

THE CONTRIBUTION OF STUDENT ECOLITERACY TO BUILD ENVIRONMENTAL CARING BEHAVIOR IN SENIOR HIGH SCHOOL

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Submitted: 20/02/2023

Revised: 25/04/2023

Accepted: 19/06/2023

Published: 08/08/2023

Abstract

This paper aims to describe the contribution of eco-literacy to building environmental caring behavior in Senior High School 1 Bandung. In capital urban of west java have an issue with a variety of environmental damage, such as uncontrolled land use conversion and rising anthropogenic disaster. Thus the environment needs humans for its sustainability. The study used two variables that, include the student's eco-literacy level and environmental caring behavior level. This research used a survey method with descriptive analysis through a quantitative approach. Primary data comes from direct interviews, surveys, and questionnaires, with secondary data coming from journals, books, and school documentation. Populations and samples were all students in 2nd grade with a total of four classes from social majors. The data analysis techniques used a normality test, linearity test, coefficient of determination R square test, F-test, and t-test. The results of this paper show the student's eco-literacy has a middle category level and the environmental caring behavior of the students has a middle category level. The development of eco-literacy must be evaluated by educational units indefinitely to build environmental caring behavior at a high category level.

Keywords

Ecoliteracy, Environmental Caring Behavior, Environmental Damage, SMAN 1 Bandung



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INTRODUCTION

Environmental damage is a problem experienced throughout the world as a result of excessive environmental exploitation and low environmental care behavior owned by the community. Indonesia and especially Bandung, certainly experience environmental problems such as a decrease in groundwater levels due to the accumulation of garbage (Sutarjo, 2023) due to the habit of using disposable products (Pratiwi et al., n.d.) and apartment construction (Sandanayake, 2022) which requires land use change in the rain catchment area (Purwoarminta et al., 2019).

Human consciousness in maintaining and preserving nature can be owned by individuals through the learning process of a lifetime that will eventually shape knowledge, attitudes, dispositions, and skills in processing as well as preserving nature (Sekaringtyas & Auliaty, 2020). So we need to make efforts to achieve an eco-literate society, that is through education in schools. Education plays an important role in building the behavior of students to care for and participate in managing the environment.

Environmental issues are very important issues to be integrated with the educational process in schools. This can be done through learning as a real effort to overcome environmental problems. There are two reasons why this is important; first, school is a place to prepare generations who are able and ready to answer future challenges, including the challenge of nature sustainability. Meanwhile, on the other hand, environmental problems include fundamental problems because they are directly related to the fulfillment of human needs and also the sustainability of human life and other living things.

However, pursuing ecological literacy through schools is not easy. In general, the world of education in Indonesia still faces various fundamental problems, such as those related to teacher quality, vision to connect learning activities with concrete and actual issues in society, supporting facilities, and government policies that can support and be conducive to education development. In particular, among educators and managers of educational institutions, there is not a strong understanding of the crisis situation faced by humans in relation to environmental damage. Hendro Sangkoyo, a researcher at the School of Democratic Economics, stated that our society is still crisis-blind. Government institutions and civil society have not been seen to take good strategic and collaborative steps to overcome and anticipate even worse socio-ecological crises.

In the context of education, environmental education in schools has enormous potential to be a form of contextual education praxis. Through environmental issues, the educational process in schools can bring students and teachers not to be fixated on mere text (textbook oriented). Students

and teachers are encouraged to understand the cluster of knowledge and theoretical sciences about nature from a broad perspective ranging from science, social, economic, and even political to dialogue with the daily reality around them. The main goal is that ecological literacy can be formed and continue to real action even though it is simple. Students and teachers are invited to reach the level of ecological literacy to then do something to change for environmental sustainability.

Education is a necessary component for behavior change (Arlinghaus & Johnston, 2018). According to the statement, education needs to be directed to build environmentally caring behavior. Efforts made to build awareness about environmental problems in schools through several programs have been implemented in basic education to higher education. The school area is used as a vehicle for habituating daily environmental care behavior. Proper knowledge of environmentally caring behavior is a major component of internal factors that can support changes in one's behavior to care more about the environment. Environmental care behavior in students starts from knowledge, one of which is obtained from geography subjects which then produces an action that is practiced through environmentally caring behavior.

Realizing the school as a conducive, fun, and quality educational environment is one of SMAN 1 Bandung's missions, namely the formation of environmentally sound behavior regarding the environmental damage that has occurred in the city of Bandung, such as flooding, garbage accumulation, climate change, land conversion, and fuel use, which have the potential to cause environmental damage (Prayudi, 2018).

So far, the issue of student concern for the environment at SMAN 1 Bandung has not received special attention, even though it has become the mission of SMAN 1 Bandung. This can be seen from the low awareness of students for basic things about environmental care such as littering, at least green and maintained parks, and also minimal toilet hygiene. This happens because of the low environmental literacy in terms of education and learning. Usually, a problem will become more serious to be addressed if it is included in the learning curriculum or academic curriculum. Ecoliteracy should be included in the curriculum.

High school learners are an integral part of society. The position is very crucial. In the next ten to twenty years, they will be the policyholders, entrepreneurs, and residents who can determine the direction of environmental management. If every individual is accustomed to behaving environmentally friendly, it is not impossible that environmental problems become a very rare phenomenon. Based on this explanation, the author wants to conduct research on the

environmentally friendly behavior of SMAN 1 Bandung students.

Efforts to improve behavior towards the environment began when in 1975, IKIP Jakarta created BPP Environmental Education for basic education. The hope is that all students see: 1) nature should not be seen as a mere living environment but as a giver of meaning to life, 2) change the paradigm of mechanistic and partial science into holistic and value-bound so that wisdom grows, 3) the importance of biocentrism and ecocentrism approaches, and 4) recognize nature so that love for nature and its contents grows.

The results of observations in several schools in Bandung City show that student behavior has not been environmentally friendly. This conclusion is shown by the behavior of those who leave the room lights on. Based on the results of an interview with one of the cleaners at one of the public high schools, it was said that the behavior of students in throwing garbage was still bad. Students are still used to littering or not throwing garbage according to its type in the space provided, even though the appeal is already there.

In this case, the author is interested in further researching the factors and their impact if Ecoliteracy is applied in the curriculum, maple content, or extracurricular activities. This will also be more in line with the vision and mission of SMAN 1 Bandung, namely the formation of environmentally sound behavior.

Previous research related to the contribution of ecoliteracy to build environmental care behavior in students was also conducted by (Wahyuni et al., 2022), which stated that the level of ecoliteracy was included in the moderate category of 62%, while the environmental care behavior was also in the moderate category of 53% and the ecoliteracy of student contributed to the environmental care behavior of the student. The conclusion is that a good level of ecoliteracy can provide a good understanding of the environmental care behavior of students. In addition, (Adela et al., 2018) in the result of his paper argue implementation of learning activities in the context of the integration of environmental education in schools is done by involving student's ecoliteracy in activities that involve students contributing to care for the plants in the school environment. The integration of environmental education has succeeded in growing the students' ecoliteracy. This is evident from the increased ecoliteracy obtained by students, both from aspects of knowledge, conscience and also application. According to research by (Putri et al., 2019) argue, the ecoliteracy and creativity of students in the use of waste in social studies learning in class V of Telajung 02 Cikarang West SDN can be increased by using a project-based learning model. In this learning, the

teacher acts as a facilitator and motivator. So, the main role in the learning process is the students themselves.

According to research by (Muliana et al., 2018). It shows student teachers in Universitas Syiah Kuala have an ecoliteracy level which is included in the medium category. Based on the finding of the study, a total of 124 respondents (51.66%) are included in the medium category, 59 (24.5%) are included in the low category, and 67 (23.75%) are included in the high category. This finding is reasonable because in Universitas Syiah Kuala, including all faculties and study programs, environmental problems had not been included in the strategic plan and had not become the main priority, so there is no optimal and comprehensive effort to realize a green campus and to create students who care about the environment. In addition, that's research related to applying program ecoliteracy in education is a priority to improve environmental caring behavior. (Syah et al., 2021) result in his paper shows Adiwiyata's success manifests in the comprehensive application of an environment-based curriculum to the learning process. This application impacts students who care about the environment and realize the importance of preserving it. The research findings also show that the implementation of the Adiwiyata Program also has a significant impact on aspects of ecoliteration (knowledge, attitude, and behavior). In other words, this program is one of the school's efforts under the supervision of an authorized environmental agency to increase students' environmental awareness.

According to all previous statements above, the researcher found out that the research was conducted from basic to higher education, and all problems are centered on the application of ecoliteracy in the school environment, which will affect the environmentally caring behavior formed in students. On this occasion, researchers selected senior high school students who were considered to have a good understanding of ecoliteracy; Bandung City was chosen because Bandung City is one of the cities that has environmental damage such as garbage accumulation, flooding, climate change, land use conversion, and fuel use, which is the basis for developing environmental care behavior indicators. The city of Bandung is considered to have good quality education, and one of them is Senior High School 1 Bandung, with good quality education whether the students have good environmental care behavior as well. Students as the next generation who have been equipped with ecoliteracy, are expected to have good behavior, knowledge, skill formation, and positive attitudes towards the environment, which can be applied in daily behavior and become development actors in the future (Aldina et al., 2022).

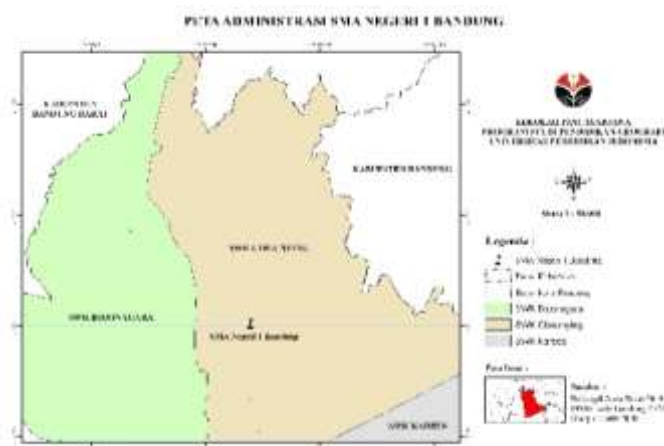
Based on the background described above, it is necessary to conduct research on the ecoliteracy of senior high school students to build environmentally caring behavior in school. The purpose of this study was to determine the level of student ecoliteracy in learning at school contributes to the formation of students' environmentally caring behavior. Ecoliteracy is important to be studied in depth and is expected to be applied to students to realize also a society that cares about the environment and sustainable development.

METHOD

This research uses a survey method with descriptive analysis through a quantitative approach. The survey method is used to obtain data from certain places that are natural (not made by researchers), but researchers carry out treatment in data collection, for example, by circulating questionnaires, tests, structured interviews, and so on (treatment is not like in experiments) (Arifin, 2020). This research uses descriptive analysis and inferential analysis techniques. Descriptive analysis techniques are performed when we look at past data performance to obtain a conclusion. This quantitative data analysis technique is used when we are dealing with very large data and volumes, and inferential quantitative data analysis techniques use statistical formulas. The results obtained from these calculations are used as a basis for making generally accepted conclusions (generalizations) (Ramdhan, 2021). The data collection method can use surveys, observations, or interviews. Data samples in quantitative descriptive techniques are more objective and structured, which can be in the form of graphs, tables or matrices, reports, and figures that can be measured in value. Thus it can be known that quantitative descriptive research is research that describes, examines, and explains a phenomenon with data (numbers) as it is without intending to test a particular hypothesis (Sulistyawati et al., 2022).

In carrying out the research on The Contribution of Student Ecoliteracy to Build Environmental Caring Behavior in Senior High School 1 Bandung, there are three steps that will be implemented by the researcher, consisting of ; (1) planning step, (2) survey step, (3) results and analysis step. The location for the research is Bandung City, especially at Senior High School 1 Bandung, chosen because it is in accordance with the background of problems related to environmental problems.

Figure 1. Administration Map of Senior High School 1 Bandung



The location for this research is Senior High School 1 Bandung which is located at Ir. H. Juanda Road, No.93, Lb. Siliwangi, Coblong District, Bandung City, West Java 40132.

Figure 2. Floor Plan of State High School 1 Bandung



The floor plan of Senior High School 1 Bandung shows that there are 33 classrooms, two teacher's rooms, one headmaster room, two vice principal rooms, one administration room, one sports field, one hall, 4 Laboratories, one counseling room, one school medical room, one library, one kitchen, two teacher's toilet, six students toilet, one multimedia, one room, one canteen, one greenhouse, one parking lot, etc.

This research was conducted in Senior High School 1 Bandung with a total of four classes in 2nd grade from social science study majors. The population in this research amounted to 140

students. The sample was determined using the total sampling technique.

Table 1. Distribution of sample

No.	Class	Samples
1.	XI IPS 1	36
2.	XI IPS 2	34
3.	XI IPS 3	36
4.	XI IPS 4	34
Sum:		140

Variable in this research used two variables. The first variable is the level of student ecoliteracy, that have been determined in accordance with *The Center for Ecoliteracy* and consists of environmental knowledge, environmental attitudes, cognitive skills, and participation, and the second variable is the environmental care behavior of the student, which have been determined in accordance with the Ministry of Environment, consisting of energy utilization, waste handling, water utilization, carbon emission contributors, and fuel use.

There are two data collection techniques in this research consist of primary and secondary. Primary data in this research, including observation, is used as a systematic recording of symptoms that appear in the object of study, and a questionnaire, is a data collection technique carried out by providing a number of statements or questions to respondents to answer while the secondary data is study documentation, is a data collection technique taken from documents or records of events that have passed, such as government regulations and policies and journal or literature that related to the research.

Data collection uses a written test with a Google form format. The instrument used in this study was an ecoliteracy and environmental caring behavior test in the form of a mixed questionnaire. Students' ecoliteracy ability was measured using an ecoliteracy test adapted from The Center for Ecoliteracy, and the environmental caring behavior of students was measured using an environmental caring behavior test adapted from the Central Bureau of Statistics and Ministry of Environment. The ecoliteracy test consists of environmental knowledge, environmental attitude, cognitive skills, and participation, and the environmental caring behavior test consists of energy utilization, waste handling, water utilization, carbon emission contributors, and fuel use.

The ecoliteracy test instrument was content validated and tested on a small scale. This treatment aims to obtain reliable question/statement items. The instrument trial was conducted on 60 students in 2nd Senior high school 5 Cimahi. The results of content validation were analyzed

using the content validity ratio (CVR). The components assessed are the item's suitability within the context of the question and the suitability of the item with the question indicator.

Then, the analysis data technique is followed by data processing procedures according to the approach used. The procedure used is: (1) checking data, (2) classification data, (3) verification data, and (4) analysis data. Then, the research will be used to analyze data for percentages, and statistic tests consist of (1) normality test, the normality test is performed to test whether, in the regression model, the independent variable and the dependent variable or both have a normal distribution or not. If the variables are not distributed normally, the results of statistical tests will decrease (Ghozali, 2018) ; (2) the linearity test, linearity test, is used to see whether the model specifications used are correct or not. Whether the functions used in an empirical study should be linear, squared, or cubic (Ghozali, 2018) ; (3) simple linear regression test including determination test, R square test, Simultaneous f test, and Partial t test (Ghozali, 2018). The value of the percentage will be interpreted by the research by using average percentage conversion according to determine the scale range by calculating the number of ideal scores in each indicator.

Then, the classification of student ecoliteracy and environmental caring behavior have a score range divided into the maximum score and minimum score. These categories can be shown in this table:

Table 2. Scoring for Student Ecoliteracy Level

Indicators	Number of Questions	Highest Point	Lowest Point	Max Score	Min Score
Environmental Knowledge	20	1	0	20	0
Environmental Attitudes	15	4	1	60	15
Cognitive Skills	10	4	1	40	10
Participation	10	4	1	40	10
Sum	55	-	-	160	35

According to Table 2, the ecoliteracy test answers are then corrected based on test scoring guidelines; the Environmental Knowledge Indicator has 20 multiple-choice questions with point 1 if true and point 0 if false, then the maximum score is 20, and the minimum is 0. Then the environmental attitude indicator has 15 questions, with the highest point being four if true and the lowest point being one then the maximum score is 60, and the minimum score is 15, and the cognitive skills and participation indicators each have ten questions with the highest point four and the lowest

point is one then the maximum score is 40, and the minimum score is 10.

Table 3. Category for Student Ecoliteracy

Category	Score	Point
High	119 – 160	75 – 100
Middle	77 – 118	48 – 74
Low	35 – 76	22 – 47

According to Table 3, student results are categorized into three classifications, namely the high category if students get a score of 119 to 160, the medium category if students get a score of 77 to 118, and the low category if students get a score of 35 to 76.

Table 4. Scoring for Environmental Caring Behavior Level

Indicators	Number of Questions	Highest Point	Lowest Point	Max Score	Min Score
Energy Utilization	5	4	1	20	5
Waste Handling	5	4	1	20	5
Water Utilization	5	4	1	20	5
Carbon Emission Contributors	5	4	1	20	5
Fuel Use	5	4	1	20	5
Sum	25			100	25

According to Table 4, the environmental caring behavior test answers are then corrected based on test scoring guidelines, all indicators including energy utilization, waste handling, water utilization, carbon emission contributors, and fuel use. Has five questions, with point 4 if true and point 1 if false, then the maximum score is 20, and the minimum is 5.

Table 5. Category for Environmental Caring Behavior

Category	Score	Point
High	76 – 100	76 – 100
Middle	51 – 75	51 – 75
Low	25 – 50	25 – 50

According to Table 5, student results are categorized into three classifications, namely the high category if students get a score of 76 to 100, the medium category if students get a score of 51 to 75, and the low category if students get a score of 25-50.

The researcher proposed the following research hypotheses :

H₀: Student Ecoliteracy Are Not Contribute To Building of Environmental Caring Behavior in Senior High School 1 Bandung

H₁: Student Ecoliteracy Contribute To Building Environmental Caring Behavior in Senior High School 1 Bandung

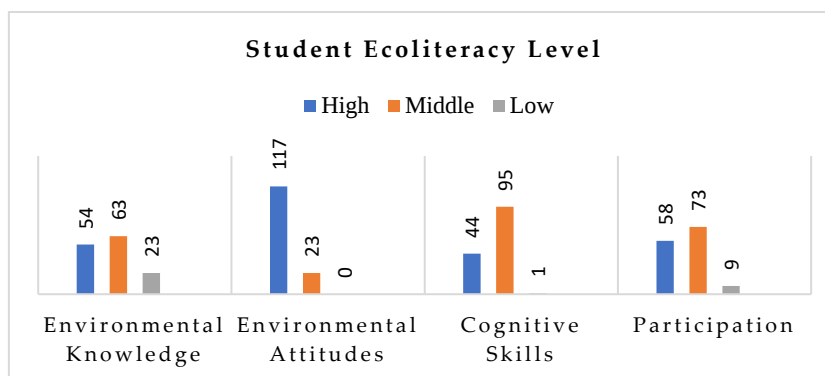
FINDINGS AND DISCUSSION

Findings

Student Ecoliteracy Level

According to the findings result that was given to 140 students, the research has been classified based on scores of environmental knowledge, environmental attitudes, cognitive skills, and participation. It will be shown in the figure below.

Figure 3. Result of Student Ecoliteracy



According to Figure 3, the researchers find out there are four indicators that have different results, which include three categories with the classification that environmental knowledge in the middle category, environmental attitudes in the high category, cognitive skills in the middle category, and participation in the middle category.

Environmental Caring Behavior

According to the findings result that was given to 140 students, the research has been classified based on the score of energy utilization, waste handling, water utilization, carbon emission contributors, and fuel use. It will be shown in the figure below.

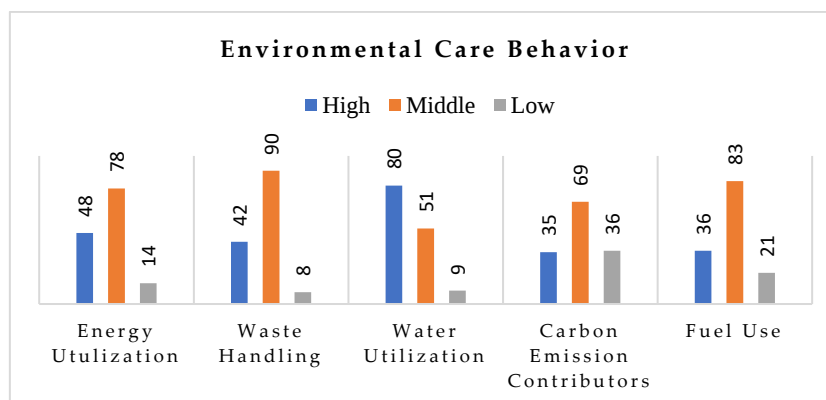


Figure 4. Result of Environmental Caring Behavior

According to Figure 4, the researchers find out there are five indicators that have different results, which include three categories with the classification energy utilization in the middle category, waste handling in the middle category, water utilization in the high category, carbon emission contributors in the middle category, and fuel use at middle category.

Contributions of Student Ecoliteracy to Build Environmental Caring Behavior

According to the findings result of the contributions of student ecoliteracy to build environmental caring behavior is measured by the statistic. The first statistical test performed was the Simultaneous F Test. It will be shown in the table below.

Table 6. Simultaneous F Test

		ANOVA				
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13374,789	4	3343,697	102,513	,000b
	Residual	4403,347	13	32,617		
	Total	17778,136	13			

According to the table, conclusions can be drawn through the principle of decision-making, which is declared influential if the significance value is <0.05 . Thus, the ecoliteracy of students is stated to have an effect on the formation of environmentally caring behavior because the significance value is 0.000 and less than 0.05. Then, to determine the value of the contribution made by ecoliteracy students to the formation of environmentally caring behavior, an R square test was carried out.

Table 7. R Square Test

Model	Model Summary			Std. The error in the Estimate
	R	R Square	Adjusted R Square	
1	,867a	,752	,745	5,711

According to the table, it can be seen that the value of students' ecoliteracy contribution to the formation of environmentally caring behavior is 0.752 or 75.2%. Then, to find out whether the influence given is strong or not, namely by conducting a determination test by looking at the R-value and matching it with the classification contained in the interpretation criteria.

Table 8. Interpretation Criteria

(R)	Interpretation Criteria
0,00 – 0,199	Very Weak
0,20 – 0,399	Weak
0,40 – 0,599	Enough
0,60 – 0,799	Strong
0,80 – 1,000	Very Strong

Source: Adapted by researcher (2023) from Riduwan (2013)

According to the solid table, it can be seen that the R-value is 0.867, and if matched with the interpretation criteria table, it can be concluded that the influence exerted by student ecoliteracy on the formation of environmentally caring behavior is very strong. The next measurement is by calculating statistical tests through partial t-tests. It can be seen the value of the contribution of indicators for student ecoliteracy variables to the formation of environmentally caring behavior.

Researchers need to conduct a partial t-test to find out whether there is an influence of ecoliteracy variables on environmental care behavior variables partially. The test results will show the results of the most significant influence of ecoliteracy variables on environmental care behavior indicators. Described in more detail in the following table.

Table 9. Partial T Test

Model		Coefficients		t	Sig.
		Unstandardized	Standardized		
		Coefficients	Coefficients		
		B	Std. Error	Beta	
1	(Constant)	-1,217	5,575		
	Environmental Knowledge	,020	,023	,038	,828
	Environmental Attitudes	,205	,096	,134	,399
	Cognitive Skills	,384	,074	,370	,034
	Participation	,373	,056	,447	,000

In the previous section, researchers have conveyed what hypotheses will be tested in this research. Researchers propose research hypotheses to be tested using a partial t-test to find out clearly which hypotheses will be accepted and rejected as conclusions. These hypotheses include:

H₀: Student Ecoliteracy Are Not Contribute To Building of Environmental Caring Behavior in Senior High School 1 Bandung

H₁: Student Ecoliteracy Contribute To Building Environmental Caring Behavior in Senior High School 1 Bandung

According to the table, it can be seen the significance value of each indicator can be concluded using the principle of decision making. If the significance value < 0.05 , then the indicator is stated to contribute to the formation of environmentally caring behavior. If observed carefully, the environmental knowledge indicator has a significance value of 0.399 which means that environmental knowledge does not contribute to the formation of environmentally caring behavior. The environmental attitude indicator has a significance value of 0.034 which means that environmental knowledge contributes to the formation of environmentally caring behavior. The cognitive skill indicator has a significance value of 0.000 which means that environmental knowledge contributes to the formation of environmentally caring behavior, and the participation indicator has a significance value of 0.000 which means that participation contributes to the formation of environmentally caring behavior.

Then it can be concluded that Hypothesis 1 is accepted, which states that "Student Ecoliteracy Is Contributing To Building Environmental Caring Behavior in Senior High School 1 Bandung."

Discussion

According to research findings, the results of the analysis show that was a significant impact of student ecoliteracy on building environmental caring behavior at State High School 1 Bandung. The student ecoliteracy has indicators consisting of environmental knowledge, environmental attitudes, cognitive skills, and participation. All indicators in student ecoliteracy are related and have their own value in building environmental caring behavior at school. Overall, student ecoliteracy has an impact or contribution to building environmental caring behavior at school. The researcher used descriptive analysis and statistical tests to measure how many students' ecoliteracy had an impact on building environmentally caring behavior at school.

Following the results of the analysis, the researcher finds out that environmental knowledge is not giving impact or contribution to building environmental caring behavior. After studying more deeply, the researcher found two factors why environmental knowledge isn't having an impact or contribution to building the environmentally caring behavior of students at school. The first factor is the student with a high value of student ecoliteracy but a low value of environmental caring behavior, and the second factor is the student with a low value of student ecoliteracy but a high value of environmental caring behavior. That's the reason why the statistical test can make a conclusion is environmental knowledge aren't have any impact or contribution to building environmental caring behavior at State High School 1 Bandung.

In other words, the student underestimates the concept of ecoliteracy but is fluent in practice in the field. This proves that not only knowledge is needed by students to build environmentally caring behavior. The knowledge obtained by students from learning at school tends to be less than optimal, but in its application, students show positive environmental care behavior. This can happen because students take part in environmental care programs in the environment around the house, such as routine cleaning activities and mutual assistance managed by neighborhood associates and the community. There is a statement that sounds "that public knowledge about environmental care behavior is very good, but in reality, community behavior is still not good" (Hutchison, 2018). In addition, (Liu et al., 2020) said environmental knowledge has no significant direct effects on pro-environmental behaviors. It is a crucial distal variable whose significant effect is fully mediated by environmental attitudes and environmental, behavioral intentions. It means although environmental knowledge is influential, it is not fully responsible for building environmental caring behavior. There are other factors that influent environmental caring behavior, for example, lifestyle,

misconceptions, ignorance, emotions, self-abilities, and values.

Environmental attitudes give a high value to impact on the environmental caring behavior of students. Which means attitudes are associated with pro-environmental behavior (Muliana et al., 2018). And also, through developing attitudes, values, knowledge, dispositions, and skills to undertake pro-environmental actions, environmental education fosters engagement in enhancing the sustainability of human-nature interactions over time (Mastrángelo et al., 2019). Also, positive attitudes toward the environment can directly affect pro-environmental behavior (Liu et al., 2020). The cognitive skills give a middle value to impact the environmental caring behavior of students. Cognitive skills are helping personally or the community to have skills in identifying, anticipating, preventing, or problem solving environmental damage. Participation is giving a middle value to impact the environmental caring behavior of the student. Participation gives a possibility and motivation to personally or community to be active in creating and realization of a sustainable environment.

All indicators in ecoliteracy are related and have their own value in developing aspects of student ecoliteracy. The purpose of the relation and value in the statement above is that environmental knowledge, environmental attitudes, cognitive skills, and participation have different ways and roles in supporting ecoliteracy as a whole, and each of these indicators has its own value in supporting ecoliteracy. To develop cognitive, affective, and psychomotor aspects of ecoliteracy in students, not only by reading about ecology but need to by giving direct experience in real life and needs making strategic policies in the effort to realize the green and eco-friendly campus.

On the scientific side, It takes the collaboration of several disciplines to understand the environment, as well as intervene in the environment so that it becomes a habitable place for humans and other creatures (Sari, 2021). That a good level of ecoliteracy can provide a good understanding of the environmental care behavior of students (Wahyuni et al., 2022), it means someone who has high skills in ecoliteracy directly contributes to impact evaluation and take decisions into consideration and keeps the environment stable. Also, some statements “the results showed that environmental knowledge and the environmental attitude possessed by students at SMPN 20 Depok is included in the high category. In addition, there is a correlation, and there is a significant correlation between knowledge and caring attitudes towards the environment of students at SMPN 20 Depok with a level of closeness that is included in the very low category with the direction of

positive relationships" (Handayani et al., 2022). It means someone who has high skills in ecoliteracy will show environmental caring behavior, and the example has a big hope and big responsibility of the environment for preventing or restoring environmental degradation. Strengthened my research results from (Ramadhan & Surjanti, 2022), which statement "the level of environmental care attitudes that exist in students will be low if ecoliteracy in students is also low and not applied consistently or sustainably. Conversely, the level of environmental care attitudes that exist in students will be high if ecoliteracy in students is also high and applied consistently or sustainably". This means there is a significant influence between ecoliteracy and ESD approaches to environmental attitudes.

These achievements certainly need to be maintained and improved in order to maintain and preserve the environment for human survival next. The integration of ecoliteracy in science learning leads to the achievement of students' mentality with environmental insight (Syukron, 2019). Education about the environment has a mission to shape human attitudes so that they care about the environment on Earth. Growing and increasing a sense of care for others and the environment can start with small things, such as activities for students (Hermawan et al., 2019).

CONCLUSION

Research discussion shows that student ecoliteracy are contributed to building environmentally caring behavior in Senior High School 1 Bandung. That is proven by the results of the coefficient of determination R square test, which indicate that student ecoliteracy has a strong impact on building environmental caring behavior in Senior High School 1 Bandung, F-test shows that the accepted research hypotheses are "Student Ecoliteracy Is Contribute To Build Environmental Caring Behavior In Senior High School 1 Bandung", and t-test shows the contribution value between ecoliteracy indicators including environmental knowledge, environmental attitudes, cognitive skills, and participation of student to build environmental caring behavior in Senior High School 1 Bandung. Researchers find out that environmental knowledge got the smallest contribution value to building environmental caring behavior. After dept-analysis, the reason why environmental knowledge is not contributed is "there are students who have low knowledge values but have good environmental care behavior values" and "there are students who have good knowledge values but have bad environmental care behavior values." In other words, this happened because students underestimated the concept of ecoliteracy but were fluent in practice in the field. This can happen because students take part in environmental care programs in

the environment around the house, such as routine cleaning activities and mutual assistance managed by the community and organization. However, this is not the main measurement in determining whether or not ecoliteracy contributes to environmental care behavior because what remains to be considered is ecoliteracy as a whole which also includes indicators of environmental attitudes, cognitive skills, and participation of students who have contributed to environmentally caring behavior.

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