Digital Tourism: A Possible Revival Strategy for Malaysian Tourism Industry after COVID-19 Pandemic

Gohar Inam, Ihtisham Ullah, Jugindar Singh, Thilageswary Arumungam

Faculty of Business and Management, Asia Pacific University Kuala Lumpur, Malaysia

Abstract

This study is a conceptual paper focusing on not only the impact of COVID-19 on the tourism industry of Malaysia but also on the possible solutions to the current global crises. Researchers emphasize the importance of digital tourism that can be a potential saviour for the dying tourism industry of Malaysia after being poisoned by the coronavirus. In this study, researchers supported their hypothesis with the two existing theories that are the theory of virtual reality and theory of digital tourism. Researchers do face a lot of challenges in collecting supporting literature because there are no published articles on this aspect of saving tourism from Corona's situation. However, many supporting papers show competency and value creation of adopting digital tourism in today's world. Researchers are bridging the literature gap by doing this research, and it will give meaningful direction to future researchers. This paper contributes towards theoretical perspective and practical implementation by providing useful insights to policymakers and governmental agencies for future planning and management of the Malaysian Tourism Industry. Moreover, other researchers can do this research on their respective tourism sector for worldwide tourism restoration and revival.

Keywords: *Digital Tourism, Malaysian Tourism Industry, International Tourism Industry, COVID-19, Global Pandemic*

Introduction

COVID-19 is a name given to a viral disease that can transmit from one infected person to another either by physical contact or by droplets while coughing or sneezing. COVID-19 that started in China spreads worldwide and also claimed thousands of lives until today. World Health Organization (WHO) announced COVID-19 (Coronavirus) to be a global emergency. Regardless of its origin, COVID-19 spread to most of the countries across the globe. Researchers are of the view that those who have a healthy immune system can recover faster than those with low immunity (CDC, 2020).

Many researchers are working day and light to make the vaccine for that virus, but no one has succeeded. Due to no vaccine or medicine, many countries have imposed lockdowns and closed their country borders for the outer world. They are of the view that viruses will stop circulating if no infected individual enters the country premises, and according to WHO, this is the right approach for now, given that there is no antidote for the virus. World Health Organization emphasizes social distancing and less travelling across the boarders to get a hold on the current worsening situation.

However, there are many negative impacts on the economies of countries because lockdown has negatively affected the global market resulting in global economic crises (Tauseef Ahmad, 2020).

International Tourism Sector

In today's world, the primary sector contributing to the world economy is none other than the tourism sector. Most of the countries, especially developing ones, mostly rely on their tourism sector for their infrastructure development, for managing stable economic conditions, the development of private organizations, and the creation of employment opportunities. Underdeveloped countries have to correctly take care of their tourism sector for future growth prospects and economic stability in the country because their other industries such as manufacturing units or natural reservoirs are not sufficient enough to cope up with the economic demand (Fayos-Sola, 1997).

Researchers find it challenging to give a precise definition to the tourism sector because there is no explicit and clear output (product) of the tourism sector like other sectors. The tourism sector is a combination of many sub-sectors, such as transportation, accommodation, hospitality, catering, decoration, and others. Tourism is a vast concept, researchers are of the view that tourism is defined as an activity that makes people travel for the reasons like, spending holidays at a scenic place, staying at a specific home for medical treatments, or any other purpose and that so for consecutive one year or less than a year. According to world data collected in the year of 2019, the only the tourism sector contributed more than 2.9 trillion USD in the GDP of the world, out of which 580.7 billion USD is from the tourism sector of the USA alone, making it the most significant contribution in societies GDP of 2019. However, city-wise number one rank for contributing the highest portion to world GDP from the sector of travel and tourism goes to Macau(Lock, 2020).

Malaysian Tourism Sector

According to the researchers, the most famous destination for tourism in Malaysia for international tourists among all other tourism-oriented countries of South East Asia. Moreover, the most renowned search word about tourism on search engines like Google and YouTube is Malaysian travel packages for international travellers. Almost every year, countless international travellers explore Malaysia's beauty, resulting in significant contributions to countries' revenue. There are numerous scenic and natural points for leisure activities, and diverse cultures off Malaysia attract travellers to Malaysia. Global tourists get excited by the various cultural events and landmarks that define the heritage plus ancient civilizations of Malaysians. According to travellers, Malaysia is a unique combination of beautiful views, natural forest, and famous beaches that makes it the most favourable destination in their travel books. Also, the tour packages, especially for facilitating and attracting tourists, play a vital role in the growth of Malaysian tourism (Bernama, 2020).

Malaysian tourism sector not only grows by itself, but it has a profound impact on related areas such as the hospitality sector, food sector, catering sector, travelling sector, and the private sector. This means that with the growth of the tourism sector all related industries grow as well. That is why in today's world for Malaysia, its tourism sector has become very important for the betterment of their overall system. Moreover, the economy of Malaysia is very much dependent upon this sector for a definite increase. According to the vision of the Malaysian tourism management department of the government, to flourish their tourism industry and retain them for more extended directions, all they have to do is make them stay for an extended period. By making them wait longer than their original plan, they can earn more in the form of rentals, restaurant bills, and travelling costs. Also, making

these entire efforts, the tourism sector will grow with speed. By its growth, they will undoubtedly need more workforces for their business to stay afloat, which means there will be more employment opportunities for the local people. With more employment opportunities comes the increase in GDP of the Country. Most importantly, the tourism sector is on number 3 out of all the other industries, according to the researchers (Hirschmann, 2020).

According to the researchers, Malaysia is one of the top tourist destinations among international travellers. Moreover, going to the national analysts is also the primary source of country development and economic growth (UKEssays, 2018). Below is a clear picture of benefits attained from the tourism sector in the form of revenue from check INS and international arrivals at hotels (MyTourismData, 2019).

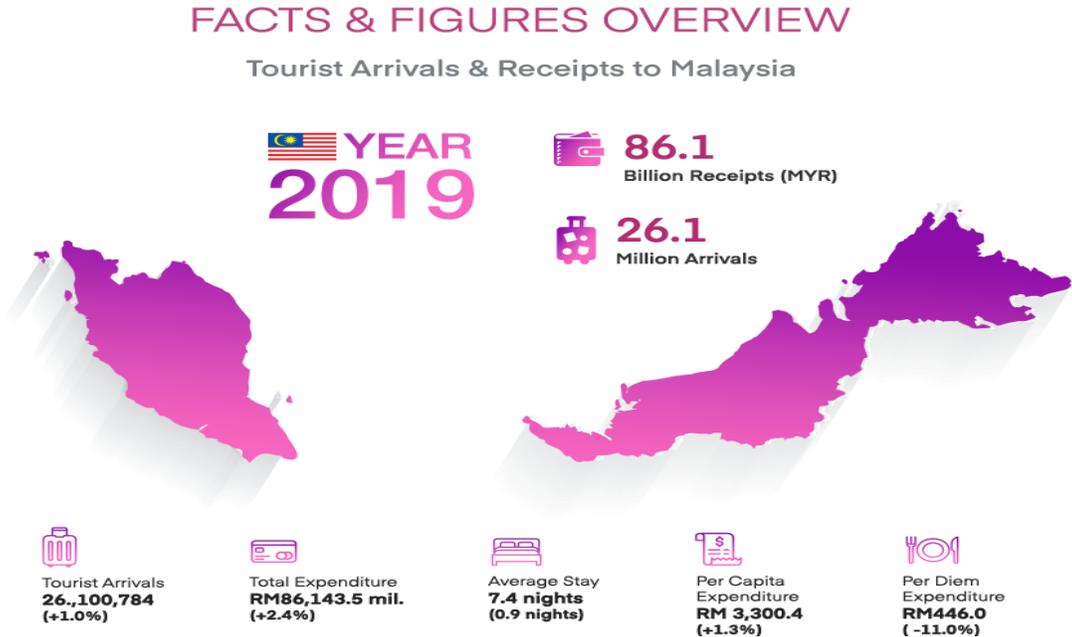**Figure 1: Tourism Statistics in Malaysia (MyTourismData, 2019)**

Table 1: Tourists Arrivals & Receipts to Malaysia by Year

Year	Arrivals	Receipts (RM)
2019	26.10 million	86.1 Billion
2018	25.83 million	84.1 Billion
2017	25.95 million	82.1 Billion
2016	26.76 million	82.1 Billion
2015	25.72 million	69.1 Billion

2014	27.44 million	72.0 Billion
2013	25.72 million	65.4 Billion
2012	25.03 million	60.6 Billion
2011	24.71 million	58.3 Billion
2010	24.58 million	56.5 Billion
2009	23.65 million	53.4 Billion
2008	22.05 million	49.6 Billion
2007	20.97 million	53.4 Billion

Digital Tourism

Digitalisation leverages digital technologies and data to transform businesses and business ecosystems. It turns markets and production processes and has significant implications for economic and social organization, innovation, and competitiveness. Digitalisation presents opportunities for SMEs to expand their market reach, increase growth, improve operational efficiencies, and sharpen their competitive edge in tourism. At a collective level, it can also help to develop and customise product offerings, improve destination connectivity, generate data to track performance and help to improve destination management. With the increasing popularity and implementation of digital technologies, all the businesses are equally impacted by it. Technology advancements changed the processes of doing things and revolutionized the whole organizational practices from scratch, resulting in innovative solutions and inventions. Like all other sectors, tourism also gets impacted by technological advancements.

According to the researchers, by adopting new ways, companies will achieve the improvements and competitiveness needed to face-off the international competition. It will also help make it more convenient for the customers but instant availability of services such as unique virtual tour guides for customizing their travel experience and making it more memorable. In that way, customers will feel more valuable and comes back in the future because of the convenience given to them by digital selection and customization of travel plans plus destinations (Gelter, 2017). By the process of technological advancement or digitalisation, the primary purpose is to create value in tourists' eyes by making them realise that they are the most important for them. At the same time, it is also crucial to have the technical knowledge plus capability to implement digitalization (Dianne Dredge, 2018).

According to the researchers, the desire and need for travel come to technological advancement. Due to emerging needs, scientists came up with technological advancements like robotics, sky satellites, communication channels, and improved travel crafts that make the lives of people convenient, secure, and comfortable. Advanced technologies encourage tourism activities and make it very convenient not only for tourists by giving them more privacy, accuracy, convenient travelling, and fast mode of telecommunications and locals by providing them with extra-earning sources. Technology is developing very fast, and researchers are afraid that the tourism sector may fall behind the technology

and digitalisation; thus, technological and digital advancement in the tourism sector goes without saying (Fayos-Sola, 1997).

Problem Statement

According to analysis and government officials in the year 2020, the Malaysian tourism sector has a prediction of achieving the target of being the host of the most prominent tourist crowd among the other countries. However, no one could have predicted that they will face the global pandemic that overshadows their whole plan of 2020. Hotels, restaurants, and airlines expect a lot of guests in 2020, but everything falls apart because of the virus. Malaysian agencies were preparing for 20/20 vision "Visit Malaysia 2020" it's all get halted for worse. Malaysia expected the turnover of almost 30 million visitors and an income of around 20 billion US dollars. Then again, the global pandemic spoiled all the efforts and planning of the Malaysian government. Along the way also affecting approximately 3.5 million employees and workers of the Malaysian tourism sector (Bethke, 2020)

According to the research, the Malaysian government has lost 45 billion USD until now because of coronavirus. The Malaysian minister of tourism during his press conference briefs mentioned that coronavirus badly crushed the sector and that its impact will last longer in the tourism sector than other industries, resulting in late revival. Moreover, in a recent survey of the department of statistics in Malaysia, it was reported that last year's employment was decreased by 14.93 million. Still, this year because of the Coronavirus, it further drops 1%. According to the Malaysian Government, most unemployed individuals are mainly from the hospitality sector, restaurant, services, and travelling (Bernama, 2020).

The major problem that the government of Malaysia is currently facing is the lockdown and closed borders, which is imposed on the wellbeing and security of the nation. Still, it is severely affecting the tourism sector. Thus, for reviving the tourism sector of Malaysia, a combined effort is needed by the collaboration of government agencies and IT technologists for the creation of a digital solution for the problem. As said by the researcher, "virtual world without borders," by researching and implementing this theory, there might be a solution out of this mess. There are no such research papers on this topic in a different scenario so that this research will be the Pioneer in this direction. There is already a concept of 3D technology and Virtual reality, but this research focuses on Virtual collaboration reality, digitalization, and tourism planning. If the investigation will be successful, then food revolutionized the concept of tourism into the idea of virtual tourism (Guttentag, 2010).

Research Questions

1. What are the possible digital solutions to help prevent Malaysia's tourism sector from losses because of COVID '19?

2. What should be done to digitalize the tourism industry of Malaysia?

3. What challenges can the Malaysian tourism industry face while implementing complete digit experience for tourists, and how can they resolve them?

Objectives

1. To determine and identify the technological advancements and tools that the tourism sector needs to digitalize their business.

2. To examine the current position of tourism industries of Malaysia in the adoption of digitalizing procedures and tools.

3. To explain and discuss possible difficulties in implementing the digital trend in the tourism sector.

4. To analyze the impact of possible solutions on the Malaysian tourism industry.

Figure 2: Research Framework
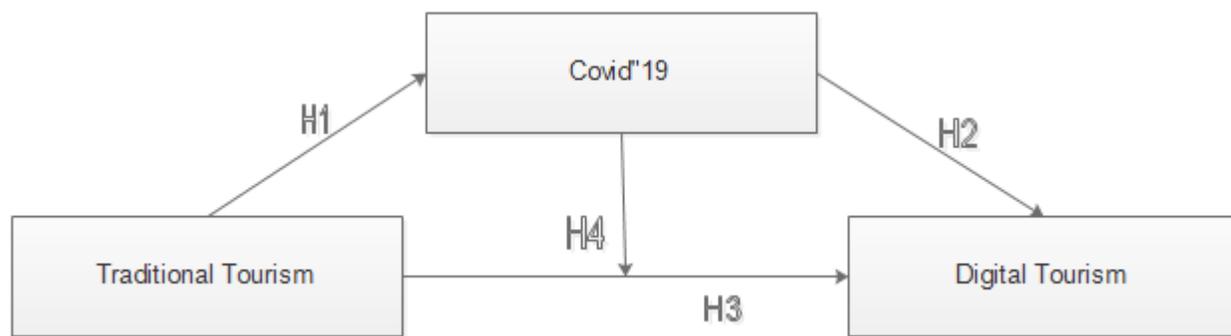
Literature Review

Impact of COVID '19 on International Tourism Sector

Because of the coronavirus situation worsening worldwide, there are many travel plans and country lockdowns that are making it harder for travellers to travel across borders, thus, resulting in a global tourism crisis. One of the recent research by UNWTO, the United Nations World Tourism Organization, almost a 100% of the UN countries are having strict policies of flying in and out, but out of the 70% are incomplete self-imposed lockdown that is they even closed their borders (UNWTO, 2020).

The policies regarding the lockdown are also being shown by the world's current situation surveys of HDX and WFP. Because of the lockdowns, many of the travellers have to cancel their travel plans. Because of this cancellation, global tourism has been severely impacted, all thanks to coronavirus (HDX, 2020; WFP, 2020).

Destinations like the museum and the locations that are being visited by the tourist, no matter local or international, are being hit harder by the coronavirus outbreak resulting in financial losses but the owners of those destinations. The analysts are also saying that the world tourism sector will get better after all the other industries. Specifically, developing countries that are most dependent upon there tourism sector are more prone to financial downturn in their GDP, which is why they must have a keen eye on their survival sector (Tauseef Ahmad, 2020).

A survey conducted on European countries shows that because of Coronavirus, there is an evident decrease in the persons spending nights in the hotels by comparison with last year's data. Below is

the graph from the 'EUROSTAT' graph that shows the difference between last year and this year very clearly (EUROSTAT, 2020):

Methodology

Sampling and Location

This is an explanatory study. Most of the studies distributed with the age group sample; the generalization of their findings was an issue and identified as another research gap. The study focused on the age group in which APU undergraduates aged between 17-35. When looking into the sampling methodology, the sample referred to APU undergraduates. In this study, the population is 12,000 students who studied in APU. Thus, a total of 150 respondents completed were gathered through a self-administered questionnaire.

Measurement of Variable

There are three parts consisted of the questionnaire to gather information related to personal information of the respondents, brand preference and selected variable. For the first part, there are 16 items used to measure celebrity endorsement. These include 4 items for a role model, 4 items for the influence of celebrity endorser, 4 items for the effectiveness of celebrity endorser's advertisements and 4 items for negative celebrity information. For the second part, there are 16 items used to measure the multiple perceived values. These include 4 items for social value, 4 items for functional value in price or value for the money, 4 items for functional value in product quality and 4 items for emotional value. Last, there are 4 items used and measure brand preference.

Every item has been evaluated as "Strongly disagree", "Disagree", "Neutral", "Agree" and "Strongly agree". The scoring of One-point will be given when the individual strongly disagreed with the statement. The scoring of Two-point will be given when the individual disagreed with the statement. The scoring of Three-point will be given when the individual is neutral with the statement. The scoring of Four-point will be given when the individual agreed with the statement. The scoring of Five-point will be given when the individual strongly agreed with the statement. To analyze it, the item which scored above the mean score was considered as "high" group while the item which scored below the mean score was considered as "low" group.

Data Analysis

The data collected was analyzed by using Statistical Package for Social Science for Windows (SPSS for Windows 20). The statistics consist of descriptive statistics such as frequency, percentage, the mean, the median and standard deviation used to examine the respondents' profile. This study used the Pearson Moment Correlation test to evaluate the relationship between independent variables and dependent variable. This study also used the Multiple Regression Analysis to find which of the independent variables would affect dependent variables which is brand preference. The level of significance at a probability level of 5% was used.

Results and Findings

Respondents' Profile

From a total of 150 respondents, the majority of the gender group was male, coming through at 58.0%

while female comes second at 42.0%. Majority of respondents were 17-21, which is 50.6%. There are 62 respondents were aged 22-26, which was 41.3%, while 6.7% were aged 27-30. The smallest categories were 31-34, and 35 and above year old, which are 0.7% and 0.7%. There about 61.3% of the respondents were local undergraduates, and 38.7% were international undergraduates. The education level attained by these respondents were relatively high. There are 58% of respondents pursuing degree courses.

Table 1: Respondents' profile

Variables	Number (n)	Percentage (%)
Gender		
Male	87	58.0
Female	63	42.0
Age		
17-21	76	50.6
22-26	62	41.3
27-30	10	6.7
31-34	1	0.7
35 and above	1	0.7
Student Type		
Local student	92	61.3
International student	58	38.7
Education Attainment		
Foundation	19	12.7
Diploma	30	20.0
Degree	87	58.0
Master	14	9.3
Marital Status		
Single	146	97.3
Married	4	2.7
Religion		
Islam	35	23.3
Christian	58	38.7
Buddhist	33	22.0
Hindu	22	14.7
Taoism	2	1.3

Referring to Table 1, there were 12.7% of respondents pursuing foundation courses, 20.0% of respondents are pursuing diploma courses, and 9.3% of respondents are pursuing master courses. The marital status of respondents consists of single at 97.3% and married at 2.7%. For religion, 38.7% respondents shown that they were Christian, followed by 23.3% of Islam, while Buddhist, Hindu and Taoism accounted for 22.0%, 14.7% and 1.3% respectively. Thus, it could be concluded that the characteristics of respondents would affect them to purchase brand preference of fashion apparel products.

Celebrity Endorsement

First, there have 4 out of 16 statements been used for determining the sub-domain in celebrity endorsement, perception of celebrity endorsers as a role model. Table 2 showed that most of the

respondents agreed that they would perceive celebrity endorsers as a role model. In the perception of celebrity endorsers as a role model (statement 2), 46.7% of the respondents agreed that they would prefer the brand if the celebrity endorser provides a good model for them to follow.

Secondly, there are 4 statements selected to measure the perceived influence of celebrity endorsement. Table 2 showed that most of the respondents (an average of 42.2%) agreed that they would influence by the celebrity endorsement in statement 1 (39.3%), statement 2 (40.0%), statement 3 (38.7%), and statement 4 (50.7%).

Table 2: Itemisation for Celebrity Endorsement, in percentage (%)

Variables	Statement	1	2	3	4	5
1. Perception of Celebrity endorsers as a role model	1. I will prefer the brand if the celebrity endorser provides a good model for me to follow.	2.7	2.0	30.0	**46.7**	18.7
	2. I will prefer the brand if the celebrity endorser leads by example.	1.3	4.0	34.7	**44.0**	16.0
	3. I will prefer the brand if the celebrity endorser sets a positive example for others to follow.	3.3	2.7	30.7	**44.7**	18.7
	4. I will prefer the brand if the celebrity endorser acts as a role model for me.	1.3	6.0	**39.3**	38.7	14.7
2. Perceived influence of Celebrity Endorsement	1. Celebrity endorsers can trigger me to recommend their brand to someone who seeks my advice.	2.0	4.0	37.3	**39.3**	17.3
	2. Celebrity endorsers can trigger me to encourage friends or relatives to prefer their brands' products.	1.3	6.0	34.7	**40.0**	18.0
	3. I will switch to a celebrity's endorsed brand, although I have no problem with a competitor's product.	3.3	6.7	35.3	**38.7**	16.0
	4. I will switch to a celebrity's endorsed brand, although the price may be relatively higher.	2.7	2.7	34.7	**50.7**	9.3
3. Effectiveness of celebrity endorser's advertisements	1. I will prefer a brand that is endorsed by a celebrity that I recognize in the brand's advertisement.	1.3	6.7	34.7	**48.0**	9.3
	2. I have purchased fashion apparel products after viewing an advertisement.	1.3	3.3	34.7	**51.3**	9.3
	3. I will prefer a brand if I am familiar with the brand name in the celebrity endorser's advertisement.	2.0	5.3	36.0	**47.3**	9.3
	4. I will prefer a brand if I think the celebrity in the advertisement is suitable for endorsing the brand.	2.2	6.7	23.9	**44.0**	23.1
4. Perception of negative celebrity information	1. I still have a good impression towards the celebrity endorser.	4.0	16.0	**36.7**	33.3	10.0
	2. I still have a positive impression towards the celebrity endorser.	3.3	12.7	**40.0**	36.0	8.0

	3. I still believe the celebrity endorser is a trustworthy spokesperson for the brand.	4.0	14.0	**38.0**	34.0	10.0
	4. I still believe the celebrity endorser is a qualified spokesperson for the brand.	5.3	12.0	**41.3**	30.7	10.7

Thirdly, there are 4 statements which selected to measure the effectiveness of celebrity endorser's advertisements. In Table 2, it showed that most of the respondents (an average of 47.7%) agreed that they would influence by the celebrity endorsement in statement 1 (48.0%), statement 2 (51.3%), statement 3 (47.3%), and statement 4 (44.0%).

Fourthly, there have 4 out of 16 statements used for determining the sub-domain in celebrity endorsement, perception of negative celebrity information. Table 2 showed that most of the respondents are neutral in four statements of perception of negative celebrity information which are statement 1 (36.7%), statement 2 (40.0%), statement 3 (38.0%), and statement 4 (41.3%).

Multiple Perceived Values

First, there have 4 out of 16 statements been used for determining the sub-domain in multiple perceived values, social value. In Table 3, it showed that most of the respondents (46.7%) agreed that they would prefer a brand that would help me to feel acceptable (statement 1). In the perceived social value, 44.7% of respondents agreed to statement 2, 44.0% of respondents agreed to statement 3, and 39.3% of respondents agreed to statement 4.

Secondly, there are 4 statements which selected for measure perceived functional value (price or value for the money). Table 3 showed that most of the respondents are neutral that they will influence by perceived functional value (price or value for the money) in statement 1 (35.3%), statement 2 (34.0%), and statement 4 (38.0%) while only 36.7% of respondents agreed to the statement 3.

Table 3: Itemisation for Multiple Perceived Values, in percentage (%)

Variables	Statement	1	2	3	4	5
1. Perceived social value	1. I will prefer a brand that would help me to feel acceptable.	2.0	7.3	28.0	**46.7**	16.0
	2. I will prefer a brand that would improve the way I am perceived.	2.0	7.3	29.3	**44.7**	16.7
	3. I will prefer a brand that would make a good impression on other people.	2.0	7.3	29.3	**44.0**	17.3
	4. I will prefer a brand that would give its owner special approval.	2.0	6.7	34.7	**39.3**	17.3
2. Perceived functional value (price or value for money)	1. I will prefer a brand if its product is reasonably priced.	3.3	8.7	**35.3**	30.7	22.0
	2. I will prefer a brand if its product offers value for the money.	3.3	8.0	**34.0**	30.7	24.0
	3. I will prefer a brand if its product is a good product for the price.	2.7	8.7	32.0	**36.7**	20.0
	4. I will prefer a brand if its product is economical.	2.7	8.7	**38.0**	33.3	17.3

3. Perceived functional value (product quality/ performance)	1. I will prefer a brand if its product has consistent quality.	1.3	6.7	27.3	**40.7**	24.0
	2. I will prefer a brand if its product is well-made.	1.3	6.7	26.7	**38.7**	26.7
	3. I will prefer a brand if its product has an acceptable quality.	1.3	5.3	27.3	**42.0**	24.0
	4. I will prefer a brand if its product lasts a long time.	1.3	4.7	33.3	**36.0**	24.7
4 Perceived emotional value	1. I will prefer a brand if its product is one that I would like.	2.7	5.3	32.0	**46.7**	13.3
	2. I will prefer a brand if its product makes me want to buy it.	2.7	5.3	32.0	**47.3**	12.7
	3. I will prefer a brand if its product makes me want to use it.	2.0	6.0	25.3	**50.0**	16.7
	4. I will prefer a brand if its product makes me feel good.	2.7	4.0	30.0	**45.3**	18.0

Thirdly, there have 4 out of 16 statements used for determining the sub-domain in multiple perceived values, perceived functional value (product quality/ performance). Refer to Table 3, it showed that most of respondents are agreed in 4 statements of perceived functional value (product quality/ performance) which are statement 1 (40.7%), statement 2 (38.7%), statement 3 (42.0%), and statement 4 (36.0%).

Fourthly, there are 4 statements selected to measure perceived emotional value. In Table 3, it showed that most of the respondents (an average of 47.3%) agreed that they would influence by perceived emotional value in statement 1 (46.7%), statement 2 (47.3%), statement 3 (50.0%), and statement 4 (45.3%).

Brand Preferences

In Table 4, there are 4 statements which selected to measure perceived brand preference. Table 4 showed that 48.0% of respondents agreed statement 1, and 45.3% of respondents agreed statement 3. While statement 2 and statement 4 are neutral, which have 42.0% of respondents and 44.0% of respondents.

Table 4: Itemisation for Brand Preference, in percentage (%)

Variables	Statement	1	2	3	4	5
Perceived Brand preference	1. I prefer a brand because I think this brand is superior to other competing brands.	4.7	3.3	33.3	**48.0**	10.7
	2. I prefer a brand simply because I prefer it.	8.0	5.3	**42.0**	40.0	9.3
	3. When considering purchasing decision of a product, I would consider a particular brand first.	3.3	5.3	37.3	**45.3**	8.7
	4. I am interested in trying other brands.	4.7	2.7	**44.0**	33.3	15.3

Mean Differences of Selected Variables

For gender, there was some difference between male and female (refer to Table 5). There has a greater impact on female, which total mean of celebrity endorsement was 60.1, and a total mean of multiple perceived value was 61.1. Celebrity endorsement and multiple perceived value could impact on female more than male because the female would more focus on their appearance look like (Khan, 2018). Female like to shop more than male because shopping would make them feel relax and enjoy (Koca & Koç, 2016). Thus, female focus more than male on the fashion appearance products.

Table 5: Mean Score Differences of Selected Variables

		Celebrity Endorsement				Multiple perceived values			
		RM	I	E	N	SV	FV.P	FV.Q	EV
Gender	Male	14.2	14.0	14.0	12.7	14.1	14.2	14.8	14.4
	Female	15.7	15.4	15.0	14.0	15.4	14.7	15.8	15.2
Age	17-21	14.9	14.5	14.1	13.6	14.7	13.5	14.6	14.5
	22-26	14.8	14.6	14.4	13.0	15.0	14.8	16.0	15.1
	27-30	14.0	15.3	13.8	12.4	12.6	18.0	14.4	12.7
	31-34	12.0	16.0	16.0	16.0	12.0	12.0	20.0	16.0
	35 and above	16.0	16.0	20.0	12.0	16.0	20.0	20.0	18.0
Student type	Local	14.5	14.0	14.0	13.3	14.6	14.9	15.1	14.7
	International	15.2	15.5	15.1	13.2	14.7	13.7	15.3	14.7
Education Attainment	Foundation	14.7	14.4	14.2	13.2	14.6	15.6	16.1	14.5
	Diploma	15.4	15.5	14.7	14.6	16.0	13.1	14.2	14.2
	Degree	14.3	14.0	14.1	12.8	14.2	14.2	15.1	14.8
	Master	16.4	16.6	15.7	13.1	14.9	16.6	16.9	15.2
Marital Status	Single	14.8	14.5	14.3	13.2	14.6	14.3	15.1	14.7
	Married	15.0	18.0	17.0	15.0	15.0	18.0	18.0	16.5
Religion	Islam	15.7	15.4	15.2	13.0	14.6	12.3	15.3	14.5
	Christian	14.4	14.2	14.4	13.5	14.9	14.3	15.2	15.3
	Buddhist	14.8	14.5	14.5	12.9	15.1	15.1	15.8	15.1
	Hindu	14.2	14.3	13.2	13.2	13.6	16.7	14.5	12.9
	Taoism	16.0	19.0	12.0	16.0	12.0	18.0	14.0	14.0

The results found that younger respondents who are the group of 17-35 would influence more by the celebrity endorsement and multiple perceived values in purchasing brand preference of fashion apparel products. The student type in APU has divided into categories which are a local and international student. Celebrity endorsement influenced international students (total $\bar{x}$ = 59) more than local students ($\bar{x}$ = 55.8) while multiple perceived value influenced local students (total $\bar{x}$ = 59.3) slightly higher than international students (total $\bar{x}$ = 58.6). This influenced their behaviour because local and international students have different cultures. So, they would be influenced by different variables.

For education attainment, the undergraduate in APU who study master have higher mean scores than others. This means they would prefer a brand which influenced more by celebrity endorsement and multiple perceived values. Also, the marital status of respondents in single (total $\bar{x}$ = 56.8) less

celebrity endorsement impact than the respondents in married (total $\bar{x}$ = 65.0). While the marital status of respondents that are single (total $\bar{x}$ = 58.7) less influenced by multiple perceived value than respondents that are married (total $\bar{x}$ = 67.5). This could be explained that the respondents who were married would influence by celebrity endorsement and multiple perceived values. There are five types of religion which included Islam, Christian, Buddhist, Hindu, and Taoism. The total mean score of each religion would influence an individual in which impact on the celebrity endorsement and multiple perceived values.

Hypothesis Testing - Pearson Moment Correlation Table of Perceived Brand Preference with Selected Variables

For measuring the degree of a linear relationship between, the Pearson Moment Correlation test is used. All of the sub-domains from independent variables tested showed a perfect positive correlation except perceived functional value (price/value for money). The strongest relationship of sub-domain with the dependent variable is between perceived emotional value with perceived brand preference (0.623), followed by the perception of celebrity endorsers as a role model with perceived brand preference (0.507) and effectiveness of celebrity endorser's advertisement with perceived brand preference (0.496).

Table 6: Correlation table of Perceived Brand Preference with Selected Variables

|		1	2	3	4	5	6	7	8	9
1	Perception of celebrity endorsers as a role model	1								
2	Perceived influence of celebrity endorsers	0.605**	1							
3	Effectiveness of celebrity endorser's advertisement	0.564**	0.489**	1						
4	Perception of negative celebrity information	0.313**	0.433**	0.154	1					
5	Perceived social value	0.455**	0.383**	0.336**	0.317**	1				
6	Perceived functional value (price/value for money)	-0.157	-0.255**	-0.256**	0.206*	-0.166*	1			
7	Perceived functional value (product quality/performance)	0.287**	0.038	0.152	0.075	0.351**	0.82	1		
8	Perceived emotional value	0.504**	0.452**	0.458**	0.370**	0.619**	-0.127	0.464**	1	
9	Perceived brand preference	0.507**	0.434**	0.496**	0.307**	0.484**	-0.180*	0.480**	0.623**	1

The most significant correlation of perceived brand preference with perceived emotional value (r = 0.623, p ≤ 0.01) may due to consumers choosing a brand based on the emotion and feeling which reflect their values. The results from the data stated that respondents would prefer a brand that they like, want to use, want to buy, and make them feel good ($\bar{x}$ = 14.7).

While, the significant correlation of perceived brand preference with perceived functional value in price or value for money ($r = -0.180$, $p \leq 0.05$). It is a perfect negative correlation with $p \leq 0.05$ because of the decrease in the price or value of money for the fashion apparel product, the increase in consumer would purchase. The mean of perceived functional value (price/value for money) was 14.4. The finding stated that consumers would prefer a brand when it is cheap, value for money, and so on.

Pearson Moment Correlation

Figure 1 showed a significant correlation between the variables in this study. All of the sub-domains of the variables are significant at $p \leq 0.01$ level (1-tailed) and positively influence brand preference except perceived functional value (price/value for money) is negative influence brand preference at $p \leq 0.05$. Hence, the hypothesis from H01 to H08 has been rejected.

Figure 1: Pearson Moment Correlation Coefficient Model (N=150)

14
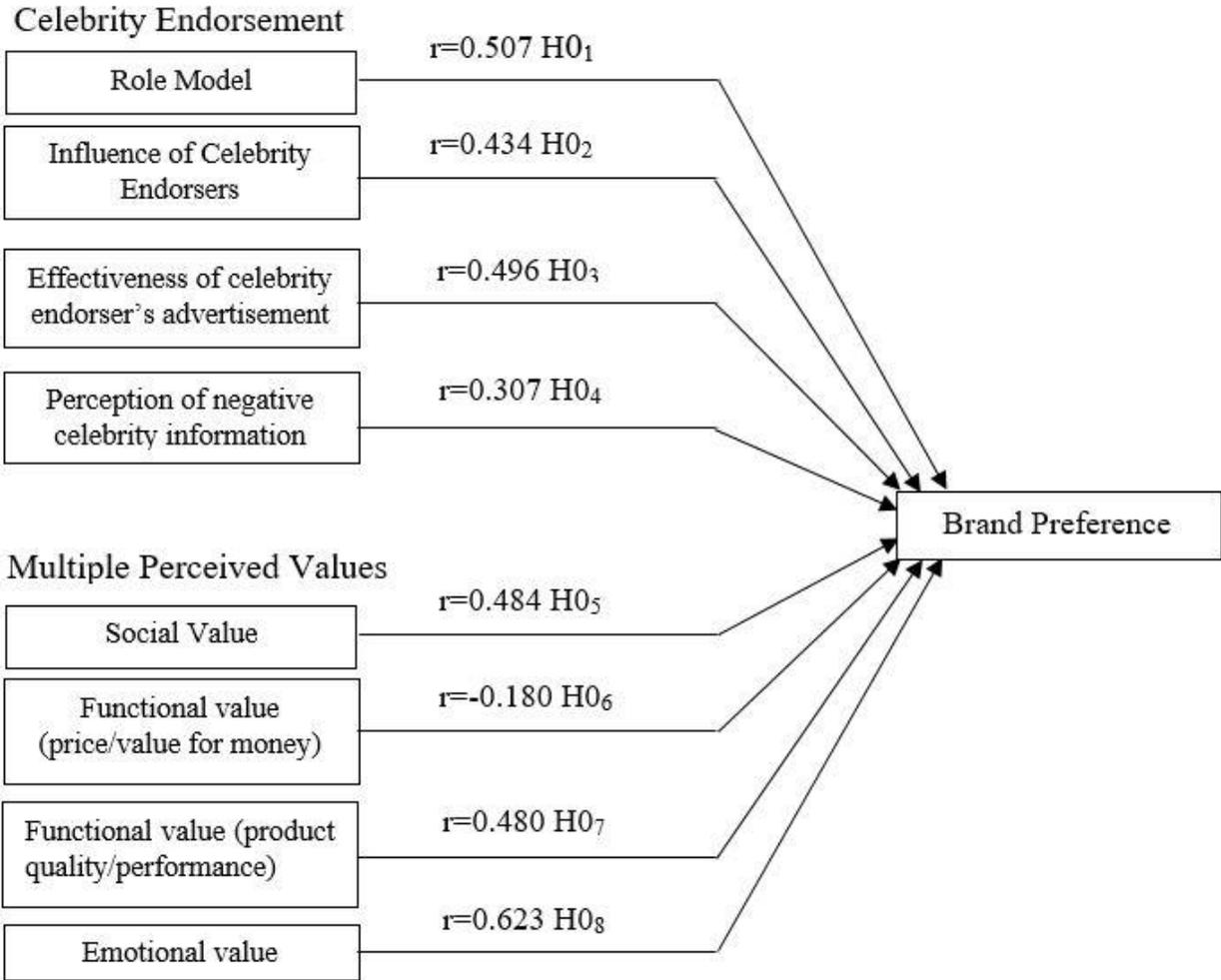
Summary of Multiple Regression Analysis for Brand Preference

The F statistic for the overall goodness of fit for the model is 20.075, which is significant at $\alpha = 0.05$. Without the non-significant variables, the final regression model produced by the enter method for brand preference in fashion apparel products is: Brand preference in fashion apparel products = 1.620 + Effectiveness of celebrity endorsement 0.202 + Perceived functional value (product quality/performance) 0.232 + Perceived emotional value 0.210.

Table 7: Summary of Multiple Regression Analyses for Brand Preference

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.620	1.448		1.118	0.265
Role Model	0.053	0.074	0.060	0.721	0.472
Perceived influence of advertisement	0.093	0.070	0.109	1.329	0.186
Effectiveness of celebrity endorsement	0.202	0.074	0.207	2.735	0.007
Perception of negative celebrity information	0.049	0.051	0.065	0.963	0.337
Perceived social value	0.051	0.062	0.062	0.817	0.415
Perceived functional value (price/value for money)	-0.043	0.045	-0.059	-0.961	0.338
Perceived functional value (product quality/performance)	0.232	0.055	0.292	4.223	0.000
Perceived emotional value	0.210	0.075	0.243	2.788	0.006

From Table 7 illustrated the multiple regression analysis for brand preference in fashion apparel products. It shows there was 53.2% of R square, which is a variance for brand preference in fashion apparel products. This indicates that 53.2% of the dependent variable in which brand preference in fashion apparel products was clarified by the linear combination of the three predictor variables. The results clearly showed that perceived functional value (product quality/performance) was found to be strongly significantly towards one of the brand preferences in fashion apparel products, followed by perceived emotional value and effectiveness of celebrity endorsement among the 8 sub-domains from independent variables.

Conclusion, Implications and Recommendations

In this study, it was conducted among APU undergraduates. Celebrity endorsement could affect the brand preference of the respondents in fashion apparel products. The results showed that the perceived influence of celebrity endorsement is the most influential factor of celebrity endorsement. The factor of perceived emotional value in multiple perceived values had more impact on the respondents' brand preference. There were most of the respondents will prefer a brand because the product makes them want to use it. The majority of the respondents prefer a brand because the brand is superior to other competing brands. The mean differences between the selected variables were provided in this study. The independent variables were used to investigate with each of sub-domain in celebrity endorsement and multiple perceived values. These would be different influences toward brand preference. From the result of the Pearson Moment Correlation Test, all of the hypotheses were rejected.

The output of the research providing celebrity endorsement and multiple perceived values towards the brand preferences in fashion apparel products could be referenced by future researchers. For the future questionnaires, it still could be referred from this study. The recommendation provided for academic research is focusing on a large sample size which can be improved in reflecting the population. These can make the results of the study more accurate, significant, and valuable. Time management also crucial in this study. The researchers can complete the study in time with quality work which involved in an accurate result.

References

Ebrahima, R., Ghoneima, A., Irania, Z. & Fan, Y. (2016). A Brand Preference and Repurchase Intention Model: The Role of Consumer Experience. Journal of Marketing Management, 32(13-14), p. 1230–1259.

Islam, M. F., Rahman, M. M. & Hossain, M. A. (2014). Influence of Factors on Female Consumers' Fashion Apparel Buying Behavior in Bangladesh. Global Journal of Management and Business Research: E-Marketing, 14(8), pp. 48-56.

IZEA (2017). Which Brands Your Favorite Celebrities Endorse. [Online] Available at: https://izea.com/2017/02/06/celebrity-endorsements-brands/ [Accessed 15 November 2019].

Khan, G. (2018). Gender Differences in Fashion Consciousness Among Malaysian Youth. 2012 Global Marketing Conference, 1(1), pp. 1220-1235.

Koca, E. & Koç, F. (2016). A Study of Clothing Purchasing Behavior By Gender with Respect to Fashion and Brand Awareness. European Scientific Journal, 12(7), pp. 234 -248.

Singh, R. P. & Banerjee, N. (2018). Exploring the Influence of Celebrity Credibility on Brand Attitude, Advertisement Attitude and Purchase Intention. Global Business Review, 19(6), pp. 1622-1639.