Relationship between environmental knowledge towards student’s attitude in environmental management

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Abstract. This research aims to analyze the relationship between environmental knowledge and student’s attitude towards environmental management. The research was conducted on Madrasah Aliyah students in Purwakarta District-West Java. The research using the survey method. The result of research shows that there was a significant linear relationship between knowledge towards student’s attitude in environmental management, but the effect was low. The result of this research is recommend a learning of geography, but it must be accompanied by efforts in cultivating attitudes that are relevant to the substance of geography.

1. Introduction
Environmental management should be cultivated from an early age in students. Good environmental management could be the assurance of a sustainable life in the future. Sustainability of role and function of the environment in supporting life optimally has to be maintained. High school students are in a significant psychological phase because they will play a social role in real life soon. Knowledge transformation and cultivating positive attitudes toward the environment are a row of steps that should be done and developed continuously. A mistake of environmental management would affect many things, such as water, air, floods, soil, or even poverty. Knowledge of the environment is highly important, although it can be not parallel with the attitude of humans. The development of human attitudes to the positive directions needs knowledge, time, and process that was not simple. Knowledge of the environment essentially is not only transformed, but also can be a fundamental of positive attitudes. Ideally, knowledge is parallel with attitudes. Various actions of humans in maintaining life must be certain to not damage the environment. The heavy metals contamination in the soil causes food and human body accumulation which is carcinogenic for human health [1]. Student’s knowledge of the environment needs to be identified because it is an important factor before taking some action. Population growth is increasing without a clear and measurable control, it has an implication on the fulfillment of facilities and infrastructure of life. Most of the resources that human needs to preserve their existence, is certain that the main part was obtained from natural resources and the environment. The population is continuously increasing in numbers, but natural resources and the environment has a limit, it is certain that knowledge, attitude and action of human that pro to environment are needed, so the life can go well without any significant shocks. Some population policies must be presented to be a significant solution. Family size effect on educational attainment is rather uncertain [2]. People tendencies to do some act, that is what is called attitude. Learning of geography is expected to be an instrument that can develop a knowledge and a wise attitude in environmental management. The utilization of media and learning resources in geography has to be maximized to foster enthusiasm and attractiveness of geography for education. GIS-based learning media developed showed significance influence on the learning achievement of learners [3]. This research aims to analyze the relationship...
between environmental knowledge and student’s attitudes toward environmental management. Conceptually, knowledge of the environment was expected to have an impact on the tendency to have a positive attitude in environmental management.

A knowledge basically is all the things that known by human after going through some general learning process. [4] stated that knowledge essentially is what we knew about certain objects, include science. Knowledge in this research framework is everything that known by human as a result of learning process that related with environmental management. Knowledge is a result of knew, that happened after people sensing towards particular object. The most of knowledge are obtained through eyes and ears. Knowledge is a guide in forming people’s attitude (http://www.definisi-pengertian.com/2015/04/definisi-dan-pengertian-pengetahuan.html). Knowledge and attitude ideally are expected to always be parallel, this means when someone’s knowledge is good, it is expected that the attitude towards an object will also good, but it was not like that in reality. Attitude is a preparedness to react towards some objects with certain steps. Attitude is a tendency of particular regularity in feelings, thinking, and predisposition of someone’s act towards an aspect in their environment. Attitude has a component structure of cognitive, affective and conative [6]. Attitude will be formed if each components was interacted between each other harmoniously and consistently. Sometimes in the journey of development, between knowledge and attitude is compared to chicken and eggs, there are party who stated that the first thing that should be done is building a new knowledge and then attitudes. But in the other party, there was an assumption that attitude is far more important than knowledge. The other view was also assume that attitude is formed as an implication of the knowledge ownership. Attitude can be measured from the directions, intensity, immensity, consistency and spontanity [6]. This research was trying to measure the knowledge and tendency of student’s attitude towards an environmental management. Environment needs to be well-managed to give support for sustainability of human’s life and also other beings. Environment is all the things and also condition that exists in a space we live in and affecting human’s life [7]. Environment should be well-managed as possible, because human and other beings is one of component that highly determine the existence of life sustainability in the future. Environmental management is a conscious effort to take care or improving environment quality so that the basic needs of human can be fulfilled as good as possible [7]. Human, is an important part of environment, and it is certained that they can not get away from the environment itself. Environmental management is basically covers the utilization, control, and maintenance [8]. Human’s role in environmental management is crucial and decisive. Human in ecological system is often positioned as man ecological dominant. Through the ownership of knowledge, technology and culture, human can play the important role in environmental management. Knowledge and technology, can have positive role, but in the other side it also can raise a negative impact if the utilization were not pay attention to the environmental principles. Technology is an application development of knowledge, the existence of technology were impossible to prevent, moreover to be hated because it was the product of human’s culture, the most important is the existence of technology should increase human civilization towards their environment (Ruhimat, 2008). Both of knowledge and technology should be positioned only as a tool for human to fulfil their needs. Disruption on one ecosystem component, is certainly will affect the sustainability of the whole ecosystem.

2. Method
This research was conducted on Madrasah Aliyah students in Purwakarta District. Determination of research sample is by simple random sampling. The tool to collect data that used was the questionnaire of environmental knowledge and student’s attitude towards an environmental management. Sample of research is students of Madrasah Aliyah Negeri and Madrasa Aliyah Al Muthohhar of Social Science Program in Purwakarta District.

3. Result and Discussion
Knowledge about the environment, in this study is positioned as a basis or foundation that is thought to strongly influence student attitudes in environmental management. Education, ideally is not just a
transformation of knowledge, but also a process of habituating a positive attitude. The result of calculations using Pearson Correlation obtained \( r \) values of 0.496. After being compared with the \( t \)-table values, it shows that there is a positive relationship. Then the significance test is done through the \( t \)-test, the result that \( t \)-arithmetic is greater than \( t \)-table, meaning the relationship between the two variables is significant. This means that the students' environmental knowledge is positively correlated with students attitudes toward environmental management. Determination index of the relationship between environmental knowledge with student attitudes toward environmental management is 0.246. This means that environmental knowledge factors influence student attitudes in environmental management by 24.6\%, and the rest is determined by other factors. Despite having a significant positive relationship, the relationship is in the low category. However, in this research it is certain that knowledge has been able to contribute to student attitude in general. Humans, are creatures that actually have a lot of intelligence, and all the potentials of that intelligence if it can be developed properly and optimally will be very beneficial for their lives. One of human intelligence outside knowledge which is very important is emotional intelligence. Knowledge development is no stranger, because it has been developed formally in various educational institutions. However, for the development of emotional intelligence, sometimes neglected, and there is no clear curriculum, even though it has a very important position in character development. Character development, including character care about the environment is not always a row of cognitive material, more important is the simulation of real examples and habituation of positive attitudes. Students must be develop their attitude towards being responsible for environmental management. Mismanagement of the environment will greatly impact the lives of future generations.

Poor and suffering experienced by the current generation, do not rule out the possibility of environmental management mistakes made in the past. Knowledge and positive attitudes of students towards environmental management are expected to reduce and or prevent future environmental degradation. Education and schools in general occupy a strategic position in developing knowledge and positive attitudes in environmental management. Human have various intelligence, so they are often said as a unique being. In the journey of human life to preserve their existence, the needed intelligence was not limited to academical intelligence, but they need other intelligence such as social and emotional intelligence. Stein (2009) stated that Emotional Intelligence has a lot to do with being intelligent about your emotions. In involves the ability to recognize your own emotions as well as the emotions of other people. It includes understanding emotions. It also has to do with how you manage other people's emotions. Emotional intelligence essentially is an ability to recognize your own emotions and emotions of other people. That ability is substantial in social life, considering that human is impossible to live alone without any help of others. Live in harmony in the middle of the difference of characteristics and background is the essence of emotional intelligence. Goleman (2007) further stated that intellectual intelligence could not be working well without having emotional intelligence. Contribution of emotional intelligence; in the practice of human life is crucial and decisive. A lot of cases show that the tendency of smart people academically is not succeeded in living their life existency because they were unable to manage their emotion condition. Sandjoyo (2011) introducing some indicators of emotional intelligence that is: recognize self-emotion, control self-emotion, self-encouragement, recognize the emotion of other people, give attention to other people, and build a relationship with other people. Knowledge, in essence, is a number of things that someone knows about a particular object. Knowledge, in essence is all what is known about an object, including is science (Suriasumantri, 2009). Human knowledge is obtained through many ways, some through formal education, but some are through non-formal education. People participation in education is expected to reach a high position. Education, will be have multiple impacts on various things. In a short-term, Gross Domestic Product (GDP) influence the participation of education in High School, higher education participation (College) influence GDP and in a long-term, Gross Participation Rate (GPR) of higher education and high school are affect the GDP (Utama, 2019).
4. Conclusion
Student’s knowledge of environment shows a tendency that relatively high. Knowledge of students about environment, was obtained not only from learning in school but also from various resources, such as mass media and the social life with their peers. There was a significant linear relationship between knowledge of students toward environment with their attitudes in environmental management that was in low category.

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