

# Exploring the Impact of Street Arts Variables in Preserving the Malaysian Culture



Qistina Donna Lee Abdullah, Salmiah Abdul Hamid, Aliffazaie Jali, Jimmy Anak Salau

**Abstract:** Street art has been becoming one of the popular artwork in contemporary art scene. It has become a tool to help in sending out messages to everyone very easily on a constant basis, just like official advertising and other communication tools. Regardless of cultural or racial differences, street art, in such a creative communication method has the ability to link with people. In fact, some cities in Malaysia have gained popularity since the creation of street arts. With the rise of street arts in Malaysia, some renowned street artists are being commissioned to produce the artworks. Despite the fact that the installation of street art has been established for quite some time, yet it is only now that people are more aware of its importance in improving the city's image, further to preserve our culture. There is still limited knowledge about the guideline to support the street art activities in preserving our culture. Therefore, this study aims to establish Factor Analysis in Exploring the Impact of Street Arts Variables in Preserving the Malaysian Culture. This paper addresses three variables which is independent variables, moderator and dependent variables. Factor analysis was conducted and eventually a whole new framework for the guideline in supporting the street art activities is proposed in developing tourism sector meanwhile preserving Malaysia culture.

**Keywords:** Factor Analysis, Street art, Malaysian culture, tourism sector

## I. INTRODUCTION

In the contemporary visual art environment, street art has become one of the tourist attractions in urban spaces and has become one of the tools that preserve cultures and heritage. According to Riggle (2010), street art has a very strong effect on people due to their visual messages that are both very attractive and shocking to their views. It also has the ability to link people regardless of cultural or racial difference in ways nothing else can (Stower, 2010). Burnham (2010) suggested that creative urban intervention creates opportunities for street – level research and development into city development. Malaysia is not an exception to the invasion of street arts. In fact, some cities have gained popularity since the creation of street arts such as Penang, Malacca and Selangor. In the research area, according to Ismail (2014), the empirical knowledge on the guideline in supporting street art activities to preserve our culture is limited.

Therefore, this paper aims to establish Factor Analysis in Exploring the Impact of Street Arts Variables in Preserving the Malaysian Culture.

To determine the measurement of scales and items for this research, factor analysis was applied to evaluate the items of the variable.

Generally, there are three variables in this study which is the independent variable (Cultural), Dependent variable (City Image) and moderator variable (Guidelines). The dimensions in these variables were identified using the Varimax rotation in the principal component factor analysis. The application of factor analysis is vital in order to recognize whether a common factor or more than a single factor exists in response to these items. Thus, in order to comprehend the fundamental structure in the data matrix, factor analysis was applied to distinguish the most practical set of variables (Hair et al., 2010). Further, the values of the Measure of Sampling Adequacy (MSA), Kaiser-Meyer-Olkin (KOM) and Bartlett's Test of Sphericity were examined to decide the suitability of the items. The MSA value of the individual things was set to be 0.50 and over, as well as KMO for by and large thing's value should be 0.60 and over. The Bartlett's Test is observed to identify the closeness of significant relationships among the variables. It is vital to continue with figure analysis in case the value of the test is huge and significant ( $p < .050$ ). Ultimately, the main items from the variables will determine the success factors in preserving the Malaysian culture through street art projects in the tourism sector. In addition, a list of important factors derived from 26 questions has been identified in determining suggestions of successful items in preserving the culture through street arts to develop the tourism sector in Malaysia. 384 respondents were asked to rank the credibility of these qualities to determine the successful street art project in the form of questions based on Likert scale (*Strongly Agree – Strongly Disagree*). This paper, in the following sections, is divided into four parts; the first section presents culture content analysis (independent variable), followed by items of guidelines (moderator), factor analyses of the item in the city image (dependent variables) and last but not least presenting the new framework based on the analysis done.

## II. CULTURE CONTENT ANALYSIS (INDEPENDENT VARIABLE)

The validity of Culture Content has been assessed using Exploratory Factor Analysis. There were 12 items in the proposed culture content. The items are divided into four sections: three items for culture, three items for heritage, three items for art and three items for ethnic.

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<p>Cultural content</p> <ul style="list-style-type: none"> <li>- Cultural tourism</li> <li>- Heritage tourism</li> <li>- Art tourism</li> <li>- Ethnic tourism</li> </ul>	<p>Culture : Three questions</p> <p>Heritage : Three questions</p> <p>Art : Three items questions</p> <p>Ethnic : Three items questions</p>
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**Figure 1: Items in Cultural content (Independent Variables)**

As can be seen from Figure 1, the Kaiser-Meyer-Olkin (KMO) value of 0.792 is very optimum for these correlation items in culture content. Result obtained from Bartlett's Test of Sphericity is 0.000 which is significant through factor analysis on 12 items based on 384 valid respondents. This data has answered the first objective which is to identify the cultural content of street arts commonly displayed by the street artists to find correlation items after rotating.

**Table 1: KMO and Bartlett's Test (Cultural content)**

Kaiser-Meyer-Olkin (KMO)		.792
Bartlett's Test of Sphericity	Approx. Chi-Square	1492.467
	Df	66
	Sig.	.000

Table 1 above which tabulates the results of factor analysis signified that few items need to be rearranged using new names of variables. Results of factor analysis with Varimax rotation revealed the existence of four (4) components with initial Eigenvalues greater than one that explains 65.13 percent of the total variance.

**Table 2: Total Variance Explained**

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.900	24.169	24.169
2	2.056	17.130	41.298
3	1.513	12.612	53.911
4	1.346	11.219	65.130

Extraction Method: Principal Component Analysis

The first component is comprised of five (5) items related to cultural tourism. This factor with loadings ranging from 0.546 to 0.803 accounted for 24.17 percent of the variance in the data. The original name of the main items was changed to cultural content because all the items were revealed as one component under culture content after the rotation. The second component accounted for 17.13 percent of the total variance with loadings ranged from 0.554 to 0.849. This factor consisted of four (4) items, a mixture of three (3) items from heritage tourism, and one (1) item from the cultural tourism. The original factors remained using the existing name of heritage tourism. The third component which includes one (1) item related to art tourism. This factor accounted for 12.61 percent of the total variance in the data with loadings ranged within 0.915. The last component which includes two (2) items is related to ethnic tourism. This factor accounted with 11.22 percent of the total variance in the data with loading ranged within 0.573 to 0.837.

**Table 3: Factor Analysis of Cultural Content Independent Variables (IV) after rotation**

Items	Component			
	1	2	3	4
Traditional culture represents the pluralistic nature of our society.	.803			
Art tourism is a medium attraction to the arts society.	.741			
Ethnic tourism represents the identity of indigenous or traditional group of people.	.686			
Art tourism is a term used when people travel to specific places to visit, explore and engage in activities related to arts.	.675			
Art tourism is an instrument that facilitates harmony and understanding among people.	.546			
Cultural heritage is an identity that represents a country.		.849		
Heritage tourism involves visiting historical or industrial site and the overall purpose is to gain an appreciation of the past.		.730		
Heritage tourism is a search for new experience carried out in new places, especially related to artifacts and activities that reflect the history of mankind in the past until now.		.571	.491	
Religious beliefs translated into street arts will reflect the city's image.		.554		
The specific culture of a place reflects the image of the city's cultural content through successful Street Arts Project.			.915	
Tourists can learn about the culture of a place or destination and gain new experience or knowledge				.837
Ethnic tourism refers to the travel motivated by performances, presentations and ethnic attraction	.502			.573

### III. ITEMS OF GUIDELINES (MODERATOR)

To determine the validity of the component of the items in the guidelines which was also evaluated by the respondents in this research, principle component factor analysis was performed. Initially, there was only one component of this variable which is the guideline with six items all together.

<p>Guidelines</p> <ul style="list-style-type: none"> <li>- Goals and Objectives</li> <li>- Theme</li> <li>- Colour</li> <li>- Function</li> <li>- Rules</li> <li>- Planning process</li> </ul>	<p>Guidelines:</p> <p>6 sub items (Questions) in one component</p>
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**Figure 2: Items in Guideline Moderator**

The KMO results in Table 4 reflects the value for guideline factors with 0.792 and Bartlett's test shows a significant value (Approx., Chi-square = 435.193,  $p < .001$ ) indicating the significance of the correlation matrix and appropriateness for factor analysis.

**Table 4: KMO and Bartlett's Test (Moderator)**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.792
Bartlett's Test of Sphericity	Approx. Chi-Square	435.193
	Df	15
	Sig.	.000

The result of the scree plot test also supported a one-factor solution. Since only one component was extracted, the solution could not be rotated. Therefore, the original name of the Guidelines was maintained.

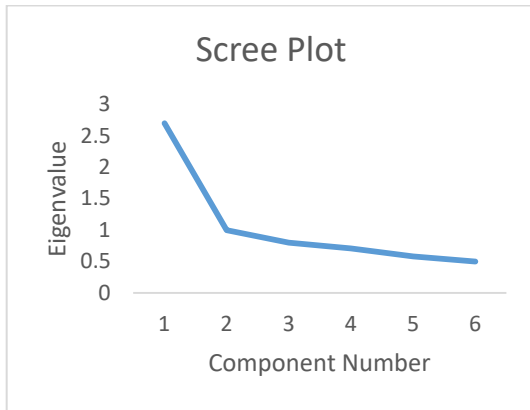


Figure 3: Result of the scree plot to support the results validity of items in the guidelines.

Table 5: Factor analysis of moderator: Guidelines

Items	Component
Selecting the colour theme must be appropriate to the local culture context.	.724
The Street artist who created the Street Arts Project need to follow the laws set by the authorities.	.701
The Planning process is very important before executing the Street Arts Project.	.673
The correct and appropriate theme is very important to ensure the success of the street arts project.	.658
Objectives and goals must be accurate and reliable.	.635
When somebody wants to create Street arts they must have a specific function and not to be treated as vandalism.	.534

#### IV. FACTOR ANALYSES OF ITEM IN THE VARIABLE CITY IMAGE (DEPENDENT VARIABLES)

In this part, the items in the city image will be analysed for its validity using Exploratory Factor Analysis to find the correlation items. There are four (4) components for the proposed city image contrasting from the literature review chapter. On the other hand, eight (8) items are divided from four (4) components to produce the successful street art.

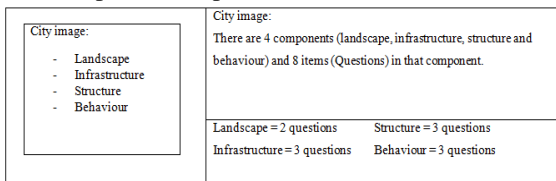


Figure 4: Component of the City Image as dependent variables

The Principal Components Factor Analysis of the city image, with varimax rotation, indicated the existence of four (4) components with initial Eigenvalues greater than one that explained 63.58 percent of total variance as can be seen in Figure 6. The total variance results supported by the result of KMO with value 0.783 and Bartlett's Test's significant value (Approx. Chi-square = 947.186,  $p < .05$ ), indicating the significance of the correlation matrix and appropriateness of Factor Analysis.

Table 6: KMO and Bartlett's Test (City Image)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.783
Bartlett's Test of Sphericity	947.186
Approx. Chi-Square	55
Df	.000
Sig.	

Table 7: Total Variance Explained (City Image)

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	1.921	17.460	17.460
2	1.837	16.704	34.163
3	1.824	16.581	50.744
4	1.412	12.836	63.580

Extraction Method: Principal Component Analysis

The first component which comprises of three (3) items is related to component 1. This factor has items loading ranging from 0.618 to 0.820 accounted for 17.46 percent of the variance. The second component is also comprised of three (3) items. This factor has items loadings ranging from 0.640 to 0.800 accounted for 16.704 percent of the variance in the data. Third, component three (3) has loadings ranging from 0.693 to 0.807 accounted for 16.581 percent of the variance in the data. The last component four (4) is comprised of two (2) items. This factor has a loading ranging from 0.618 and 0.665 accounted for 12.836 percent. To determine the first component name, the item with more items (questions) that are the same in one component is noted. After doing the rotation component matrix, the first component is comprised of three (3) items related to the structure factors and this is because, there are two (2) questions from structure factors with high value, and then one (1) question from behaviour factors. The second component is comprised of also three (3) items related to the landscape factors, in which two (2) questions from landscape factors with high value, and then one (1) from infrastructure factors. The third component is comprised of three (3) items, and this is also related to the behaviour factors, because of two (2) questions in behaviour factors with high value and one (1) question from structure factors. The last component is comprised of two (2) items, related to infrastructure factors, with high value.

Below is Table 8, Rotated component matrix.

Table 8: Rotated Component Matrix<sup>a</sup> City Image as a dependent variable

Items	Component			
	1	2	3	4
A proper and well-organised development of the structure of the city attracts tourists to visit the city.	.820			
The local community's attitudes and behaviour will effect tourists' attraction to our city.	.685			
Attractive and unique structures related to the culture and heritage of the city affect tourists' arrivals.	.618			
The Landscape is referring to urban design, architecture, green spaces and generally public spaces in the city.		.800		
An ordered and structured landscape symbolizes the success image of the city.		.690		.414
Well-developed infrastructure is also one of the tourist attractions for a city and will affect the success of street arts as a medium to preserve the culture and heritage.		.640		
Influenced by the attitude of wanting to know about a new place.			.807	
The visitors who revisit a specific place are influenced by their experience engaged with the place.			.699	
Visitors are also influenced by experiences travelled with the surrounding people.			.693	
The sufficient infrastructure in urban development will improve the living standard of the community.				.665
The attitude or behaviour of people in a city also represents their identity.				.618

# Exploring the Impact of Street Arts Variables in Preserving the Malaysian Culture

## V. NEW PROPOSE FRAMEWORK

As a conclusion, the result of establishing Factor Analysis to Investigate the Impact of Street Arts Variables in Preserving the Malaysia Culture, the creation and the existence of street art for public to experience the story of a city is crucial in creating a vibrant and cheerful environment.

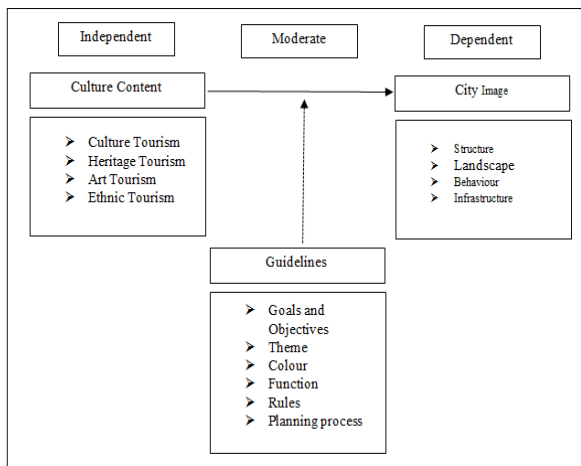


Figure 5: New propose framework

The Street Art Project will certainly develop the street arts as one of the favourable venue attractions. Thus, the city needs some additional creative art to enrich the area as well as stimulate and build the positive social environment. Preserving culture has a significant potential as a medium for people to interact and appreciate their surroundings while at the same time creating a playful and memorable place for the community. On the other hand, based on the result, new framework has been proposed accordingly (Figure 5) to determine the success factors in preserving Malaysian culture through the street art projects which could provide better insights for the local authorities in developing the city area as part of the tourism attractions.

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Finance Berhad based in Kuala Lumpur before she began her career as an educator in UNIMAS. Qistina developed a strong sense of devotion for arts and management area whereby she is involved mainly in consultancy job which engage with the private sector, state government, GLC and community. Her research area and publications focuses on Leadership, Public Private Partnership, Arts, Culture and Heritage Management. Qistina committed to her career as she is currently supervising few postgraduate students and average of 40 undergraduate students. Her passion towards arts management is verified through few taught courses such as Funding and Sponsorship in the Arts, Financial Management in the Arts Organization, Research Methodology and many more. This experience gave her a deep appreciation on how important is her career and self-improvement in determining the future generations.

**Dr. Salmiah Abdul Hamid** is a Senior Lecturer in the Design Technology Programme, Universiti Malaysia Sarawak. She has gained her MFA degree at Rochester Institute of Technology, NY, and her PhD from Aalborg University, Denmark. Her research interests include urban mobility, information graphics, road signs system, visual communication and tourism geography. In the future, her aims are to integrate the mobility research into the graphic design field and improve the Malaysian city design planning and tourism development.

**Aliffzaraie Jali** is a Lecturer in the Cinematography Programme, Universiti Malaysia Sarawak. His area of expertise is in filmmaking focusing on pre-production and post-production related workflow. This includes scriptwriting, story and design conceptualisation, film editing, and visual effects design. Aliff has a keen interest in film documentaries, Asian Horror and cultural studies in film where most of his studies and research stem on. He started his carrier with UNIMAS since 2012 with MA in Film and Visual Studies from Queen's University of Belfast in United Kingdom. He is currently active in teaching and supervising students while involved with the university's effort to improve Teaching and Learning in Higher Education such as producing Massive Open Online Courses and delving in digital (game-based learning) education engagement. Apart from producing videos for educational purposes, he has also co-created films and videos for corporate ventures, documentaries, short films, music videos and video-multimedia for internal as well as external events.

**Jimmy Salau** is a research officer in the social development Sarawak in Ministry of Welfare, Community Wellbeing, Women, Family and Childhood Development. Graduated in arts in management at University Malaysia Sarawak., I have been working with Finance Institution (AEON Credit) as an Executive Management, this fill I learn about finance in institution, for example Loan and "Pay Back", short term, long term, is all about money with our community. Before that 2016, I been working with Research Innovation and Management Centre University Malaysia Sarawak (UNIMAS) since last two year and I have successfully handled the correspondence research, attendance conference, publication, filling and data entry and also have working as a surveyor under World Wide Fund (WWF) and Eco- Ideal Environment and Science Malaysia.