

The Level of Environmental Concern in State Middle School Students in Yogyakarta City

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Abstract: This study aims to determine the level of environmental care of students in junior secondary adiwiyata schools in the city of Yogyakarta. The results showed that the level of environmental care of students in the Adiwiyata Junior High School in Yogyakarta City was in the category of very good tendency or 80,25%. This interest can be seen from various habits of caring for the environment, including (1) energy consumption with habits such as daily electricity use. (2) waste disposal, students are accustomed to sorting waste according to its type in the place provided. Waste that can be used by students as materials for making crafts. (3) keep the environment clean, students have carried out pickets according to schedule and participate in maintaining the surrounding public facilities. (4) adequate use of clean water and use of used water for other purposes. (5) use of carbon emissions to avoid the greenhouse effect and (6) use of fuels in moderation. If all schools implement the Adiwiyata program, the level of environmental awareness will increase.

Keywords: Environmental care, Student, Adiwiyata School.

Introduction

The decline in the level of biological addiction and the destruction of ecosystem functions causes a threat to human life. Environmental problems in Indonesia are currently occurring in many regions, according to Daryanto (2013) environmental problems include logging, water pollution from waste, smoke and haze from forest fires, illegal dumping, disposal of raw waste without processing and air pollution. Based on the results of calculations by the Central Bureau of Statistics, the Index of Environmental Ignorance in Indonesia is 0.51. The dimension with the highest index value is 0.72 for waste management activities, indicating that Indonesia has a high level of indifference to waste management. The high level of indifference to waste management shows the behavior of households in Indonesia that use methods that are not environmentally friendly. Waste management such as burning has reached 53% and can cause air pollution.

Yogyakarta is one of the cities that has a strong attraction for immigrants, the density and busyness of Yogyakarta from all the activities in it makes the carrying capacity of the environment decrease. The Environmental Quality Index (IKLH) is one of the DIY government's target indicators in environmental management. Based on the 2020 IKLH report, the index score reached 61.60 which is classified at a moderate level. The achievement of IKLH shows the need for government efforts in better environmental management, the better the quality of the environment will have a positive impact on humans and vice versa. According to data from the Indonesian Central Agency for Environmental Statistics released in 2018, the Environmental Ignorance Behavior Index (IPKLH) in the Yogyakarta Special Region area reached 0.52 with a national average of 0.51. Giving meaning to the achievement of the index is that if the index is close to 1.00, the level of indifference is getting stronger.

One of the efforts to reaffirm the government's role in environmental development can be realized through the education sector. Education in Indonesia is one of the main priorities carried out by the government. It is stated in the regulation of Law Number 32 of 2009 concerning Environmental Protection and Management, which emphasizes that everyone has rights and roles in environmental management. Environmental education is an alternative to minimize the damage that occurs in the environment. Understanding environmental education broadly based on the United States Government of Environmental Protection Agency (2021) can be interpreted as a process that teaches individuals to study environmental problems, find solutions to problems and take action to improve the environment through education. The existence of this environmental education will provide a deeper understanding of existing environmental issues and have the skills to make the right and responsible decisions.

Based on the results of observations by researchers at SMP Negeri 4 Yogyakarta, there are abandoned trash can facilities so that the sorting of organic and inorganic waste is no longer as it should be. This is a problem in Adiwiyata schools where students should be familiar with proper waste management. Waste management can be started by sorting waste according to its category, such as organic and inorganic waste, however, in conditions in the field, there is still a mixture of organic and inorganic waste. Another problem was found in the parking lot environment of SMP Negeri 6 Yogyakarta where there was leaf litter strewn about. The location of the parking lot is in the front area of the school which is often passed by students for access to the main building and a place to wait for pickup. Supposedly the cleanliness of the school environment is no longer the responsibility of cleaning staff, but all students must have awareness of caring for the environment so that environmental cleanliness can be maintained and can make the school environment clean and comfortable.

Another problem that exists in schools is the lack of discipline in carrying out daily picket duties. Some students are still found not to carry

out picket assignments that have been mutually agreed upon. The formation of picket officers is intended as a form of caring for the environment, especially the cleanliness of the class occupied for learning. The cleaning program implemented in schools includes clean Friday, in this activity it is recommended that all classes clean the areas around the school that have been determined. The appeal given to schools intends to awaken students to better protect the environment around them. Another finding is based on the results of observations made by researchers at SMP Negeri 8 Yogyakarta that discrepancies were found in the adiwiyata rules regarding the prohibition of using environmentally unfriendly food wrappers in the school area. Students still don't use their own places to eat and drink a lot. The fact is that in the school environment there are still many canteen services that provide food wrap using plastic, this is certainly contrary to the rules that have been set. The more plastic food wrap used, of course, will increase the production of waste in schools. If waste production cannot be balanced with good management, new environmental problems will arise.

Methods

Study area

This study uses a quantitative approach to the type of survey research. According to Sugiyono (2021) survey research was carried out with the help of questionnaires on large or small populations. This survey research was conducted to determine the level of environmental care of students in schools. In this study, the population used was all public junior high schools in the city of Yogyakarta. The sampling technique uses random sampling because it is based on random sampling without regard to the existing strata in the population. Researchers took samples from students in class VII, VIII, IX. As an estimate, researchers can determine 10% - 15% of the total population of 3,799. Therefore researchers will take approximately 400 samples from the existing population subject. The parameters used to measure the level of environmental care are energy consumption, waste

disposal behavior, environmental cleanliness, use of clean water, use of carbon emissions and use of fuel.

Procedures

Instrument reliability validity test

Based on testing the validity of the instrument with the product moment it gives valid results on all statement items or as many as 31 items. This calculation was obtained from F_{count} which has a greater value than F_{table} , namely 0.361. The reliability test results on the questionnaire items were 0.906 with a strong interval level. Meanwhile, the results of the reliability test on the questionnaire items were 0.906 with a strong interval level.

Data analysis

The data analysis technique used is descriptive statistical analysis. Descriptive analysis is an overview of the variables which include the maximum value, minimum value, average, media, mode and standard deviation which is carried out with the help of the SPSS program. After obtaining this value, it is then calculated to find the frequency distribution with the Sturges formula in Mundir (2014). The researcher then determines the tendency of environmental care variable categories by referring to the limits according to Azwar (2015) with the formula as explained below:

- $X > (M_i + 1,5 S_{di})$very good category
- $M_i < X \leq (M_i + 1,5 S_{di})$ good category
- $(M_i - 1,5 S_{di}) < X \leq M_i$ enough category
- $X < (M_i - 1,5 S_{di})$ less category

Results and Discussion

Result

The environment is everything that exists around living things and influences the growth of life. According to Safitri (2020) the environment is a living system consisting of a spatial unit with all its contents including the physical and human, living things and their behavior, the surrounding natural conditions and their utilization for survival. Caring for the environment according to Asmani (2013) is an attitude shown to prevent damage to the natural

environment and seek to repair any damage to nature that has occurred. Habituation of attitudes given through the school realm can be carried out continuously and sustainably. The categorization of the tendency for students' environmental care level to be at an acquisition score of more than 124 has a frequency of 321 students, or 80.25% of the total sample. Furthermore, in the good category with a range of acquisition scores between 93 to 124, it has a frequency of 74 students or as much as 18.5%. In the moderate category, the score ranges from 62 to 93, with a frequency of 5 students or 1.25%. In the less category, there is no percentage of 0% or there are no samples included in it. Based on the calculation above, the environmental care level of students at Adiwiyata schools is in the "very good" category with a total of 80.25%.

From the results of the discussion above, it can be concluded that as many as 80.25% are in the very good category, there are 321 students and it can be concluded that the program is able to provide very good reinforcement of environmental care for students. This can be carried out by schools through various habits that are taught to their students. Caring for the environment which is used to measure students' environmental awareness is reviewed through several indicators including energy consumption, care for garbage disposal, care for environmental cleanliness, care for water use, care for carbon emissions, care for fuel use.

Caring for the environment in general at school can be used as a first step in forming better environmental conditions for sustainability. The willingness of students who are nurtured from childhood becomes a provision for environmental care, so that environmental damage can be minimized. Seeing the condition of a clean and well-maintained school environment can familiarize students with a willingness to take care of their surroundings. The school has held various activities planned as a form of environmental concern. The realization of caring for the environment in schools is not only carried out in a participatory form but can be through integration into the subjects being taught. Learning in each school has been integrated with the existing environmental conditions, so it is hoped that students will be able to produce intermediary

works related to the environment and be able to apply environmental knowledge to overcome other environmental problems. Another emphasis is that students are trained to be able to make scientific work related to the environment which can be realized in the form of papers, articles, posters. This creation can be carried out in Indonesian subjects or on certain day celebrations held by the school or outside the school.

The Adiwiyata program aims to instill the love of school residents for their environment including instilling caring and environmentally cultured behavior. Apart from being expected to create a healthy, clean and comfortable environment, Adiwiyata schools are also expected to become agents of change for the community around the school. Schools must be able to become a model for society in creating a healthy environment. The implementation of caring for the environment is expected to be transmitted to the community around the school to protect each other's environment. The implementation of caring for the environment through the Adiwiyata program is carried out by the school referring to four components, namely environmentally sound policies, implementation of an environment-based curriculum, participatory-based environmental activities and management of environmentally friendly supporting facilities and infrastructure.

The formation of environmental care can be carried out every day, for example when students throw garbage in its place, buy food in the canteen by bringing their own places to eat and drink. It is important to pay attention to the management of waste disposal starting from when the waste is produced to the final disposal. Through the Adiwiyata program, each school has a waste bank, which is one of the waste management models. Waste management in this waste bank applies the 3R principles, namely reduce, reuse and recycle. The system implemented is a waste collection management system, then the selection and distribution of unused waste. The existence of a waste bank as a collective dry waste management system that can drive the economic value generated from the waste. Usually the management of the waste bank is carried out by officers from the selected adiwiyata extracurricular

activities. The waste that can be collected in the waste bank is dry waste such as plastic, paper, aluminum and others. The presence of waste banks in schools is expected to be able to provide significant benefits for school members in acting on the waste they produce. The establishment of a waste bank at school can be used as a form of caring for the environment, especially in waste management. Able to create a clean and healthy environment and reduce the habit of burning garbage and hoarding garbage. The advantages of waste banks can also be seen from the economic aspect, namely being able to increase student income in the form of deposit savings.

Classroom cleanliness has become the responsibility of all students, such as an appeal not to scribble on public facilities. The appeal was issued as a form of reinforcement to protect or care for the environment. Each student is taught to be able to use public facilities wisely. It is hoped that these small things can become a habit for every student to care about the environment. The more often students maintain cleanliness, the more aware they are of environmental concern. Environmental cleanliness is a state of being free of dirt including dust, garbage and odors. Environmental maintenance needs to be done as a rescue from the danger of damage. Hygiene behavior is a series of various forms of behavior that people do towards the environment.

Discussion

Based on the results of the discussion and research conclusions, the implications that can be formulated are that if all schools implement the Adiwiyata program, the level of environmental awareness will increase. If this can be done every day, it will minimize environmental problems.

The form of environmental concern which is used as a parameter of success is divided into six types, namely energy saving, school efforts in realizing environmental care, especially in energy consumption, there are many appeals posted on every wall and other school areas. The school strives for this as a form of reminder for students so that habituation will be created in their daily lives. In addition, the condition of the school environment is also strived not to lack light so that

sunlight can be used as natural lighting. The second is waste management, the presence of waste banks in schools is expected to provide significant benefits for school members in acting on the waste they produce. The establishment of a waste bank at school can be used as a form of caring for the environment, especially in waste management. Able to create a clean and healthy environment and reduce the habit of burning garbage and hoarding garbage. The advantages of waste banks can also be seen from the economic aspect, namely being able to increase student income in the form of deposit savings.

The third is environmental cleanliness, environmental cleanliness is a state of being free from dirt including dust, garbage and odors. Environmental maintenance needs to be done as a rescue from the danger of damage. Clean behavior is a series of various forms of behavior that people do towards the environment, including behavior that is not responsible for the environment, such as polluting the environment, to actions that are responsible for maintaining and cleaning the environment. Pollution in schools has been minimized a lot with the existence of an environmental care activator program that is carried out at each Adiwiyata school in accordance with the appeal in the Principal's Decree. Fourth, the use of clean water, the presence of a clean environment will certainly make the water around it free from disease. Fifth, namely caring for the environment in the use of carbon emissions can be found by participating students in caring for plants. These plants are deliberately cultivated by the school as a form of care to reduce the adverse effects of carbon emissions. The hope is that getting used to caring for trees will benefit from treating plants wisely so as to create a comfortable and beautiful atmosphere.

Sixth is the use of fuel. Various habits or supporting activities have been carried out by students such as not using motorbikes for short distances, taking advantage of public transportation facilities.

Conclusions

The results showed that the level of concern for the environment in state junior high schools in the city of Yogyakarta was at a "very good" level with a percentage of 80.25%. The success parameters for each aspect have different categories, namely environmental care for energy consumption, environmental care for waste, environmental care for environmental cleanliness, environmental care for water use, care for carbon emissions in the "very good" category and environmental care for the use of materials. fuel is in the "good" category. The strategy in each school can be carried out through daily habits that are supported by other supporting facilities such as an appeal to use sufficient water, an appeal to maintain cleanliness, there are healthy or hydroponic plants and teaching to make the best use of resources. The implementation of the adiwiyata program in schools is a form of cooperation in realizing environmental awareness so that environmental care will be more sustainable. Environmental protection and management activities can be implemented by maintaining the school environment by school members through class pickets, clean Friday, class cleaning competitions and garden maintenance activities by each class. All school members need to utilize school facilities in accordance with the principles of environmental protection and management, including maintenance of school gardens, maintenance of family medicinal plants, school forests, nurseries, fish ponds and the need for waste management.

Conflict of Interest: e as a researcher declare that there are no conflicts of interest concerning the publication of this article.

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