

Does Parents' Work Affect Students' Environmental Literacy in Bali, Indonesia?

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ABSTRACT

Environmental problems still often occur in Indonesia. At this time there is a lot of environmental damage and excessive use of natural resources. Problems can be reduced if people have environmental literacy. Environmental literacy is an individual's ability to understand and interpret environmental conditions. This study aimed at describing the effect of parents' work on the environmental literacy of high school students. This study was an ex post facto research. The population in this study was the eleventh-grade students of Public Senior High School 1 Kediri, Tabanan, Bali, Indonesia which consisted of six classes of Mathematics and Natural Sciences. Samples were selected using a cluster random sampling technique. The number of students in this study was 140 students from 4 classes. The instrument used in this study was an environmental literacy inventory consisting of five dimensions, including knowledge, attention, sensitivity, attitudes, and behavior towards the environment. The study results showed that there is no effect of parent's work on students' environmental literacy.

Keywords: Environmental literacy, education, school, ANOVA analysis

1. INTRODUCTION

Parents play important roles in guiding and accompanying children when they are at home. The parent's responsibility is creating a conducive environment and knowing every potential growth and also children's intelligence at every stage. Moreover, in this epidemic of Covid-19, the roles of the teacher have been replaced by the parents. Apart from working, parents need to take participate in the online learning process. The online learning process is not as effective as when students were studying in the school, the students spend more time at home. Therefore, it is very important if education today is integrated by special achievements for making the students more literate to the environment. Moreover, when they are at home, parents are more intensive in doing interaction with children in their surrounding environment.

Environmental issues are very well used to raise awareness and behavior towards the environment. Environmental literacy can make the students more critical and can bring up a solution in the form of a realistic action to the problems in the surrounding environment. Steps in teaching environmental literacy can be started through the positive impact of Covid-19 on the environments, such as reducing water and air pollution and also keeping the plants and animals. Hopefully, after this, the children can

bring up solutions for the environmental problems that are helpful continually in long term.

However, behind this positive impact that can be taken from the above problems, there is also a negative impact. Apart from accompanying children, the parents have the other responsibility that is work. Parents have to work to fulfilling all the needs of the family. Many parents that are busy with the work and not give attention to the growth of the children at home, it is that just. But these are problems are back again into each of parents' personalities.

The literacy term may already be familiar for many people. However, a little number of people understand its meaning and definition clearly. According to the Indonesia Dictionary, literacy is interpreted as an individual ability to processing information and knowledge for life skills. Literacy is also defined as more than just ability. Environmental literacy is awareness and cares about the environment to solve problems and find out the new solutions [1]. It focuses on pressing, comparing, and measuring the level of environmental literacy [2]. The experts conclude that the environmental literacy is a final decision and the best way to resolve the environmental problems including knowledge, attitude, and awareness toward the environment [3]. The environmental problems

will keep on happening if people do not care and keep the surrounding environment [4].

The environmental literacy is very important for all people. The study of environmental literacy is still lacking in Indonesia. The study about environmental literacy has been done in Turkey, Taiwan, Europe, and German [5]-[8]. One of the ways to create environmental literacy is building consistent communication from the parent's involvement [9]. The parent's involvement is by the way in giving morals, experiences, and finances [10]. The results showed that the effect of parent's works on environmental literacy is caused by the parents always want the best for their children [11]-[13]. After giving treatment by the parents, children hopefully can developing knowledge, awareness, behavior, and attitude towards environmental literacy [14]. However, there was no relation between the parent's work with students' environmental literacy [15]. The parents are more focused on finding out money to fulfill their life needs [17]. The purpose of the study was to describe the effect of parent's work towards students' environmental literacy in SMAN 1 Kediri, Tabanan, Bali, Indonesia.

2. METHODOLOGY

This study was a type of ex post facto research. The respondents of the study were the eleventh-grade students of Mathematics and Science Class in SMA N 1 Kediri, Tabanan, Bali, Indonesia with a total of 140 students. The environmental literacy inventory covers five dimensions, including knowledge (15 items), intention (15 items), sensitivity (16 items), attitude (9 items), and behavior (8 items). It used scales of 1 to 5 describing from strongly disagree to strongly agree. The environmental literacy scores based on the differences in parents' work were analyzed using two-way analysis of variance with a significant level of 5%. The analysis was carried out with the help of SPSS v. 25.

3. RESULTS AND DISCUSSION

Results of study on the parents' work are showed Table 1.

Table 1. Description of the research samples.

No.	Father's Work	Mother's Work	Total
1	Laborer/Farmers	Laborer/Farmer	14
		Aeller/Entrepreneur	4
		House Wife	8
2	Aeller/Entrepreneur	Aeller/Entrepreneur	30
		State Civil	14
		House Wife	11
3	State Civil	Aeller/Entrepreneur	7
		House Wife	15
		State Civil	37
TOTAL			140

Descriptive statistics analysis resulted in conclusions of parent's work based on environmental literacy (see Table 2). From Table 2 it can be seen that the highest average score of parent's work was on the state civil.

Table 2. Summary of parents' work statistics

NO	Parent's Work	Mean	SD
1	Laborer/Farmer	139.50	25.31
2	Aeller/Entrepreneur	126.93	25.26
3	House Wife	127.73	24.08
4	State Civil	129.02	24.45

Before conducting ANOVA, the normality test and variance homogeneity test need to be done. The results of the normality test showed that data were normally distributed (sig>0,05) and variances among the dimensions were also homogeneous (sig >0,05). The result of two-way ANOVA test indicated that there were no effects on parent's work on students' environmental literacy (Table 3).

Table 3. The result of the two-way ANOVA of parent's work based on students' environmental literacy

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5218.137a	8	652.267	1.076	.384
Intercept	1685346.955	1	1685346.955	2.7813	.000
Father's occupation	1824.505	2	912.252	1.506	.226
Mother's occupation	3653.597	3	1217.866	2.010	.116
Father occupation*Mother occupation	2505.029	3	835.010	1.378	.252
Error	79378.034	131	605.939		
Total	2418466.000	140			
Corrected Total	84596.171	139			

The instrument used was environmental literacy inventory that covered five dimensions, including knowledge, attention, sensitivity, attitude, and behavior towards the environment. The environmental literacy inventory was distributed online using Google form. The result of statistics analysis test showed that the effect of parent's work was bigger than 0,05 (sig.>0,05) (Table 3). The study results confirmed that there was no effect of parents' work on students' environmental literacy. This was normal due to parents have a big responsibility, and most parents assume that their children already got enough knowledge just in school. Many environmental literacy activities can be taught at home, such as watering the plants, throwing the rubbish in a trash can, not burning trash carelessly, and gardening in the house yard. Some of the studies done before showed there was no effect of parents' work on student environmental literacy [18]-[22]. Parents only focus on work to produce money for the family. [23]. Parents try to choose the best school for their children where parents hope that the school educates their children [24]. On the other hand, parents provide smartphones for their children so that they can do the tasks assigned by the school. [25].

The mastery of environmental literacy is very important in learning. There are many examples of learning materials that can be given through environmental literacy [26]. Aside from that, the students will be able to apply environmental literacy to support the learning that is followed. If the environmental literacy starts from the simple one will provide benefits and become a big experience to keep the surrounding environment [27].

4. CONCLUSION

Environmental literacy is very important for students to be mastered because environmental literacy can help the students in solving problems. If the environmental problems still happen a lot and people care less about it, so sooner or later the nature sources will be extinct and cause difficulties. Therefore, Thus, the formation of environmental literacy would be better started from the family. The study results showed that there is no effect of parent's work on students' environmental literacy.

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