

Do Cultural Styles Predict Pro-Environment Behaviour among Slum-area Resident of Jakarta?

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Abstract. Promoting pro-environmental behavior is essential to ensure the sustainable living environment was preserved. The cultural aspect is considered one of the critical determinant in predicting pro-environmental behavior. However, the interplay between these aspects was still open for further discussion, particularly in Indonesia. This study was aimed to examine the effect of individualism-collectivistic cultures on pro-environmental tendency among Jakarta's slum area resident. We classified cultural style into four different types; Horizontal Individualism (HI), Vertical Individualism (VI), Horizontal Collectivism (HC), and Vertical Collectivism (VC). While pro-environmental behavior was divided into two broad tendencies (positive and negative). Non-probability sampling technique with a purposive sampling approach was subjected to data collection. 196 Jakarta's residents were voluntary participated in this study. The study finding indicates that there were differences in pro-environmental tendencies based on cultural style variation.

1 Introduction

As one of the fastest growing economic city in the region, Jakarta has continuously experienced a massive population outbreak. More than 30 million resident lived in a greater Jakarta area, made it one of the densest place in the world. Consequently, urban development issues related to the following social phenomena are raised. Like for example, according to the Indonesian statistical bureau [1], the number of poverty in Jakarta is consistently increased from year to year. Poverty occurs not limited due to the economic challenges, such as inflation and income gap, but also comes from a higher rate of urbanization which affects to the higher job-market competition and a raised of unemployment number.

These problems bring more devastating impact to the life of people in low-social economic status. A lack of housing, as well as low consumption rate among this population, pushes them to profoundly live side by side with others in a poor-standard settlement with

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lack of sanitation and limited access to social facilities. Furthermore, numerous environmental issues emerged within this population, such as emerging air, water and, land pollution. These problems implicate to Jakarta's environmental damage emergency. While the poverty and its negative environmental impacts are still in there, numbers of pro-environmental movements emerge throughout the city recently. These efforts initiated by the communities and the local government. The aim is to solve city's ecological problems by encouraging people to do small and immediate acts, such as recycling waste, put the waste on the right place, and creating a local "green" area around the neighborhood. However, this encouraging attempt need more than merely a planned program nor financial support from the authorities. Hence, it needs to be necessarily driven by a strong psycho-social attribute, such as a strong social initiative based on cultural reinforcement.

Culture is strongly associated with the way we lived our life, including how we develop our pro-environmental attitude and behavior. It is shaped our worldview and changes the way we regulate our behavior to the environment [2]. Literature has been consistently indicating that eco-behaviour is driven by culture in which people lived through value and social influence. Unfortunately, this assumption is mostly based on western study finding [3]. While how different cultural styles influenced pro-environmental behavior in developing non-industrial country is apparently neglected [4].

Even though Indonesian is known as a strong collectivist society [5], some people lived in an urban area like Jakarta is likely exposed to the Western individualist lifestyle, which may progressively impact to their cultural preference into more individualist oriented. The interplay between the vast changes of cultural orientation among urban society and how eco-behaviour is developed will be interesting theme to explore. This study was aimed to systematically investigate the association between pro-environmental behavior based on the cultural style variation using a psycho-ecological perspective, particularly related to those lived in Jakarta's slum area has never been explored sufficiently.

2 Materials and Methods

This research study was using a cross-sectional approach by utilizing regression analysis. Researcher team was developed two questionnaires to measured collectivist-individuals culture orientation (Hofstede) and pro-environmental attitude. Both scales were developed in the Indonesian language which aimed to measure the constructs for the respective population.

2.1 Instrument

An instrument validation test on an individualism-collectivism scale confirmed 20 final items out of 51 initial items. Researchers analyzed the scale's internal consistency in which indicating a Cronbach's alpha score of .98 that suggest a satisfying reliability index met. To measure the environmentally friendly attitude variable, researcher construct the scale of for the respective attitude consist of 57 items. Once the discrimination power test conducted, 24 items were not well suited with the scale and needed to be removed. Subsequently, this scale has Cronbach's alpha of .92 means the scale has superb reliability. To test the hypothesis, the researcher employing a chi-square analysis ran at SPSS version 16.

2.2 Population and Sample

People lived in a slum area at Jakarta were invited to participate in this survey. Samples were chosen due to the researcher's intention to understand the difference of individualism-collectivism culture with an eco-behavior attitude. 196 Indonesian adults (18–65 years old), lived in Jakarta's slum was voluntary participated in the questionnaire session that takes around 30–45 minutes to complete.

3 Results and Discussions

Data were collected through a paper-based method that took place in their house. This approach was used to ensure that the respondent is understood about the questionnaire. The environmental friendly attitude variable was obtained from 196 respondents resulted in a mean group average of 154.32 ($SD = 16.959$; variance of 287.594, skewness or curve fault of -0.518, the kurtosis of 0.021). While Individualism-Collectivism data obtained from 196 respondents demonstrated a mean score of 111.07 ($SD = 10.211$). Normality test data was run and showed that the data is typically distributed for individualism-collectivism variables, but for the environmentally friendly attitude variable, the p-value obtained is not normally distributed. However, this evidence could be excluded since the sampling size was above 100 cases that can be considered as normal.

The cultural style was categorized into four different styles, thus were horizontal individualism (HI), vertical individualism (VI), horizontal collectivism (HC), vertical collectivism (VC), and categorized environmentally friendly attitudes into positive environmental positives and negative environmental attitudes. The environmental friendly attitude of the confluence was divided into two positive and negative directions with positive attitude criteria if it has a total score of environmental friendly attitude or X of 164.72 and greater than 164.72. The eco-friendly attitude is categorized as negative if it has a total score of 143.917 and is smaller than 143.917. The total score of environmental friendly attitudes that falls between 143.19 and 164.72 is not included in the category or uncategorized.

Finding from the analysis showed that respondents who have a strong environmental attitude were 61 respondents (31.12%), while 46 respondents (23.47 %) were having a negative environmental attitude. Respondents who did not fall into both category were 89 (45.41%).

Table 1. Culture and Environmental Friendly Attitudes.

<i>Cultures</i>		<i>Environmental Friendly Attitudes</i>			<i>Total</i>
		<i>Positive</i>	<i>Negative</i>	<i>Uncategorized</i>	
Individualism	Horizontal	13	15	20	48
	Vertical	4	11	16	31
Collectivism	Horizontal	24	5	31	60
	Vertical	11	10	16	32
	Uncategorized	9	46	6	25

The respondent with the category of HI is 48 respondents (24.4%), respondent with category VI 31 respondents (16%), respondent with HC category as many as 60 respondents (30.6%), respondent with category VC as many as 32 respondents (16.3%) and uncategorized respondents (12.7%). A Pearson chi technique was applied to unfold the difference between the two variables, that is with the main hypothesis given in this study obtained above Pearson chi value is 21.729 bigger than chi table, with df of 8; hence chi table value is 15.507. The p-value of the arithmetic is 0.005, smaller than α (0.05). Based on the results obtained, it can be concluded that there was a significant difference in the proportion of environmentally friendly attitudes based on individualism culture - collectivism.

4 Conclusion

There was a significant difference in the frequency of environmental friendly attitudes based on individualism culture - collectivism. Based on the results obtained, it can be concluded that H_0 was rejected and therefore, H_a is accepted. The majority of Jakarta residents who have a positive environmental attitude tend to cultured horizontal collectivism (HC). While the majority of Jakarta citizens who have negative environmental attitude, tend to be cultured Horizontal Individualism (HI). There is a difference of frequency in each cultural dimension of individualism-collectivism to the positive and negative attitude of the environment. Meanwhile, based on the results of this study, there may be an assumption that there is still a tendency to behave in a non-pro-environment because of individual individuals who think themselves identical to individuals with individualism culture. So the impact will be the possibility of making people with individualistic cultures as the mastermind of environmental problems. In fact, not necessarily all people with individualist culture is bad or negative.

Based on the result of the research, there was the difference of individualism culture - collectivism toward environmentally friendly attitude in Jakarta. This means that the citizens of Jakarta in the slums tend the different types of individualism culture - collectivism. In slums, not only tend to one culture but diverse. In slums, most frequencies are residents with a culture of horizontal collectivism (HC) with characteristics [6]: the individual sees itself as an aspect of the group. The concept of self is closely related to and interdependent with others in the group (in-group), which he sees as himself. The value of equality is emphasized. The positive impact of the results of this study is individuals with HC culture, more likely to be environmentally friendly. The collective individual is the individual who emphasizes shared goals with others and sees himself as an aspect of the group. That way when they want to dispose of garbage, there will be a tendency to behave in the garbage disposal place. They will think of other people also in the act so that they are less likely to throw garbage carelessly. Thus, the positive impact in slum areas, environmental problems can be helped by the existence of these individual individuals. Individuals with a collective culture especially HC is expected to invite another individual to be more attitude and behave environmentally friendly. The results of this study can be used for the interest in the handling of environmental problems, especially waste problems in Jakarta.

References

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