Perception of Tourism Impact and Support Tourism Development in Malaysia

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Abstract: 1) Background: Tourism is one of the prominent industry that has a capability to generate handsome income for developed as well as developing countries. However, the study to investigate specifically the perception of local residents towards tourism is still lacking. The perception of the locals is important since it could determine the extent of their support for tourism development. Plus, previous research found that male residents are more support better towards the tourism development. Thus, this factor is adapted as well in this study to examine whether this gender may influence to the tourism industry. 2) Methods: This study used Structural Equation Modeling (SEM) technique for determining the structural estimates between constructs. 3) Results: The respondents agree that positive perception, negative perception and tourism impact has a significant impact on support for tourism development in which has been recognized as Social Exchange Theory model. Moreover, the finding also revealed that gender has a potential to moderates the causal effect of tourism impact on tourism development. 4) Conclusion: The resident understand the tourism sector could strengthen economic nation but they also want the natural resources should be protected.

Keywords: social exchange theory; structural equation modeling; tourism development

1. Introduction

Tourism impact is a popular topic in tourism research (Ko & Stewart, 2002) and now become more attentive among scholars and academicians to study this field. Although tourism research is viewed as an important element in country development but the finding revealed thus far is inadequate to elucidate these aspects. In Malaysia, the researchers are more incline to associate the Service Quality (Lau, Akbar, & Fie, 2005; Gronroos, 1984; Mey, Akbar, & Fie, 2006; Ennew, Reed, & Binks, 1993; and Kandampully, Mok, & Sparks, 2001), Physical Infrastructure (Pocock & Phua, 2011; Bookman & Bookman, 2007; Kasim, 2007; Wong, 1997; and Henderson, 2003) and Human Capital (Liu & Wall, 2006; and Durbarry, 2004) on tourism development. They are very lack of study to relate with the attitude and perception of resident towards tourism development in Malaysia. In order to fill the gap through this research, we are using the social exchange theory model that has been proposed by (Long & Kayat, 2011; Allen et al., 1993; Andreck et al., 2005; Andriotis, 2005; Andriotis & Vaughan, 2003; Ap, 1990; Chen, 2000; Getz, 1994; Johnson, Snepeger & Akis, 1994) to explain the perception residents on support for tourism development.

Such information would lead us to identify the important factor involved on perception of resident besides provide the better facilities to enhance the tourism satisfaction. Because the positive attitude and perception of residential is essential for visitor satisfaction and thus encourage them to repeat visitation in the future. Although a lot of the previous research associate the repeat visitation as destination loyalty in determining the tourism satisfaction, but, none of articles from Malaysia so far dealt with the perception of residents of the impact of tourism towards support for tourism development. Hence, there is need a comprehensive study to concentrated with the perception of residents in tourism development. Using social exchange theory, the perception of the resident can be identified properly whether can be valuable or not on tourism development. It suggests that
people evaluate an exchange based on cost and benefits incurred as a result of that exchange (Long & Kayat, 2011). Means that, an individual who get the cost and benefits that tended to improve their quality of life resulting from the tourism industry are more likely to have a positive perception on tourism development and subsequent will support this particular sector every time. However, this situation is might be not happen in other individual who perceives the disadvantages on tourism development and thus will oppose on this sector. If this situation is happen, the researcher need to address of what is the main issue that lies behind the tourism development.

Moreover, (Long & Kayat, 2011) figure out that males were more supportive of tourism development than females. Thereby, this study is attempt to take into account of gender in our discussion so that we manage to identify which group is support in Malaysia. Due to the limited budget and time constraints, it was decided to focus on one location at Terengganu area. In terms of the methodology, the second generation modeling likely Structural Equation Modeling (SEM) is most suitable to implement in this study since this method has a capability to handle the multiple variable simultaneously. Plus, SEM seems is becoming prominent to assists the researchers analyze their research in providing of parameter estimates for hypothesis testing. Plus, the model involved in the study is resembled to the previous one which is from Long & Kayat (2011) that has been implemented at National Park, Ninh Binh, Vietnam. Thus, its meet with the character of SEM as one of the theory-driven or conformation testing to confirm the proposed framework is supported or not in Terengganu, Malaysia.

In addition, SEM is one of the strict method in which the analysis will be conducted properly in the basis of parametric testing. Specifically, the study makes an attempt to determine the perception of resident towards the tourism development besides comparing males and females in this discussion. So, the structure of the paper is as follows. First, relevant review of literature on perception of residents and its dimension likely socio, economic and environment and hypothesis development are discussed. This is followed by research methodology that comprised of target population, sampling technique and the characteristics of SEM. Then after, Confirmatory Factor Analysis (CFA) is discussed which is one of the compulsory method in SEM. Finally, the paper concludes the findings, future research and limitations.

2. Review of Literature on Environmental Impact

In Malaysia, Ministry of Culture, Arts and Tourism had formulated The Malaysian National Tourism Policy (NTP) in 1992 to develop the tourism industry that seem has a potential to generate a great contributor to the economy country. This policy is responsible to provide a guidelines and management practices for tourism destination (Bhuiyan, Siwar, & Ismail, 2013) besides to conserve the environment. Therefore, ecotourism is identified as one of the sustainable tourism form which is one part of this plan to preserve the tourism areas. Such information on policy is implies that Malaysian government is very serious to preserve the environment by formulated several acts for ensuring sustainability. By following government action to sustain the environment manage to yield a good response by the local community and thus they are more likely to have positive perception on the tourism development.

However, some of the individual may disagree with the government plan due to the human activity would be involved to build the physical infrastructure for tourism area. Thus, the quality of the nature will be deteriorated by the human activities (Mihalic, 2000). This statement is also supported by other authors that are really concern about the quality of natural attraction (Pizam & Mansfield, 2000; Middleton & Clarke, 2012).

2.1 Review of Literature on Socio-cultural Impact

Crompton & Ap (1994) stated that the socio-cultural impact constitute a great number of observed impact from tourism as perceived by resident and it seems that it very difficult to measure or quantify this factor since it can change slowly over time. This transformation can leading to the positive or negative perception among the resident towards the tourism development. In terms of
positive perception, socio-cultural impact would be great since the improvement of various local services, infrastructure development, public transport, and the participation of local communities in community-based tourism. This statement is supported by Mbaiva (2004) and Kim & Patrick (2005). In addition, Brunt & Courtney (1999) stated that tourism also can lead to the advancement in education and healthcare. However, negative impact can be great contributed due to the improvement of socio-cultural. Among negative impacts observed are the relocation of traditional communities, racism, break-up the traditional family structure and relationship, increase in crime and prostitution (Zamani Farahani & Musa, 2012).

Therefore, the negative impact inevitably happen since this issue also prevailing in other countries. Although there are a lot of article explained by authors about the positively and negatively impact of socio-cultural, they are in no absolute consensus of what constitutes the dimensions of tourism impact (Andereck, Valentine, Knopf & Vogt, 2005; Long, Perdue & Allen, 1990; McCool & Martin, 1994; Haralambopoulos & Pizam, 1996). Therefore, this study prefer conceptual model that has been developed by Long & Kayat (2011) to estimate the causal effect between positive and negative perception on tourism development. This statement will be support us to continue of our study using SEM later on.

2.2 Review of Literature on Economic

In Malaysia, the number of tourist increasing every year and now become one of the most prominent industry to generate income nation. In order to accelerate the progress of tourism industry, governments are noticeably playing a strong marketing and promotional role in the emerging of the medical tourism (Pocock & Phua, 2011). This trend is also occur in our neighbor countries likely Thailand and Singapore. Therefore, the competition among these countries become tangible to attract the tourist in various method. In 2007, Malaysia achieved 253.84 Million MYR (USD 78 Million) through the investment of medical tourism. Although Malaysia show some improvement in terms of the healthcare service, physical infrastructure, and human capital to enhance the visitor satisfaction, this tactical also has been implemented in our neighbor countries. In terms of the positive perception of residents, this activity is really good for income nation besides posit Malaysia as one of the most preferred destination among retired people based on report previously.

However, there are some resident assume this activity is not contribute a great solution to increase the income nation. They blame on the government plan due to the increasing price of many goods and service due to the tourism sector. Plus, they believe that the income from tourist benefits only a few people in this community. In fact, they are hope this benefit should be shared equally with them so that they will be satisfied.

2.3 Theoretical Framework

As aforementioned, we decide to model the structural model as Long (2011) suggested in order to estimate the causal effect of positive and negative perception, and overall evaluation of tourism impact on tourism development in Terengganu, Malaysia. Moreover, we also provide questionnaire that resemble as Long (2011) developed. This instrument is comprised of 43 items and 10 items of socio-demographic. Originally, this questionnaire is utilize 5 point of Likert scale in determining the respondent opinion (1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, and 5 = strongly agree) but we modify the measurement scale from 5 points to 10-point since it perceives more independent to take into account the respondent option. According to Hair et al., (2014), the longest scale in measurement scale will avoid data from getting extreme value that tended to the outlier of data.

This paper address on Terengganu area to obtain the data of resident perception towards tourism development. Therefore, the sample will be selected from the population in this area using simple random sampling. We find out that the current population was estimated of 1,123.8 million from Department of Statistics. To obtain the minimum requirement of sample size that uses SEM, we compute the number of observed variables and latent construct in the model, the anticipated effect
size, and the desired probability and statistical power levels through lower bound sample size and Cumulative Distribution Function (CDF) (Soper, 2015). So, the result revealed was 126 of sample size. Nonetheless, we printed out 500 questionnaire but in turn only 470 answered. Then after, we analyze the normality test using p-p plot, Kolmogorov-Simonov and boxplot to identify which items are tended to the serial collinearity. Hence, we find out that only 450 respondent is accepted to consider for statistical inferential.

Figure 1: Theoretical Framework

With illustrated in Figure 1, the positive and negative perception are included in the same box to impose on support for tourism development. In AMOS 21.0 application, this model will be split into two main constructs that exhibited as positive perception and negative perception. Meanwhile, three factors namely environment, social and economic will be categorized as component or sub-construct at every corresponding main constructs.

3. Method

Structural Equation Modeling (SEM) is a data-analytics technique increasing gaining popularity over one decade (Martens, 2005). SEM has its own class for being able to answer a large number of research question and research hypothesis simultaneously. Today, SEM recognized as two primary method that can be known well as covariance and component based SEM which developed in terms of confirming or prediction. Researchers can use SEM for purpose as varied as confirming the factor structure of a behavioral science to analyzing the structural model, potential mediator and moderator effect, testing the measurement model and latent growth curve for longitudinal analysis (Martens & Haase, 2006).

In addition, the researchers can model the multiple observed variable or incorporate with unobserved variable to estimate the causal effect between the relationship of independent and dependent variable. Unlike of other statistical method, covariance based SEM (CBSEM) is a confirmatory technique specifically involve entire theoretical model in one analysis (Martens & Haase, 2006; Hair et al., 2014).

4. Results

As exhibited in Figure 2, all the fitness index \( \text{Chiq/df} = 3.381 \leq 5.0 \) (Marsh & Hocevar, 2005), \( \text{RMSEA} = 0.073 \leq 0.08 \) (Browne & Cudeck, 1993), \( \text{CFI} = 0.908 \geq 0.90 \) (Bentler, 1990), \( \text{IFI} = 0.908 \geq 0.90 \) (Zainudin, 2012; Afthanorhan & Ahmad, 2014) are achieved once several observed variables are deleted. The reliability for this model is achieved when the value of Cronbach Alpha and Composite Reliability was higher than 0.70. Meanwhile, validity like Maximum Shared Variance (MSV), Average Shared Variance (ASV), and discriminant validity are satisfied as presented in Table 2.
Table 1: Reliability Report

<table>
<thead>
<tr>
<th>Latent Construct</th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
<th>ASV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support_Tourism</td>
<td>0.941</td>
<td>0.888</td>
<td>0.083</td>
<td>0.077</td>
</tr>
<tr>
<td>Positive</td>
<td>0.966</td>
<td>0.904</td>
<td>0.712</td>
<td>0.339</td>
</tr>
<tr>
<td>Negative</td>
<td>0.994</td>
<td>0.982</td>
<td>0.712</td>
<td>0.389</td>
</tr>
<tr>
<td>Tourism_Impact</td>
<td>0.939</td>
<td>0.885</td>
<td>0.383</td>
<td>0.232</td>
</tr>
</tbody>
</table>

Table 1 presents the reliability report for each construct developed in Figure 2. Based on the finding, all the reliability and validity are meet with its requirement. The result of MSV and ASV should be lower than the value of AVE. All of these results are calculated manually using the formula proposed. Next, we take into account of discriminant validity to test of how distance between variance captured and latent variable correlation. The discriminant validity is achieved when a diagonal value (in bold) is higher than the value in its row and column.

Table 2: Discriminant Validity

<table>
<thead>
<tr>
<th>Latent Construct</th>
<th>Support_Tourism</th>
<th>Positive</th>
<th>Negative</th>
<th>Tourism_Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support_Tourism</td>
<td>0.942</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>0.278</td>
<td>0.951</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>0.268</td>
<td>0.844</td>
<td>0.991</td>
<td></td>
</tr>
<tr>
<td>Tourism_Impact</td>
<td>0.288</td>
<td>0.478</td>
<td>0.619</td>
<td>0.941</td>
</tr>
</tbody>
</table>
Figure 3 is the structural model that has been design resembled with the theoretical framework along the fitness index. The single headed arrow is referring to the causal effect from exogenous to endogenous construct in while the double headed arrow is refers to covariance between exogenous constructs. The result of path estimate can be perceives in the following table. We find out that this model achieve 20.9% of support tourism via square multiple correlation. Means that, 20.9% of support for tourism development has been explained well by three main constructs that involved in the study. Meanwhile, 100%-20.9% = 79.1% can be obtained from other appropriate factors. Hair et al., (2014) put forth that if the square multiple correlation between of 13% to 26% are considered as medium effect. So, we can conclude that the model involved are insufficient to be consider as large effect. Therefore, we might to add other factor in theoretical framework in the future to enhance the effect size of structural model.

<table>
<thead>
<tr>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support_Tourism &lt;-- Positive</td>
<td>.335</td>
<td>.130</td>
<td>2.577</td>
<td>*** Supported</td>
</tr>
<tr>
<td>Support_Tourism &lt;-- Negative</td>
<td>.151</td>
<td>.055</td>
<td>2.745</td>
<td>*** Supported</td>
</tr>
<tr>
<td>Support_Tourism &lt;-- Tourism_Impact</td>
<td>.201</td>
<td>.083</td>
<td>2.429</td>
<td>.015 Supported</td>
</tr>
</tbody>
</table>

Main constructs namely positive perception, negative perception and tourism impact are perceived significant effect on support for tourism development. Thus, one can be conclude that the residents in Terengganu states believe the tourism development has possibility to yield positive and negative effect in nation development in terms of three angles such as environment, socio-cultural and economics. This finding would convinced to our discussion regarding the positive and negative perception are exist among the residents here. The one who believe the benefits will continuously support to the government plan to attentive the tourist travel to this country since their positive thinking. However, the negative person would refute this positive growth and assume this plan might be trouble in their life. By comparing the estimation between positive and negative perception towards economics, environment, and social-culture, we figure out that most of the residents believe the enhancement of tourism development will benefits them and thus leads them to think positively regards on the tourism.
Among the positive perception, the residents opined that economic indicator is the most important element in tourism development. They believe the preset of tourism manage to create new business opportunities for local residents (Factor loading= 0.75) and improved employment opportunities (Factor loading=0.64). For socio-culture factor, we presume this construct as the reference point for main construct (positive perception) so that the result of regression weight can be identified. If reference point is not stated, the calculation will be stop criterion due to the identification problem. Next, we find out that the local residents agreed to environment impact can be influenced on tourism development. They believe that tourism has improved the area appearance (Factor loading=0.70) and capable to provide an incentive for the restoration. Therefore, the residents tend to have this benefits due to the tourism impacts.

Although the local resident seem preferred to acts as positive perception rather than negative perception, but we still need to conduct this analysis in depth so that the main problem can be identified. In terms of environment factor, we figure out that the respondents whom disagree with tourism pointed out that the tourism yield negative impact on the natural resources (Factor loading=0.79), created significant solid waste and air (Factor loading= 0.85), and the cause of fewer natural landscape (Factor loading=0.84). This finding is in line with previous research (Mihalic, 2000) to put forth that the quality of natural phenomenon is deteriorated by human activities. Plus, environment impact is viewed as most important element in negative perception residents in which contradict to the resident who tend to have positive perception.

In terms of economic impact of negative perception, the respondents are seem not satisfy with economic activities that managed by government. They believe tourism income generated in the areas goes to individuals (Factor loading= 0.81), income from tourism benefits only a few people (Factor loading = 0.71) and the prices of goods and service increased (Factor loading= 0.75). Overall, we believe the local resident need the benefits should be shared equally with them so that they will be acknowledged too. Nonetheless, the respondents opined that tourism development in Terengganu brings more benefits than harm (Factor loading= 0.69) and believe that the benefits of tourism exceed the cost to the people.

This finding is meet with previous research which is by Tatoglu et al., (2000), Andriotis (2004), Kuvan and Akan (2005) to present that resident strongly agree that tourism has positive economics, environment and socio-culture impacts. Plus, it is worth noting that the positive perception, negative perception and tourism impact are significant impact on tourism development. To achieve the last research objective whereby to identify which gender (male or female) is more support better to the tourism development. Therefore, the multi-group confirmatory factor analysis (SEM-MGA) will be executed.

<table>
<thead>
<tr>
<th>Table 4: Moderator Result</th>
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<tr>
<td></td>
</tr>
<tr>
<td>Support_Tourism &lt;- Positive</td>
</tr>
<tr>
<td>Support_Tourism &lt;- Negative</td>
</tr>
<tr>
<td>Support_Tourism &lt;- Tourism_Impact</td>
</tr>
</tbody>
</table>

Based on Table 4, there are no significant different when gender as moderator variable is employed at two causal effect (Positive ➔ Support Tourism and Negative ➔ Support Tourism). Meanwhile, we find out that gender moderates the relationship of tourism impact on tourism development. Since gender has a capability to moderates the relationship between tourism impact and support tourism, thus, we need to find which group is more support better in tourism development using comparison of standardized estimate. The finding reveal that female is more support better in providing of tourism development (0.39 vs 0.09). To add, this finding is contradict with Long (2011) found that male is more supportive than females.
5. Discussion

Using social exchange theory that has been recognized in various prominent research, we decide to employ this theoretical model as well in our analysis using Structural Equation Modeling (SEM). This study is the first research that has been applied thus far in Malaysia even generally has been discussed by other country. Remarkably, all the model involved in the study are significant relationship on tourism development. Means that, the respondent admit that the tourism industry manage to influence their quality of life whether worth or not. The one whom get the benefits and cost due to tourism industry would perceives as positive perception. Instead, the one whom get loss and harm due to tourism industry would perceives as negative perception.

Based on the result of Table 4, we find out that the residents are prone to have a positive perception on tourism development and thus will assists to support this sector. In terms of positive perception, economic indicator is viewed as an important element to increase the income nation. So, they agree to put forth this tourism manage to creates business opportunities and thus increase the employability for local people. Meanwhile, they opined that environment factor is the most important factor in terms of negative perception. This is because the quality of natural phenomenon would be deteriorated due to human activities.

Therefore, one can be conclude that The resident understand the tourism sector could strengthen economic nation but they also want the natural resources should be protected. So, we suggest that the government officer should concern the quality of environment as well besides too focusing on the generated income. They must think thoroughly if they intend to implement a new plan so that the local resident do not affected. Last but not least, we surprised that female is perceived more supportive than male on tourism development. This is because most of previous study stated that male group is more active to support the tourism. This differ situation is may happen because of differ culture adapted. Thus, we need to conduct a comprehensive research to understand the characters of male and female in Malaysia for the future research.

Author Contributions: This work was carried out in collaboration from all authors. Zainudin Awang designed the study, wrote the protocol, and wrote the first draft of the manuscript. Asyraf Afthanorhan managed the literature searches; analyses of the study performed the structural model using AMOS 21.0. Plus, he address the guidelines to conduct Confirmatory Factor Analysis (CFA) and Sharifah TMR managed the to read and confirm of each approach applied so that the research work met the objective research to guide the readers and reviewers. Therefore, all authors read and approved the final manuscript.

Conflicts of Interest: The authors declare no conflict of interest.

References


