

Gempa Perekat The Movement to Process Garbage Becomes an Educational Game

by Mizam Kurniyanti

Submission date: 2 Februari 2023 08:35PM (UTC+0700)

Submission ID: 2137099004

File name: The_Movement_to_Process_Garbage_Becomes_an_Educational_Game.docx (3.82M)

Word count: 4213

Character count: 22797

Gempa Perekat: The Movement to Process Garbage Becomes an Educational Game Tool for Early Childhood Through Self-Help Groups for Family Welfare Development

Mizam Ari Kurniyanti¹, Ahmad Guntur Alfianto^{1*} Miftakhul Ulfa¹, and Ari Dwi Sulaksono²

¹Nurse Professional Study Program, STIKES Widyagama Husada Malang Indonesia

²Nursing Science Study Program, STIKES Widyagama Husada Malang Indonesia

ABSTRACT

Garbage is a problem in urban areas. One of the efforts that can be made against the waste problem is reprocessing it into useful materials. PKK is a family welfare coaching group that can turn waste into media material for educational games for PAUD students through self-help groups. The goal of this community service and research is to empower and assist PKK activist groups in optimizing waste as an educational game tool for children from a young age. The method used is a quantitative and qualitative approach. The quantitative data are in the form of demographic data, knowledge, and skills. In contrast, the qualitative data comes from structured interviews and FGDs with a grid of questions about waste, the efforts that have been made, and the benefits of recycling the waste as an educational game tool. The measuring tool used is a questionnaire about waste knowledge and a waste processing checklist sheet. The target of this activity was 25 PKK groups at RW 02 of Merjosari Subdistrict, Lowokwaru District, Malang City, and it was carried out in June-August 2019. This Gempa Perekat activity consisted of health education, focus group discussion, and forming self-help groups. The result of this activity is that the respondent's knowledge increases after receiving health education about waste management (0.000). There is an average skill in processing waste into a good educational game tool (73) among respondents, and they stated that all this time, waste has been disposed of, put in plastic bags, and burned. Furthermore, respondents hoped that there would be

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widyamahusada.ac.id

waste management that could be useful for PAUD students by processing waste into educational games. The conclusion of this activity is the Gempa Perekat program as a form of intervention in dealing with waste in the city by empowering the PKK as a self-help group in making educational game tools for PAUD students from waste.

KEYWORDS *games, garbage, self-help*

Introduction

The problem of waste in Indonesia today continues (1). This is very closely related to a clean and healthy lifestyle and culture in society (2). Several sources explain that waste is something that is of little use and value to society. Garbage is also interpreted as residual material from human activities. Garbage is also something that is thrown away and ignored until it is unwanted or unused material (3).

The world's population is currently increasing, and the level of urbanization in each region is also increasing annually, making the waste problem even more significant and varied (4) (5). The variety and amount of waste, especially in urban areas, make the problem of waste management more complex. Several efforts can overcome the waste problem, such as recycling it back into useful products (6). Waste processing also requires a lot of community participation in the form of empowerment in the community (7).

Merjosari Subdistrict, especially Rukun Warga (RW) 02, has problems processing waste. The waste processor is of particular concern to the head of RW 02 because Merjosari Subdistrict is a densely populated sub-district and is dominated by rented houses and student boarding houses. The results of the initial study conducted by initiating assessments and interviews with Posyandu cadres and community leaders in the Merjosari Subdistrict stated that residents are always complaining about the amount of waste that is increasing day by day and a lot of garbage that is in the gutters in front of

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widyamahusada.ac.id

the house. Residents have also received training related to waste recycling and the use of organic and non-organic waste, but this was not continued because there was no assistance from policymakers.

Based on the results of partner interviews, namely the Family Welfare Development Group (PKK) in RW 02 Merjosari Subdistrict, Malang City, it was stated that the PKK activist group had been taught by one of the institutions in Malang City how process waste, one of which was by making bags, flowers, tablecloths, and clothes hangers from waste from residents of RW 02 Merjosari Subdistrict. The PKK activist group also said that many PKK activist groups became early childhood education (PAUD) teachers in the Merjosari Subdistrict so that the activity of making handicrafts from waste was not resumed. In addition, complaints from PKK groups that are PAUD teachers stated that there had been very little income in PAUD, so learning media and infrastructure, especially educational game tools, are very minimal at the PAUD.

Children who attend PAUD schools aim to change their behaviors, starting from cognitive, affective, and psychomotor (8). Changes in behavior are taught in early childhood in accordance with the growth and development of children, especially those aged 2-4 years (9). Children who are in PAUD have the fastest developments in aspects of religion, morals, social interaction, intellectual, and emotional development (10). Character aspects in PAUD children can be developed using relevant themes and activities, resulting in cognitive, affective, and subtle psychomotor changes in the form of language to social aspects (11).

The problems experienced by partners in RW 02, Merjosari Subdistrict, Malang City, include garbage and limited learning media in the Merjosari Subdistrict PAUD. Efforts that the PKK can make include forming a self-help group (SHG). Self-help groups, or SHGs, are carried out to increase self-confidence and provide mutual support and motivation in a group with the same problem (12). The problems faced by the PKK group in RW 02 Merjosari Subdistrict are waste and its processing.

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widygamahusada.ac.id

Moreover, learning and educational media for PAUD children are costly, so the educational game tools in PAUD are very minimal.

The goal of this research and community service is to empower and assist the PKK mobilizing group in optimizing waste as an educational game tool for children at an early age in Merjosari Subdistrict, RW 02, Lowokwaru District, Malang City. With community service and research, it is hoped that it can increase the knowledge and skills of the PKK mobilizing group regarding waste processing as an educational game tool for early childhood. Furthermore, at the end of the activity, self-help group assistance activities are contested as a final assessment effort in demonstrating these educational game tools to the community.

Methods

Both community service and this research use both quantitative and qualitative approaches. This approach is used to measure demographic data such as age, education, employment, and marital status, as well as knowledge and skills in processing waste for PKK mobilization groups. At the same time, the qualitative data collected through directional interviews is related. Efforts that have been made by residents or partners regarding waste, current efforts that intersect with other aspects of the sub-district, and the benefits of educational game tools made by the PKK mobilizing group.

This activity was carried out in RW 02, Merjosari Subdistrict, Lowokwaru District, Malang City. This activity was carried out from June to August 2019. The activity was carried out by holding discussions with the PKK mobilizing group regarding waste problems in the RW 02 Merjosari Subdistrict. The following activity was waste-related health education, followed by a focus group discussion (FGD) with the PKK mobilizing group for the formation of self-help groups in the creation of educational games for children from an early age. The next activity was for the PKK driving groups to practice making educational game tools for early childhood. Finally, the last result was the

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widyamahusada.ac.id

presentation of educational game tools for early childhood to community leaders and the head of the PKK RW 02 Merjosari Subdistrict.

The instrument used in community service and this study was a questionnaire related to knowledge of waste processing that consisted of 20 questions with indicators of the meaning of waste, types of waste, methods of waste processing, and types of waste recycling. The questionnaire results range from 0 to 100, with correct and incorrect answer choices. The waste knowledge questionnaire was previously tested for validity and reliability with a Cronbach alpha value of 0.895. As for the waste management skills instrument, it is used for educational games using a checklist sheet with indicators of cooperation, skills, and usefulness. The result of the checklist sheet is 0-100. The instrument was also tested for validity and reliability, with a Cronbach alpha value of 0.910.

Qualitative data was collected using the FGD method with guided questions in the PKK mobilizing group that participated in self-help group activities. The questions asked were in the form of open-ended questions, which included: What is the problem with garbage in Merjosari Subdistrict, what has been done so far in processing the waste, what efforts can be made to solve the waste problem, and how to process waste to make educational game tools for schoolchildren early on.

Data analysis used for quantitative data is presented in the form of frequency for continuous data and the mean and standard deviation in the presentation of numerical data. The test used is the paired t-test statistic. Moreover, if the p-value is less than 0.05, then there is a difference. The qualitative analysis used the thematic analysis method for each question during the focused discussion. The results of the analysis are used as input for improving the activities involved in forming subsequent self-help groups. This community service and research ³ received ethical approval from the ethical committee of the Ministry of Health. This research and community service ³ has received approval from the research ethics committee of the Chakra Brahmanda Lentera institution with an ethically proper number No.112/022/XII/EC/KEP/LCBL/2022.

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widyamahusada.ac.id

Results

The results of focus group discussions with the PKK mobilizing group in RW 02 Merjosari Subdistrict, Lowokwaru District, were analyzed to reveal the group's perception of the waste problem in their area. Garbage is disposed of in plastic bags, and there are cleaners who pick it up. Furthermore, almost all residents do not understand or care about selecting waste that can be used for recycling. In addition, residents also often burn garbage.

Table 1. Characteristic data of the PKK driving group RW 02, Merjosari Subdistrict, Lowokwaru District (n = 25)

Characteristics	
Age (years, mean \pm SD)	43 \pm 6.09
Gender	
Man	0 (0%)
Woman	25 (100%)
Profession	
Housewife	12 (48%)
Civil Servant (ASN)	4 (16%)
Private employee	4 (16%)
teacher	5 (20%)
Status	
Marry	22 (88%)
Not married yet	3 (12%)
Residential / Rukun Tetangga (RT)	
RT 1	7 (28%)
RT 2	11 (44%)
RT 3	7 (28%)

Characteristic data from respondents or partners shows that all of them are women with an average age of 43. Meanwhile, most jobs are held by housewives (48%) with married status (88%). The majority of respondents were also from RT 2 (44%).

The results of health education about waste management in the PKK driving group RW 02, Merjosari Subdistrict, Lowokwaru District (n = 25) previously obtained the data normality test using the

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widygamahusada.ac.id

Kolmogorov-Smirnov test with a result of $0.010 > 0.05$, so that the data has a normal data distribution. Moreover, the homogeneity test uses the Leven test with a result of 0.810, whose value is > 0.05 , so that it has a homogeneous meaning between the two variables of knowledge before and after being given health education related to waste processing.

Table 2. The level of knowledge before and after being given health education about waste management in the PKK RW 02 mobilization group, Merjosai village, Lowokwaru District (n = 25)

Variable	Average	SD	p
Prior knowledge	60,80	13,820	0.000
After knowledge	82.40	11,824	

The results of the knowledge before and after being given health education from the PKK driving group RW 02, Merjosari Subdistrict, Lowokwaru District, showed a change in the level of knowledge.

The next stage of activity is another FGD related to the waste management plan in RW 02 Merjosari Subdistrict, Lowokwaru District. The results of interviews returned to the PKK driving group revealed a perception regarding proper and correct waste management. Several PKK mobilizing groups said that they had an early childhood education (PAUD) school but did not have supporting facilities for learning media. Furthermore, the results of the FGD agreed on making educational game tools from the garbage in the Merjosari Subdistrict. In addition, they also argue for the sustainability of the program.

Table 3. The results of the skills assessment in making educational game tools by the PKK RW 02 Merjosari Subdistrict District of Lowokwaru through self-help groups

Variable	
Skills in making educational game tools (grade, mean \pm SD)	73 \pm 7.7

The results of the assessment of the PKK RW 02 Merjosari Subdistrict Subdistrict, Lowokwaru District, saw the self-help group have an average score of 73 out of a total score of 100. This has a value close to the highest value.

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widyamahusada.ac.id



(a)



(b)



(c)



(d)

Figure 1. Activities carried out include (a) health education activities and FGDs related to waste management; (b) making educational game tools carried out by PKK RW 02, Merjosari Subdistrict, Lowokwaru District through self-help groups; (c) presentation activities of educational game tools to all partners and respondents; and (d) giving awards and certificates to the PKK mobilizing group RW 02, Merjosari Subdistrict, Lowokwaru District.

Discussion

Garbage is a challenging problem to overcome. Many waste problems around the community are processed into fertilizer and then burned (13) (14). However, only a little is reused as new things that the community can use or utilize (15). Various empowerment programs that can be carried out to recycle waste are useful (16).

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widygamahusada.ac.id

Currently, urban waste also creates a problem that does not run out or find a solution to be recycled again. Many government programs or sub-district officials always promote or innovate programs for recycling waste (17). However, with the existence of this innovation program, sometimes it is not carried out until monitoring and evaluation are carried out, so sometimes the program becomes neglected (18). Empowerment programs in the community, such as Gempa Perekat, are aimed at processing household waste into tools or media for PAUD children. This program, which involves the PKK mobilizing group, must be able to become a model for support and waste management done properly and correctly, as well as the benefits of using waste as a student learning medium.

This program, which targets the PKK of RW 02 Merjosari Subdistrict, Lowokwaru District, can increase knowledge, particularly in the processing of waste into goods useful to PAUD students. Besides that, the FGD method also found the right solution for processing waste into an educational game tool for PAUD students. The next program is to make educational game tools from household waste through self-help groups. This self-help group is a form of group that provides mutual support and motivation for problem solving (19) (20). This self-help group was formed to help each other make educational game tools for the PKK RW 02 driving group, Merjosari sub-district, Lowokwaru District.

Some of these models that have been implemented for community empowerment have been integrated into the form of health education, FGDs, and self-help groups (21) (22). Health education is one of the initial forms of community empowerment that can be carried out with any target (23). This form of health education can change a person's behavior through the stages of cognitive change or knowledge. Changes in knowledge can cause a person to act in making a decision based on the outcomes of cognitive processing (24). In addition to the decisions that have been determined, someone will perform actions that have been previously accepted as a result of knowledge and attitudes.

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widyamahusada.ac.id

Changes in behavior resulting from this knowledge can be understood as related to proper waste management. The results of this increase in knowledge can be influenced by several factors, from gender, age, and level of education to the model of education or health promotion that is carried out, such as an active or passive model in providing health education. Good health education uses an active approach because, with this active approach, all participants become involved in providing health education (25).

The FGD is the next Gempa Perekat program, which is the result of a discussion process to determine whether the program can be carried out by the PKK driving group. FGD is a discussion model with a brainstorming approach and analyzes some of the problems found in the community (26). With the FGD model, the participation of participants in determining a problem and being able to find solutions together makes this model very appropriate for mobilizing or empowering communities. Several models of the FGD approach, which are frequently carried out by the community, can drive societal changes toward a more healthy way of life (27).

The next empowerment model is to carry out activities aimed at changing knowledge and attitudes through health education and FGDs. The empowerment that can be done through mutual assistance and peer support can effectively improve one's life skills (28). Self-help groups are an effective form of group support and motivation among peers for improving skills (29). What distinguishes this model of empowerment is that there are experts in the group. The expert is a companion or mentor who previously was an expert in a particular field.

The PKK group is a form of mobilization in the community that can empower the community through activities or programs owned by the sub-district or village. One of these driving groups is involved in driving educational programs such as those in early childhood education (30). PAUD itself is a form of guidance formed by the PKK. However, in reality, the PAUD program that should have

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widyamahusada.ac.id

facilities as learning media is very minimal. This effort can be driven through the PKK driving program by seeking learning facilities and modules for PAUD students.

In the PKK RW 02 mobilizing group in the Merjosari Subdistrict, Lowokwaru District, five people became PAUD teachers. To understand the problems experienced by PAUD in the RW 02 area, the teacher becomes an expert capable of providing facilities for or facilitating the manufacture of this educational game tool. As a result, this self-help group program has the potential to become a form of empowerment that the PKK group can carry out by facilitating or creating educational game tools. The advantage of this Gempa Perekat program is that the program is implemented enthusiastically by all PKK in RW 02 Merjosari Subdistrict, Lowokwaru District. The existence of a team of experts in making and innovating the manufacture of educational game tools for PAUD students can be a facility, especially for the PKK in RW 02 Merjosari Subdistrict, Lowokwaru District, who are not able to make educational game tools for PAUD students. With this program, the educational game tools that become learning models or facilities are obtained at a lower cost. However, in the absence of this program, educational game facilities or tools for PAUD students may only last for a while because some of the materials use too much paper and can easily decompose.

Conclusion

Activities from the Gempa Perekat Empowerment Program are one of the innovation programs in processing waste into educational games for PAUD students, with the target being the PKK activist group. This Gempa Perekat activity provides an overview of waste management in urban areas, which can be used as a model or facility for educational games. This activity program increases knowledge in the PKK driving group and improves skills in making educational game tools for PAUD students through self-help groups. Gemap Perekats can be used as a form of intervention in dealing with waste

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widyamahusada.ac.id

in an effort to recycle it into materials or models that are useful for PAUD students and integrate them into the ten main PKK programs, namely education and skills.

Acknowledgment

We express our gratitude to the Institute for Research and Community Service, STIKES Widyagama Husada Malang, for funding the internal community service grant program in 2019 and the research group for mental, community, family, and geriatric nursing, STIKES Widyagama Husada Malang. This program was realized in the form of community and community service, especially by the PKK group RW 02, Merjosari Subdistrict, Lowokwaru District, Malang City, which had participated in this community service program.

Conflict of Interests

There is no Conflict of interest

References

1. Northcoot MS. Rubbish, Recycling and Religion: Indonesia's Plastic Waste Crisis and the Case of Rumah Kompos in Ubud, Bali. *Int J Interrelig Intercult Stud.* 2020;3(1):1–19.
2. Anggraeni Y, Ninin RH, Dalimunthe KL, Fauzi N. Integrated Waste Management in Supporting Awareness of Healthy Clean Communities in the Garut City Area. *Int Summit Sci Technol Humanit (ISETH2019)Advancing Sci Thought Futur Sustain Dev.* 2019;107–14.
3. Wilson DC, Velis CA. Waste management - Still a global challenge in the 21st century: An evidence-based call for action. *Waste Manag Res.* 2015;33(12):1049–51.
4. Kleszcz J, Maciejko A. Impact of the Municipal Waste Collection System in Cities on Urban Space and the Functioning of their Inhabitants. *Civ Environ Eng Reports.* 2020;30(1):33–42.

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widygamahusada.ac.id

5. Gutberlet J, Uddin SMN. Household waste and health risks affecting waste pickers and the environment in low- and middle-income countries. *Int J Occup Environ Health*. 2017;23(4):299–310.
6. Lumeno SS, Warouw FF, Kembuan D, Ratu R. Analysis of Waste Bank Management Model Around Lake Tondano Tourism Object in Supporting Sustainable Tourism Development. *Indones J Urban Environ Technol*. 2022;5(3):317–28.
7. Sakai S ichi, Yano J, Hirai Y, Asari M, Yanagawa R, Matsuda T, et al. Waste prevention for sustainable resources and waste management. *J Mater Cycles Waste Manag*. 2017;19(4):1295–313.
8. Oktavianingsih E, Ismiatun AN. Assessing stability motor skills of five-to-six-year old and six-to-seven-year old obese children. *JPPM (Journal of Educators and Community Empowerment)*. 2020;7(1):16–22.
9. Eddy LH, Wood ML, Shire KA, Bingham DD, Bonnick E, Creaser A, et al. A systematic review of randomized and case-controlled trials investigating the effectiveness of school-based motor skill interventions in 3- to 12-year-old children. *Child Care Health Dev*. 2019;45(6):773–90.
10. Estrada CAM, Lomboy MFTC, Gregorio ER, Amalia E, Leynes CR, Quizon RR, et al. Religious education can contribute to adolescent mental health in school settings. *Int J MentHealth System*. 2019;13(1):1–6.
11. Dzainudin M, Yamat H, Yunus F. Emerging Young Children's Thinking through Social and Cognitive Development in the Project Approach. *Create Educ*. 2018;09(14):2137–47.
12. Landstad BJ, Hedlund M, Kendall E. Practicing in a person-centred environment–self-help

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java

Indonesia

E-mail:ahmadguntur@widygamahusada.ac.id

- groups in psycho-social rehabilitation. *Disabled Rehabilitation*. 2020;0(0):1–10.
13. Ayilara MS, Olanrewaju OS, Babalola OO, Odeyemi O. Waste management through composting: Challenges and potentials. *sustain*. 2020;12(11):1–23.
 14. Ferronato N, Torretta V. Waste mismanagement in developing countries: A review of global issues. *Int J Environ Res Public Health*. 2019;16(6).
 15. Bernardo CA, Simões CL, Pinto LMC. Environmental and economic life cycle analysis of plastic waste management options. A review. *AIP Conf Proc*. 2016;1779(October 2016).
 16. Saragi S, Sinaga K, Purba B. the Role of the Government in Community Empowerment Through Waste Bank Management. *Dharmawangsa Int J Soc Sci Educ Humanit*. 2020;1(2):130–43.
 17. Hadiyanti P. A Group Approach in a Community Empowerment : A Case Study of Waste Recycling Group in Jakarta. *J Educ Practice*. 2016;7(29):157–67.
 18. Brotosusilo A, Hilya Nabila S. Community engagement and waste management policy: A comparative analysis. *E3S Web Conf*. 2020;211:1–6.
 19. Ngai SSY, Jiang S, Cheung CK, Tang HY, Ngai HL, Ng YH. Measuring development of self-help organizations for patients with chronic health conditions in Hong Kong: Development and validation of the self-help organization development scale (shods). *Int J Environ Res Public Health*. 2021;18(3):1–15.
 20. Kamala S, Jyothi U. Empowerment of Rural Women through Self Help Groups. *Int J Curr Microbiol Appl Sci*. 2018;7(10):3048–52.
 21. Tung CY, Chang CC. The Effect of Empowerment Program on Health Education Teachers

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java

Indonesia

E-mail:ahmadguntur@widyamahusada.ac.id

- with Health Insurance Education. *Int J Educ Methodol*. 2022;8(2):313–20.
22. Kumboyono K, Alfianto AG. Psychoeducation for Improving Self Efficacy of Care Givers in Risk Coronary Heart Disease Prevention : The Study of Family Empowerment. *Indian J Public Heal Res Development*. 2020;11(03):2309–13.
 23. Wijayanti DP, Alfianto AG, Rahmawati I, Yusniawati YNP. Fire management: A virtual treatment towards psychological preparedness among health college volunteers in Indonesia. *J Palembang Nurs Stud*. 2022;2(1).
 24. Wandira SA, Alfianto AG, Rufaindah E. Intervention Creating Opportunities For Personal Empowerment (Cope) Influences The Prevention Of Covid-19 Social Stigma In City Communities. *Nurs News J Ilm Nursing*. 2021;5(3):133–41.
 25. Dodok Y, Guntur A, Indriyawati, Wicaksono KE. Behavioral Differences In Seeking Help For Mental Health Among Generation Z From The Kodi People Group And The Madurese Ethnic Group. *J Appl Nurs Heal*. 2022;4(1):68–75.
 26. Alfianto AG, Jayanti ND. Banana Gen Alpha: A Smartphone Application To Reduce Parenting Stress For Parents With Alpha Generations. *Indonesian Nursing Media*. 2020;3(3):121.
 27. Axelsson M, Schønning V, Schønning V, Bockting C, Buysse A, Desmet M, et al. Lived experiences: A focus group pilot study within the Mentally project of mental healthcare among European users. *BMC Health Serv Res*. 2020;20(1):1–19.
 28. Wicaksono and Alfianto. Family Centered Empowerment Model for Behavioral Changes in Poor Families Preventing Hypertension in Bantur District. *Jl-KES (Journal of Health Sciences)*. 2019;2(2):55–60.

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java Indonesia

E-mail:ahmadguntur@widygamahusada.ac.id

29. Thilagaraj A. European Journal of Molecular & Clinical Medicine A Study On Women Empowerment Through Self-Help Group Members With Special Reference To Virudhunagar District In Tamil Nadu. Eur J Mol Clin Med. 2020;7(3):4218–29.
30. Yuniriyanti E. PKM: Preschool Pkk Al Ikhsan Panggungrejo Village – A Form of Village Synergy and Early Childhood Education. Dharmakarya. 2019;8(3):210.

*Correspondence:

Ahmad Guntur Alfianto

Nurse Professional Study Program, STIKES Widyagama Husada Malang, Jalan Taman Borobudur Indah 3A Malang City, East Java
Indonesia

E-mail:ahmadguntur@widyamahusada.ac.id

Gempa Perekat The Movement to Process Garbage Becomes an Educational Game

ORIGINALITY REPORT

5%

SIMILARITY INDEX

5%

INTERNET SOURCES

3%

PUBLICATIONS

0%

STUDENT PAPERS

PRIMARY SOURCES

1

e-journal.sari-mutiara.ac.id

Internet Source

3%

2

aisel.aisnet.org

Internet Source

2%

3

doaj.org

Internet Source

1%

Exclude quotes On

Exclude matches Off

Exclude bibliography On