Educational Management

The Effect of Principal Leadership and School Culture through the Adiwiyata Program on the Environmental Awareness Character of SMAN 2 Blora Students

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Article Info	Abstract
	This study aims to determine and analyze the effect of principal leadership and school culture on the environmental awareness character through the Adiwiyata program as a moderating variable. This research is important in term of determining the impact of the Adiwiyata program to the environment awareness since there are some other factors included especially at school students level. This research is a quantitative research conducted with a sample of 284 students at SMA N 2 Blora. Data were collected by questionnaire and documentation. The data were analyzed by multiple regression, T test and coefficient of determination. The results showed: (1) Principal leadership does not directly affect environmental awareness, (2) School culture does have a significant impact on environmental awareness, (3) Adiwiyata program does not moderate the effect of principal leadership on environmental awareness, and (4) Adiwiyata program does not moderate the effect of school culture on environmental awareness. The result of this research is in line with psychoanalysis theory by Sigmund Freud since the culture impact students' character. The result of this research can be used as the one of the reference in implementing Adiwiyata program, also can be used as a reference in improving environmental awareness character. The impact of these independent variables can be improved in various ways, including: (1) increasing the interaction of the principal with students through environmental conservation activities, (2) integrating Adiwiyata program into the school culture that has been running, and (3) environment-based program to increase students' interest in environmental conservation

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INTRODUCTION

Humans are creatures that have intelligence and minds. With this mind, it is hoped that humans can run life and socialize well. Interaction is not limited to interactions between humans, but there are also interactions between humans and the environment. Environmental issues have become very important in this era. There is a lot of environmental issues around us, ranging from

small to large scale. Along with the development of times in this era, causing changes and damage to nature which in turn contributes to environmental damage. One of the causes of natural and environmental damage is none other than human actions (Ardanita, 2017).

The cultivation of environmental character can be an alternative to this problem. Environmental character education needs to be taught and developed on an ongoing basis so that humans are able to be wise in addressing environmental issues. Character education in schools can be implemented through classroom-based, school culture-based, and community-based approaches. The Adiwiyata program is one of the efforts designed by the Indonesian government to keep a strong environmental character in students. The implementation and influence of the Adiwiyata program on the achievement of the cultivation of environmental awareness character in students is certainly also influenced by other supporting factors including the leadership of the principal and school culture. (Kardoyo, 2020) suggests that good leadership in education is effective leadership. The criteria for effective leadership reflect various aspects of the organization such as organizational characteristics, innate characteristics, and also the changes that exist in it.

The main role in carrying out the school management pattern that cares about the environment lies in the leadership of the principal and the entire school community, both together and individually. Handayani (2015) argues that the growth of the spirit of activity, synergistic collaboration, interest in the progress of education quality, a friendly work climate, and the development of the quality of teacher professionalism is highly dependent on the quality of the principal's leadership. Another factor that can influence the process and results of the cultivation of environmental awareness character of students is school culture. Those all elements is important to be determined since they are showed the improvement of the environment awareness. This research analyzed these elements deeply in term to get the impact value to the environment awareness especially at SMA N 2 Blora so that the impact can improve. This study aims to analyze and determine the influence of the principal's leadership and school culture on the environmental awareness character of SMA N 2 Blora students.

METHOD

This study adopts a quantitative research approach, which emphasizes the use of numerical data and statistical methods to investigate relationships, test hypotheses, and draw conclusions. Quantitative research is a systematic method of inquiry that focuses on quantifying variables and analyzing measurable data to understand phenomena and uncover patterns. It is particularly suited for studies that aim to generalize findings across populations or test theoretical models.

There are several types of quantitative research, including descriptive, correlational, experimental, and causal-comparative research. This study employs a causal research design, which seeks to establish cause-and-effect relationships between variables. Causal research is used to identify how independent variables influence dependent variables, enabling researchers to make predictions and understand the dynamics of specific interactions.

In this research, a sample of 284 students from SMA N 2 Blora was studied to examine causal relationships between variables of interest. Data were collected using questionnaires, which provided structured and consistent responses, and documentation, which added context and depth to the analysis. The collected data were then analyzed using multiple regression to assess the collective impact of independent variables, T-tests to determine the significance of individual predictors, and the coefficient of determination to measure the explained variance. This approach ensures robust and reliable findings.

RESULTS AND DISCUSSIONS

Description Environmental Awareness Character

Environmental awareness character refers to the attitudes, values, and behaviors that reflect an individual's understanding and concern for the environment. This character trait involves recognizing the impact of human actions on

nature, embracing sustainable practices, and promoting the preservation and protection of natural resources. The variable analysis of environmental awareness character at SMA Negeri 2 Blora is as follows.

Table 1 Statistical description of environmental awareness character variables

	Minimum	Maximum	Mean	Std. Deviation
Environmental Awareness Character	34	75	62.17	9.623

Based on the Table 1, it is known that the environmental awareness characteristics variable has an average value of 62.17. The lowest value on the principal leadership variable obtained from the questionnaire analysis results is 34, the highest value obtained is 75 and the standard deviation value is 9.623.

This data shows that the value of the environmental awareness character variable or is in a high category, this category refers to the description of the environmental awareness character variable as follows.

Table 2 Variable description of environmental awareness character.

No.	Interval	Total	Percentage	Criteria
1	66,8-75	101	35,56	Very High
2	58,6-66,7	111	39,08	High
3	50,4-58,5	39	13,73	Medium
4	42,2-50,3	25	8,80	Low
5	34-42,1	8	2,82	Very Low
Total		284	100	

From the results of the analysis of the table 2 above, it is known that the characteristics of environmental care are high with an average value of 62.17 with a percentage of 39.08%. The variable characteristics of environmental care are explained by 3 indicators, namely knowledge about the environment, environmental care attitudes and environmental care behavior.

Adiwiyata Program Description

The analysis of Adiwiyata program variables at SMA Negeri 2 Blora is as follows.

Table 3. Statistical description of Adiwiyata program variable

	Minimum	Maximum	Mean	Std. Deviation
Adiwiyata Program	15	75	63.65	8.614

Based on the table above, it is known that the Adiwiyata program variable has an average value of 63.65 with the lowest value at 33, the highest value is 75 and the standard deviation is 8.614 or is in a high category, this category refers to the description of the Adiwiyata program variable as follows.

Table 4 Description of Adiwiyata program variable

No	Interval	Total	Percentage	Criteria
1	66,6-75	105	37,0	Very High
2	58,2-66,5	123	43,30	High
3	49,8-58,1	34	12,00	Medium
4	41,4-49,7	20	7,0	Low
5	33-41,3	2	0,7	Very Low
Total		284	100	

From the results of the table analysis above, it is known that the Adiwiyata program is categorized as high with an average value of 63.65 with a percentage of 43.3%. Adiwiyata program variable is explained by 2 indicators, namely the achievement of the Adiwiyata program components and the successful implementation of the Adiwiyata program.

Description of Principal Leadership

The analysis of principal leadership variables at SMA Negeri 2 Blora is as follows.

Table 5 Statistical description of principal leadership variables

	N	Minimum	Maximum	Mean	Std. Deviation
principal leadership	284	15	75	62.67	10.099

Based on the table 5, it is known that the principal leadership variable has an average value of 62.67 with the lowest value at 15, the highest value is 75 and the standard deviation is 10.099 or is in a high

category, this category refers to the description of the principal leadership variable as follows.

Table 6 Description of principal leadership variables

No	Interval	Total	Percentage	Criteria
1	63-75	150	53	Very High
2	51-63	101	36	High
3	39-50	28	10	Medium
4	27-38	2	1	Low
5	15-26	3	1	Very Low
	Total	284	100	

From the analysis of the table above, the principal's leadership is highly categorized with an average value of 62.67 with a percentage of 36%. Principal leadership variables are explained by 3 indicators, namely personal, interpersonal and contextual.

Description of School Culture

The analysis of school culture variables at SMA Negeri 2 Blora is as follows.

Table 7 Statistical description of school culture variables

	N	Minimum	Maximum	Mean	Std. Deviation
School Culture	284	34	75	61.57	8.947

Based on the table above, it is known that the school culture has an average value of 61.57 with the lowest value at 34, the highest value is 75 and standard deviation is 8.947 or is in the high category, this category refers to the description of the process quality variable as follows.

Table 8 Statistical description of school culture variable

No.	Interval	Total	Percentage	Criteria
1	66,8-75	90	31,7	Very High
2	58,6- 66,7	111	39,1	High
3	50,4- 58,5	47	16,5	Medium
4	42,2- 50,3	31	10,9	Low
5	34-42,1	5	1,8	Very Low
Total		284	100	

From the analysis of the table above, the school culture is highly categorized with an average value of 61.57 with a percentage of 39.1%. School culture variables are explained by 3 indicators, namely norms, the role of education and social interaction.

Table 9. T-test Results Equation 1

	Model	Unstandardized	Coefficients	Standardized Coefficients		
		B	Std. Error	Beta	t	Sig
1	(Constant)	22.906	2.816		8.133	.000
	Principal leadership	.118	.062	.130	1.904	.058
	Valid N (listwise)	.604	.070	.586	8.611	.000

The influence of the principal's leadership on the environmental awareness character of SMA N 2 Blora students.

From the results of data testing, a significance value of 0.058 > α = 0.05 was obtained. This value indicates that the principal's leadership does not have a significant influence on the environmental awareness character of students. This is contrary to the theory discovered by John B. Watson's behavioristic theory. This theory states that human behavior, including character and personality, is influenced by learning from the outside aspect.

Aspects such as reinforcement, punishment, and conditioning are the main factors in the formation of character and individual behavior.

Another theory that is not in line with the results of this study is the theory of Albert Bandura, namely social cognitive theory where individual character can be formed through examples or observations of the direct actions of others. Albert Bandura states that character can be formed through the process of imitating what is seen and occurs in the surrounding environment. This is different from the results found that it turns out that the principal's leadership that provides reinforcement, exemplary and conditioning to the students are still not able to have a significant influence on the environmental awareness character of students.

Principal leadership does not have a significant effect can occur due to several factors, including: a. The role of the principal in interacting directly with students is still not optimal. The principal has many interests that make the interpersonal factors of the principal, especially with students, less. This can be a factor that triggers the influence of principal leadership on students' environmental awareness character to be insignificant. b. The influence of other factors is stronger. In line with the results of this study, there are other variables that have a significant influence on the environmental awareness character, namely school culture.

The influence of school culture on the environmental awareness character of SMA N 2 Blora

From the results of data testing, a significance value of $0.000 < \alpha = 0.05$ was obtained. This value indicates that school culture is able to have a significant influence on the environmental awareness character of students. This research is in line with the Ethics of Virtue character building theory proposed by Aristotle. Aristotle argued that character is formed from the attitude of virtue carried out by individuals in accordance with the prevailing order. This is certainly in line with this study which found that the good culture that has been running at SMAN 2 Blora is able to give a great influence on formation of students' environmental awareness character at SMA N 2 Blora.

These results are supported by the results of another study conducted by Ashari (2021) which was conducted at SMA 1 Geger, Madiun Regency. The study showed significant results where school culture and discipline simultaneously contributed to the school culture influence students' environmental awareness character by 26.73%. While culture has a partial influence on the environmental awareness character of 22.28%. Another study conducted by Manurung (2018) also obtained significant results from the influence of school culture on the character of students. The results of research conducted at Gajah Mada Junior High School in Bandar Lampung shows that school culture has a significant influence on student character with a coefficient of determination of 49.2%.

Table 10 T-test Results Equation 2

	Model	Unstandardized	Coefficients	Standardized Coefficients		
		B	Std. Error	Beta	t	Sig
1	(Constant)	49.080	12.447		3.943	.000
	Kepemimpinan Kepala Sekolah	-.447	.341	-.489	-1.310	.191
	Budaya Sekolah	.304	.414	.295	.734	.463
	Program Adiwiyata	-.085	.217	-.088	-.389	.698
	X1M	.009	.006	1.079	1.604	.110
	X2M	-.001	.007	-.098	-.129	.897

The influence of the Adiwiyata program in moderating the the relationship between the principal's leadership and the environmental awareness character of SMA N 2 Blora students.

From the results of data testing, the significance value of the moderating variable on the direct effect of the principal's leadership on environmental awareness character is $0.897 > \alpha$

= 0.05. This shows that the Adiwiyata program has not been able to moderate the influence of the principal's leadership on the environmental awareness character. This theory is not in line with the behavioristic theory proposed by Albert Bandura. Albert Bandura developed a social learning theory that combines behavioristic elements with cognitive and social thinking in character and behavior formation. The Adiwiyata program implemented at SMA N 2 Blora includes aspects of rules and habits that are applied at school. However, the results found that the rules and behavioral habituation through the Adiwiyata program have not been able to provide a significant influence in moderating the influence of the principal's leadership on the formation of students' environmental awareness character.

This research is not in line with the results found by (Rumini, 2022) who found that the Adiwiyata program partially or individually was able to significantly have a positive influence on environmental character building. Another study conducted by (Budiman, 2022) also showed different results from this study where it was found that the role of the principal and the Adiwiyata program is a series that supports each other in the formation of students' environmental awareness character. This shows that there are still inconsistencies in the role of the principal and Adiwiyata program simultaneously in realizing the environmental awareness character of students.

The influence of the principal's leadership has not been able to be improved by the implementation of the Adiwiyata program because the Adiwiyata program that was implemented emphasized habits and regulations rather than the direct role of the principal. This study is limited to personal, interpersonal and contextual factors of the principal and it was found that the principal's leadership has not been able to be improved by the implementation of the Adiwiyata program.

The influence of Adiwiyata program in moderating the relationship between school culture and environmental awareness character of SMA N 2 Blora students.

From the results of data testing, the significance value of the moderating variable on the direct effect of school culture on the environmental awareness character is 0.110> α = 0.05. This shows that the Adiwiyata program has not been able to moderate the influence of school culture on the environmental awareness character. This happens because the school culture factor has a strong influence of 55.7% along with the principal's leadership and the Adiwiyata program variable is not able to increase or decrease the influence of the school culture variable. The implementation of Adiwiyata program at SMAN 2 Blora is designed and implemented by adjusting the physical, social and cultural conditions that exist in the school and the surrounding environment. The school culture that is formed has been very attached to the students and the Adiwiyata program variable has not been able to moderate the influence of school culture on the caring character of students.

The results of this study are also related to the theory of psychoanalysis proposed by Sigmund Freud argues that the superego factor or the order, norms prevailing in the environment is one of the individual character builders. From the results of this study, the influence of the culture in the school environment was able to contribute in shaping the character of students, especially the environmental awareness character. However, other results found that not all variables in this study were able to significantly influence the character building of students. This theory also contradicts the results which show that the rules and habituation factors carried out through the Adiwiyata program have not been able to moderate the influence of school culture on the formation of environmental awareness character.

The results of this study differ from research Munazilah (2023) conducted at SMAN 4 Serang City by testing a questionnaire sample of 111. The test results prove that the Adiwiyata School program is effective in improving the environmental awareness character with data obtained by 24,253> Q2 and the average percentage result of 72%. The adiwiyata school

program is partially able to provide knowledge and awareness in efforts to preserve and manage the environment so that students of SMAN 4 Kota Serang have an environmentally caring character

CONCLUSION

This study aims to determine the influence of principal leadership and school culture on the environmental awareness character students of SMAN 2 Blora Jawa Tengan with the Adiwiyata program as a moderation variable. Based on the data collection and analysis that has been carried out using multiple regression models, T tests and determination coefficients, the following conclusions can be drawn: The better leadership of the principal will take the environmental awareness character of students increasing, although it is not significant. The more positive the school culture is implemented, the character of caring for the environment of students will experience a significant increase. The Adiwiyata program is not able to moderate the influence of the principal's leadership and school culture on the character of caring for the environment and only has an insignificant influence.

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