Grounded Model in Accessible Tourism Case Study: Kuala Lumpur Metropolitan City

Syaidatul Azzreen Ishak, Ang Kean Hua, Owi Wei Ping

To Link this Article: http://dx.doi.org/10.46886/IJAREG/v5-i1/4215
DOI: 10.46886/IJAREG/v5-i1/4215

Received: 27 Feb 2018, Revised: 04 April 2018, Accepted: 26 April 2018

Published Online: 21 May 2018

In-Text Citation: (Ishak, Hua, & Ping, 2018)

Copyright: © 2018 The Author(s)
Published by Knowledge Words Publications (www.kwpublications.com)
This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode
Grounded Model in Accessible Tourism Case Study: Kuala Lumpur Metropolitan City

Syaidatul Azzreen Ishak¹, Ang Kean Hua², Owi Wei Ping³
¹Department of Architecture, Faculty of Built Environment, University of Malaya, 50603 Kuala Lumpur, Malaysia, ²Department of Environmental Sciences, Faculty of Environmental Studies, Universiti Putra Malaysia (UPM), 43400 Serdang, Selangor, Malaysia, ³Department of Mathematics, Faculty of Science and Mathematics, Universiti Pendidikan Sultan Idris, 35900 Tanjung Malim, Perak, Malaysia.
Email: rappum8@gmail.com

Abstract
This study investigated the accessible tourism in Kuala Lumpur, which specifically focuses on people with disabled. Face-to-face interview with local authority and non-governmental organizations were conducted to gather information of tourism industry, which concentrated on facilities and services provided. Through domain analysis, accessible tourism model is emerged from the data. The model is further validated with quantitative survey study involving 94 participants with disabled in visual impairment and physical challenged. The finding established a grounded model for accessible tourism in the Kuala Lumpur city.

Keywords: Tourism Industry, Face-To-Face Interview, Quantitative Survey, People with Disabled

Introduction
Accessible tourism can be defined as tourism and travel activity that provides accessibility of ‘mobility, hearing, visual, cognitive or intellectual and psychosocial disabilities, including the elderly and people with temporary disabilities, to all disabilities and non-disabled people’ (Akinci, 2013; ENAP, 2012). In other words, the meaning of accessible tourism can also be pronounced as but not limited to, as an activity to enable people to access requirements including mobility, vision, hearing and cognitive dimensions of access, to function independently and with equity and dignity through the delivery of universally designed products, services, and environments (Luiz, 2010; Darcy and Dickson, 2009). Specifically, the concept of accessible tourism which include, but not discriminate and all encompassing, is the preferred term for all but specially focuses on disabled tourism. Therefore, accessible tourism will required the services without barriers and challenges for all activities of holiday in accordance with all the processes and services (Akinci, 2013). According to ENAT (2012), the accessible tourism should include barrier-free destination (especially on infrastructure and facilities), transport (by air, land and sea), high
quality services (which involve with delivered by trained staff), activities and attraction (which allow participation involve in tourism), as well as marketing through website or book systems (preferred in information accessible for all). So, the accessible tourism is inclusive of all people including those travelling with children or senior citizens, as well as people with disabilities (Darcy and Dickson, 2009).

In Malaysia, tourism activity plays an important role to the country, especially in economic development perspective. According to the Ministry of Tourism and Culture on tourism report in 2016, tourist’s arrival is recorded 26.76 million with the total receipt of MYR82.1 billion; which increase 1.73 million of tourist’s arrival and MYR21.54 billion in total receipt from the past 5 years (Tourism Malaysia, 2016). Simultaneously, this industry are expected to contribute about MYR 103.6 billion in gross national income (GNI) by 2020 (PEMANDU, 2013). The ongoing to achieve of 2020 vision and mission would require spectacular campaign such as ‘Malaysia Truly Asia’ to promote the country tourism activities. Malaysia is rich with flora and fauna like Mulu Cave National Park and Forest Research Institute Malaysia (FRIM) that appropriate to be known as biodiversity tourism activity, heritage attraction like Penang and Melaka which known as historical tourism activity, as well as crystal-clear underwater visibility and abundance of marine life that known as marine tourism activity (Star Online Portal, 2014; Thirumoorthi et al, 2013; Ong and Musa, 2012). Therefore, the opportunity to access the tourism activities through facilities and services provided should be at the excellent level. In other words, accessible tourism required to be in line with the tourism activities provided in the country.

Since accessible tourism is considered newly approach in Malaysia, therefore, this study aims to develop grounded model of accessible tourism which focuses on local authority, non-governmental organizations (NGOs), as well as participant (people with disabled in visually impaired and physical challenged) that experienced on the facilities and services of accessible tourism.

Methods
Establishing a Grounded Model of Accessible Tourism
Grounded theory research is considered the outputs can be adapted, implemented, and reassessed according to the researcher’s need (Creswell, 2005). One of the main criteria to determine the validity of the outputs is the ability of the theory generated can be adapted for application in various contexts (Strauss and Corbin, 1990). Hence, grounded model theory is appropriate for this study because it considered the theoretical requirement and interpretative method (Glaser and Strauss, 1967).

In this study, there are two methods in gathering the information, where the first is involve with face-to-face interview collecting data from a group of local authority and NGOs on the facilities and services provided for the accessible tourism; and the second will be involve with question survey that collected from the participant with disabled in visually impaired and physical challenged which experienced in tourism activities. The main purposed to conduct the second methods is to validate the model that generated from qualitative approach.

Participants of the Study
Sampling in grounded theory research is generally used to select respondents that have potential to provide the researcher with the information required to generate a theory/model implicit in the corpus data (Chua and Chua, 2017). Local authority (n=10) and NGOs (n=5) were selected as main respondents because they are directly involved in the implementation of the accessible tourism for facilities and services provided.

The face-to-face interview is conducted for the collection of in-depth qualitative data from two groups of respondents, which is (1) local authority, and (2) NGOs. In other words, local authority will provide information about the planning and implementation of the facilities, while NGOs is more towards recommendations to enhance the effectiveness of quality services provided in ensuring the accessible tourism towards people with disabled would be satisfied. These two groups will be focuses on the facilities and services, as well as information about tourism activities that being marketed to promote accessible tourism.

Data Collection and Analysis
In qualitative data analysis, data collection and analysis are always performed simultaneously (Strauss, 1987). Grounded theory research uses a systematic method of data collection and analysis with the aim of constructing an in-depth understanding of social and psychological phenomena (Chenitz and Swanson, 1986). Therefore, to achieve this aims, data analysis involves two steps of coding: open coding and axial coding. Open coding involves with checking and rechecking data that have been collected and only relevant codes are given to statements that a both meaningful and important; while axial coding is a synthesis of open coding as the codes for categories are connected to each other.

In making the link between codes, a domain analysis technique is used by employed semantic relationship question technique (Spradley, 1980). According to Spradley (1980), the question is normally asked include ‘How is this statement linked to other statements?’, ‘Are there similarities to other statements?’, ‘Is it the outcome of a strategy?’, and ‘Is it the outcome of a process?’ This technique enables the researcher to arrange and place an idea with data with the same theme in a domain.

Results
From the domain analysis, four core themes emerged from the data, namely disability biodata, barrier tourism, tourism characteristic, and accessible tourism. The story line for the grounded model was stated by taking accessible tourism as the main theme and tracing its relationship to other themes.

Story Line
The research shows that barrier tourism become main factor to the satisfaction of disability biodata. In other words, facilities and services provided through the tourism characteristics should be concerned on the people with disable when involved in tourism industry. Poor quality services will negatively affect the tourism characteristic and this matter could cause chances to develop the barrier in tourism. Therefore, to improve the opportunity of accessible tourism, the satisfaction of participant with disabled becomes important to determine the problems of
planning and implementation on the facilities, as well as the services that required improvement to sustain the tourism industry.

Validating the Grounded Model

Participants
Quantitative survey data were collected from 94 respondents with disability on the satisfaction on accessible tourism in Kuala Lumpur. Majority participants are female (n=54, 57.4%) followed by male (n=40, 42.6%), where most of them are single (n=49, 52.1%), and married (n=43, 45.7%) are having the education level until university (n=77, 81.9%) with bachelor degree and master degree. Most of them are having the household income of more than RM 5001 with 37 people (39.4%) and followed by less than RM 3000 are 34 people (36.2%), RM 3001 to RM 4000 are 16 people (17%), and the last are RM 4001 to RM 5000 with 7 people (7.4%).

Survey Questionnaire
The survey questionnaire used in this study consisted of two sections that correspond to the demographic details and three main variables in the accessible tourism model generated from the emerging data of interview. There were total of 10 to 20 items. The items were created based on the data of each theme generated from the face-to-face interview. The items used categorical scale measurement ranging from 1 to 5, which refer as Likert scale with ‘1’ indicate as ‘strongly disagree’ and ‘5’ indicate as ‘strongly agree’.

Data Analysis
In testing the validity and reliability of the model, PLS SEM analysis was performed in two stages. The first stage is the validity (construct validity and discriminant validity) and reliability (composite reliability and Cronbach’s alpha internal consistency reliability) of the variables (the four themes) were examined to ensure that the items are valid and reliable to represent the concept of four variable in the model; and the second stage is to identify the relationships among the variables that generated from the first stage.

Results
Preliminary Analysis of Data: Validity and Reliability of the Variables
PLS-SEM is a non-parametric model testing analysis that does not require the data of the items involved in the analysis are normally distributed (Chua and Chua, 2017). However, the validity and reliability of the variables in the model should be established prior to examination of the relationship among the variables. This is to ensure that the four variables are valid and reliable to represent by their indicators, which are the instrument items. The convergent validity of variable is achieved when the loadings of the item for each variables are (1) the loading of each individual items are greater than 0.5, and (2) the average variance extracted (AVE) for the variable being greater than 0.5 (Hair et al, 2016). The results show that the four variables achieved their construct validity (Table 1). Meanwhile, the Cronbach’s alpha and composite reliabilities should greater than 0.7 (Hair et al, 2016), which the result is also achieved in this study.
Table 1: Validity and Reliability of Variables in Model

<table>
<thead>
<tr>
<th>Latent Variables</th>
<th>Indicator</th>
<th>Convergent Validity</th>
<th>Reliability</th>
<th>R Square</th>
<th>Redundancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessible Tourism</td>
<td>AT1</td>
<td>0.750</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AT2</td>
<td>0.890</td>
<td>0.6772</td>
<td>0.8064</td>
<td>0.7355</td>
</tr>
<tr>
<td>Barrier Tourism</td>
<td>BT1</td>
<td>0.944</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BT2</td>
<td>0.982</td>
<td>0.9227</td>
<td>0.9723</td>
<td>0.9581</td>
</tr>
<tr>
<td></td>
<td>BT3</td>
<td>0.956</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability Biodata</td>
<td>DB1</td>
<td>0.858</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DB2</td>
<td>0.700</td>
<td>0.6134</td>
<td>0.8312</td>
<td>0.7123</td>
</tr>
<tr>
<td>Tourism Characteristic</td>
<td>TC1</td>
<td>0.911</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TC2</td>
<td>0.958</td>
<td>0.8985</td>
<td>0.9637</td>
<td>0.9431</td>
</tr>
<tr>
<td></td>
<td>TC3</td>
<td>0.974</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The discriminant validity of a construct is achieved when inter-correlations among the variables in the model are smaller than 0.9. The implications are that the variables are independent to one another and no overlapping of concepts is found. Generally, multi-collinearity causes overlapping of concepts among the variable in a model; which is happen due to extremely strong inter correlation (r≥0.9) between variables in the model (Byrne, 2010). Table 2 indicate the result of the inter-correlation coefficient among all of the variables were less than 0.9; which showing the variables are free from multi-collinearity problems, and the discriminant validity of the variables for the model us achieved.

Table 2: Inter-correlation among the Variables in Model

<table>
<thead>
<tr>
<th>Latent Variables Correlation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessible Tourism</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barrier Tourism</td>
<td>0.2799</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability Biodata</td>
<td>-0.2421</td>
<td>-0.2031</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>Tourism Characteristic</td>
<td>-0.2988</td>
<td>-0.7913</td>
<td>0.4639</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

The Final Model

PLS-SEM analysis is conducted using Smart PLS software to establish the relationship among the variable in model. Smart PLS software is able to provide researchers for accurately and effectively to model and analyze the inter-relationships among the latent variables that have multiple indicators (Hair et al, 2016). Generally, Smart PLS has ability to multiple equations of the correlational and causal relationships in a model are computed at the same time. Therefore, researchers can used it to support their theories by extending the standard multivariate analysis, which involve with regression, factor analysis, and analysis of variance.
Final model can be shown in Figure 1, which indicating the accessible tourism model with the other three core factors. The data in Table 3 indicate that the factors contribute 81.5% of accessible tourism model ($R^2=0.815$).

![Figure 1: The Model of Accessible Tourism](image)

**Table 3: T-statistic and Standardized Regression Weight ($\beta$) of the Relationship Among Variables in Model**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationships (IV $\rightarrow$ DV)</th>
<th>T-Statistics Value</th>
<th>Standardized Regression Weight ($\beta$)</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>BT $\rightarrow$ AT</td>
<td>2.0585**</td>
<td>0.192</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>DB $\rightarrow$ AT</td>
<td>2.2905**</td>
<td>-0.172</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>TC $\rightarrow$ AT</td>
<td>3.7694****</td>
<td>-0.067</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>BT $\rightarrow$ TC</td>
<td>4.6461****</td>
<td>-0.727</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>DB $\rightarrow$ TC</td>
<td>3.2875***</td>
<td>0.316</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>DB $\rightarrow$ BT</td>
<td>2.9989***</td>
<td>-0.203</td>
<td>Supported</td>
</tr>
</tbody>
</table>

*BT=Barrier Tourism; AT=Accessible Tourism; TC=Tourism Characteristic; DB=Disability Biodata
(*Significant at $p<0.1$; **Significant at $p<0.5$; ***Significant at $p<0.01$; ****Significant at $p<0.001$)

Among the three direct factors of accessible tourism, tourism characteristic ($\beta=-0.067, p<0.001$) are considered as main factor to influence the accessible tourism, followed by disability biodata ($\beta=-0.172, p<0.5$) and barrier tourism ($\beta=0.192, p<0.5$). In other words, one unit input of positive in barrier tourism would cause a 0.192-unit increase in the accessible tourism. The implication is that, with full support of tourism characteristic, barrier tourism, and disability biodata would be maximized to 82.5% ($R^2=0.8154$).

Meanwhile, tourism characteristic is significantly influence by barrier tourism ($\beta=-0.727, p<0.001$) and disability biodata ($\beta=0.316, p<0.01$) to provide the total of 72.2% ($R^2=0.722$). Lastly,
Barrier tourism is influenced by disability biodata (β=-0.203, p<0.01) to provide a total of 64.1% ($R^2=0.641$). Therefore, the model of accessible tourism can be presented as below;

$$AT = 0.192BT - 0.172DB - 0.067TC$$  \hspace{1cm} (1)$$

**Discussion**

Creswell (2005) stated that a theory or model in grounded theory research generated from the research data is an abstract explanation or understanding of a process concerning variable in some topic hidden in the research data. In other words, the finding of the qualitative data analysis in this study leads to the formation of accessible tourism model, which can be used as a reference to be implemented in tourism industry. However, the model that generated from the data does not have a wide scope of applications (Chua et al, 2013; Glaser and Strauss, 1967). Hence, the model produced from this study does not aim to produce standards to be used in the country, but more appropriate to be implemented in Kuala Lumpur city area. Therefore, the accessible tourism model can be used as a reference in Kuala Lumpur city to enhance the tourism industry into better quality of facilities and services provided.

Based on the model generated, it is confirmed that accessible tourism is influenced by tourism characteristic, barrier tourism, and disability biodata. In other words, barrier tourism decrease will cause an increasing in tourism characteristic through better quality provided in facilities and services, which indirectly increase the disability biodata satisfaction and enhance the accessible tourism. Therefore, disability biodata satisfaction plays an important role in determinate the positive or negative impact in accessible tourism model.

According to interview and surveying question, the participants with disability people (specifically involve with visual impairment and physical challenged) suggested that not only facilities and services should be focus and improve the quality, but also provide information and promotion in the tourism perspective could help to increase in accessible tourism. For example, Tourism Malaysia should provide information for disabled people, where to go, how to get there, where to stay, etc.; media and training institutions should be informed about the disable’s travel opportunities; hotel and travel agencies should provide detailed information about travel opportunities and arrangements for disabled people on their web pages; travel agencies and hotels should have vehicles designed for use by disabled travellers; and each enterprise should provide training for their personnel about the disabled people’s tourism market, as well as the use of international symbols for physically disabled should be obligatory in the tourism industry. When this solution is carry out accordingly, therefore, the issues and problems involve with barrier tourism will be solved and automatically increase the tourism characteristic and accessible tourism.

**Conclusion**

This study generates a model for the implementation of accessible tourism for tourism industry in Kuala Lumpur city. Researcher can use this information to identify unanswered issues or questions in the literature and define future research directions concerning on tourism industry.
The study helps educators better understand the concept of accessible tourism and the factors that are related to it.

The strength of this study is that it suggests an approach to further validating the grounded model to improve the generalizability of the mode. However, the findings of this study are limited to the characteristic of Kuala Lumpur city area, and therefore, further research in accessible tourism can be conducted in other locations and fields of studies to provide a greater picture of the accessible tourism model.

References

Bryne, B. M. (2010). *Structural equation modeling with SMART PLS: basic concepts, applications, and programming (2nd ed.).* N.Y.: Routledge, Taylor and Francis Group


Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and
techniques. Newbury Park: SAGE