## INFLUENCE OF PARENTS' BEHAVIOR ON AWARENESS OF CHILDREN TOWARDS ENVIRONMENTAL PRESERVATION

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#### Abstract

Environmental quality in Indonesia, particularly in the urban areas, have been significantly degraded. Indonesian usually inherits traditions in preserving the environment over generations. In this research, a survey was conducted to investigate the influence of parents' behaviour on awareness of children towards environmental preservation. Respondents were selected from several elementary schools located near Cikapundung River, Bandung, Indonesia. Questionnaires were distributed to find out how students preserve the river. The results of the research showed an insignificant correlation (determination coefficient 0.3) between parents behaviour and children knowledge in preserving the river. Additionally, tradition in preserving the river and environment has also been degraded. Furthermore, 46 percent of respondent believe that wastewater can be discharged directly into the river. The research concludes that both children and parents' awareness in preserving the environment should be improved through formal education, community engagement and key stakeholders involvement.

Keywords: parents' behavior, children awareness, environmental preservation, environmental education

## **1. Introduction**

Environmental preservation is everyone responsibility. It has been occurring for a long time, the environment condition has deteriorated, which then more or less made our lifestyle changed. The insensitivity of the community towards their own environment has made the environment condition become worse, like air pollution, river pollution and solid waste problem. In respond to this, the Indonesia Government has initiated the implementation of environment education/learning since 1975. This initiative has been a joint-cooperation between the Ministry of Education and Ministry of Environment. Through this program, the Indonesian people and citizen should be actively involved in preserving the environment.

Preserving the environment is not something new to Indonesian. The formal initiative may have been coming from Government of Indonesia. However from the local story and wisdom, the ancestors of Indonesian people have taught their descendants on how to preserve the environment surround us. Due to the fast development in the sector of industry, economy and population, the level of pollution has increased significantly over the past few years. Not to mention, the forest degradation in Indonesia has been the focus of attention of the international community. Some of the environmental problems in Indonesia are deforestation, wildlife trade, pollution, overfishing. National development cannot be avoided. However preserving what have been told by our ancestors should also become important consideration. In addressing the situation above, it is important that we are able to participate in the development, also at the same time we are able to preserve the environment as much as possible. In some of the areas in Indonesia, there are some communities that still uphold the local culture or habit to preserve the nature and environment through preserving their forest, river and water springs.

With the growth of economy and development, the traditional values have been diminished. The transfer of values from one generation to the next generation has not been done well. The role of parents to transfer the good values from our ancestors in preserving the nature and environment has also efficiently. Some of young generations do not have a clue to the existence of all these good values from their ancestors on the importance of preserving the nature.

The children might follow the behavior of their parents in their daily life. If the parents do not really care about the environment, then it might be reflected in the behavior of their children toward the environment. If in the daily life, the parents have bad habits such as throwing garbage everywhere, unhealthy living, or dirty house, then there is a possibility that the children will also follow those bad examples. Parents' behaviors and habits of the family members will form the character of the children or other family members. The ancestors has probably had better understanding in preserving the environment through the thinking that a man is an inseparable part of the environment itself. What a parent do to its environment will affect to children behavior in the future. Have the parents taught their children to live well side by side with the environment? Do they teach their children about the local habit in their areas?

One of the legacies of the Bandung's people is Cikapundung river. This river has been used for known for the water sources for people live in Bandung area. Local government officials in Bandung have been working hard to preserve the river to maintain its quality and quantity. Efforts to preserving this natural resources through education and socialization for the Bandung community to be actively involved in guarding and preserving the surrounding environment of the river and their houses.

This research was conducted to see whether the culture in preserving the environment are still well maintained or not. The research also observed the influence of parents' behavior toward the children's behavior with regards to preserving the environment. The selected respondents came from the elementary schools around the Cikapundung river, Bandung-Indonesia. The questionnaires were disseminated to explore how the students involve in preserving the river near their schools. Through this research, it is also expected that a

better understanding regarding the influence of the parents in transferring the culture to the children in preserving their environment.

#### 2. Method of Research

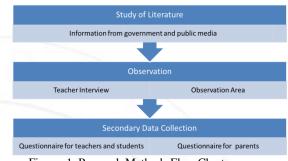


Figure: 1. Research Methods Flow Chart

In January 2014, Study Program of Environmental Engineering of Pasundan University and Department of Life and Environmental Engineering in the University of Kitakyushu have done a preliminary research to identify the influence of parents' behavior toward the student's knowledge and awareness in preserving the river and its surrounding. The data collection in this research through dissemination was conducted of questionnaires for 208 students from 5<sup>th</sup> grade from 7 elementary schools located around Cikapundung river in Bandung city. The 5<sup>th</sup> grade elementary school students were chosen because at this level, they have been taught about the environmental education as instructed in the curriculum.

This research was conducted in area of Babakan Siliwangi, Bandung Indonesia. The particular area where the research conducted was sub-district of Lebak Siliwangi. This sub-district has 8 RW and 25 RT with the total area of 100 hectares/acres. Geographically, the location of the Lebak Siliwangi is geographically more or less 700 meters above the sea level. In 2009, the total population of subdistrict of Lebak Siliwangi was 4,167 people or equal to 1,023 households. The sub-district of Lebak Siliwangi is the most populous area with the low quality of santiation. Therefore, it was very important to conduct the study/field research in this area. The location for the dissemination of the questionnaires can be seen in the following map. Figure 2 shows about map of Lebak Siliwangi area near Cikapundung River. This map shows the area questionnaire distributed in 7 elementary schools.

In selecting the elementary school, this research focused on the elementary schools that are located near the Cikapundung river and that has been selected under the Adiwiyata Mandiri Program. Adiwiyata Mandiri Pogram is a program run by Ministry of Environment to involve the schools that actively preserving the environment through their environmental education.



Pictures 1: Map of Lebak Siliwangi

SD Pertiwi (Pertiwi Elementary School) is one of the ten elementary schools that selected to participate in the Adiwiyata Mandiri Program. As one of these schools, SD Pertiwi has several other elementary schools to be mentored. Those other mentored elementary schools were SD Pelesiran, SD Lingga Wastu, SD Baptis, SD Mathlaul Khairiyah, SD Yakeswa and SD YKPPK. All of these seven elementary schools have been selected for this research.

### 3. Result and Discussion

"Young citizens of today are growing up in a world that is very different from their parents and grandparents. It's a world in which they are confronted by four difficult and intersecting challenges: dangerous environmental change, growing social inequality, an unsustainable global economy, and weakening democracies as local communities struggle to hold global power to account"(Hayward 2014)

Global warming and climate change have been the ongoing discourse in national or international community. Environmental education is an important tool to increase the awareness of the people toward the environmental preservation. Based on the previous research, environmental education has more or less influenced the young generation to be more aware on the importance of preserving the environment. To enable the environment education to influence the students' behavior more, a more interesting method or techniques to teach the environment issue is needed. Those interesting techniques may include outdoor learning, participate directly in problem solving activities on the environment issue with tother organization, etc (Hsu, 2010).

Parents' behavior has been one of the factors that may have influenced their children's knowledge and behavior. Nonetheless, other aspects may have also influence either parents' or children's knowledge or behavior in the issue of preserving the environment. Some results from the research, the graphics based on the responses from the question regarding the distance of the river to their houses and whether it influences the parents' behavior or children's knowledge.

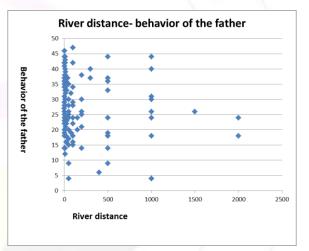


Fig 2: River distance -Behavior of the father

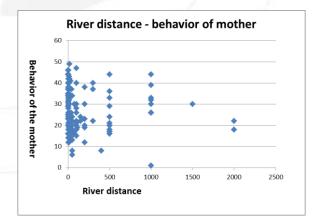


Fig 3: River-distance behavior of mother.

The figures show some of the results of the preliminary survey done in January 2014. As demonstrated by the two graphics above, the

distance of the river toward the parents behavior has weak correlation. The figure below also demonstrated that behavior of the parents has weak correlation with the knowledge of the children in preserving the environment. The two graphics below (fig 4 and 5) showed the correlation of father's behavior with the knowledge of their children and the correlations of mother's behavior with the knowledge of their children. Mother behavior in this paper is how a mother behaves friendly to the environment in the surrounding rivers. A score of 100 was given if the behaviour or knowledge of the individual towards the environment was very good, based on the responses for every question or statement. In this study, using a scale of 100. The division of scale as follows: 0-25 : very bad, 25-50 : bad, 50-75 : Good, 75-100 : Very Good

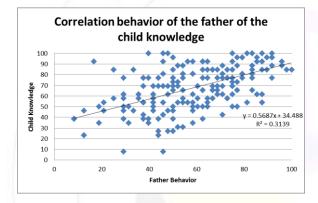


Fig 4: Correlation of father's behavior towards the knowledge of the children on the environment

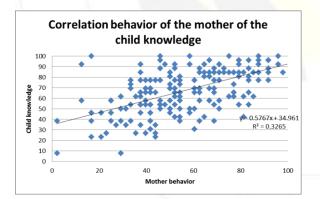


Fig 5: Correlation of mother's behavior towards the knowledge of the children on the environment

Figure 4 and 5 above demonstrated the environment education from the parents did not strongly influence the knowledge of the children in preserving the environment, in particular the environment of the river. Therefore, in the effort of increasing the awareness of the importance of preserving the environment, the subject of

Environment Education (PLH – Pendidikan Lingkungan Hidup) in elementary school is crucial. Figure 6, 7 and 8 demonstrated the results of the behavior of the students of elementary school about the Cikapundung River.

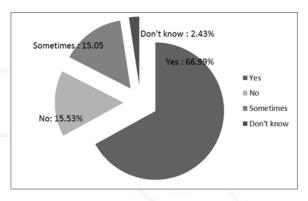
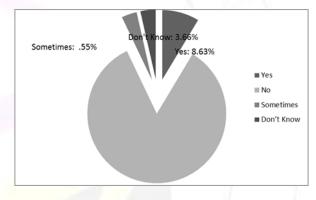
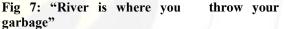
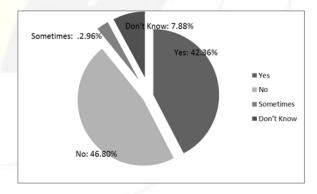


Fig 6 : "I participate in making the Cikapundung river clean"







# Fig 8: "Wastewater in the bathroom can be dumped into the river"

In general, the elementary students realized that the river has to be preserved and no garbage should be thrown into the river. Most of the students were not aware that the wastewater from bathroom should not be discharged into the river (53.2 percent). Aside from that, the result of the study has also shown that not all the students have applied everything that they have learned from the

environment education. One of the causes was because the method used for studying the environment education was not interesting enough.

Based on the observation of the river condition in the big cities in Indonesia, most of them have similar poor conditions. River with full of household garbage has been a common view. Most of the children are not aware that the water in the river has to be preserved well. The river cannot be treated as a moving garbage that will sweep the garbage away along with the rain. One of the reasons that made the quality of the water in the river decreased was the increase of wastewater concentration in the river. This kind of water pollution has been caused not only by the liquid waste from the by the industrial wastewater but also domestic waste (waste water from bathroom, kitchen and toilet).

Those conditions have become the concerns for every environmental activist and other citizens who have been of the importance of preserving the environment. The government of Indonesia has been working hard in campaigning the program of environmental education not only in the school, but also in the general community.

Aside from the government's efforts, community has also had some culture in preserving the environment. One of the examples the culture that relates to preserving environment is "Bersih Deso". This is a ritual that has been traditionally preserved by the people in Gasang village in East Java Indonesia. In a group, the people in this village, There are together cleaning surrounding. They clean the streets, the public sewage and the river. In other area, such as Ciomas in West Java Indonesia, the people there have jointly preserved their forest and water springs. They have called their forest as the forbidden forest. Since long time ago, only certain people can go to those areas, because they were concerned that their young generation cannot preserve their forest and water springs. Those kind of learning and values should be taught from the parents or older generation to the children or younger generation, in order to have a good environmental preservation. The environmental education is one of the tools in enabling the changes of the way we think about how we can live in an environmentally friendly earth.

These kind of cultures that respect the environment, which have been inherited from our ancestors are the key points to have a sustainable environment for humanity. These local wisdom ("kearifan local") has become knowledge, belief, understanding, habits, traditions or ethics that have been inherited, nurtured and well maintained in the community in certain area from one generation to the next generation.

Based on the results of the questionnaires that the parents' has little influence toward the student's knowledge on the environment, has also confirmed that the parents have not successfully transfer the local wisdom in preserving the environment, in particular the preservation of Cikapundung river as one of the legacies that need to be preserved by the Bandung people. The limitation of the knowledge of the parents in relations to the environment is probably one of the factors that cause the low correlations between knowledge of the parents and the behavior of their children toward environment. The education for the community conducted by the local government of Bandung or by NGOs (Nongovernmental Organizations or LSM/Lembaga Swadaya Masyarakat) can become one of the learning media for the parents. The children then can study the remaining materials from the schools or the teachers. Furthermore, the knowledge and skill of the teacher in teaching the environmental education is also important to be considered as one of the aspects that can influence the students' behavior toward environment. Methods and tools used by the teacher in teaching this environment issue may also affect the level of materials absorbed by the students. In the end, all of these factors will determine whether they can shape the students to be more environmentally friendly to their surroundings.

## 6. Conclusion

One of the roles of the parents is to educate their children to live better in an environmentally friendly place. However, the question is how big is the influence of the parents toward their children, in particular in inheriting their habits. In responding to this issue, environmental education is also needed by the parents of the students. This way, the parents are able to be reminded about how historically our ancestors had environmentally friendly way of living. The way of thinking of young generation is influenced by so many factors. Those factors are role of parents as friend, the community surround the students either at school or at home and the information from social media. Quality of the teachers as the main educator at school has also been very crucial in forming the way of thinking of the students. Therefore, the teachers need to have the right knowledge and skills in teaching the environmental education.

In relations to this research, intensive and more environment education for the community in general is needed urgently, so that Indonesia will have young generations who are more concerned and more active in preserving the environment.

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Indriyani Rachman, is Phd student 2 semester. Research on environmental education and environmental issues related to solid waste management. Have tested the worksheet to a method of problem-based learning about PLH in several major cities in Indonesia. Many follow the international conference about environmental problems in several countries. Such as the UK and Japan and get found for research funding from the Japanese government Kitakyushu City, Mitsui, Asahi and grants from several local governments in Indonesia. Currently continues to conduct research about environmental education and environmental problem in 8 cities in Indonesia

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