

Dimensionality of Communities' Belief Attitude toward Rural Tourism Development

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Abstract

Rural tourism is becoming increasingly important to the Malaysian economy and tourism product offering. Rural tourism enables tourists to reunite with nature and the culture of the destinations, and that it contributes to the economic and social recovery of the rural areas, as well as to the conservation of the environment and the spreading of local cultures. Nonetheless, development projects are often designed and implemented in which indigenous people have minimal voice in policy and management of it. Tourism which simply transplants urban investment and enterprises to a rural setting does little to improve communities' incomes. As a result, many indigenous people rightly feel that tourism industry has a poor track record, in disregarding their legitimate interests and rights, and profiting from their cultural knowledge and heritage. The present study in the paper involved looking at validating the dimensionality of the four tourism impact namely, economics, environment, social and cultural impact as perceived by local communities. Data was gathered through a survey using a structured questionnaire and administered to the community members residing at Bario. A series of tests such as factor analysis, correlation, and reliability analysis was conducted to confirm that the instrument is valid (content, construct, convergent, discriminant and nomological) as well as reliable. Implications regarding the value of conducting validity and reliability test for practitioners and researchers are discussed.

Keywords: Tourism development, communities' attitudes, goodness of measure, validity, reliability, Bario

Introduction

Tourism is one of the industries that have the highest potential to contribute towards economic development and job creation particularly in rural areas (Bredhenhann & Wickens, 2003; Ruiz Molina, Gil-Saura, & Moliner-Velazquez, 2010). Rural tourism is a valuable and growing sector of the overall tourism market. Economic growth, socio-cultural development, protection and improvement of both the natural and built environment and infrastructure are some of the significant contributions of rural tourism. Although rural destinations are less visited by tourists compared to cities or urban holiday resort, rural destinations has more to offer as they have wide open spaces, are less congested and have more natural amenities for the purpose of relaxation. These are the attributes that people particularly seek when choosing tourists' destination. In addition, the people at the tourists' destinations are friendly and may possess natural attractions that provide enjoyment for visitors (e.g., jungle, forest, flora and fauna). Furthermore, the local inhabitants are open and hospitable to visitors and tourists, even if they are not involved in the tourism activities in the destination.

Tourism sector has been recognized by Malaysian government as a valuable and growing sector and a catalyst to Malaysian economic renaissance and it is listed as one of the National Key Economic Areas (NKEA) under the Tenth Malaysia Plan, Malaysia was ranked the Ninth most visited country in the world and received approximately RM1 billion receipts per week from foreign visitors. It is estimated that in year 2020, Malaysia will receive more than 36 million tourist arrivals and RM168 billion tourist receipts which has the potential to generate high yield to the country.

With that, it is imperative for rural destinations preserve their natural environment and culture as it is these attributes that attract tourists to visit these destinations. There is a lack of published commercial research and studies on rural tourism destination in Malaysia and many public sector tourism organizations are not yet convinced of the value of these studies and therefore still rely on the fairly standard quantitative visitor survey. This study therefore endeavors to fill the gap in the existing literature concerning the lack of communities' perceptions in rural tourism development.

literature Review

Past research on tourism had focused mainly on the economic benefits of tourism (Kuvan & Akan, 2005; Tosun, 2005) and no known researchers have been found to explore the impact of tourism from communities' perspective. Greaves and Skinner, (2010) and Ibrahim and Gill, (2005) revealed that there are a number of drivers such environmental wonders, outdoor recreation, scenery and festival and events, that help to create the demand for rural tourism visitation and these demand drivers (e.g., working either alone or in conjunction with others), help to fulfill the needs of the rural tourism visitors. Tourism is noted as a service industry and its management practices are concerned with issues such as quality and productivity (Otto & Ritchie, 1996).

There have been studies on communities' attitudes in the past, however, these have been done on the Western context (e.g. Girard & Gartner, 1993; McCool & Martin, 1994; Harrill & Potts, 2003). Hence, this study intends to examine communities' attitudes towards the impact of tourism, based on the dimensionalities of social, economic, cultural and environment. The site of this study is Bario, a rural destination in Sarawak. Bario is located on the island of Borneo, close to the Malaysia-Indonesia border between Sarawak (Malaysia), and Kalimantan (Indonesia). As Bario is remotely located, it takes about 14 hours drive through unpaved and muddy logging road; or a two-day boat ride or a 12-day-long trek across forested mountains. The only practical way to get there is a one-hour flight on a 19-seater Twin Otter aircraft.

Research Methodology

The main focus of this paper is to assess the goodness of measure (validity and reliability) of the tourism measurement from four perspectives namely, economics, environment, social and cultural impact as perceived by local communities. The environment in which this study was carried out is in a rural tourism destination, specifically, Bario, Sarawak.

Sample

The population of the present study consists of local communities currently residing at Bario for more than 5 years. A total of 120 questionnaires were distributed by the authors to the local communities. Of the 120 questionnaires distributed, only 66 (55%) were returned. The questionnaires, together with cover letters (seeking their cooperation and explaining the purpose of the study) were personally handed to local communities after a brief personal communication concerning the topic and the goals of the study.

Survey instrument

This study has adopted Sharma & Dyer (2009) and Ap (1992) method to measure the four impact of tourism studies known as economics, environment, social and cultural impact because of the conceptual consistency underlying the definitions that were used in its development and also because it has been proven to have adequate psychometric properties There were all together 15 items in this section. The question items were modified to adapt to the Malaysian context of rural tourism. Respondents were asked to rate their perception using the 7-point Likert scale with: 7 = *strongly agree*, 6 = *agree*, 5 = *slightly agree*, 4 = *neutral*, 3 = *slightly disagree*, 2 = *disagree*, and 1 = *strongly disagree*, for all the 15 items.

Research Results

Sample Characteristics

Profile of the Respondents

Table 1 shows the demographic profile of the respondents. Based on Table 1, male respondents were more than female respondents with 39 male respondents (59.1%) and 27 female respondents (40.9%). With respect to the 66 respondents' highest education received, a majority were at high school level or below (59 respondents or 89.4%), followed by Diploma level (6 or 9.1%) and only 1 Degree holder participated in this research. Majority of the respondents (63.6%) are earning an income of less than RM500 per month. The demographic details are as shown in Table 1.

Table 1: Demographic Profile of Respondents

Demographic Variable	Category	Respondents (<i>N</i> = 66)	
		Frequency	Percentage
Gender	Male	39	59.1
	Female	27	40.9
Educational level	High school or below	59	89.4
	Diploma	6	9.1
	Degree/Professional	1	1.5
Income per month	< RM 500	42	63.6
	RM 501 – RM 1000	17	25.8
	RM 1001 – RM 2000	4	6.1
	RM 2001 – RM 3000	3	4.5

Testing the Goodness of Measure for the Tourism Dimension Construct

Content Validity

Content validity refers to the extent to which an instrument covers the meanings included in the concept (Babbie, 1992). In a similar vein, Rubio, Berg-Weger, Tebb, Lee, and Rauch (2003) refer to content validity as to the extent to which the items on a measure assess the same content or how well the content material was sampled in the measure. Essentially, the goals of content validity are to clarify the domain of a concept and judge whether the measure adequately represents the domain (Bollen, 1989). Content validation results in a theoretical definition that explains the meaning of the variable in question (Bollen, 1989) and is supported by the literature overview (Gomez, Lorente, & Cabrera, 2004).

Construct Validity

Researchers often use factor analytic techniques to assess construct validity of the scores obtained from an instrument (McCoach, 2002). Factor analysis represents a broad category of approaches and mathematical procedures for determining the latent variable structure of observed variables (Nunnally, 1978). In this study, an exploratory factor analysis with an orthogonal rotation of varimax was used to evaluate the construct validity of the instrument. In turn, to evaluate the construct validity, we performed a principal components analysis on the set of 15 items of the scale. The result of this analysis is summarized in Table 2. The analysis extracted only a 4 factor solution, each with eigenvalues above one, which explain 72.68% of the

total variance. The KMO was 0.83 indicating a meritorious level based on Kaiser and Rice (1974) and the Bartlett's test for sphericity was significant ($\chi^2 = 643.24, p < 0.00$). Factor 1 was named as Social impact, whereas Factor II was named as Economics impact. Factor III consisting of Cultural impact and Factor IV was known as Environment impact. Based on the rotated component matrix, out of the 15 items, 1 item was dropped either due to loadings less than 0.50 suggested by Hair, Anderson, Tatham and Black (2006) or cross loading in another component.

Convergent Validity

Further to the construct validity test using the factor analysis (between scales) another factor analysis but this time using the within scale was utilized to test the convergent validity. According to Campbell and Fiske (1959), convergent validity refers to all items measuring a construct actually loading on a single construct. Convergent validity is established when items all fall into 1 factor as theorized. Convergent validity was carried out through a within factor, factor analysis in order to obtain a more in-depth judgment of the dimensionality of the construct under study (Hair et al, 2006). All the four factors displayed unidimensionality with Social impact, KMO was 0.79 explaining 77.40 percent of the variation; Economics impact, KMO was 0.75 explaining 71.87 percent of the variation; Cultural impact, KMO was 0.83 explaining 57 percent of the variation; Environment impact, KMO was 0.70 explaining 70.65 percent of the variation. Thus, the analysis provided evidence of convergent validity.

Table 2

Factor analysis results for Economics, Environment, Social and Cultural Impact

	Component			
	Soci al	Eco nomics	C ultural	Enviro nment
Tourism will likely increase crime rate.	.882	.151	.074	.288
Tourism is likely to result in traffic congestion.	.833	.222	.028	.296
Tourism is likely to lead to more vandalism in our community.	.828	.278	.277	.148
High-spending tourists are likely to negatively affect our way of living.	.632	.273	.588	-.130
Tourism is likely to lead to social ills in our community.	.622	.176	.590	-.032
The prices of goods and services are likely to increase because of tourism.	.066	.893	.141	.088
The cost of developing tourist facilities is too much.	.231	.791	.073	.292
The price of real estate (e.g. house land, etc) is likely to rise because of tourism.	.128	.777	.09	-.159
Tourism is likely to put more pressure on local services such as police and fire protection, utilities and roads.	.229	.775	.080	.248

Tourism is likely to result in unpleasantly overcrowded parks, and other outdoor places in our community.	.264	.540	.463	.138
Our communities are likely to suffer from living in an ecotourism destination.	-.039	.052	.903	.074
Tourism is likely to change our local culture.	.194	.148	.823	.000
Construction of accommodations and other tourist facilities are likely to destroy the natural environment.	.237	.246	.051	.876
Tourism is likely to result in pollution (e.g. noise and environmental).	.600	.031	-.009	.651

Discriminant Validity

Discriminant validity refers to the extent to which measures of 2 different constructs are relatively distinctive, that their correlation values are neither an absolute value of 0 nor 1 (Campbell and Fiske, 1959). A correlation analysis was done on the 4 factors generated and the result is presented. As can be seen all the factors are not perfectly correlated where their correlation coefficients range between 0 or 1. Hence, we can conclude that discriminant validity has been established.

Table 3

Intercorrelations of the major constructs

	Economics_i m	Envi ron_im	Social_ im	Cult ural_im
Economic_i m	1			
Environ_im	.514**	1		
Social_im	.468**	.683*	1	
Cultural_im	.341**	.352*	.547**	1

***. Correlation is significant at the 0.01 level (2-tailed)*

Nomological Validity

Nomological validity which is another form of construct validity is the degree to which a construct behaves as it should within a system of related constructs called a nomological set (Cronbach & Meehl, 1955). Cronbach and Meehl (1955) posited that in order to provide evidence that a measure has construct validity, a nomological network has to be developed for its measure. In essence what this means is that we have to develop a nomological link between the variable we would like to validate and another variable which has been proven theoretically to be related to this particular variable. Previous researchers (Ibrahim & Gill, 2005; Wang, Bickle & Harrill 2009) have found a meaningful relationship between local communities' attitudes toward positioning strategy of the tourism destination. Hence for the purpose of this study, the

construct validity of the four impact measure was validated through tourism belief attitudes of rural tourism destination to test the nomological validity. As tourism belief attitudes has been shown to be related to perception of the local communities, we used positioning to be correlated with the 4 impacts and the result is presented in Table 4. As theorized, the 2 impacts were significantly related to tourism belief attitudes thus confirming nomological validity.

Table 4
Results of the nomological validity test

		Econom ics_im	Envi ron_im	Soc ial_im	Cultura l_im
Dependent					
Tourism belief attitudes		.28*	-.28	-.06	.42**

**p< 0.01, *p< 0.05

Reliability

Reliability measures the degree to which the test score indicates the status of an individual item on the factors defined by the test, as well as the degree to which the test score demonstrates individual differences in these traits (Cronbach, 1947 as cited in McCoach, 2002). “A reliability coefficient demonstrates whether the test designer was correct in expecting a certain collection of items to yield interpretable statements about individual differences” (Cronbach, 1951, p. 297 as cited in McCoach, 2002). Generally, Nunnally (1978) proposed 0.70 to be the minimum acceptable standard for internal consistency. The reliability coefficient was 0.87 for economics impact, 0.78 for environment impact, 0.90 for social impact and 0.79 for cultural impact. Hence, it can be concluded that these measures possess sufficient reliability.

Table 5
Reliability coefficients

Variable	Cronbach Alpha
Economics	0.87
Environment	0.78
Social	0.90
Cultural	0.79

The means and standard deviations, among the study variables are contained in Table 6. As shown in Table 6, the standard deviations of the variables were all exceeded 1.0, indicating that the study variables were discriminatory.

Table 6
Descriptive for the major constructs

Variable	Mean	Standard Deviation
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Economics	3.63	1.45
Environment	3.61	1.39
Social	3.48	1.58
Cultural	3.68	1.61

Note: All items used a 7-point Likert scale with (1=Strongly disagree and 7=Strongly agree)

Discussion and Conclusion

This study endeavors to test the dimensions of tourism scales that are important for rural tourism development, based on local communities' perspectives. From the study, all four dimensions of tourism scales, namely environment, social, cultural and economics are capable of explaining sufficient variation in the construct being measured in Malaysia context. This research also revealed that there are similarities and differences concerning the dimensionality of tourism scales construct between western context and eastern context.

It has been propounded that, the progress of research on rural tourism has been slow but steady. Over the past few years, there has been a strong increased interest in these matters both in terms of theoretical thinking as well as empirical research. It is believed that an appropriate time to address the extent to which the progress about rural tourism destination thus far could be applied to a variety of social issues.

Hence, it is timely to understand the importance of the dimensionalities affecting the local rural tourism industry as it can be extremely useful for tourism studies. Although these four impacts namely, environment, social, cultural and economics have been studied in previous researches, no known researches have been found to empirically study the impact on rural tourism destination in the Malaysia context. This study has added to the growing body of research in tourism research by using a series of tests to test for validity and reliability of the constructs. Preliminary results demonstrated a valid (content, construct, convergent, discriminant and nomological) as well as reliable four dimension scale for measuring the main factors on rural tourism studies.

Interestingly, it was found that these four impacts namely, environment, social, cultural and economics are capable of explaining sufficient variation in the construct being measured in the Malaysian context. Thus, having a guide like the present study to follow can be very helpful to researchers in power structure related areas.

This study has chosen local communities of Bario as respondents for this study and it emphasizes the importance of communities' attitude for the development of rural tourism industry. Past research on rural tourism had mainly centered on developed countries such as Europe or North America, and not many on the Asian continent (Chaudhry & Tewari, 2010). Ultimately, local Bario community and the industry players in particular will benefit from this study as this will amplify which are the areas in the community concerns that needs improvements.

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