

The Impact of The Rural Culture and Cultural Attractions on Poverty Alleviation: The Moderating Effect of Tourism Resources

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Abstract

This study aims to investigate the impact of rural culture and cultural attractions on poverty alleviation and the moderating effect of tourism resources on rural, culture, wildlife, nature and physical. Convenience sampling was applied in selecting 520 respondents. The Statistical Package for Social Science was used to analyse the descriptive statistic while Partial Least Square-Structural Equation Modelling (SEM) was used to analyse the hypotheses. The results show both rural culture and cultural attractions have a positive effect on poverty alleviation. Besides, tourism resources have a positive moderating effect on rural culture and poverty alleviation. Poverty reduction through tourism, communities right to use tourism resources and accommodate different cultural views are supported by Human Development Theory on the positive findings. However, tourism resources a negative result on cultural attractions and poverty alleviation. Therefore, this study suggests that preserving cultural attractions such as cultural buildings, landscapes, monuments, traditions, arts, crafts, food, and customs should be encouraged for socio-economic benefits.

Keywords: Rural Culture, Cultural Attractions, Tourism Development, Moderator, Tourism Resources, Malaysia

Introduction

Cultural tourism is defined as an interaction between tourists and locals in exchanging the different ways of life that has been practiced from generation to generation (Dong 2020). Cultural tourism is a product that contributes economic and non-economic benefits to people (Mitchell & Ashley, 2010). Moreover, cultural tourism fosters pride through the sharing of traditional and customary values and helps in preserving culture (Satarat, 2010). In Sarawak, the cultural values, heritage, and traditions of 28 ethnic groups provide an avenue to promote cultural tourism (Ministry of Tourism, Arts, and Culture Sarawak, 2016). The ethnic groups'

traditional knowledge of the forest and medicinal plants, fishing activities, weaving techniques, cultural heritage, and festivals have also contributed to cultural tourism (Lo, Ramayah & Hui 2014).

In developing countries, economic diversification has contributed economically and culturally to the livelihood of local communities (Manwa & Manwa, 2014). Sarawak receives tourists from Brunei, Indonesia, the Philippines, China, Singapore, the United Kingdom, India, Australia, and Thailand. Sarawak's Gross Domestic Product from tourism increased from RM8.4 Billion in 2016 to RM8.59 Billion in the following year. Global tourism is projected to attract 1.8 billion tourists in 2030 (United Nations World Tourism Organization, 2017). The projection shows the potential domestic and inbound overnight in hotels lead a country to conclude that tourism alleviates poverty (Llorca-Rodríguez, García-Fernández & Casas-Jurado, 2020). In 2016, Sarawak (1.7%) had the smallest Income Recipients Per household compared to Labuan (2.0%) that had the highest among all the states in Malaysia. The Mean Household Income by working population in Sarawak had the smallest increase at 1.3% than 19% on Penang Island. Less than 6% - 20% of households in rural areas of Sarawak located within 5km - 9km to the government secondary schools, and public healthcare and only 30% of households in Sarawak have access to piped water (Khazanah Research Institute, 2018).

Success in tourism has created a mechanism for engaging the local community in tourism and utilizing tourism resources that contribute toward socio-economic development (Pawson, d'Arcy & Richardson, 2015). Therefore, based on current tourism Gross Domestic Product trends, Sarawak provides the best avenue for this study to embark upon the issue of the tourism sector and its contribution to human development. Specifically, this study examines the impact of rural culture and cultural attractions on poverty alleviation and to identify the moderating effect of tourism resources on poverty alleviation.

Literature Review

The homestay programme emphasised in the Ninth Malaysia Plan (2006-2010) through the Rural Community Tourism Program and the Homestay Tourism Program focused on promoting the rural culture in Malay villages to protect, preserve, and enhance Malay traditions (Economic Planning Unit, 2006; Satarat, 2010). Like, the homestay programme, community-based tourism such as in Namibia (Saarinen 2010), Thailand (Satarat, 2010; Nitikasetsoontorn, 2014), Malaysia (Lo, Ramayah & Hui, 2014), and community-based cultural tourism (Salazar, 2012) have introduced rural culture to tourists. Rural culture plays an essential role in developing tourism products to generate income. Therefore, rural culture was chosen as an independent variable in this study.

Cultural attractions is identified as the movement of a person for cultural enthusiasm, such as the performing arts (e.g., the Adelaide Arts Festival or Perth International Arts Festival), cultural tours (e.g., to museums, temples, historical monuments or archaeological sites), pilgrimage tours (e.g., religious travel), festival tours (e.g., Jazz festivals or Food festivals) (Derrett, 2004). Local food festivals have been identified as a cultural attractions in Italy, Australia, Malaysia, and New Zealand discouraged the growth of fast food industries and created job opportunities for the farmers (Frost & Laing, 2013). Jazz festivals (e.g., Jazzinty Novo Mesto and Jazz Cerkno) in the Republic of Slovenia increased tourist arrivals and employment in local areas (Vecco & Srakar, 2017). Cultural attractions in a few countries have

added value to tourism jobs and economic growth; therefore this study further measures cultural attractions in alleviating poverty in Sarawak.

Tourism as a labour-intensive business uses tourism resources owned by the local community or the government to enhance the local community's livelihood and a country's economy (Keovilay, 2012; Miyakuni, 2012; Truong, 2014; Njoya & Seetaram, 2018). Tourism resources are unique because consumption happens at the place of production. The scenario created at tourist destinations is more likely to have a direct impact than other places where product consumption is located away from its destination (Duffield, 1982). The development of tourism resources brings monetary and non-monetary benefits to the community by operating those tourism resources (Gholami, Assayesh & Alipour-Nakhi, 2010). Sarawak blessed with tourism resources which have earned benefits for the local people with the use of tourism resources. Tourists travel to experience tourism resources in different places, while the local community uses tourism resources to earn a living (Sathkumara, 2014). In this study, cultural, wildlife, natural, rural, and physical (e.g., caves) resources are categorised as tourism resources and measured as a formative moderator variable.

On the contrary, the absence of local government involvement and lack of community knowledge in Vietnam has discouraged the local community from employing cultural resources in tourism (Suntikul et al., 2016). The Himalayan community in Bhutan has embraced the Gross National Happiness rather than the Gross National Product in measuring the quality of life. The Gross National Happiness measures happiness, spirituality, and cultural authenticity. Cultural authenticity is among the most popular attractions for tourists. As a result, cultural resources have impressively increased the number of tourist arrivals in Bhutan and alleviated poverty (Suntikul & Dorji, 2016).

Wildlife tourism is growing in protected areas in developing countries that are rich in biodiversity and rainforests. The Volcanoes National Park Rwanda is famous for mountain gorillas. The National Park contributes to the pro-poor income through value chain businesses, namely, accommodation, food and beverages, gorilla trekking tourism activities, and shopping (Spenceley et al., 2010). In North America, wild horses' tourism contributes to economic development. Tourists tend to hug the wild horses as hugging symbolises the western frontier (Notzke, 2016). While, wildlife resources contribute to a country's economy, employing wildlife resources in tourism interrupts the ecology of the animals such as disturbance in feeding and breeding patterns, interruption of parent and offspring bonds, and habitat modification (Moorhouse, d'Cruze & Macdonald, 2017). Therefore, employing wildlife resources such as Orangutan, Hornbill, Crocodile, Wild Boar and Proboscis Monkey as tourism resources to generate income is acceptable through conservation and protection of ecology strategies in Sarawak.

Ban Mae village, in Chiang Mai, Thailand utilises the natural resource of wild orchids as a tourism product and a symbol of the village's attractions. The local community sells the wild orchids and wild honey to tourists. In Bang Chao Cha village, Angthong, Thailand, the local community sells baskets made from rattan (Satarat, 2010). Rural resources are defined as capital assets to generate income via tourism (Chin, 2015). In Western countries, visiting vineyards, wineries, wine demonstrations, and wine festivals are considered as utilising rural resources (Hall & Macionis, 1998). In the Waterloo region of Ontario, Canada, the rural

landscape such as rolling hills, maple woods, and the Grand River Valley are used to produce rural tourism products (McClinchey & Carmichael, 2010). In Sarawak, rural tourism, sustainable rural tourism, village tourism, rural sports tourism (e.g., folk games), farm tourism, geo-tourism, country music (e.g., sape), rural medical tourism (e.g., herbs) and gastronomy tourism (food tourism) can be created with the use of rural resources to generate income.

Physical resources encompass caves, heritage buildings, landmarks, historical places, memorials, and museums (Kiernan, 2013). Physical resources generate income from entrance fees (Butler & Hinch, 2007). Caves create national parks for ecosystem sustainability through tourism (Gray, 2004; Kiernan, 2013). The Musanze Caves in Rwanda uses its physical resources to promote archaeology, nature, adventure, heritage, and cultural tourism. Tourism in Hong Kong contributes to conserving physical heritage buildings. Using physical heritage buildings in tourism extends the building's life span, saves demolition waste, encourages energy reuse, and provides economic benefits to the locals (Yung & Chan, 2012).

Employing tourism resources of culture, wildlife, nature and rural and physical resources brings socio-economic improvement to people. Therefore, in this study, tourism resources are identified as a moderator because when tourism resources are utilised, the impacts of rural culture and cultural attractions increase and thus the poverty level decreases. Tourism resources as a moderator measure the strength and/or weakness relationship between rural culture, cultural attractions, and poverty alleviation (Baron & Kenny, 1986).

Poverty alleviation means improving human development by having earnings above the Poverty Line Income, raising the socio-economic status of an individual and improving access to sources of energy, water supply, tarred roads, cooking appliances, education and healthcare (Manwa & Manwa, 2014). As poverty declines, the income of a household increases with a person's ability to earn more cash. An increase in income improves the quality of life and social welfare for the household (Sen, 1999). Additionally, developing countries give importance to poverty alleviation to people living in extreme poverty and living on earnings of less than US\$1.90 per person per day (World Bank, 2016). Therefore, poverty alleviation was chosen as an dependent variable in this study.

Underpinning Theory

In 1990s to 2000s, the Human Development Theory was used to alleviate poverty through tourism, to increase community access to tourism resources and to accommodate different cultural views (Welzel, Inglehart & Klingemann, 2003; Saarinen & Rogerson, 2014; Sharpley & Harrison, 2019). The Human Development Theory in tourism started with pro-poor tourism, philanthropy tourism and volunteer tourism in British and Europe, then expanded to Australia, the United States and is now growing in Asian and African countries as charity tourism that works to alleviate poverty (Zyl, Inversini & Rega, 2015). Pro-poor tourism, philanthropy tourism and volunteer tourism carry the concept of traveling for humanitarianism to improve the quality of life among the local community and preserve the culture (Mostafanezhad, 2014; Sharpley & Harrison, 2019). The theory integrates poverty reduction strategies to recognise the multi-dimensional nature of poverty such as a lack of electricity, clean drinking water, infrastructure, education, and healthcare and believed tourism revenue benefits the locals via cultural tourism (Sharpley & Telfer, 2014).

Conceptual Framework

This study investigates the effects of rural culture and cultural attractions on poverty alleviation and examines the relationship of the rural culture and cultural attractions with tourism resources on poverty alleviation. The rural culture (Satarat, 2010; Saarinen, 2010; Salazar, 2012; Nitikasetsoontorn, 2014), cultural attractions (Frost & Laing, 2013; Vecco & Srakar, 2017); tourism resources (Mthembu, 2011; Keovilay, 2012; Miyakuni, 2012; Truong, 2014) and poverty alleviation (World Bank, 2016) have been adopted from various studies. In short, this study aims to investigate tourism resources as a formative moderator between rural culture, cultural attractions, and poverty alleviation and contribute to the research gap as shown in Figure 1.

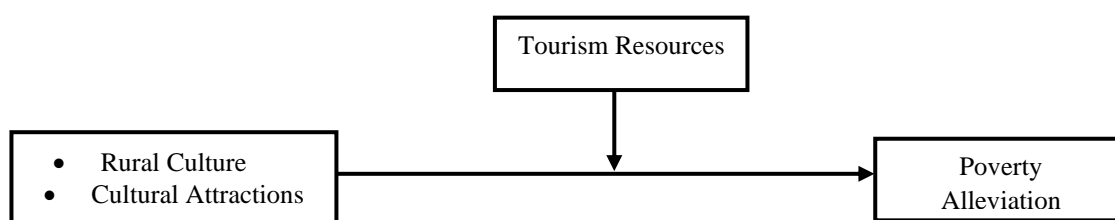


Figure 1: The conceptual framework

Source: Satarat (2010), Saarinen (2010), Mthembu (2011), Keovilay (2012), Miyakuni (2012), Salazar (2012), Frost and Laing (2013), Nitikasetsoontorn (2014), Truong (2014), World Bank (2016), and Vecco and Srakar (2017)

Rural Culture and Poverty Alleviation

Rural culture and poverty alleviation are related to homestay programmes or community-based tourism. Homestay or community-based tourism is an alternative form of lodging in place of expensive accommodation (Agyeiwaah, Akyeampong & Amenumey, 2013). Homestays allow tourists to stay with a selected accommodation provider and experience the host's daily lifestyle and rural culture, which in turn increases the involvement of rural communities to generate income (Ahmad, Jabeen & Khan, 2014). The homestay activities in Johor, Malaysia have brought a positive impact for a better source of livelihood (Salleh et al., 2016). A community-based tourism weaving co-op project in Ccaccacollo, Peru has created employment and income from the selling of the woven products to tourists (Lucchetti & Font, 2013). Another study on community-based tourism and poverty alleviation in Sapa, Vietnam highlights that 55 communities were glad about the income generation through community-based tourism (Le, Weaver & Lawton, 2016). Overall, rural culture increases tourist arrivals and improves life for the local communities. Hence, hypothesis H1 is structured:

H1: There is a positive relationship between rural culture and poverty alleviation.

Cultural Attractions and Poverty Alleviation

Tourists often demand an authentic exhibition of culture and lifestyles that are considerably different from one another (Reisinger & Steiner, 2006). Therefore, cultural attractions are a great potential for travel itineraries. People with different lifestyles, traditions and cultural patterns offer different customs, dress codes, handicrafts, ways of cooking and ways of producing local food. The differentiation in culture creates a unique attractions for tourists (Cetin & Bilgihan, 2016). At the same time, the local communities' involvement in providing cultural activities for tourism directly promotes a destination as a cultural attractions

(Richards, 2001). Thus, cultural attractions are one of the suitable mechanisms to bring local communities all over the world out from poverty (Aslam & Jolliffe, 2015). For example, in the Republic of Slovenia, the Jazz Festival as a cultural attractions increased tourist arrivals and alleviated poverty (Vecco & Srakar, 2017). Cultural attractions also enable the local communities to earn from selling entrance tickets and souvenirs, and working as tour guides (Ertugral & Dincer, 2003). Generally, the tourism sector promotes the selling of traditions and exotic lifestyles as a cultural attractions. Hence, hypothesis H2 is structured:

H2: There is a positive relationship between cultural attractions and poverty alleviation.

Tourism Resources Moderate the Relationship between Rural Culture and Poverty Alleviation

As many local communities continue to battle with poverty, tourism in the global trade represents people to travel to experience diverse tourism resources which contributes to poverty alleviation (Muhanna, 2007). Tourism resources bring tourists in as consumers get in contact with the local communities who are as a producers of tourism resources which generate socio-economic benefits (Musinguzi, 2012). One of the tourism resources that is often abundant in local communities is cultural resources in rural areas. Tourism provides a path to market the cultural resources through cultural tourism and homestays (Okumus et al., 2012). Cultural preservation in Human Development Theory has also created an awareness among the younger generation of non-financial benefits (Hillman, Moyle & Weiler, 2017). Rural culture acts as an effective tool in fighting against poverty especially with the use of tourism resources (Musinguzi, 2012). Therefore, H3 is developed:

H3: Tourism resources moderate the relationship between rural culture and poverty alleviation.

Tourism Resources Moderate the Relationship between Cultural Attractions and Poverty Alleviation

Tourism resources as in physical heritage buildings, historical places, landmarks, museum, craft applications, cultural landscapes, local traditional food, clothing and festivals symbolise the differences in people's lifestyle as cultural attractions (Smith & Ram, 2017). Therefore, cultural attractions produce various types of tourism products such as arts tourism, religious tourism, pilgrim tourism, indigenous cultural tourism, ethical tourism, community-based tourism, wine tourism, heritage tourism for the world's population to sightsee. Moreover, tourism resources are also treated as livelihood resources in the context of achieving community development (Daskon & Binns, 2010). Cultural attractions involve the local communities in tourism while creating permanent solutions to poverty by generating financial benefits (Kennedy & Dornan, 2009). Viewing tourism resources as a livelihood resource is also explained in the sustainable livelihood framework (Petersen & Pedersen, 2010). Thus, the moderator of tourism resources has a stronger effect on cultural attractions and poverty alleviation. Therefore, H4 is developed:

H4: Tourism resources moderate the relationship between cultural attractions and poverty alleviation.

Research Method

Kuching and Miri were selected for this study as both divisions record the highest tourist arrivals among other divisions in Sarawak. Tourist arrival in the year 2016 stands at 815,497 in Kuching followed by 352,888 in Miri (Ministry of Tourism, Arts, and Culture Sarawak, 2016).

Sampling gives a reliable sample size as well as saves time and cost rather than collecting data from an entire population (Rattan Eagles & Mair, 2012). A simplified formula by Yamane (1967) was used to calculate the sample size, where a 95% confidence level and the level of precision at 0.05 is assumed. In 2016, Kuching the capital of Sarawak had the highest population with 771,600 followed by Miri with 380,600. So, the total population of Kuching and Miri Divisions was 1,152,200.

$$n = \frac{N}{1+N(e)^2}$$

$$n = \frac{1,152,200}{1+1,152,200(0.05)^2} = 400 \text{ respondents}$$

Where:

n = sample size

N = population size

e = level of precision

Yamane's (1967) sample size formula suggests that the number of 400 respondents is adequate. In addition, Israel (1992) recommends that an adjustment in the sample size is needed to compensate for non-response to the questionnaires. Many researchers commonly add 10% - 30% to the sample size to compensate for uncompleted, unfilled and unreturned questionnaires. However, in this study the researcher included an additional 70% for mailed questionnaires. The number of mailed questionnaires can be substantially larger than the number required for a desired level of confidence and precision (Israel, 1992). In this study the sample size was increased by 70% from 400, with an additional 280 giving a sample size of 680. A sample size sum of between 30 - 500 is sufficient for most studies (Sekaran. 2003).

$$400 * (70/100) = 280 \text{ respondents}$$

$$400 + 280 = 680 \text{ total respondents}$$

The data collected was quantitative primary data. Removing the uncompleted, unfilled, and unreturned questionnaires, the remaining 520 questionnaires were used to analyse the impact of tourism on poverty alleviation. Convenience sampling was used to select the employees from the Sarawak Cultural Village (68 respondents), hotels [e.g., United Yes Retreat; Miri Merit; Miri Park City; Miri Marriot and Mulu-Marriot (163 respondents)], hostel [e.g., Bunker bed and breakfast (1 respondent)], resorts [e.g., Damai Puri; Damai Beach; Palm Beach and The Nomad (34 respondents)], national parks [e.g., Jong's Crocodile Park; Samajaya; Semenggoh Nature Reserve; Kubah; Santubung; Mount Gading and Mulu National Parks and Niah, Fairy and Wind Caves (164 respondents)], Malaysian Handicraft Development Corporation, Sarawak Branch (24 respondents) souvenir shops [e.g., Sue J's Handicraft, My Village Barok, Sarawak Handicraft, Usun Souvenir, and Art and Souvenir Gallery (8 respondents)], and Layer Cake Houses [e.g., Warisan Layer Cake House and Mira Layer Cake Factory (11 respondents)], as well as homestay owners [e.g., Annah Rais; Santubong; Tanah Hitam; Pueh; Kedayan and Patrick Homestays (47 respondents)].

The questionnaire has two sections. The first section covers, the profile of respondents while the second the Likert scale questions. The Likert-scale questions used a 1-5 and 1-7 scale from 'strongly disagree' to 'strongly agree' to measure 34 items. The 7-point Likert scale was used to measure the dependent variable of poverty alleviation, while the 5-point Likert scale was used to measure the independent variable of rural culture, cultural attractions, and tourism resources. The variety of choices in the scales created more variance among the variables (Bruner & Hensel, 1993). The items used to measure poverty alleviation, rural culture, cultural attractions, and tourism resources were adapted from Faulkner and Tideswell (1997), Yoon, Gursoy and Chen (2001), Satarat (2010), Mthembu (2011), Keovilay (2012), Musinguzi (2012), Miyakuni (2012), Mohamed (2013), Truong (2014), and Nitikasetsoontorn (2014).

The questionnaires were hand-delivered to the Sarawak Cultural Village, accommodation providers, National Parks, souvenir shops, and Layer Cake Houses. The respondents were requested to fill the questionnaire at their convenience within a week upon delivery. Respondents who failed to fill in the questionnaires within a week were given another week's extension; after the deadline, the questionnaires were considered unfilled. The Statistical Package for Social Science version 22.0 was used to describe the demographic characteristics of the respondents, while Partial Least Squares-Structural Equation Modelling 3.0 was utilized to assess the measurement and structural models. Partial Least Squares-Structural Equation Modelling 3.0 was employed because the model involved a combination of formative and reflective items (Hair, Ringle & Sarstedt, 2011). The items on tourism resources were formative, while those on rural culture, cultural attractions, and poverty alleviation were reflective.

Results

Descriptive Analysis

Most of the respondents in this study were male (56.5%), aged between 18-62, of Malay ethnicity (27.3%), married (64.1%) and with secondary education (65.6%). The majority of the respondent earns between RM1001-RM1500. (see Table 1).

Table 1

Demographic characteristics of the respondents

Demographic	Frequency (n)	Percentage (%)	Respondents (N=520)		
			Demographic	Frequency (n)	Percentage (%)
<i>Gender</i>			<i>Education status</i>		
Male	294	56.5	Primary education	53	10.2
Female	226	43.5	Secondary education	341	65.6
<i>Ethnicity</i>			Diploma	70	13.5
Malay	142	27.3	Degree	39	7.5
Iban	72	13.8	Others	17	3.2
Bidayuh	92	17.7	<i>Income level (RM)</i>		
Chinese	44	8.5	Less than 500	42	8.1
Kelabit	30	5.8	501-1000	153	29.4
Penan	29	5.6	1001-1500	193	37.1
Berawan	39	7.5	1501-2000	36	6.9
Others	72	13.8	2001-2500	44	8.5
<i>Marital status</i>			2501-3000	6	1.2
Single	176	33.8	3001-3500	24	4.6
Married	333	64.1	3501 and above	22	4.2
Others	11	2.1			
Respondents (N=520)		M	SD	Minimum	Maximum
Age (in years)		37	11.55	18	62

Statistical Analysis of the Measurement Model

The SmartPLS 3.0 (M3) was used to analyse the confirmatory factor analysis. Confirmatory factor analysis was used to measure the loading and weight of an item, reliability, and validity. This was followed by convergent validity which consists of composite reliability and average variance extracted and discriminant validity.

A total of 22 reflective and 12 formative items was designed to measure the research model but the item PA09 was deleted for having a lower loading of 0.494. Table 2 shows the loading values achieved for the rural culture (0.782 - 0.875); cultural attractions (0.761 - 0.871) and poverty alleviation (0.709 - 0.744) (Hair et al. 2010). The correlation of each item exceeded the recommended value of 0.5. The tourism resources weight was between (-0.081 - 0.364). Therefore, the items are reliable and valid for the convergent validity test.

Table 2

Result of the measurement model

Variable	Item	Loading/Weight	Composite reliability	Average variance extracted	Measure
Rural culture	RC1	0.822	0.933	0.700	Reflective
	RC2	0.875			
	RC3	0.843			
	RC4	0.852			
	RC5	0.841			
	RC6	0.782			
Cultural attractions	CA1	0.813	0.937	0.680	Reflective
	CA2	0.871			
	CA3	0.862			
	CA4	0.836			
	CA5	0.795			
	CA6	0.829			
	CA7	0.761			
Tourism resources	TR1	0.340	SIM	SIM	Formative
	TR2	0.025			
	TR3	0.069			
	TR4	-0.081			
	TR5	0.102			
	TR6	0.070			
	TR7	0.139			
	TR8	0.364			
	TR9	0.146			
	TR10	0.056			
	TR11	0.065			
	TR12	0.021			
Poverty Alleviation	PA01	0.733	0.900	0.529	Reflective
	PA02	0.709			
	PA03	0.735			
	PA04	0.744			
	PA05	0.736			
	PA06	0.714			
	PA07	0.724			
	PA08	0.721			

Note: PA09 deleted due to low loading

As mentioned, convergent validity consists of composite reliability and average variance extracted tests. The composite reliability values were highly reliable for rural culture (0.933); cultural attractions (0.937) and poverty alleviation (0.900) as the threshold point was above 0.708. The average variance extracted values for rural culture (0.700); cultural attractions (0.680) and poverty alleviation (0.529) were above the threshold value of 0.5 (Hair et al., 2014). Therefore, convergent validity was achieved in this study.

Discriminant Validity

Table 3 shows the comparison of the square root values of each variable. The average variance extracted values should be greater than other variables (Henseler & Chin, 2010). The square root values of average variance extracted for rural culture (0.836), cultural attractions (0.825) and poverty alleviation (0.727) were greater than any other variable. Therefore, discriminant validity was achieved.

Table 3

Discriminant validity of measurement model

	CA	PA	RC	TR
CA	0.825			
PA	0.524	0.727		
RC	0.699	0.501	0.836	
TR	0.539	0.609	0.524	N/A

Assessment of the Structural Model

Figure 2 shows the positive t-value result of rural culture (H1) and cultural attractions (H2) on poverty alleviation. The tourism resources (moderator) t-value interaction result shows a stronger relationship between rural culture and poverty alleviation (H3) and a weaker relationship between cultural attractions and poverty alleviation (H4).

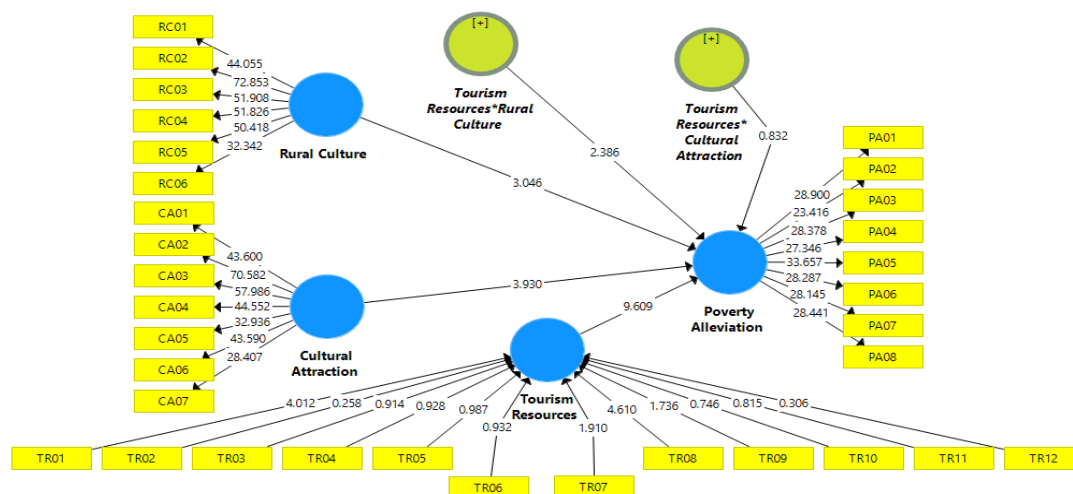


Figure 2: Results of structural model

Table 5

Path coefficients and hypothesis testing

Hypothesis	Relationship	Beta	t-value	Supported
H1	Rural culture → Poverty alleviation	0.138	3.046**	Yes
H2	Cultural attractions → Poverty alleviation	0.196	3.930**	Yes
H3	Rural culture * Tourism resources → Poverty alleviation	0.129	2.386**	Yes
H4	Cultural attractions * Tourism resources → Poverty alleviation	-0.042	0.832	No

Note: *p<0.05, t-value greater than 1.645-2.32 (1 tailed)

**p<0.01, t-value greater than 2.33 (1 tailed)

Discussion

H1: There is a positive relationship between rural culture and poverty alleviation.

Hypothesis 1 postulated a positive relationship between rural culture and poverty alleviation. Table 5 illustrates that the relationship between rural culture and poverty alleviation ($\beta=0.138$, $t\text{-value}=3.046$) is positive, where the t -value is higher than 1.645 (<0.05). The results appear to be in line with Agyeiwaah, Akyeampong and Amenumey (2013), Ahmad, Jabeen and Khan (2014), Salleh et al. (2016), and Le, Weaver and Lawton (2016) that rural culture alleviates poverty. The results also agree with the Human Development Theory which states that the promotion of rural culture in tourism engages the local communities to gain socio-economic benefits. The local communities in this study are pleased to preserve their rural culture and traditions for the future generation. This creates an awareness among the younger generation in Sarawak on the importance of culture in generating income. The anxiety of losing their valuable heritage to modernisation explains why the local communities in Sarawak choose to preserve their rural culture. The preservation has also attracted the attention of tourists and United Nations Educational Scientific and Cultural Organisation to create cultural tourism. For example, the creation of Annah Rais Homestay in Kuching and collecting entrance fee to Annah Rais Homestay contributes to the Bidayuh tribe. The finding is supported by Grobar (2017) who confirmed that, in Peru, handicraft businesses preserve and promote rural culture. Furthermore, promoting rural culture to tourists breaks the isolation of the local communities and enables them to communicate with people from different countries to enhance their livelihood.

H2: There is a positive relationship between cultural attractions and poverty alleviation.

Hypothesis 2 postulated a positive relationship between cultural attractions and poverty alleviation ($\beta=0.196$, $t\text{-value}=3.930$) (see Table 5). The finding is compatible with Ertugral and Dincer (2003), Aslam and Jolliffe (2015), and Vecco and Srakar (2017) who said that cultural attractions contribute to poverty alleviation. The finding is also consistent with the Human Development Theory which explains that cultural attractions in tourism improve the quality of life among the locals in Sarawak. For example, the Annah Rais Longhouse in Padawan is a unique tourist cultural attraction in Kuching. The Bidayuh community provides homestay facilities, works as tour guides, and sell their local harvest and souvenirs to tourists to generate income. Meanwhile, the entrance ticket charges are used to upgrade infrastructure facilities. The Sarawak Cultural Village and Annah Rais Longhouse are rich in cultural-historical and architectural monuments that make a treasury of the Sarawak culture for the next generation. The cultural attractions give a chance for all to visit. The aim of Sarawak Cultural Village and Annah Rais Longhouse is to attract a considerable number of domestic and foreign tourists to generate income. Likewise, in Kuching and Miri, the Gawai or Harvest Festival, Rainforest Music Festival, 'Nukenen' or Food and Cultural Festival, Siniawan (Chinese Village) Festival and Kaul Festival by the Melanau people are a few festivals celebrated to promote cultural attractions in generating income.

H3: Tourism resources moderates the relationship between rural culture and poverty alleviation.

Hypothesis 3 tested the moderating effect of tourism resources. Table 5 shows that tourism resources have a stronger relationship between rural culture and poverty alleviation ($\beta=0.129$, $t\text{-value}=2.386$). The result is consistent with the Human Development Theory which describes that human's right in utilising resources to increase socio-economic development. Finding from this study show that utilising tourism resources such as culture, wildlife, nature,

rural and physical alleviates poverty. The utilisation of tourism resources in a rural culture promotes permanent conservation and encourages sustainable management of Sarawak cultural heritage assets. Moreover, the use of tourism resources has helped in increasing the socio-economic level of a community and conserved the rural culture of Iban, Bidayuh, Kelabit, Penan, and Berawan. Vargas-Hernandez (2012), and Safiullin e al. (2014) said rural culture is a vital factor for socio-cultural and economic development in providing the use of tourism resources for livelihood sustainability is consistent with H3.

According to Figure 3, the relationship is positive at the high-level use of tourism resources but there is no relationship at the low-level use of tourism resources. The high-level use of tourism resources such as culture, wildlife, nature, rural and physical contributes to rural culture and poverty alleviation, as well as tourism resources utilised to produce cultural tourism, community-based tourism and gastronomy tourism to generate income. The low usage of tourism resources shows no relationship between rural culture and poverty alleviation. Therefore, a high-level use of tourism resources is recommended for poverty alleviation in tourism development.

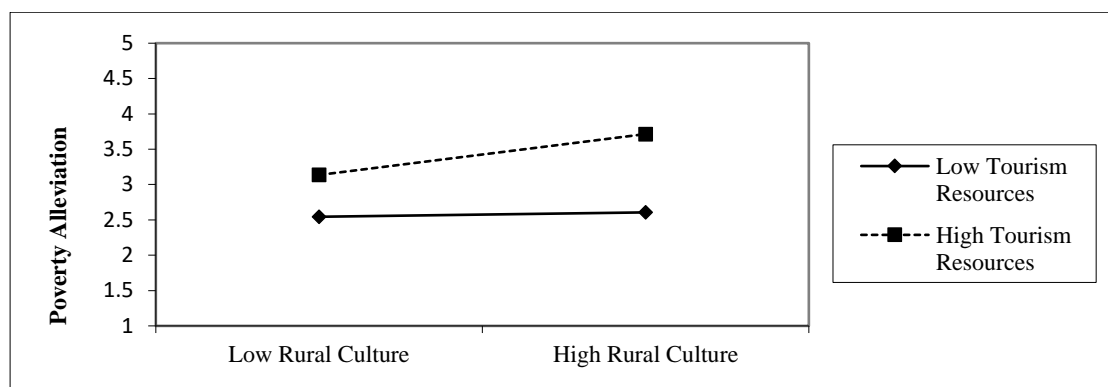


Figure 3: The effect of interaction on rural culture and tourism resources on poverty alleviation

H4: Tourism resources moderate the relationship between cultural attractions and poverty alleviation

Hypothesis 4 tested tourism resources effect between cultural attractions and poverty alleviation. The results reveal that tourism resources have a weak relationship between cultural attractions and poverty alleviation ($\beta=-0.042$, $t\text{-value}=0.832$) (see Table 5). The results seem to contradict past studies such as Daskon and Binns (2010); Petersen and Pedersen (2010) and Smith and Ram (2017) who view tourism resources as a resource to generate income. A lack of community commitment, influence of the power of authorities, economic circumstances, and levels of modernisation probably have led to this insignificant result. Therefore, engaging and managing tourism resources wisely in tourism helps in alleviating poverty.

The highest number of respondents (86 / 16.5%) work as accommodation providers while the lowest number of respondents were handicraft, pottery and edible local product producer (28 / 5.4%) and souvenir sellers (26 / 5.0%). Referring to Table 4, the result show that the larger tourism businesses gained more revenue than local communities. Therefore, promoting cultural resources such as festivals, traditions, heritage, and celebrations in rural areas may benefit the locals directly. Implementing a policy to export Sarawak handicrafts

worldwide by the Ministry of Tourism, Arts, and Culture Sarawak may contribute to the community directly as what has been proven in Peru (Grobar 2017).

Table 4

Tourism Related Jobs of the Respondents

Tourism Job Specialisation	Respondents (N=520)	
	Frequency (n)	Percentage (%)
Tour guide	42	8.1
Accommodation provider (i.e., homestay, hotel, resort, or bed and breakfast)	86	16.5
Food and beverage provider	75	14.4
Transport provider	43	8.3
Travel operator (i.e., travel agency and information centre)	63	12.1
Tourism event and cultural activity organiser	45	8.6
Souvenir seller	26	5.0
Handicraft, pottery or edible local product producer	28	5.4
Nature conservation and wildlife, bat and bird protector	30	5.8
Tourism management department	50	9.6
Other tourism jobs (i.e., security, maintenance, gardener)	32	6.2

Multicollinearity (VIF)

Table 6 indicates that multicollinearity did not exist among the exogenous variables as all variance inflation factor (VIF) values are under or less than 3.3 (Diamantopoulos and Sigouou 2006). Therefore, there were no multicollinearity issues between the constructs in the structural model.

Table 6

Variance Inflation Factors (VIF)

Exogenous Construct	VIF
Rural Culture	2.272
Cultural Attractions	2.612
Tourism Resources	2.719

Note: Variance Inflation Factors (VIF) should be under or less than <3.3

Coefficient of Determination (R^2) of the Moderating Effects

The R^2 value is used to measure the strength of the moderating effects of tourism resources on the conceptual framework in this study. Table 7 indicates the model predicted accuracy increased from 0.435 to 0.447 with tourism resources. The rule of thumb for the acceptable R^2 is 0.67 (substantial), 0.33 (moderate) and 0.19 (weak) (Chin, 2010). Thus, the framework strength was at a moderate level and can be considered acceptable.

Table 7

 R^2 on poverty alleviation with and without interaction effect

Endogenous Construct	R^2 Variance	
	Without Interaction Effect	With Interaction Effect
Poverty Alleviation	0.435	0.447

Conclusions

The aim of this study is to examine the impact of rural culture and cultural attractions on poverty alleviation and the moderator effect of tourism resources between rural culture and cultural attractions in alleviating poverty. The findings show permanent conservation and sustainable use of tourism resources such as cultural buildings, monuments, cultural landscapes, traditional arts, crafts, food, and customs can promote socio-economic development. The finding of this study can become the avenue of future studies to focus on certain ethnic groups Sarawak on cultural tourism in alleviating poverty with the use of tourism resources. Besides, a case study involving one ethnic group might explain cultural tourism in a specific context. The local communities are concerned about preserving their rural cultures and cultural attractions. Hence, studying rural cultures and cultural attractions of specific ethnic groups may create awareness among the younger generation about the importance of cultural protection as well as differences between cultures, beliefs and customs.

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