, E. M., & Phin, G. S. (2016). Factors Influencing The Adoption of Internet Banking in Malaysia. *Journal of Internet Banking and Commerce*, 21(1), 1-28. Retrieved from <https://www.proquest.com/scholarly-journals/factors-influencing-adoption-internet-banking/docview/1799378232/se-2?accountid=51152>
- Ajzen, M. F. (1975). *Belief, Attitude, Intention and Behaviour : An Introduction to Theory and Research*. Reading, MA: Addison -Wesley.
- Alwahaishi, S. & Snasel, V. (2013). Consumers' Acceptance And Use Of Information And Communications Technology: A UTAUT And Flow Based Theoretical Model. *Journal of Technology Management and Innovation*, 8(2), 61-73.
- Amin, H. (2007). An Empirical Investigation On Consumer Acceptance Of Internet Banking In An Islamic Bank. *Labuan Bulletin of International Business and Finance (LBIBF)*, 5, 41-65.
- Anita S Acharya, A. P. (2013). Indian Journal Of Medical Specialities 2013;4(2):330-333. *Sampling: Why and How of it?*, 1-2.
- Arpaci, I., Kilicer, K., & Bardakci, S. (2015). *Effects Of Security And Privacy Concerns On Educational Use Of Cloud Services*. *Computers in Human Behavior*, 45, 93–98. doi:10.1016/j.chb.2014.11.075 \
- Arpaci, I., Yardimci Cetin, Y., & Turetken, O. (2015). Impact of Perceived Security on Organizational Adoption of Smartphones. *Cyberpsychology, behavior and social networking*, 18(10), 602-608. doi:<http://dx.doi.org/10.1089/cyber.2015.0243>
- August, b. D. (2020). Value beyond tourism. *LokaLocal's Virtual Tours offer travellers a taste of Malaysia*, 2.
- Aukstakalnis, S., & Blatner, D. (1992). *Silicon Mirage; The Art And Science Of Virtual Reality*: Peachpit Press.
- Babin, B. J., & Zikmund, W. G. (2015). *Exploring Marketing Research*: Cengage Learning.
- Barr, P., Noble, J. & Biddle, R. (2007). Video Game Values: Human–Computer Interaction And Games. *Interacting With Computers*, 19(2), 180-195.
- Bervell, B., & Umar, I. N. (2017). Validation Of The UTAUT Model: Re-Considering Non-Linear Relationships Of Exogenous Variables In Higher Education Technology Acceptance Research. *EURASIA Journal of Mathematics Science and Technology Education*, 13(10), 6471-6490.

- Bonett, D. G. (2008). *Confidence Intervals For Standardized Linear Contrasts Of Means. Psychological Methods, 13(2), 99–109.* doi:10.1037/1082-989x.13.2.99
- Brown, A., Ahmad, S., Beck, C., & Nguyen-Van-Tam, J. (2016). *The Roles Of Transportation And Transportation Hubs In The Propagation Of Influenza And Coronaviruses: A Systematic Review. Journal of Travel Medicine, 23(1), tav002.* <https://doi.org/10.1093/jtm/tav002>
- C.Michael Hall, D. S. (2020). An International Journal of Tourism Space, Place and Environment. *Pandemics, Transformations And Tourism: Be Careful What You Wish For, 11-13.*
- Polimeris, S. & Calfoglou, C. (2016). International Journal of Cultural and Digital Tourism. *Cultural Tourism Destinations And The Power Of Virtual Reality, 100-101.*
- Carlsson, C., Carlsson, J., Hyvönen, K., Puhakainen, J., & Walden, P. (2006). Adoption of Mobile Devices/Services — Searching for Answers with the UTAUT. Proceedings of the Annual Hawaii International Conference on System Sciences. 6. 132a- 132a. 10.1109/HICSS.2006.38.
- Catherine, N., Geoffrey, K. M., Moya, M. B., & Aballo, G. (2017). Effort Expectancy, Performance Expectancy, Social Influence And Facilitating Conditions As Predictors Of Behavioral Intentions To Use ATMS With Fingerprint Authentication In Ugandan Banks. *Global Journal of Computer Science and Technologies: E Network, Web & Security, 17(5), 4-22.*
- Ceenu George, M. K. (2017). Seamless And Secure VR: Adapting and Evaluating Established Authentication Systems for Virtual Reality. *Network and Distributed System Security Symposium.*
- Cennimo, D. J. (2020). What is COVID-19? Retrieved from <https://www.medscape.com/answers/2500114-197401/what-is-covid-19>
- Chao, C. M. (2019). Factors Determining The Behavioral Intention To Use Mobile Learning: An Application And Extension Of The UTAUT Model. *Frontiers In Psychology, 10, 1-14.*
- Chayomchai, A. (2020). The Online Technology Acceptance Model of Generation-Z People in Thailand during COVID-19 Crisis. *Management & Marketing, 15(s1), 496-512.* doi:<http://dx.doi.org/10.2478/mmcks-2020-0029>
- Chen, T. Y., & Popovich, U. M. (2002). *Correlation: Parametric and nonparametric measures.* Thousand Oaks etc.: Sage publications.
- Chua, P. Y., Rezaei, S., Man-Li, G., Oh, Y., & Manimekalai, J. (2018). Elucidating Social Networking Apps Decisions. *Nankai Business Review International, 9(2), 118-142.* doi:<http://dx.doi.org/10.1108/NBRI-01-2017-0003>
- Chua, S. (2020). Abang Johari Launches First-Ever Virtual Reality Theme Park In Borneo. Retrieved from <https://www.theborneopost.com/2020/10/12/abang-johari-launches-first-ever-virtual-reality-theme-park-in-borneo/>
- Chung, N., & Koo, C. (2015). *The Use Of Social Media In Travel Information Search. Telematics and Informatics, 32(2), 215–229.* doi:10.1016/j.tele.2014.08.005

- Crevathy, b. (2020). International Journal Of Management (ijm). *Determinants Of Behavioural Intention On E-Wallet Usage: An Empirical Examination In Amid Of COVID-19 Lockdown Period*, Volume 11, Issue 6, June 2020, pp. 92-104, Article ID: IJM_11_06_008.
- Co, Thomas, Lunsford, & Rae (1995). JPO Journal of Prosthetics and Orthotics: July 1995 - p 17A. *The Research Sample, Part1 : Sampling*, 174.
- Choi, D., Kim, J., Kim, S. (2007). ERP Training With A Web-Based Electronic Learning System: The Flow Theory Perspective, International Journal of Human-Computer Studies, 65 (1), 223-243.
- Cui, F., Lin, D., & Qu, H. (2018). *The Impact Of Perceived Security And Consumer Innovativeness On E-Loyalty In Online Travel Shopping*. *Journal of Travel & Tourism Marketing*, 35(6), 819–834. doi:10.1080/10548408.2017.1422452
- Davis, F.D. (1989) 'Perceived usefulness, perceived ease of use, and user acceptance of information technology', MIS Quarterly, Vol. 13, No. 3, pp.319–340.
- Davies, W. (2020, March 24). The Last Global Crisis Didn't Change The World. But This One Could. The Guardian. <https://www.theguardian.com/commentisfree/2020/mar/24/coronavirus-crisischange-world-financial-global-capitalism>
- Deborah Agostino, M. A. (Jul, 2020). Museums During The Global COVID-19 Pandemic. *Italian State Museums During The COVID-19 Crisis: From Onsite Closure To Online Openness*, 362-367. <https://www.tandfonline.com/doi/full/10.1080/09647775.2020.1790029>
- DeLone, W.H. & E.R. McLean (1992) "Information systems success: the quest for the dependent variable", Information Systems Research 3, March, pp.60-95.
- Digital News Asia. August, b. (2020). Value beyond tourism. *LokaLocal's Virtual Tours offer travellers a taste of Malaysia*, 2.
- Eiselen, R., Uys, T., Potgieter, N. (2005). Analysing Survey Data using SPSS 13: A workbook.
- Ekanayake, I., & Gnanapala, A.C. (2016). Travel experiences and behavioural intentions of the tourists: A study on eastern province of Sri Lanka. *Tourism, Leisure and Global Change*, 3, 50-61.
- Elengoe, A. (2020). COVID-19 Outbreak in Malaysia. *Osong Public Health and Research Perspectives*, 11(3), 93–100. <https://doi.org/10.24171/j.phrp.2020.11.3.08>
- English, E. A. (2017). Shinawatra University. *What is Sampling ?*, 1-2.
- Escobar-Rodríguez, T., & Carvajal-Trujillo, E. (2014). *Online Purchasing Tickets For Low Cost Carriers: An Application Of The Unified Theory Of Acceptance And Use Of Technology (UTAUT) Model*. *Tourism Management*, 43, 70–88. doi:10.1016/j.tourman.2014.01.017

- Fishbein, M. & Ajzen, I. (1977). Attitude-Behavior Relations: A Theoretical Analysis and Review of Empirical Research. *Psychological Bulletin*, 888-918.
- Fishbein, M. & Ajzen, I. (1975). Belief, Attitude, Intention and Behaviour: An Introduction to Theory and Research. *Addison-Wesley Publishing Co, Inc., Boston*.
- Flavián, C. and Guinalú, M. (2006), "Consumer trust, perceived security and privacy policy: Three basic elements of loyalty to a web site", *Industrial Management & Data Systems*, Vol. 106 No. 5, pp. 601-620. <https://doi.org/10.1108/02635570610666403>
- Foo, L.-P., Chin, M.-Y., Tan, K.-L., & Phuah, K.-T. (2020). The Impact Of COVID-19 On Tourism Industry In Malaysia. *Current Issues in Tourism*, 1–5. <https://doi.org/10.1080/13683500.2020.1777951>
- Fox, J., & Arena, D., & Bailenson, J. (2009). Virtual Reality: A Survival Guide for the Social Scientist. *Journal of Media Psychology: Theories, Methods, and Applications*. 21. 95-113. [10.1027/1864-1105.21.3.95](https://doi.org/10.1027/1864-1105.21.3.95).
- Franziska Roesner, T. K. (2014). Security and Privacy for Augmented Reality Systems. *Communications of the ACM*, 88-96.
- Gupta, A., & Arora, N. (2017). *Understanding Determinants And Barriers Of Mobile Shopping Adoption Using Behavioral Reasoning Theory*. *Journal of Retailing and Consumer Services*, 36, 1–7. doi:10.1016/j.jretconser.2016.12.012
- Gupta. A., Dogra, N. and George, B. (2018), What determines tourist adoption of smartphone apps? An analysis based on the UTAUT-2 framework. *Journal of Hospitality and Tourism Technology*, 9(1), 50-64. <https://doi.org/10.1108/JHTT-02-2017-0013>
- Gupta, S. & Kim, H. W. (2010). Value-driven INTERNET shopping: The mental accounting theory perspective. *Psychology and Marketing*. 27. 13 - 35. [10.1002/mar.20317](https://doi.org/10.1002/mar.20317).
- Guriting, P., & Ndubisi, N. (2006). Borneo online banking: evaluating customer perceptions and behavioural intention. *Management Research News*, 29, 6-15.
- Guttentag, D. A. (2010). Virtual reality: Applications And Implications For Tourism. *Tourism Management*, 31(5), 637–651. <https://doi.org/10.1016/j.tourman.2009.07.003>
- Hashim, K.H., & Jusof, M.J. (2010). Spherical High Dynamic Range Virtual Reality for virtual tourism: Kellie's castle, Malaysia. 2010 16th International Conference on Virtual Systems and Multimedia, 297-300.
- Heldal, I. (2007). Supporting Participation In Planning New Roads By Using Virtual Reality Systems. *Virtual Reality*, 11, 145–159.
- Holzmann, P., Schwarz, E. J., & Audretsch, D. B. (2020). Understanding The Determinants Of Novel Technology Adoption Among Teachers: The Case Of 3D Printing. *Journal*

- of Technology Transfer*, 45(1), 259-275. doi:<http://dx.doi.org/10.1007/s10961-018-9693-1>
- Hu, P., Chau, P., Sheng, O., & Tam, K. (1999). Examining the Technology Acceptance Model Using Physician Acceptance of Telemedicine Technology. *Journal of Management Information Systems*, 16(2), 91-112. Retrieved August 1, 2021, from <http://www.jstor.org/stable/40398433>
- Huang, Y.-c. (2011). Clemson University. *Virtual Tourism: Identifying The Factors That Affect A Tourist's Experience And Behavioral* , 57-86.
- Ibrahim, A., Mohamed, N. F. F., Yusof, S. A. M., Mat, R. C., & Zulkifli, A. N. (2007). Enhancing Virtual Tourism—Adoption and Implementation of Virtual Reality Techniques. *Readings On Tourism And Hospitality, Universiti Utara Malaysia Press, Sintok*, 163-180.
- I-Chiu Chang, H.-G. H.-F.-C. (2007). Physicians' Acceptance Of Pharmacokinetics-Based Clinical Decision Support Systems. *Expert Systems with Applications*, 296-303.
- Im, I., Kim, Y., & Han, H. J. (2008). The Effects Of Perceived Risk And Technology Type On Users' Acceptance Of Technologies. *Information and Management*, 45, 1-9.
- K.Hsu, C.-y. W. (2010). The Relationship of Destination Image, Satisfaction and Behavioural Intentions: An Integrated Model. *Journal of Travel & Tour Marketing*, 829-843.
- Kamarudin Shafinah, N. S. (2013). Determinants of User Behavior Intention (BI) on Mobile Service: A Preliminary View. *Procedia Technology*.
- Kalakota, R. & Whinston, A. (1997). *Electronic Commerce: A Manager's Guide. Addison-Wisley Professional*.
- Kamerlin, S. C. L., & Kasson, P. M. (2020). Managing Coronavirus Disease 2019 Spread With Voluntary Public Health Measures: Sweden as a Case Study for Pandemic Control, *Clinical Infectious Diseases*, Volume 71, Issue 12, 15 December 2020, Pages 3174–3181, <https://doi.org/10.1093/cid/ciaa864>
- Kerr, O. S. (2008). *Criminal Law in Virtual Worlds*. 415-429.
- Kim, S. & Bae, J. & Jeon, H. (2019). Continuous Intention on Accommodation Apps: Integrated Value-Based Adoption and Expectation–Confirmation Model Analysis. *Sustainability*. 11. 1578. 10.3390/su11061578.
- Kim, H. W., Chan, H. & Gupta, S. (2007). Value-Based Adoption of Mobile Internet: An Empirical Investigation. *Decision Support Systems*. 43. 111-126. 10.1016/j.dss.2005.05.009.
- Kim, M. J., Chung, N., & Lee, C-K. (2011). The effect of perceived trust on electronic commerce: Shopping online for tourism products and services in South Korea. *Tourism Management*. 32. 256-265. 10.1016/j.tourman.2010.01.011.

- Kozul-Wright, R., Barbosa, N. (2020). *This Crisis Will Change The World – For Better, Or Worse. Tribune Magazine.* <https://tribunemag.co.uk/2020/03/coronavirus-will-change-the-world-for-better-or-worse>.
- LaMorte, W. W. (2019) The Theory of Planned Behaviour, Boston University School of Public Health. Retrieved from <https://sphweb.bumc.bu.edu/otlt/mphmodules/sb/behavioralchangetheories/BehavioralChangeTheories3.html>
- Lau, C. K. H., Chui, C. F. R., & Au, N. (2019) Examination of the adoption of augmented reality: a VAM approach, *Asia Pacific Journal of Tourism Research*, 24:10, 1005-1020, DOI: 10.1080/10941665.2019.1655076
- Lee, O., & Oh, J. E. (2007). The impact of virtual reality functions of a hotel website on travel anxiety. *Cyberpsychology and Behavior*, 10(4), 584-586. <https://doi.org/10.1089/cpb.2007.9987>
- Lee, J. H. & Song, C. H. (2013). Effect Of Trust And Perceived Risk On User Acceptance Of A New Technology Service. *Social Behavior and Personality*, 41(4), 587-598.
- Lenth, R. V. (2012). Primary Article. *Some Practical Guidelines for Effective Sample Size Determination*, 1-2.
- Limayem, M., Hirt, S., & Cheung, C. (2007). How Habit Limits the Predictive Power of Intention: The Case of Information Systems Continuance. *MIS Quarterly*. 31. 705-737. 10.2307/25148817.
- Liu, D., Maimaitijiang, R., Gu, J., Zhong, S., Zhou, M., Wu, Z., Luo, A., Lu, C., & Hao, Y. (2019). Using The Unified Theory Of Acceptance And Use Of Technology (UTAUT) To Investigate The Intention To Use Physical Activity Apps: Cross-Sectional Survey. *JMIR Mhealth Uhealth*, 7(9), e13127.
- López, R. E. C. (2020). Augmented Reality, Immersed Reality and Mixed Reality as a Business Strategy in Honduran Companies. *The Journal of Applied Business and Economics*, 22(2), 54-61. Retrieved from <https://search.proquest.com/docview/2415031225?accountid=51152>
- Ltd., K. (2020). ENAI-European Network for Accessible. *COVID-19 and Opportunities For VR Based Tourism Economy*, 2-5.
- Lund Research Ltd (2012). Convenience Sampling Is A Type Of Non-Probability Sampling Technique. *Convenience Sampling*, 1-3.
- Lwoga, E. T., & Lwoga, N. B. (2017). User Acceptance Of Mobile Payment: The Effects Of Usercentric Security, System Characteristics And Gender. *The Electronic Journal of Information Systems in Developing Countries*, 81(3), 1-24.
- Mair, S. (2020, March 30). What will the world be like after coronavirus? Four possible futures. *The Conversation*. <https://theconversation.com/what-will-the-world-be-like-after-covid-19-141111>

- Malhotra, N. K., & Peterson, M. (2001). *Marketing Research In The New Millennium: Emerging Issues And Trends. Marketing Intelligence & Planning*, 19(4), 216–232. doi:10.1108/eum0000000005560
- Masrom, M. (2007). *Technology Acceptance Model and E-learning*. Retrieved from Research Gate: https://www.researchgate.net/publication/228851659_Technology_acceptance_model_and_E-learning
- Matkar, A. (2012) Cronbach's Alpha Reliability Coefficient for Standard of Customer Services in Maharashtra State Cooperative Bank. *IUP Journal of Bank Management*, 11, 89-95.
- Mazuryk, T., & Gervautz, M. (1996). Virtual reality-history, applications, technology and future. Gills, B. (2020). Deep Restoration: From The Great Implosion To The Great Awakening. *Globalizations*. <https://doi.org/10.1080/14747731.2020.1748364>
- McKinsey & Company. (2020). *Beyond Coronavirus: The Path To The Next Normal*. <https://www.mckinsey.com//media/McKinsey/Industries/Healthcare%20Systems%20and%20Services/our%20Insights/Beyond%20coronavirus%20The%20path%20to%20the%20next%20normal/Beyondcoronavirus-The-path-to-the-next-normal.aspx>
- Ministry of Health. (2020). Special Meeting Of The Central Disaster Management High-Level Committee On Covid-19 Infection, Number 5, Year 2020. Retrieved from <https://covid-19.moh.gov.my/terkini/022020/situasi-terkini-21-feb-2020/30%20TPM%20-%202021022020%20-%20EN.PDF>
- Minucciani, V. & Garnero, G. (2013). Available and Implementable Technologies for Virtual Tourism: A Prototypal Station Project. 7974. 193-204. 10.1007/978-3-642-39649-6_14.
- Moorhouse, D. N. (2020). The Current Pandemic Has Brought Forth Unprecedented And Unpredictable Change That Presents New Challenges For The Tourism Industry. *Can Virtual Reality Help Tourism Destinations Recover From COVID-19*.
- Moses, O. & Eze, U. (2011). Understanding Virtual Reality Technology: Advances and Applications. 10.5772/15529.
- Myung Ja Kima, C. M. (2019). *International Journal of Information Management. A Hedonic Motivation Model In Virtual Reality Tourism: Comparing Visitors*, 237-242
- O'Brolcháin, F., Jacquemard, T., Monaghan, D., O'Connor, N., Novitzky, P., & Gordijn, B. (2016). The Convergence of Virtual Reality and Social Networks: Threats to Privacy and Autonomy. *Science and engineering ethics*, 22(1), 1–29. <https://doi.org/10.1007/s11948-014-9621-1>
- Muhammed Mamman, A. F.-B. (2016). Factor Influencing Customer Behavioural Intention to Adopt Islamic Banking in Northern Nigeria: a Purposed Framework. *IOSR Journal of Economics and Finance*, 51.
- National Security Council. (2020). Kenyataan Media Majlis Keselamatan Negara, Jabatan Perdana Menteri. Retrieved from <https://www.mkn.gov.my/web/wp->

- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- Nyesiga Catherine, D. K. (2017). Effort Expectancy, Performance Expectancy, Social Influence and Facilitating Conditions as Predictors of Behavioural Intentions to Use ATMs with Fingerprint Authentication in Ugandan Banks. *Global Journal of Computer Science and Technology*
- Oh, O. L.-E. (2007). The Impact Of Virtual Reality Functions Of A Hotel Website On Travel Anxiety. *CyberPsychology & Behavior*, 584-586 .
- Onaolapo, S., & Oyewole, O. (2018). Performance Expectancy, Effort Expectancy, And Facilitating Conditions As Factors Influencing Smart Phones Use For Mobile Learning By Postgraduate Students Of The University Of Ibadan, Nigeria. *Interdisciplinary Journal of E-Skills and Lifelong Learning*, 14, 95-115.
- Parahoo, K. (2014). *Nursing Research: Principles, Process And Issues*: Macmillan International Higher Education.
- Patel, H., & Cardinali, R. (1994). Virtual Reality Technology In Business. *Management Decision*, 32(7), 5. doi:<http://dx.doi.org/10.1108/00251749410068111>
- Polit, D. F., & Beck, C. T. (2009). *Essentials Of Nursing Research: Appraising Evidence For Nursing Practice*: Lippincott Williams & Wilkins.
- Politico. (2020, March 19). Coronavirus Will Change The World Permanently. Here's how. Politico Magazine. <https://www.politico.com/news/magazine/2020/03/19/coronavirus-effect-economy-life-society-analysis-covid-135579>
- Quan-Haase, A., & Young, A. L. (2010). *Uses and Gratifications of Social Media: A Comparison of Facebook and Instant Messaging*. *Bulletin of Science, Technology & Society*, 30(5), 350–361. doi:10.1177/0270467610380009
- Rafeedalic, D. (2017). To Understand Population, Sample And Various Sampling Techniques . *Research: Population and Sample*, 1-9.
- Rahman, S. & Bhowal, A. (2017). Virtual Tourism and Its Prospects for Assam. *IOSR Journal of Humanities and Social Science*. 22. 91-97. 10.9790/0837-2202019197.
- Razif, M., Miraja, B. A., Satria, F. P., Nadlifatin, R., Belgiawan, P. F., Anak Agung Ngurah, P. R., & Shu-Chiang, L. (2020). Investigating The Role Of Environmental Concern And The Unified Theory Of Acceptance And Use Of Technology On Working From Home Technologies Adoption During COVID-19. *Entrepreneurship and Sustainability Issues*, 8(1), 795-808. doi:[http://dx.doi.org/10.9770/jesi.2020.8.1\(53\)](http://dx.doi.org/10.9770/jesi.2020.8.1(53))
- Reyes-Mercado, P. (2018). Adoption Of Fitness Wearables. *Journal of Systems and Information Technology*, 20(1), 103-127. doi:<http://dx.doi.org/10.1108/JSIT-04-2017-0025>
- Rogers, E. M. (1995). *Diffusion of Innovations*. *The Free Press*.

- Ronald L. Thompson, C. A. (1991). Personal Computing: Toward a Conceptual Model of Utilization. *MIS Quarterly*, 125-143.
- Rosario, G.-R. M., Carmen, D.-F. M., & Pino-Mejías, M. Á. (2020). The Impact Of Virtual Reality Technology On Tourists' Experience: A Textual Data Analysis. *Soft Computing*, 24(18), 13879-13892. doi:<http://dx.doi.org/10.1007/s00500-020-04883-y>
- Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences* [by] John T. Roscoe.
- Reinhard, C D (2010). Interviews Within Experimental Frameworks: How To Make Sense Of Sense-Making In Virtual Worlds. *Journal of Virtual Worlds Research*, 3 (1).
- Research Methods for The Social Science (2016). *Chapter 8 Sampling*, 2-3. <https://courses.lumenlearning.com/suny-hccc-research-methods/chapter/chapter-8-sampling/>.
- Colin Robson (2007). *How to Do a Research Project: A Guide for Undergraduate Students* Oxford, UK: Blackwell Publishing
- San Martín, H., & Herrero, Á. (2012). *Influence Of The User's Psychological Factors On The Online Purchase Intention In Rural Tourism: Integrating Innovativeness To The UTAUT Framework*. *Tourism Management*, 33(2), 341–350. doi:10.1016/j.tourman.2011.04.003
- Sapsford, R., & Jupp, V. (2006). *Data collection and analysis*. SAGE Publications in association with the Open University.
- Shafinah, K., Sahari, N., Sulaiman, R., Yusoff, M. S. M., & Ikram, M. M. (2013). Determinants Of User Behavioral Intention (BI) On Mobile Services: A Preliminary View. *Procedia Technology*, 11(2013), 127-133.
- Shamoo, A. E., Resnik, D. B., & Masters, B. R. (2007). *Responsible Conduct of Research*. *Journal of Biomedical Optics*, 12(3), 039901. doi:10.1117/1.2749726
- Shin, D.-H. (2009). *Towards An Understanding Of The Consumer Acceptance Of Mobile Wallet*. *Computers in Human Behavior*, 25(6), 1343–1354. doi:10.1016/j.chb.2009.06.001
- Shumaila Yousafzai, J. P. (2003). A Proposed Model of E-Trust for Electronic Banking . 847-860.
- Slade, E., Williams, M., Dwivedi, Y., & Piercy, N. (2014). *Exploring Consumer Adoption Of Proximity Mobile Payments*. *Journal of Strategic Marketing*, 23(3), 209–223. doi:10.1080/0965254x.2014.914075
- Snasel, S. A. (2013). Consumers' Acceptance And Use Of Information And Communication Technology: A UTAUT And Flow Based Theoretical Model. *Journal of Technology Management and Innovation*, 61-73.
- Solutions, S. (2020). Academic Research Resources, Dissertation. *Sample Size Calculation And Sample Size Justification*.

- Song, J.-H. L.-H. (2013). Effects Of Trust And Perceived Risk On User Acceptance Of A New Technology Service . *Social Behavior and Personality An International Journal*, 587-598.
- Stanat, R. (1984). *SIS International Market Research*. Retrieved from SIS International Research: <https://www.sisinternational.com/what-is-quantitative-research/>
- Stainton, D. H. (2020). Tourism Teacher. *Virtual Tourism Explained: What, Why And Where*, 2-5
- Sung, Y.-T., Chang, K.-E., & Liu, T.-C. (2016). *The Effects Of Integrating Mobile Devices With Teaching And Learning On Students' Learning Performance: A Meta-Analysis And Research Synthesis*. *Computers & Education*, 94, 252–275. doi:10.1016/j.compedu.2015.11.008
- Ryu, Gao, Wong, Shiu, Xiou, Fong & Benjamin (2020). Emerg Infect Dis. 2020 May; 26(5): 961–966. *Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—International Travel-Related Measures* , 1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7181936/>.
- Stangl, B., & Weismayer, C. (2008). *Websites And Virtual Realities: A Useful Marketing Tool Combination? An Exploratory Investigation*. In P. O'Connor, W. Hopken, & U. Gretzel (Eds.), *Information and communication technologies in tourism 2008* (pp. 141–151). New York: Springer.
- Sussmann, S., & Vanhegan, H. (2000). *Virtual Reality and the Tourism Product: Substitution or Complement?*
- Tan, P. J. B. (2013). Applying The UTAUT To Understand Factors Affecting The Use Of English W-Learning Websites In Taiwan. *SAGE Open*, October-December, 1-12.
- The Movement Control Order (MCO) for COVID-19 Crisis and its Impact on Tourism and Hospitality Sector in Malaysia. (2020). *International Tourism and Hospitality Journal*, 2–7. <https://doi.org/10.37227/ithj-2020-02-09>
- Thomas, T. D., Singh, L., & Gaffar, K. (2013). The utility of the UTAUT model in explaining mobile learning adoption in higher education in Guyana. *International Journal of Education and Development using Information and Communication Technology*, 9(3), 71-85.
- Times, N. S. (June 1, 2020). In #JOM! DO: New Normal Experience At Home. Malaysia: New Straits Times Press (M) Bhd. A part of Media Prima Group.
- Timothy Junga, M. C. (2016). Information and Communication Technologies in Tourism 2016. *Effects of Virtual Reality and Augmented Reality on*, 4.
- Titus, I. L. (2017). An Assessment of The Provision of Micro-Credit For Women Empowerment in Plateau State, Nigeria. *Geografia*, 13(2) Retrieved from <https://www.proquest.com/scholarly-journals/assessment-provision-micro-credit-women/docview/2488701296/se-2?accountid=51152>

- Troy D Thomas, L. S. (2013). The Utility of the UTAUT Model in Explaining Mobile Learning Adoption in Higher Education in Guyana. *International Journal of Education and Development Using Information and Communication Technology*, 71-85.
- Trybou, P. D. (2016). Performance Expectancy, Effort Expectancy and Social Influence as Factors Predicting the Acceptance of (Non-) Fluoroscopy-Guided Positioning for Radiographs and the Relationship with Leadership. *UNIVERSITEITGENT*, 7-9.
- Tuffour, J. K., & Matey, E. (2019). The Success of The Global Business Leader: The Expatriate Perspective in Ghana. *The Journal of Applied Business and Economics*, 21(9), 75-85. Retrieved from <https://www.proquest.com/scholarly-journals/success-global-business-leader-expatriate/docview/2352613174/se-2?accountid=51152>
- Vanhegan, S. S. (1997). "Will Virtual Reality. *Virtual Reality And The Tourism Product*, 4.
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2016). Unified Theory Of Acceptance And Use Of Technology: A Synthesis And The Road Ahead. *Journal of the Association for Information Systems*, 17(5), 328-376.
- Venkatesh V., Morris M. G., Davis G. B., Davis F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27, 425-478.
- World Health Organization (2020). Coronavirus disease (COVID-19) advice for the public. Retrieved from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>
- Williams, J. P. (1995). Virtual Reality: A New Horizon for the Tourism Industry. *Journal of Vacation Marketing*, 125.
- Wilson, J. (2014). *Essentials Of Business Research: A Guide To Doing Your Research Project*: Sage.
- Woisetschläger, D., Lentz, P. & Evanschitzky, H. (2011). How habits, social ties, and economic switching barriers affect customer loyalty in contractual service settings. *Journal of Business Research*. 64. 800-808. 10.1016/j.jbusres.2010.10.007.
- Yang, M., Al-Mamun, A., Mohiuddin, M., Che Nawi, N., & Zainol, N. R. (2021). Cashless transactions: A study on intention and adoption of e-wallets. *Sustainability*, 13(2), 831. doi:<http://dx.doi.org/10.3390/su13020831>
- Jeong, Y., Kim, S., & Yu, J. (2019). Determinants of Behavioral Intentions in the Context of Sport Tourism with the Aim of Sustaining Sporting Destinations. *Sustainability*, 11, 3073.
- Yung, R. K.-L. (2019). Current Issues in Tourism. *New realities: a systematic literature review on virtual reality*, 5-12
- Zhou, T. (2011). The effect of initial trust on user adoption of mobile payment. *Information Development - INF DEV*. 27. 290-300. 10.1177/0266666911424075.

APPENDICES



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Dear respondents,

DETERMINANTS OF BEHAVIOURAL INTENTION ON VIRTUAL TOURISM
USAGE AMONG TOURIST IN MALAYSIA DURING COVID-19 LOCKDOWN

We are student from UNIVERSITI MALAYSIA KELANTAN, which is currently pursuing our Bachelor of Entrepreneurship in Tourism. Currently, we are conducting a research survey on the topic of Behavioural Intention on Virtual Tourism Usage Among Tourist in Malaysia During COVID-19 Lockdown.

The objective of this research are to investigate the relationship between performance expectancy and behavioural intention of Virtual Tourism usage among tourists. Besides that, researchers want to examine the relationship between effort expectancy and behavioural intention of Virtual Tourism usage among tourists. Also, the researchers want to study the relationship between social influence and behavioural intention on Virtual Tourism usage among tourists as well as relationship between perceived security and behavioural intention of Virtual Tourism usage among tourists.

All the information given will be treated with strictest confidentiality and only for the research propose. You may contact us at the following telephone number 017-8522881 or email address: muhdkhairulariffin@gmail.com for further information.

We hope that you would co-operate in completing the questionnaire with the best of your ability. There is no right or wrong answer. Your participation will enrich for future research.

Thank you for your willingness to participate in the study.

Part A: Demographic Profile

This section intends to get an information about respondent’s demographic background. Please tick (√) in the best answer according to your information.

1. Gender:

- Male Female

2. Age:

- Below 20 years old 41 – 50 years old
 21 – 30 years old 51 – 60 years old
 31 – 40 years old Above 61 years old

3. Nationality:

- Malaysian Non-Malaysian

4. Marital status:

- Single Married

5. Education:

- PhD Honours Degree/ STPM
 Master Degree Graduate Diploma

Bachelor's Degree

SPM

6. Income:

Below RM 2000

RM 4001 – 5000

RM 2001 – 3000

Above RM 5000

RM 3001 – 4000



Part B: Descriptive analysis

In this part, respondents are asked to tick (√) their agreement level on a Likert five-point scale ranging from one (1) with "strongly disagree", two (2) with "disagree", three (3) with "neutral", four (4) with agree, or five (5) with "strongly agree".

Section 1: Behavioural Intention toward Virtual Tourism usage

Below are the reasons why would you start to travel virtually?

	Reasons	1	2	3	4	5
1.	Virtual Tourism seems fun to tourists.					
2.	I have the desire to do virtual tourism in my home.					
3.	I believe I can save money by doing virtual tourism.					
4.	I hope that more tourism companies utilize virtual tourism.					
5.	Doing virtual tourism will beneficial for me.					

Section 2: Performance Expectancy toward Virtual Tourism usage

Below are the reasons why virtual tourism seems useful to you?

	Reasons	1	2	3	4	5
1.	Virtual Tourism is more convenient than traditional tourism.					
2.	Virtual Tourism could save my money.					
3.	Virtual Tourism could enhance my travel experience.					
4.	I found virtual reality device to be useful for virtual tourism.					

5.	Virtual Tourism will improve my passion to travel.					
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Section 3: Effort Expectancy toward Virtual Tourism usage

Below are the reasons why would you think Virtual Tourism is easy or not easy for you?

	Reasons	1	2	3	4	5
1.	Using virtual reality device for virtual tourism would be easy for me.					
2.	It is easy to access virtual tourism.					
3.	I found that traveling in virtual tourism is hassle free.					
4.	I would found myself to travel anywhere easily with virtual tourism.					
5.	My interaction in virtual tourism is clear and understandable.					

Section 4: Social Influence toward Virtual Tourism usage

Below are the reasons why would you think virtual tourism is important in the tourism industry?

	Reasons	1	2	3	4	5
1.	I think it is important to have virtual tourism in the tourism industry.					
2.	Virtual tourism would be useful in the tourism industry.					
3.	Virtual tourism would be a good substitute for traditional tourism.					
4.	Virtual tourism would be good to have during a pandemic or lockdown.					

5.	I would rather use virtual tourism as it is cost-effective rather than the expensive traditional tourism.					
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Section 5: Perceived Security toward Virtual Tourism usage

Below are the reasons why virtual tourism is safe for you?

	Reasons	1	2	3	4	5
1.	I do not need to worry about my safety when traveling virtually.					
2.	My personal information and identity are safely hidden when travel virtually.					
3.	Virtual tourism tourists can travel anywhere safely without worrying about physical threats.					
4.	Risk of threats in virtual tourism is non-existent compare to traditional tourism.					
5.	My personal data is safe because virtual tourism does not need any online connection.					



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