

Conference Paper

Toward Green City, Children's Education on Cultural Behaviour


Abstract

Children who are going to be the next generation that will be the citizens in today's cities and cities in the future are going to live in the majority of the villages that have transformed into very big cities in Indonesia. These cities, with all their complex problems, require their citizens to appreciate as well as interact nicely with them and their communities. Therefore, it is very significant to groom the new generation that knows the green cities' social behavior. The aims of this research are as follows: First, to describe the level of comprehension of the awareness of cultural behavior as the necessary behavior required to reside in the cities to build the great communities; Second, to organize the typical guidance for the child education on cultural behavior to green cities. The methodology employed in this research is the descriptive quantitative design together with tendency test that compares the mean or average of the research result as well as the ideal mean. The study was carried out in Surabaya, Indonesia. The result of the study indicated that the understanding level of cultural behavior revealed a reasonably good standard for all the four categories and a good level for the entire research. Reasonably good level implies that the understanding level is fair and needs to be improved to make it conform to the Surabaya development shortly. Thus, it is essential to develop guidance for children for cultural behavior education toward creating green cities.

Keywords: cultural behavior education, green cities, guidance

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1. Introduction

A fantastic urban architecture will result in a community which has a high social asset. In fairness, it awakened from two integrations [1]. First, a comprehensive system of urban governance, which produces a good public space, adequate infrastructure, and good environmental quality. Secondly, the understanding of people about the importance of urban culture which encourages an excellent urban culture. Thus, it will be appropriate to conclude that the planning and arrangement of a perfect city and the importance of urban culture become imperative to promote the strengthening of the community's social capital [2]. Architecture as a matter of human life reflects the culture in every society interacting closely with structural, historical, political, economic and social features

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of community [3]. An understanding of the city culture and making the social capital of citizens stronger will automatically prompt citizens to be more responsible for the city environment, including building a green and a well-rounded city.

Children constitute a future generation who will reside in the city today, or in the future as the majority of rural areas in Indonesia will transform into a big city. The town, with its problem of complexity, demands its residents understand as well as have excellent interaction with it, its environment, and its community. Hence, it's very vital to groom a new generation that has an awareness of cultural behavior which will result in the formation of a green city.

This study has two aims. First, to determine how much awareness of urban culture the city residents have in the means of excellent city life. Second, to arrange the guide of city culture education for children that are responsive to the environment to create a green city.

Urban cultural behavior implies a culture which includes physical systems (technology), social systems, and a system of ideas, which are obtained via learning [4]. Thus, city culture is a kind of behavior which applies to city life and can produce a fantastic city community. That behavior derived from the learning process that will be better off if conditioned via the education process. Hence, children's education regarding urban culture is crucial.

Living in the city demands an understanding of the culture and way of life of the city. In agreement with Wuss [5], Wirt [6], and Lees [7], Kamil noted that there exist four aspects which must be understood and responded to positively by the urban residents, to achieve a secure and harmonious life. Understanding the urban culture implies a readiness to negotiate on four aspects of city life: heterogeneity, density, social intensity, and anonymity [8].

Density refers to solidity, which is usually calculated using the formulation of the number of people per land area. The higher the population per meter square, the higher will be the density of the area. Migration, as well as urbanization, is one of the leading causes of high density. The problem of economic inequality is another factor which triggers high density. The upper class can purchase a large area, construct luxurious as well as super luxurious houses where only a few people live. They buy one or more new houses for investment without living in it. Conversely, many families having nine or more members live together in very small houses such as those built on a small piece of land about 36 square meters or less.

Heterogeneity means the variation in behavior and character of residents of the city. The city is the center which attracts mass movements of rich and poor, the youth, male

and female, educated and uneducated, and people of other socio-cultural attributes. They all migrated to the city for various reasons, such as studying, working or seeking a means of livelihood, and more. Therefore, the city has different individuals with all manner of differences mingling as one.

Anonymity implies that city residents living individually and collectively form part of the city. Individuals, as well as communities, melt into the urban citizens that seems to be nameless. Hence, a municipal convention is required, which happens to be a generally agreed upon a rule which is aimed at creating a very peaceful life. This urban convention is subdivided into two types, which are a legal convention, such as obedience to zebra cross, traffic signs, traffic light, and lots more. The cultural convention, in the form of consensus, is based on culture, customs, or local norms.

Social intensity means the method, depth, and frequency of social interaction among citizens. A person tends to be comfortable while hanging out with people that have certain things in common with them. Similarities concerning with ethnicity, education, hobbies, religion, and more, which constitute different communities. These communities have the potential for creating quality cities if the activities of the population are positive. However, the opposite condition will also arise if the differences between communities result in social friction.

Therefore, the first goal of architecture is to build a proper space for human activities. Having sufficient knowledge about human beings and their relationships with others can be useful in creating an environment that is appropriate for certain types of activities. On the other hand, as social creatures, humans have various qualitative and quantitative levels of social interactions; while many of the existing buildings have created a deeper gap in human relations by solely responding to the functional needs and failing to give focused attention to human factors [9].

2. Research Methods

This paper relies on half of the outcomes of the research conducted in 2013 in Surabaya. The choice of Surabaya as the research city is informed by purposive consideration, concerning the result of the study carried out the year before. The center of Surabaya city was found to feature very high objective quality. Therefore, there was an assumption that it could be a study model for the development of urban structure policies and urban culture education models.

The technique used to gather the data of city residents' understanding of cultural behavior is a questionnaire, supported by interview. To fulfill the reliability and validity

requirements of the research the deductive analysis was carried out to fulfill the content validity; inductive validity was carried out to test the internal validity using the product moment correlation technique from Pearson; External validity has to do with the level of the instrument scale which is capable of predicting variables designed as criteria. The item is considered valid if the significance coefficient in the correlations table is lower than α (confidence level) which is set at 0.05. If the opposite happens, namely ρ value > 0.05 , then the item is considered invalid; The next step is testing instrument reliability on all things which have been found valid. The test was performed using an internal consistency model via a split technique that was analyzed by the Spearman-Brown formula. If the correlation coefficient (ρ value) of the calculation results is ≥ 0.8 , then the instrument is considered reliable.

For the variable understanding of urban culture behavior, it appears that out of 35 questions representing four research indicators, there were seven questions (numbers 3, 4, 15, 16, 17, 28, and 35) which were considered invalid. These seven questions are done away with and are not processed in the subsequent data of the questionnaire. Depending on the testing of all the questions items which have been considered valid above, testing all variables produces a correlation coefficient (ρ value) 0.777, with the upper split technique producing a correlation coefficient of 0.807, the lower split technique producing a coefficient of 0.818, which means that the whole is greater than 0.7. Thus, the instrument is considered reliable and can be used.

This study was designed by using data which have an ordinal scale, accidental and purposive samples. Therefore, it does not fulfill the requirements of parametric statistics. Based on that, this study does not need testing of the parametric requirements for normality and homogeneity tests, and it was decided immediately to use non-parametric statistics. Providing an overview of each of the variables X and Y, descriptive analysis is employed, showing frequency, mode, means, and median data. Then a tendency test was carried out for the interpretation of the data.

The interpretation of data via trend test depends on the mean of each variable (X) which is compared with the parameters Ideal Mean (Mi) and Standard Deviation (SD). The Ideal Mean is a fixed parameter which is determined using calculation: $\frac{1}{2} \times (\text{minimum value} + \text{maximum value})$. Interpretation criteria are formulated as follows:

Furthermore, as part of the recommendations of the research, an urban culture children's education guide was prepared, toward building a better urban community in the future, leading to the creation of a green city. This guide was formulated by adopting and adapting the primary references: *A Kid's Guide to Building Great Communities: A Manual for Planners and Educators*. Canadian Institute of Planners [9]. The guidelines

TABLE 1: Criteria of Descriptive Interpretation Measurement.

Very Low = $X < Mi - 1.5 SD$
Low = $Mi - 0.5 SD > X \geq Mi - 1.5 SD$
Moderate = $Mi + 0.5 SD > X \geq Mi - 0.5 SD$
High = $Mi + 1.5 SD > X \geq Mi + 0.5 SD$
Very High = $X \geq Mi + 1.5 SD$

are adapted to the local context (Indonesia), but this paper has not yet described the outcomes of the Implementation, and only gives examples of a small portion of the models and learning materials for urban culture education.

3. Research Result and Discussion

The results of the study indicate that the overall level of understanding of the citizens of the city of Surabaya on urban culture lies in good category (as shown in table 2). Well, this implies that the citizens of Surabaya manifest a high understanding of aspects of urban life. City residents, thus, have both the ability and awareness to negotiate with diversity, density, social institutions, and social intensity relating to the public interest.

TABLE 2: Test Understanding of Total Variable toward Urban Culture Behaviour.

X average	137.62			X ideal	1/2 x (minimum score + maximum score)			
SD	27.76				1/2X (28+196)=112			
No	Raw score	Mature value	Conversion				Criterion	
1	$Xi + 1.5 SD$	153.64			137.62	>	153.64	Very good
2	$Xi + 0.5 SD$	125.88	153.64	>	137.62	\geq	125.88	Good
3	$Xi - 0.5 SD$	98.12	125.88	>	137.62	\geq	98.12	Good enough
4	$Xi - 1.5 SD$	70.36	98.12	>	137.62	\geq	70.36	Not good
5					137.62	<	70.36	Bad

If each aspect is looked at in detail, it reveals that the level of citizens' understanding of urban culture is only a pretty good category. It is moderate, meaning average (mediocre). However, for such a large city as Surabaya, this level of understanding is sufficient to prove that high objective city quality, based on the results of the research in the first year, affects the understanding as well as cultural awareness of its citizens. About the density, the understanding level of citizens is also quite good. That is, city residents have tolerance and a high enough threshold for density. This is because the residents of the city are used to living in a thickly populated city, have the ability to adjust to the density of the city, not feel too crowded because they reside in densely populated

cities, and have enough thresholds for stress owing to lives jostling in traffic congestion, densely populated housing environment, and more.

A similar result indicated the aspect of heterogeneity, the level of understanding of citizens falls in a pretty good category. In terms of diversity, the city is an area which has much variety and diversity. This diversity encompasses socioeconomic levels, cultural differences, ethnicity, level of education, beliefs, age, gender, and more.

Similarly, on the anonymity aspect, as the citizens of the city have differences, multifarious needs, and interests, it is not possible for a citizen of the city to be a lone ranger or individualistic. As part of a city, an individual is subject to public rules, citizenship conventions, and social institutions. In this aspect, it was discovered that the citizens of the city of Surabaya also possess a good level of understanding.

In the aspect of social intensity, citizens of Surabaya also possess a pretty good understanding. That is, city residents are in a position to know, hold formal or informal meetings, interact, and do activities together with others, including activities in the public space of the city.

Based on the findings, the discussion highlights two things. First, city residents who were respondents in this study are residents who are used to enjoying public space, and they have an average level of secondary education. The level of understanding of this urban culture behavior in the general public, including lower-class residents who have low knowledge, needs to be examined further. For the time being, there is an assumption that the general public has a lower level of understanding than citizens who are used to enjoying public space.

Second, the level of understanding of urban culture behavior is in a reasonably good category on all the four indicators and good when considered as a whole. Moderate, implying that the understanding is average, and must be improved to adjust to Surabaya's increasingly complex life in the future. The good category should be suspected that it is not due to the urban culture education which is carried out in a planned manner by the city government, but rather due to the role played by the citizens. The communities in Surabaya widely play the role of the citizens. An analysis of the Jawa Pos daily news above reveals that the city government focuses more on the social, economic, and physical and development of the city. Meanwhile, urban culture education has never been planned and programmed; it has always been a consequence of city development. In this context, the roles played by various community members is very significant.

4. Conclusion and Recommendation

The result of the research revealed that relatively, the level of understanding of Surabaya residents towards city culture behavior is regarded as good. Good, implying that Surabaya residents have a high enough understanding of the aspect of urban life. Therefore, townspeople have the ability and awareness to negotiate with diversity, density, social regulation, and social intensity which correlate with the public interest. However, city residents who were respondents in this study were residents who were used to enjoying public space, and they have an average level of secondary education. The research did not test the understanding level of this urban culture in the general public, including lower-class people who have low education.

The level of understanding of the cultural behavior of the city is moderate in the four indicators and good if considered as a whole. The category moderate was not due to urban culture education which is planned by the city government, but it was rather due to the roles played by the citizens themselves. The role of citizens is widely played by the communities in Surabaya. Hence, this paper recommends the government, community or school to implement the education guide on urban culture toward green cities. The example model for urban culture education is indicated as follow [10].

1. Define the environment

Purpose: Improved motor skills and perception of space

Media: Constructions

Method: Presentations

Study: Local history, community, and city geography

Level: 4 to 9

Come up with a puzzle based on your community environment (neighborhood, city or country) or a fictional city. Make use of the colored area function map, or a base map involving the identification of various places such as factories, schools, shops, or homes. Use any specific existing map or make it yourself. The size of the puzzle is based on the age of the children and the type of map. Let your puzzle be in such a way that all parts have the same shape. Form groups with each group having 2-5 children. Discuss how and why a city looks "different." Is there anything right or wrong? Put all parts of the puzzle together, one after the other, to allow for an understanding of how a city is formed and built.

After that, carry out a survey: In which environment do you want to live?

Here are the examples of survey's statement: Environment hoped for by the children

1. The place which has the best environment is in
2. The place which has the worst environment is in
3. The most favorable environment in my community is in
4. The most disagreeable environment in my community is in
5. If I become (Mayor / *Camat* / *Lurah*), then I will make the environment (city / sub-district / *kelurahan*) better for young people, using the methods of
6. The three major environmental problems in my community are
7. Is there anything which needs to be altered in your environment? If there are, mention three main things which need to be changed, and ways of doing this? ..

2. Describing the environment

Purpose: Increasing the sensitivity towards the environment

Study: The language ability

Levels: 1 to 3; 4 to 8

My environments' name is:

Some words below can be employed to explain objects or places in your surroundings. Next, to each word, write the name of the place or object in your neighborhood or draw it with a sketch, which you believe fits the word. Write your answer in the box. Include yourself if necessary.

TABLE 3: Template: Describing the place or object in my environment.

Wet		Fresh	
Dirty		Unfriendly	
Friendly		Beautiful	
Bad Traffic		Clean	
Dangerous		Healthy	
Safe		Colored	
Quiet		Messy	
Peaceful		Dry	
Dark		Bright	
Old		Young	
Mysterious		Delightful	
Noisy		Calm	

3. Environment and Citizenship

Purpose: Enhancement of responsive attitude towards the environment

Method: Observation

Study: Citizenship

Level: 4 to 8; 9 to 12

What is the meaning of environment? Can you explain why an environment is created in your community? What is the name of your environment? What are the names for some other environments? Can you place it on the maps? What is a famous place in that area?

Select an environment in your community, to make it more focused. Ensure that your chosen location is well-known. It may start with your environment.

Divide students into groups and create large charts or schemes, with each group having its charts. Ask students to work together to complete the chart. After that, you can compare the idea.

TABLE 4: Template: Scheme of Environmental Problems.

Our Environment
Place, element, object, or the activity that you enjoy in the surroundings:
Problems which exist in your environment:
Things that need to be changed or improved in your environment:

There are many ways of presenting information:

Select one block from your surroundings and produce a streetscape using mural paper.

1. Draw or use pieces of paper to incorporate buildings. Use different ingredients to make your mural more interesting and fun.
2. Produce a booklet about your surroundings by using information obtained from the previously made chart. Ensure that illustrations are included in it.
3. Come up with a fictional story in which the setting is your environment. It may be an adventure story or a mystery story.
4. Produce a traffic sign for your environment
5. Make a poster about your environment

4. Designing the dream city

Purpose: Imagination, creativity, and environmental awareness

Method: Construction

Media: Presentation

Level: 3 - 6

1. Create an imaginary room

Inform the students to make or draw models, or make collages, which fantasize a bedroom or any special room at home. Discuss their design. Why did they make the design and how important is it to them? What is the space limit? What material is used?

2. Create a dream house

Materials: Glue, construction paper, markers, shoe boxes, tin foil, or cardboard. Tell the students to cut pieces from shoe cardboard to make doors, windows, and other details of the dream house. Discuss the functions, types as well as materials for doors, windows, and roofs.

Note: Houses can be large. Use refrigerators, computer boxes, or televisions.

3. Build an Environment

Houses which have been made can be arranged into an environment. Ask students to create other buildings in the environment such as supermarkets, grocery stores, mosques, schools, etc. Ask some of the students to design other elements found in the environment, such as cars, trees, bridges, and so on. Put everything together to form an ideal environment.

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