

## THE EFFECT OF NATURALIST AND ECOLOGICAL INTELLIGENCE ON ENVIRONMENTAL ATTITUDE OF HIGH SCHOOL STUDENTS

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**Abstrak:** Tujuan dari penelitian ini adalah untuk mengetahui hubungan antara kecerdasan ekologis dan kecerdasan naturalis dengan sikap peduli lingkungan. Di salah satu Sekolah Menengah Atas, penelitian ini dilakukan pada tahun 2022. Penelitian ini menggunakan data deskriptif dan kuantitatif. Siswa di sekolah menengah atas merupakan populasi penelitian, dan sampel dari siswa tersebut dipilih secara acak. Untuk mengumpulkan data digunakan instrumen kuesioner untuk menilai kecerdasan ekologis, kecerdasan naturalis, dan sikap peduli lingkungan. Analisis data menggunakan regresi linier berganda dan diuji dengan SPSS. Temuan menunjukkan hubungan yang signifikan antara kecerdasan ekologis dan kecerdasan naturalis dan dampaknya terhadap sikap peduli lingkungan. Hasil uji F menunjukkan bahwa kombinasi kecerdasan ekologis dan naturalis berpengaruh positif dan signifikan terhadap sikap peduli lingkungan.

*Kata kunci:* kecerdasan ekologis, kecerdasan naturalis, siswa, sikap peduli lingkungan

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**Abstract:** The purpose of this study is to ascertain the relationship between ecological intelligence and naturalist intelligence and environmental care attitudes. At one of the senior high schools, this study was conducted in 2022. This research uses descriptive and quantitative data. Pupils in senior high school made up the study's population, and a sample of those pupils was selected at random. In order to collect data, a questionnaire instrument is used to assess ecological intelligence, naturalist intelligence, and environmental concern attitudes. Data analysis used multiple linear regression and was tested using SPSS. The findings demonstrated a significant relationship between ecological intelligence and naturalist intelligence and their impact on environmental care attitudes. The results of the F test demonstrate that ecological and naturalist intelligence combination have a favorable and significant impact on attitudes toward environmental care.

*Keywords:* ecological intelligence, naturalist intelligence, students, environmental care attitude

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### Introduction

Indonesia is a country with a population that is always increasing. The total population of Indonesia, as seen from the population projection figures, in 2010 showed a figure of 238,518.8 people. Then it increased in 2015 to 255,461.7 people, and in 2019, there were 268,074.6 residents. Population projections are not mere estimates of population numbers; these results are the result of a scientific calculation based on assumptions about the components that affect the rate of population growth, namely births, deaths, and migration. As a result of population growth, the environmental quality index (IKLH) showed a decline (2011 was 65.50; 2012 was 64.21; and 2013 was 63.1). This is because a large number of individuals (humans) will always demand that nature be used as a place to live. Nature is generally acknowledged to have value and worth, but in fact, it is seen as a resource that humans can continue to abuse by polluting it, causing damage to it, and engaging in other negative behaviors (Iskandar, 2017).

The fact that this happened in one of city has serious problems related to the final waste disposal site

(TPA). According to the data for February 2019, the volume of waste generated by the community has reached 970.49 metric tons per day, and only 367 metric tons per day of waste can be served by the Environmental Service until it is taken to the TPA. Two approaches to waste management have been used, namely the waste bank program and the establishment of temporary trash disposal sites (TPS) combined with 3R activities. The TPS and 3R programs are strategic initiatives of the municipal government, and they are fully funded, but the waste bank is a project that can foster community engagement and empowerment. Since 2012, there has been a waste bank program. Based on data of April 2022, 230 waste banks have been formed. The number of customers at the waste bank is 7,910. However, since it was initiated in 2012, only 50% of the waste banks that actively report weighing results and save waste every month are active. Based on these data, it can be seen that the lack of community participation in the waste bank program is evidence of a low level of concern for the environment (Aini, 2014).

A severe ecological crisis will occur if a group of people exploit nature at will without heeding the rules that apply. Conditions like this will endanger human survival. As a result, there will be environmental damage either due to internal factors (originating from within the earth) such as volcanic eruptions, earthquakes, forest fires, or floods due to natural processes. Further damage due to external factors (caused by humans) such as air, water, and soil pollution. The results of a survey on the behaviour of people who care about the environment from the Ministry of Environment stated that the Environmental Care Change Index (IPPL) was only around 0.57 percent. The rating does not top 1, indicating that Indonesian society still has a relatively low level of environmental concern. To understand many living occurrences that are harmful to the environment, efforts must be made to develop a critical and compassionate mindset (E.D. Astuti, 2023). Without the steps of the process, which comprise information and intelligence, application, and habits, the attitude of caring for the environment cannot develop (K. Karyaningsih, 2023). Activities to maintain environmental conditions are the responsibility and obligation of all individuals on this earth, including students (M. Idris, 2022); (A.H.P. Hamzah, 2022). It is expected that students will have knowledge, concern, and skills, as well as a positive attitude towards the environment and a responsible attitude for maintaining the balance of the environmental system and its use in various aspects of life (Azzet, 2011).

Concern for the environment is an important variable in controlling environmental quality. Environmental problems are still a big responsibility for society, especially students, because they will affect the quality of life in the future. Students' concern for the environment is inseparable from various factors, namely external and internal factors (M. Idris, 2022). The external factors in question include the learning that students get from each subject they experience (A. Ismail, 2018). While the internal factor is multiple intelligences. Efforts to build a critical attitude and concern for the environment begin with creating ecological education (Hamzah, 2023). To develop ecological sensitivity and increase understanding of the environment's role in an ecosystem that affects human life, ecological education is desperately needed (Y.E. Rachmad, 2023). Understanding the value of nature for human life and the need to maintain and sustain a peaceful and balanced way of life are two results of ecological education. Efforts to increase ecological education should be given and instilled from an early age (M. Mernisa, 2018).

Education is the sum of all learning experiences that take place in all environments and throughout life. Education has a very important role in efforts to shape individuals as expected, namely to be able to become a talented generation. The ideals dreamed of by the community through education will be realized through students in future generations. According to the meaning of this education and the implementation of D. Phantomvanit and R.M. Lesaca in UNESCO, 1981, environmental education is an indispensable vehicle for solving environmental problems. Through the process of environmental education, a person must develop sensitivity to the environment, responsibility, and environmentally friendly behaviour (F. Yusup, 2015). Materials about the environment are generally integrated with biology subjects at the upper secondary level. Learning biology directly in the environment will provide students with experiences that will help them gain more meaningful concepts. This type of learning can help them understand the concepts of the material being taught and apply them (I. Kamaruddin, 2023). Because the nature of biology as a science is to know, understand, and develop understanding through the application of all concepts, the environment can be used as a resource for learning biology. By using the environment as a resource for learning, students will not only receive material and understand concepts directly but can also foster environmental awareness. Biology learning in class X, KD 3.5, is analysing ecosystem components and the interactions between these components (Naim, 2012).

Internal factors such as multiple intelligences can also help build a critical attitude and concern for the environment (Yaumi, 2012). The multiple intelligences include ecological intelligence and naturalist intelligence. The main focus of educational objectives ought to be ecological intelligence (B.S. Nugroho, 2023). Education must be able to produce morally upright individuals who are conscious of their impact on the

environment (Notoatmojo, 2010). Thus, it is clear that ecological intelligence cannot be developed through a teaching method that merely involves the transmission of information, but rather through a teaching method that engages students as active learners (Parinussa, 2023). Students who get education that fosters ecological intelligence and awareness with a focus on information transfer will only become knowledgeable about the environment and lack environmental consciousness and care (Rosiana, 2019). The ability to recognize differences and similarities between the traits of species, both flora and fauna, such as plants, animals, and other living environments, as well as being able to effectively interact with nature, is referred to as naturalist intelligence (Suhirman, 2019).

Cases from the field demonstrate that one high school's attitude toward environmental protection is still insufficient since pupils do not use their knowledge to address environmental issues in their daily lives, do not maintain and care for school buildings and environments, do not use school land and facilities in accordance with the principles of environmental protection and management, and do not participate in environmental action activities carried out by outsiders (Tannady, 2023).

## Method

This study uses a descriptive quantitative method with an ex post facto research design. The research target population is students in high school. The research sample employed basic random sample, and 198 students in total participated in the survey. This study's method of gathering data was a non-test method. A questionnaire sheet is the non-testing tool that is being employed. A Likert scale or rating scale is used on the questionnaire sheet for each component of the assessment. Research instruments must first be evaluated to make sure they are dependable and valid before being utilized to gather data. Calculating the connection between the values derived from the statements and the Pearson correlation to test the correctness of this study the data obtained is valid if the Pearson correlation can have a value lower than 0.05. The Alpha Cronbach technique using SPSS was utilized for the study's reliability test.

## Findings and Discussion

According to the description analysis's findings, ecological intelligence scored between 16 and 39 out of a possible 60. Based on the calculations, the average value (mean) was 29.53; the median value was 30; the most frequently occurring value (mode) was 33; and the standard deviation was 4.42. Most students have ecological intelligence with grades in the class interval 31–33, namely 49 students (24.7%). The value with the least ecological intelligence is the value in the 16–18 class interval, which is only 2 people (1.0%). It is known that most students have ecological intelligence in the moderate category, namely as many as 137 students (69.2%), while students who have ecological intelligence in the high category are as many as 35 students (17.7%), and the remaining 26 students (13.1%) have ecological intelligence in the low category. Indicator number 6, namely "Giving attention, empathy, and respect for others and other living things", is the indicator with the highest average score, which is equal to 51.8% compared to other indicators. Therefore, it can be explained that indicator number 6 is the indicator that is most mastered by students in six state schools. Conversely, indicator number 8, namely "committed to equality, fairness, inclusivity, and respect for all people," is the indicator with the lowest average score compared to other indicators, namely 26.8%. This shows that indicator number 8 is the indicator that is least mastered by students. Aspect number 3, namely "Aspects of Skills," is the aspect with the highest average score, which is equal to 43.45% compared to other aspects. Therefore, it can be explained that aspect number 3 is the aspect that is most mastered by students. On the other hand, aspect number 1, namely "Knowledge Aspect," is the aspect with the lowest average score compared to other aspects, namely 37.46%. This shows that aspect number 1 is the aspect that is least mastered by students.

Naturalist intelligence data obtained a minimum score of 22 and a maximum score of 63. Based on the calculations, an average value (mean) of 37.28, a median value of 37, the most frequently occurring value (mode) of 35, and a standard deviation of 6.53 were obtained. Most students have naturalist intelligence with grades in the class interval 32–36, namely 59 students (29.8%). The least naturalist intelligence is the value in class intervals 57–61 and 62–66, namely only 1 person (0.5%) each. Most students have naturalist intelligence in the medium category, namely 141 students (71.2%), while students who have naturalist intelligence in the high category are 31 students (15.7%) and the remaining 26 students. (13.1%) have naturalist intelligence in the high category. Indicator number 10, namely "a sense of belonging and affection for animals", is the indicator with the highest average score percentage, which is equal to 54.83% compared to other indicators. Therefore, it can be explained that indicator number 10 is the indicator that has the highest influence on the naturalist intelligence of students in public schools. Conversely, indicator number 12, namely "identifying the

characteristics of life and death," is the indicator with the lowest percentage average score compared to other indicators, namely 28.34%. This shows that indicator number 12 is the indicator that has the lowest influence on students' naturalist intelligence. Aspect number 6, namely "Interested in the world of animals or plants", is the aspect with the highest average score, which is equal to 50.25% compared to other aspects. Therefore, it can be explained that aspect number 6 is the aspect that is most mastered by students. On the other hand, aspect number 5, namely "the ability to distinguish between animate and inanimate objects," is the aspect with the lowest average score compared to other aspects, namely 28.34%. This shows that aspect number 5 is the aspect that is least mastered by students.

A minimum score of 23 and a maximum score of 59 were achieved for attitude of caring for the environment. The computations led to an average value (mean) of 40.68, a median of 40, a most common value (mode) of 37, and a standard deviation of 7.08. 52 students (26.3%) in the class range of 33–37 show an attitude of environmental concern, which is the majority of pupils. The least concern for the environment is the value in the class interval 58–62, namely only 2 people (1.0%). Most students have an environmental care attitude in the moderate category, namely 133 students (67.2%), while students who have an environmental care attitude in the high category are as many as 37 students (18.7%), and the remaining 28 students (14.1%) have an attitude of caring for the environment in the low category. Indicator number 16, namely "energy conservation", is the indicator with the highest average percentage, which is equal to 61.88% compared to other indicators. Therefore, it can be explained that indicator number 16 is the indicator that has the highest influence on the environmental care attitude of students in public schools. Conversely, indicator number 11, namely "air conservation," is an indicator with the lowest average percentage compared to other indicators, namely 29.21%. This shows that indicator number 11 is the indicator that has the lowest influence on students' environmental care attitudes. Aspect number 7, namely "Attitude towards waste", is the aspect with the highest average score, which is equal to 54.33% compared to other aspects. Therefore, it can be explained that aspect number 7 is the aspect that is most mastered by students. Conversely, aspect number 4, namely "the ability to distinguish between animate and inanimate objects," is the aspect with the lowest average score compared to other aspects, namely 33.54%. This shows that aspect number 4 is the aspect that the participants least master.

According to the results,  $H_0$  is disproved because the variable  $X_1$  has a significance level of  $0.05 < \alpha < 0.000$ .  $H_0$  is also disregarded if  $X_2$  has a significance level of  $0.05 < \alpha < 0.000$ . Therefore, it can be said that the variable  $X_2$  significantly and positively affects  $Y$ . Therefore, it can be said that the two variables  $X$  have a significant impact on  $Y$ , at least in part (individually).  $H_0$  is ruled out with a significance level of  $0.05 < \alpha < 0.000$ . This demonstrates that the two factors  $X_1$  and  $X_2$  together significantly affect  $Y$ . The correlation coefficient,  $R$ , which measures how strongly variables  $X_1$  and  $Y$  are related, has a value of 0.519, which denotes a link in the moderate group. According to the  $R$  square value (coefficient of determination), which is 0.270,  $X_1$  accounts for 27% of the  $Y$  variable's variance, with the remaining 63% being impacted by unknown external factors. The correlation coefficient ( $R$  value) between the variables  $X_2$  and  $Y$  is 0.741, which denotes a link that falls within the category of strong relationships. The  $R$  square value (coefficient of determination) is 0.549, which means that variable  $Y$  is affected by  $X_2$  to the tune of 54.9%, with other unresearched factors accounting for the remaining 45.1%. That 0.774, which denotes a relationship in the strong category, is the value of  $R$  (correlation coefficient), which measures the strength of the relationship between variables  $X_1$  and  $X_2$  with  $Y$ . The  $R$  square value (coefficient of determination) is 0.600, meaning that the two  $X$  variables account for 60% of the  $Y$  variable's variance, with the remaining 40% being influenced by unknown external factors.

Ecological intelligence data can be uncovered using instruments adapted from the Centre for Eco literacy. In the ecological intelligence instrument, 15 valid and reliable question items were obtained. Based on the calculations, it can be seen that the majority of students who have ecological intelligence in the medium category are as many as 137 low students, namely 26 students (13.1%), while students who have ecological intelligence in the medium category are as many as 137 students (69.2%), and the remaining 35 students (17.7%) have ecological intelligence in the high category. Ecological intelligence variables can be classified based on the results of the average scoring of each indicator according to the instrument grid. It can be seen that indicator number 6, namely "Giving attention, empathy, and respect for others and other living things", is an indicator with the highest average score, which is equal to 51.8% compared to other indicators. Therefore, it can be explained that indicator number 6 is the indicator that is most mastered by students. Conversely, indicator number 8, namely "committed to equality, fairness, inclusivity, and respect for all people," is the indicator with the lowest average score compared to other indicators, namely 26.8%. This shows that indicator number 8 is the indicator that is least mastered by students in public schools. Aspect number 3, namely "Aspects of Skills," is the aspect with the highest average score, which is equal to 43.45% compared to other

aspects. Therefore, it can be explained that aspect number 3 is the aspect that is most mastered by students. On the other hand, aspect number 1, namely "Knowledge Aspect," is the aspect with the lowest average score compared to other aspects, namely 37.46%. This shows that aspect number 1 is the aspect that is least mastered by students.

Naturalist intelligence data can be revealed using instruments developed by previous researcher. In the naturalist intelligence instrument, 21 valid and reliable question items were obtained. Based on the calculation above, it can be seen that most students have naturalist intelligence in the medium category, namely 141 students (71.2%), while students who have naturalist intelligence in the high category are as many as 31 students (15.7%), and the remaining 26 students (13.1%) have naturalist intelligence in the high category. Naturalist intelligence variables can be classified based on the results of the average scoring of each indicator according to the instrument grid. It can be seen that indicator number 10, namely "a sense of belonging and affection for animals", is the indicator with the highest average score percentage, which is equal to 54.83% compared to other indicators. Therefore, it can be explained that indicator number 10 is the indicator that has the highest influence on the naturalist intelligence of students in public schools. Conversely, indicator number 12, namely "identifying the characteristics of life and death," is the indicator with the lowest percentage average score compared to other indicators, namely 28.34%. This shows that indicator number 12 is the indicator that has the lowest influence on students' naturalist intelligence.

Aspect number 4, namely "Love nature, animals, and plants", is the aspect with the highest average score, which is equal to 48.31% compared to other aspects. Therefore, it can be explained that aspect number 4 is the aspect that is most mastered by students. On the other hand, aspect number 5, namely "the ability to distinguish between animate and inanimate objects," is the aspect with the lowest average score compared to other aspects, namely 28.34%. This shows that aspect number 5 is the aspect that is least mastered by students. In the naturalist intelligence instrument, 23 valid and reliable question items were obtained. Based on the calculation above, it can be seen that most students have an environmental care attitude in the medium category, namely as many as 133 students (67.2%), while students who have an environmental care attitude in the high category are as many as 37 students (18.7%), and the remaining 28 students (14.1%) have an attitude of caring for the environment in the low category.

Ecological intelligence variables can be classified based on the results of the average scoring of each indicator according to the instrument grid. It can be seen that indicator number 16, namely "energy conservation", is the indicator with the highest average percentage, which is equal to 61.88% compared to other indicators. Therefore, it can be explained that indicator number 16 is the indicator that has the highest influence on the environmental care attitude of students in public schools. Conversely, indicator number 11, namely "air conservation," is an indicator with the lowest average percentage compared to other indicators, namely 29.21%. This shows that indicator number 11 is the indicator that has the lowest influence on students' environmental care attitudes. Aspect number 7, namely "Attitude towards waste", is the aspect with the highest average score, which is equal to 54.33% compared to other aspects. Therefore, it can be explained that aspect number 7 is the aspect that is most mastered by students. Conversely, aspect number 4, namely "the ability to distinguish between animate and inanimate objects," is the aspect with the lowest average score compared to other aspects, namely 33.54%. This shows that aspect number 4 is the aspect that is least mastered by students.

The study's findings indicate that students' views toward environmental protection are influenced by ecological intelligence. Several data analyses, including the partial t test, the correlation coefficient test, and the coefficient of determination, can demonstrate this in a way that is both positive and significant. The preparatory test is administered before the test. 27% of students' attitudes toward environmental care are sufficiently influenced by ecological intelligence, and the remaining 45.1% are influenced by other factors that were not considered. Ecological intelligence has three aspects that can be seen. In this study, results showed that the "skills aspect" was the aspect with the highest average score, which was 43.45% compared to other aspects. Therefore, it can be explained that these aspects are the ones that are most mastered by students. Conversely, the "knowledge aspect" is the aspect with the lowest average score compared to other aspects, namely 37.46%. This shows that this aspect is the one that is least mastered by students.

The low aspect of knowledge on ecological intelligence affects the low environmental care attitude of students. Because students will act as agents of change in society, namely agents in developing community behaviour who have knowledge, insight, attitudes, and behaviours that uphold sustainability and who are conscious of their limitations, it is crucial that students develop ecological intelligence during the learning process. Natural resources, the problem of global warming, and those who can use ecological intelligence or eco-pedagogical learning applications to change people's attitudes toward the environment. Building

knowledge independently in a meaningful way can be done through several learning models, one of which is the multiliteracy model. In order to build students' insights and understanding so they can develop thinking skills (critical, creative, problem-solving, and metacognition) based on and developed through a socio-cultural background, multiliteracy serves as the foundation for organizing education and learning. In accordance with this, it is known that the Eco pedagogy is effective because of research done by prior researchers. Approach-based multiliteracy model is more effective for increasing students' ecological intelligence and environmental caring character. The application of the Eco pedagogy Approach-based multiliteracy model must be supported by cooperation between elements, both between teachers and school management. This needs to be done in order to realize the effectiveness of quality learning, so that it has implications for the development of potential and the development of ecological awareness in students.

This study found that ecological intelligence has a relationship with an attitude of caring for the environment, which is in accordance with the opinions of several experts. One example of an action that reflects an attitude of caring for the environment is being able to use nature properly and wisely and to preserve and protect it. Therefore, when a person's ecological intelligence increases, his caring attitude towards the environment will also follow suit. Based on the results of the expert opinion analysis and correlation calculations, the research hypothesis, which reads "there is an influence between ecological intelligence and environmental care attitudes," can be concluded to be proven. The results of the study show that naturalist intelligence influences the environmental care attitudes of students. This can be proven by several data analyses that have a positive and significant influence, namely the partial t test, the correlation coefficient test, and the coefficient of determination. The test is carried out after the prerequisite test. Naturalist intelligence has a strong influence on students' environmental care attitudes, namely 54.9% of the environmental care attitude variable, and the remaining 45.1% is influenced by other factors not examined.

Naturalist intelligence is the ability possessed by individuals to distinguish living things in the form of plants and animals or other sensitivity related to nature. That naturalist intelligence can be developed in biology learning because it is related to nature. The naturalist intelligence of students really masters indicator number 10, namely "a sense of belonging and affection for animals" which is the indicator with the highest average score, which is equal to 54.83% compared to other indicators. Indicator number 10 is included in the aspect of the ability to love nature, animals, and plants. Because students have received biology lessons in class X that discuss nature and the environment, their naturalist intelligence is growing. So naturalist intelligence is one of the factors that influences the environmental care attitude of students. As stated in previous research, which reveals that one of the characteristics that exist in children who have naturalist intelligence is their enjoyment of nature and their ability to process, utilize, and preserve it, 18 This is also evidenced by the fact that students in public schools who had naturalist intelligence in the moderate category were 141 (71.2%), students who had naturalist intelligence in the high category were 31 (15.7%), and the remaining 26 (13.1%) had naturalist intelligence in the high category.

This study is consistent with work done by earlier researchers. A questionnaire with data analysis methods like the Pearson correlation test served as the study tool. The findings revealed a substantial correlation between naturalist intellect and concern for the environment. An action of caring for nature and the surrounding wildlife is an attitude of doing the same. Students' concern for the environment is inseparable from various factors, namely external and internal factors. The external factors referred to include the learning that students get from each subject they experience. While the internal factor is multiple intelligences (MI).

The analysis's findings indicate that students' attitudes toward environmental protection are significantly and simultaneously influenced favourably by both ecological and naturalist intelligence.  $H_0$  is rejected since it is demonstrated that the significance value is  $0.000 < 0.05$ . So, one of the factors that influence environmental care attitudes includes ecological intelligence and naturalist intelligence. This intelligence grows, among others, from habituation in the family or school environment, in accordance with the theory developed by William Stern that two factors are very decisive in the development of a child, namely innate and environment. The intelligence of a child is, of course, inherited from the genetics of both parents and then developed in the family and school environment. Ecological and naturalist intelligence possessed by a person will form an attitude of caring for the environment through the habits that exist in the environment where they live and study. Character building in caring for the environment should start with the family, because it is in the family that a child spends his time. In addition, emotional relationships such as those in the family are not found anywhere else. In addition to the family, an attitude of care for the environment must also be developed in education. Therefore, schools are the most effective medium for building environmental awareness and concern.

The school environment and teachers are one of the factors that also influence this, because involvement, understanding, and awareness about the importance of protecting the environment are

implemented through education. So school is one place that is very helpful in developing intelligence and forming attitudes. Strengthening educational character can support the optimization of the teacher's role as part of the educational ecosystem and as someone at the forefront of learning. The role of the teacher, especially as a facilitator for strengthening educational character, is the entry point to its success. The attitude of caring for the environment cannot grow without the stages of the process, which include knowledge and intelligence, implementation, and habits. Knowledge is one of the dominant factors that influence behaviour; a person will behave according to the knowledge he has. environmental care Behaviour that is classified as good can be influenced by the level of education of students who are classified as middle, namely high school. As students at the upper secondary level, they have understood that the environment requires concern from everyone so that the existing environment can be maintained and not damaged. One of the factors that influences behaviour is the level of education. The level of education affects one's knowledge, and the higher the level of education, the better the knowledge one has. Someone who has a good level of education is likely to have good knowledge so that he can show better behaviour towards the surrounding environment compared to someone with a lower level of education. Students with a high school education illustrate that they have enough ability to preserve the environment, including the school environment. This condition is in line with previous researcher which states that one of the factors that influence behaviour is the level of education. Activities to maintain environmental conditions are the responsibility and obligation of all individuals on this earth, including students. The responsibility that appears is a manifestation of individual attitudes. Knowledge and intelligence are processes of growing an attitude of caring for the environment so that ecological intelligence and natural intelligence are factors that influence and stimulate students to be able to behave in a way that cares about the environment around them. This is proven by the tests that have been carried out: ecological intelligence and natural intelligence together have a significant influence on environmental care attitudes.

## Conclusion

According to the partial t test, ecological intelligence significantly and favourably affects attitudes toward environmental stewardship. According to the partial t test, naturalist intelligence significantly and favourably affects environmental concern sentiments. Based on the results of the simultaneous F test, ecological intelligence and naturalist intelligence together have a significant influence on environmental care attitudes. environment-based education programs such as turning all schools into Adiwiyata-based schools and adding content about the environment in the process of teaching and learning activities to increase ecological intelligence and naturalist intelligence in students. improve and develop aspects of knowledge on ecological intelligence and naturalist intelligence in students, as well as train more aspects of students' skills towards caring for the environment. improve the environmental care attitude of students so that environmental conditions become more beautiful. Can further increase sensitivity to the surrounding environment ecologically and naturally, starting with simple activities at school and at home, so as to create the next generation of nations who have a high attitude of caring for the environment. Not only known in theory but also practiced in everyday life. Such as reducing the use of motorized vehicles.

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