

Research Article

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## WASTE UTILIZATION TRAINING ABOUT STYROFOAM BECOME A BATAKO IN THE SCAVENGER WASTE COMMUNITY IN PALOPO CITY

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### Abstract

**Background:** The amount of waste that is not processed and classified as non-biodegradable waste such as Styrofoam, well managed household waste is 36.8%. The amount of waste that is not properly managed is 63.2% of the total weighted waste of 282,654 tonnes. Lack of training for scavengers and the community has resulted in a large amount of styrofoam waste not being used.

**Methods:** The purpose of this study was to assess the effect of training on using Styrofoam waste into bataco. This research is a pre-experimental study with a one group pre testpost test design, conducted a pretest, then given treatment in the form of training and practice recycling styrofoam into concrete blocks. After that, within a period of approximately 1 month after treatment, a posttest is carried out to measure again. The respondents were trash scavengers, amounting to 83 people.

**Results:** The test results in this study indicate that there is an effect of training on the use of Styrofoam waste into concrete blocks in the garbage scavenger community in Palopo City with a value of  $p = 0.000$ .

**Conclusion:** Styrofoam can be modified to become concrete clocks. This can reduce the garbage waste in the community in Palopo City.

**Keywords:** *Training, Styrofoam, Scavengers, Garbage*



## INTRODUCTION

Total volume of garbage in South Sulawesi, every day reached 1000 tons / day, bins were not treated reached 425 tons / day. Figures this will continue to increase every year, given that the population of Indonesia more years will continue to grow and will affect large to increase the volume of garbage, especially garbage inorganic (Ministry of Environment and Forestry, 2018; the Environment Agency, 2018) Management of garbage house household in South Sulawesi which is managed by the well of 35.8% and which is not managed by the well amounted to 64.2% of the amount of garbage that is weighted as much as 8,677 tons (Ministry of Health of the Republic of Indonesia, 2018). 3R behavior (Reuse, Reduce, Recycle) is still rarely done. The percentage of the most frequently treated garbage to the recycling set to 0.19%, making manure compost 0.53%, is used for food animal 0.26%, still less than 1%. While approximately 54.65% house stairs most often dispose of garbage by means burnt (Health, 2018). Pengelolaan garbage home household who managed with good by 36.8% and the amount of garbage that is not managed by either of 63.2% of the amount of garbage that is weighted as much as 282.654 tons (Ministry of Environment and Forestry, 2018; Sucipto, C, 2012) A large amount of trash that is thrown away every day shows that in every day society produce bins with the number of the lot. The amount of garbage that is generated and is not managed by the well can cause pollution. Contamination occurs when people who used to burn garbage, and throw trash any place such as a river or the gardens empty and hoarding rubbish which is difficult to unravel as Styrofoam (Abida, 2017; Sumantri, 2015). To overcome the problem that, it is necessary to do an effort to improve the knowledge, self efficacy and skills of people in

the recycle birthday or utilize the back of garbage into a material that is useful as a form of concern about the environment and health. As well as the research that is carried out showed that the factor education in terms of this training, a factor that is most holding role important in the sustainability of the craft-based garbage in the hamlet Sukunan (Atmaji, 2017; Wirahadi, 2016). As is in the study is based on the results of interviews with respondents who are scavengers declare that they at all have not been given the training associated with the use of garbage styrofoam, so not yet know how, moreover to practice cultivation or use was at once yet had an idea. It is also the underlying research to provide treatment in the form of training of the utilization of waste styrofoam on a scavenger of garbage in City Palopo.

## METHOD

Research is a research pre experiment with the design of one group pretest posttest design (Creswell, 2016) done pretest, then given a *treatment* in the form of training and practice of recycling the Styrofoam into a brick. After that in the period of time less over 1 month after treatment carried out post-test to measure the return of self-efficacy, knowledge and skills of the utilization of waste Styrofoam into a brick. The number of respondents in this study were 83 scavengers. The data obtained in this study were analyzed using the Wilcoxon test.

## RESULTS AND DISCUSSION

Table 1. Distribution of respondents based on gender

type gender	Frequency (f)	Percentage (%)
Male	28	33.73
Women	55	66.27
Total	83	100

Source : Primary data, 2020

In table 1 show of the 83 respondents , the distribution of types of sex male number 28 (33.73%) of scavengers and the manifold sex women a s much as 55 (66.27%) of scavengers .

Table 2. Effect of training on the use of styrofoam waste .

	Mean	SD	P-value
Pretest	20.59	5.25	0,000
Posttest	34.98	0.15	

Note : Wilcoxon test

Based on table 2, from the results of the Wilcoxon test analysis , the mean pretest = 20.59 and posttest = 34.98 and the pretest and posttest p values are 0.000 or less than 0.05. In the study it was also obtained that before given training of scavengers at once has not been able to practice the way of processing garbage Styrofoam, but once given the training they are skilled to practice to produce work that is worth economical form of bricks from waste Styrofoam. It is demonstrated that the difference in value of the average /mean between *pretest* to *posttest* . Results of the study is also in line with research that has

been done by Kurniaty& Rizal ( 2011) on the utilization of the results of the management of garbage as an alternative material of building construction . In addition it is also no research that has the effect that the research that is done by Marliani ( 2015) concerning the use of waste home household (garbage anorganik) as a form of implementation of the educational environment.

## CONCLUSIONS

There is the effect of the training on the use of waste Styrofoam into a brick on scavenger of garbage in City Palopo . This study suggests:

1. The environmental office can adapt this training to be applied to other groups of scavengers.
2. The Government through the office environment life that overshadowed the field of hygiene needs to be much socializing related to the utilization of waste Styrofoam and establish cooperation with the private consumer results of the work of the scavenger as a step minimize trash that is not processed.

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