

Effectiveness of Outdoor Education on Student Characters Building

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Learning in physical education can be done outside of school (outdoor education). This model provides innovations to increase students' interest and enthusiasm in participating in learning, especially in Physical Education and Recreation subjects and other subjects. The game presented in outdoor education fosters more positive character of students. The purpose of this study is to find out how the role of outdoor education in shaping student character. Research Methods The experiments in this study used quantitative and qualitative approaches. The experimental research design used in this study was nonequivalent pre-test-post-test control group design (pre-test-post-test two groups). One of the considerations used in choosing this design is because it is a design that is widely used in research in the field of education. Based on the results of the study can be known the average value of student character assessment includes the results of affective, cognitive, and psychomotor values between the control class and the experimental class. The pretest and posttest scores of the control group did not experience a significant increase. While the pretest and posttest scores of the experimental group experienced a significant increase because of the treatment given to the outdoor education model. Test results Differences in the average value of characters from the two treatments. The t-test showed that the mean experimental class (0.349) and the mean control class (-0.175), then outdoor education gave a statistically significantly different value ($p < .05$) to the increase in character values in physical education learning. So it can be concluded that the hypothesis testing resulted in H1 being rejected that the outdoor education model played a role in shaping the character of students in SMA Negeri 2 Sukoharjo.

Key words : outdoor education, student character, Physical Education

Introduction

The learning process is generally done in class through formal education. In the physical education curriculum can be done outside the classroom in the natural surroundings of the school building. Through a learning process activity that is designed outdoors makes interdisciplinary learning for students. Utilizing the nature around the school which is usually

used as a place of learning, will provide positive energy to student learning activities. Nature's potential naturally stimulates students' senses to develop their attitude sensitivity. According to S Priest (2010) a new definition of education outside the classroom based on six main points is presented. Outdoor education: (1) is a method for learning; (2) experiential; (3) occurs mainly outside; (4) requires the use of all senses and domains; (5) based on interdisciplinary curriculum material; and (6) are relationship problems involving people and natural resources. Defined simply but comprehensively by Ford, Phyllis (1986) describes where learning takes place in any outdoor environment, topics to be taught outdoors and every aspect of culture related to the environment, and the purpose of activities developing knowledge, skills, and attitudes. It is hoped that students will be more aware of the importance of the natural environment in applying their skills in their daily lives. Students need to adapt and pay more attention to the need to utilize the environment. The learning process of using nature as a medium is seen to be very effective in knowledge management, because everyone will be able to feel, see directly and even be able to do it themselves, so that the transfer of knowledge based on experience in nature can be felt, translated, developed based on the capabilities possessed (Kusriyanti & Sukoco, 2020).

One of the activities programs that are widely used to support positive development in children is an outdoor education program (Enoksen & Lynch, 2018; Gartner-Manzon & Giles, 2018). The element of education in schools in the learning process determines the growth and development of children wherever children are located. In the learning process, there are many factors that can lure students to develop life behaviors. Cognitive, affective and psychomotor aspects are things that teachers need to pay attention to in assisting the development of children. So that the positive development of children becomes synchronous when the outdoor education program coexists in all three aspects. Psychomotor domain is the mastery of certain skills such as abseiling, kayaking, and mountain climbing activities that involve mastery of techniques. On the other hand, the cognitive domain focuses on knowledge, facts, and problem solving skills; while the affective domain focuses on developing attitudes, values and appreciation of problems, including attitudes towards the environment (Harun and Salamuddin 2013). Three areas must be developed in accordance with the curriculum taught at school. Students are required to have attitudes, knowledge, and skills in an effort to shape their character.

The natural environment is a place that influences the development of children's character. Believe it or not a conducive environment will foster a good child's personality. There are three places that are components for the formation of children's character, namely

in the family, at school, then in the natural environment. The natural environment and children interact naturally brings out the children's conscious nature how they feel life inwardly. This way of thinking, visual, and living about nature gives rise to the formation of characters about the way of life of children (Goleman, 2000: 407). Goleman in his theory also explained that there must be attention in shaping the character of children. Character education which involves aspects of knowledge (cognitive), feelings (feeling), action (action) is a plus character education. When this aspect is not carried out, character education cannot be carried out. Implementation of character education must be done systematically and continuously (Thomas L).

Problems in learning physical education in an effort to shape student character experience inhibition in SMA Negeri 2 Sukoharjo. The field conditions in the school are very small. Place as the implementation of learning is narrow so that the runag of student movement becomes limited. Facilities and infrastructure in schools are still inadequate, physical education teachers cannot implement teaching innovatively. Students' interest and enthusiasm are low in the learning process. Then students become less active tend to do minimal movement and play in physical education learning. According to Brockman, Fox & Jago (2011, p.2) active play contributes important to the formation of cognitive, physical, social, and emotional development of children which is not necessarily obtained from a form of structured physical activity. These things become the main problems of students in developing cognitive, cognitive and psychomotor aspects of physical education learning in school. Teachers must be prepared with something new to prepare for learning to refresh students' enthusiasm in the learning process.

Realizing the importance of the implementation of outdoor education activities for students, the researchers conducted a preliminary study of the contents of the high school curriculum, and assumed that there were problems faced by teachers in implementing outdoor education learning. Based on this the researcher conducted an interview with a teacher of SMA N 2 Sukoharjo, with the result that there were indeed problems in the field related to learning activities outside the classroom, which from the students themselves did not understand some of the benefits and the lack of support from the school for the procurement of these activities. Therefore, researchers are interested in conducting outdoor education research models to shape the character of students in SMA N 2 Sukoharjo.

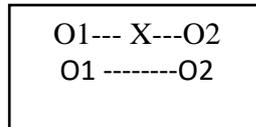
Provision of outdoor education models as an effort by researchers to present learning physical activity in physical education that is fun. Games that are made and presented in outdoor education models can shape the character of students. Learning

activities in the form of game competition give rise to an attitude of cooperation, responsibility, skills, leadership, and others. Outdoor education can improve various aspects of adolescent development such as cooperation, leadership, social skills and responsibility (Bruner, Eys, & Carreau, 2016). In line with this statement Rickinson.M., Et.al. (2004) said Outdoor learning had a positive influence on students' interpersonal and social skills. For example social effectiveness, the ability to communicate, the ability to connect and establish cooperation in groups / teams.

Research Method

A. Tools and Materials

This study uses a qualitative and quantitative approach, also called Mixed methodology design (mixed research) because the approaches between qualitative and quantitative support one another, integrated, and one unit to complement each other (Arikunto, 2006: 11). This research is an educational research conducted at school. Usually in educational research design nonequivalent pre-test-posttest control group design (pre-test-posttest two groups) becomes the choice used. The following research design schemes can be described by (Arikunto, 2006: 86) :



Scheme research
Nonequivalent Pre test-Post test Control Group Design

Experimental research designs in research method theory have several kinds of designs. In this experimental study researchers used the pre-test and post-test control group design methods proposed by Sugiyono (2012: 112). There are two groups chosen randomly, then previously given a pretest to find out the initial situation between the experimental group and the control group. From this pretest the initial data of the control group and the experimental group can be seen. Then the control group was not given treatment while the experimental group was given treatment to find out the results of the comparison of the two groups. After the treatment was given, a posttest was conducted to find out the final data results of the two groups. To determine the significance of the effect of treatment can be tested using statistics using parametric tests or non-parametric tests. If there is a significant difference between the value of the control group and the

experimental group, then the treatment given has a significant effect. Research design *Outdoor education*

Pretest	Group	Actifity	Treatmen	Posttest
Test Variabel Character	Eksperimen	learning outdoor class	<i>Games Outdoor education</i>	Test Variabel Character
	Control	Penjas	Konvensional	

B. Instrument Collection data

In this study the research instrument was used to determine student ratings through the measurement of affective, cognitive, and psychomotor aspects as students' character values. In Nurbudiyani (2013) explains the measurement of cognitive, affective, and psychomotor domains as follows.

Measurement of cognitive aspects is done by two tests. First, a subjective test by giving a description item in the form of material given to students as a whole. While objective tests are measured by observations using the observation sheet that has been made. In this study to determine the cognitive aspects of researchers using an objective test.

Measurement of affective aspects is done by observation. Observation activities are focusing on an object by using all the senses. So taking value by observation is not limited to just one person, the environment and nature can be used for data retrieval.

Measurement of psychomotor aspects is done to obtain the results of student skills in the learning process. Direct observation is used to assess students' abilities in the form of movement abilities (reflex motion, basic motion, and skilled motion), student skills (perceptual skills, physical skills, and communication skills). The value is taken through observation with the observation sheet that has been made before.

The following can be explained by the student character formation variable table which is used as an observation sheet guide according to (Misbach, 2006: 19):

Conceptual Definition	Operational Definition	Sub Variabel	Indicator
Cognitiv	Cognitive Rational intellectual potential in the form of knowledge, understanding, application, analysis, and evaluation. Rational knowledge Have a sense of courage, compassion, high cooperation, good discipline, and can solve problems	Cognitive Rational intellectual potential in the form of knowledge, understanding, application, analysis, and evaluation. Rational knowledge Have a sense of courage, compassion, high cooperation, good discipline, and can solve problems	Cognitive Rational intellectual potential in the form of knowledge, understanding, application, analysis, and evaluation. Rational knowledge Have a sense of courage, compassion, high cooperation, good discipline, and can solve problems
Afectiv	Affective The embodiment and change of behavior and attitudes that produce moral / ethical values that arise in moral behavior and ethics Pray solemnly, Be honest, be fair	Affective The embodiment and change of behavior and attitudes that produce moral / ethical values that arise in moral behavior and ethics Pray solemnly, Be honest, be fair	Affective The embodiment and change of behavior and attitudes that produce moral / ethical values that arise in moral behavior and ethics Pray solemnly, Be honest, be fair
volition	Will	Will	Will
Behavior	(volition) Attitude to commit and commit to doing good and positive things. The level of imitation, manipulation, precision, articulation, and naturalization	(volition) Attitude to commit and commit to doing good and positive things. The level of imitation, manipulation, precision, articulation, and naturalization	(volition) Attitude to commit and commit to doing good and positive things. The level of imitation, manipulation, precision, articulation, and naturalization

c. Sampling

A sample of 62 students were selected randomly and divided into two groups.

The control group was 31 students and the experimental group was 31 students.

Results and Discussion

The sampling technique in this study used a random sampling technique. A sample of 62 students were selected randomly and divided into two groups. The control group was 31 students and the experimental group was 31 students. In collecting data researchers used observations and questionnaires. Expert validators have validated the questionnaire that the researcher made. The questionnaire measurement uses a Likert scale which was stated by Djaali (2008: 28). Likert scale is a scale used to measure the attitudes, opinions, and

perceptions of a person or group of people about an educational phenomenon or phenomenon.

After knowing the data that has been taken, then the t-test is performed. T-test different test can be used in testing how much influence the independent variable is used individually in explaining the dependent variable partially in this study (Ghozali, 2012: 98). Data processing uses a statistical approach to obtain conclusions from the research results. With the method of staticka different test researchers will get the results of how the effect of the treatment that has been given. This test is used to determine the initial conditions of the experimental and control groups. This formula will answer hypotheses about how the role of outdoor education and whether it has a significant effect on the formation of student character. Then the assessment of affective, cognitive and psychomotor aspects in the form of observations using the observation sheet with variable criteria that have been made.

- a) a) Comparison table of Average Character Values Results in the Control Class and Experiment Class

No	Variabel Character	Average Value			
		class control		Eksperimen Class	
		Pre-test	Post-test	Pre-test	Post-test
1	Afective	68,67	70,56	67,33	84,63
2	Cognitive	65,03	71,76	66,47	81,34
3	Psikomotor	62,40	68,54	62,03	79,44

Based on the table above, it can be seen the average value of student character assessment includes the results of affective, cognitive, and psychomotor values between the control class and the experimental class. The pretest and posttest scores of the control group did not experience a significant increase. While the pretest and posttest scores of the experimental group experienced a significant increase due to the treatment of the outdoor education model. So it can be concluded that the average value of the characters of the experimental group students is better than the control group.

Using the normality test, the data obtained is normally distributed or not. Kolmogorov-Smirnov statistical technique (K-S test) as a use in the normality test data of the control group and the experimental group. in testing with staticka can be known if the data is normal or not by: 1) If the value of the control / experiment group has a calculated value that is lower than the table at the significance level (α) 0.05 it can be concluded that the data come from populations that are normally distributed. 2) If the value of the control / experiment

group has a higher calculated value than the table at the significance level (α) 0.05, it can be concluded that the data come from populations that are not normally distributed. The following is presented in the form of a data normality test table:

Normality Test Table Character Average Value

Group	Mean	Std. Dev	Z	p.	Conclusion	Information
Eksperimen	0.3292	0.07414	0.877	0.425	TerimaH ₀	Normal
Control	-0.1685	0.18940	0.561	0.91	TerimaH ₀	Normal

The table shows that based on the normality test, the average value of the character of both the experimental class and the control class has a lower calculated value than the table at the significance level (α) 0.05. Thus it can be concluded that the average population of the pretest and posttest scores of the experimental and control classes is normally distributed.

1. Homogeneity Variance Test

Testing the variance homogeneity test data, it can be seen sampling from the population has the same variance data and or does not have significant difference data. Homogeneity statistical tests of the values of the distribution of control groups and experiments were carried out. Data interpretation can be seen in the results of statistical tests with SPSS. The following are presented in the form of data homogeneity test tables:

Homogeneity Test Table Character Average Value

Group	Mean	Std. Dev	F	df1	df2	p.	Conclusion	Information
1. Eksperimen	0.3292	0.07414	23.0920	1	74	0.000	Terima H ₀	Homogen
2. Kontrol	-0.1685	0.1894						

The table shows the results of the calculation of homogeneity test (Levene Test) the average value of characters. Based on statistical calculations, the population of the two treatments was homogeneous, indicated by $p < 0.05$.

After a normality test and a homogeneity test on the learning attitude data, it was found that the experimental and control classes were normal and homogeneous in distribution, thus it could be continued by testing the difference between the two averages using t-test with a significance level (α) 0.05. The results of t-test calculations for two free samples (Independent samples t-test) using SPSS .

2. T Test

Analysis of the data used to answer the research hypothesis is t-test or t-test. In t-test testing this study used two hypotheses according to (Sugiyono, 2009: 272) namely (H₀) the null hypothesis and the alternative (H_a) hypothesis. The explanation is H₀ means there is no significant difference while H₁ means there is a significant difference. H₀ is accepted or H₁ is rejected if the significance level > 0.05, and H₀ is rejected or H₁ is accepted if the significance level < 0.05 .. The prerequisite test analysis uses SPSS 21 statistical analysis software.

Homogeneity Test Table Character Average Value

Group	Mean	Std. Dev.	Std. Error Mean	F	<i>p.</i>	t	<i>p.</i>
1.Experimen	0.349	0.0618	0.0109	26.925	0.000	15.057	0.000
2.Control	-0.175	0.1894	0.0289				

The table shows the results of the test differences in the average value of characters from the two treatments. Based on the difference test value shows that outdoor education gives a significantly different statistical value ($p < .05$) to the increase in the value of character in physical education learning.

Discussion

This research uses qualitative and quantitative approaches. This method is also called Mixed methodology design. This research uses a quantitative approach with a quasi-experimental method by applying outdoor education as a treatment. Outdoor education is held for 2 months for 8 meetings, each meeting held for two hours of study. The treatment given is specifically designed for high school level with the aim of improving student character education in the school environment.

In accordance with the psychological context that is applied in social life in interacting with a person's character can be divided into 3 according to Astuti1 & Mardius (2017). : (1) Spiritual and emotional development, intellectual development; (2) Sports and Kinesthetic (Physical and kinesthetic development); and, (3) Taste and Willpower (Affective and Creativity development). This research emphasizes the character of students in three domains, namely affective aspects, cognitive aspects, and psychomotor aspects. These three domains exist within students and are developed through outdoor education programs. Learning outside the classroom is appropriate to be applied in the education curriculum. In line with what was done in a study entitled "Curriculum for Excellence Through Outdoor Learning"

conducted by Learning and Teaching Scotland. (2010).

The results of interviews and observations conducted by researchers, the problem of students is the activeness in physical education learning. Outdoor education invites students to enthusiastic about moving and learning using the real place they see and use. Nicolls (2004: 21) revealed that the teaching and learning process is active and "hands on" that is a lot of time space for physical activities so as to make learning motivating. Students in outdoor education will get a wider range of motion so that students are more active in physical activity.

The application of Outdoor Learning can provide uses in increasing the ability to live socially and interpersonal skills yourself such as the ability to communicate, work together, and interact with friends. (Dillon, J. 2005) So in this research outdoor education also answers the problems that exist in physical education learning in SMA Negeri 2 Sukoharjo. According to the results of data processing done outside of school education plays a role in shaping the character of students in the realm of affective, cognitive and psychomotor.

Conclusion

Based on the results of the research that has been done, the average value of character assessment obtained includes the results of the affective, cognitive, and psychomotor grades of two classes, namely the control class and the experimental class. The acquisition of the pretest and posttest scores of the control group did not increase significantly. On the other hand the pretest and posttest scores of the experimental group increased significantly because they were given the treatment of outdoor education models. So it can be concluded that the average value of the characters of the experimental group students is better than the control group. So the results of the data that has been processed and then analyzed, it can be concluded that the outdoor education model plays a role in shaping the character values of students in SMA Negeri 2 Sukoharjo.

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