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# ORIGINAL CONTRIBUTION Strengthening the Intentions and Actions of the Mother in Preparing Vegetables and Fruit Menus through the Emotional Demonstration Method

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**Abstract**— This study aims to implement the emotional demonstration education method for reinforcement of mother's intentions and actions in providing a menu of vegetables and fruit in the family is the mother. Therefore, an intervention program is needed in the form of an educational method about the benefits and provision of vegetables and fruits at the household level, which can arouse the emotions, and memories of the mother. The research used quasi-experiment method with the nonequivalent control group design. The target population is 649 people, with a sample of 90 housewives (divided into 2 groups; 45 interventions and 45 controls) in two villages. Pre-post-test measurements were carried out to obtain the strengthening of intention and action aspects in providing vegetables and fruits at the household level. The results showed that there was an increase in the intention of housewives in the intervention group by 6.8 points at the value of p = 0.003, while in the control group, the opposite occurred in the form of a decrease in the score of 6.8 (p = 0.229). In addition, there was also an increase in the percentage of housewives who had good actions after the intervention in the two groups, but the number of percentage increases in the intervention group was much greater at 82.3% (p = 0.000) compared to the control group which was only 2.3% (p = 1.000). It was concluded that the intervention using the emotional demonstration method could strengthen the intention and improve the mother's actions in providing a menu of vegetables and fruits for her family. The study makes recommendations for relevant parties such as the health office, health center, and government at the village level and encourages them to collaborate in promoting educational efforts about the importance of providing a menu of vegetables and fruits with the main goal of mothers using the emotional demonstration method integrated into the community movement program to eat fruits and vegetables.

Index Terms— Mother's Intentions and Actions, Vegetable Menu & Fruit, Emotional Demonstration Method.



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## Introduction

The main problem with regard to the consumer of vegetables and fruits, especially in Indonesia, is that the community is still under the recommended consumption. Even though the recommendations for balanced nutrition guidelines determine the recommended standard for consumption of vegetables and fruits per day as much as 250 grams (Ministry of Health, 2014). Meanwhile, recommendations from Yngve et al. (2005) for the consumption of vegetables and fruits amounted to 400grams per day. Other recommendations sourced from the Dietary Guidelines for American state that consumption of vegetables and fruits per day is as much as 5 servings. If the portion is not fulfilled it can cause a deficiency of vitamins, minerals and fiber so that it can trigger various diseases.

Peltzer & Pengpid (2012) outline the curious facts about vegetable and fruit consumption in children aged 13-15 years in five Southeast Asian countries, namely 76.3% of children of this age do not like consumption of vegetables and, only 28% consume less than 1 time per day and around 13.8% who consume vegetables and fruits less than once per day. This research recommends the urgency for intervention programs aimed at increasing vegetable and fruit consumption among children and adoles-

There were various results of research, which is emphasize the importance of consumption of vegetables and fruits in maintaining health and preventing disease. Research by Fadila et al. (2019), shows that there was a relationship between maternal behavior in providing a menu of vegetables and fruits that was balanced with nutritional status in children. Recommendations regarding the need for an education program on the importance of vegetable and fruit consumption for children, especially for mothers as the main providers of family menus were also found from the results of research by Mohammad & Madanijah (2015), who examined fruit and vegetable consumption of school-aged children in Bogor.

Mothers are the determinant in providing food consumed by the family. A mother who is used to providing food for the family every day should have the ability to menu nutrition according to the needs at the household level (Agency for Health Research and Development (Indonesia), 2013). The nutrition menu that meets the needs and is balanced in the household is one of them by fulfilling the intake of vegetables and fruit.

cents. Recommendations that are considered appropriate for the target are providing education for families to prepare a menu of vegetables and fruit at the household and family level prioritizing messages about the benefits of vegetable and fruit consumption in childhood and adolescence.

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Vegetables and fruit are food sources that contain lots of vitamins and minerals that are very beneficial for health, development and growth. The results of basic health research in 2013 showed that people aged  $\geq 10$ years ate less fruits and vegetables. Intake of balanced nutrition is very important for children's growth and development, which requires the role and support of the mother in providing this intake. The act of the mother in providing fruit at home has a positive relationship with fruit consumption in children. It means that the increase in fruit availability in households is directly proportional to the increase in fruit consumption in family members (Mohammad & Madanijah, 2015). In line with this, the findings of the results of a previous study from Bourdeaudhuij et al in 2008 stated that there was a close relationship between the availability of fruits and vegetables at home and the level of consumption of fruits and vegetables in children. Thus, the role of mothers is very important as a savior of nutrition for family members, therefore it is very important for behavioral strengthening interventions for them to provide a menu of vegetables and fruits at home.

There are various kinds of educational methods used in strengthening health behaviors. These methods include; lectures, counseling, simulations, role-playing, guidance and the like. However, the educational method was considered not effective in arousing the emotions of the target of housewives in providing a menu of vegetables and fruit for the family. An educational method intervention is needed that can touch emotions and feelings of the target, in this case a housewife, in order to strengthen her intentions and actions to provide vegetables and fruit for her family.

The educational method initiated by the Global Alliance for Improved Nutrition (GAIN) in 2017 called emotional demonstration can be assumed to meet these needs. Because this emotional demonstration is an educational method that is participatory in conveying information in a fun manner and or touching the emotions of the target of education. The characteristics of a method like this will facilitate the target's memory of the message given, with the result that the impact will be more felt compared to the educational strategy in reinforcing other behaviors.

## Objective of the study

An intervention program is needed in the form of implementing an educational method about the benefits and provision of vegetables and fruits at the household level that can arouse target emotions and memories. This study aims to implement an emotional demonstration education method to provide reinforcement of behavior in housewives from aspects of intention and action in providing a menu of vegetables and fruit for the family.

#### Literature Review

Emotional demonstration education method

Emotional demonstration is a participatory educational method in conveying simple messages by pleasing and or touching the emotions of the target of education. Thus it is very easy to remember the goals and the impact is more felt than the educational strategies in other behavioral changes. The purpose of this education method is to be able to touch the feelings of the target of education with the result that the message and information delivered can be absorbed and last long in the feeling compared to only the target mind because it will be more quickly forgotten (Global Alliance for Improved Nutrition (GAIN), 2017).

#### The theory of Behavior Intention

Snehandu B. Kar tried to analyze the intentions of people in acting or behaving. Kar analyzes health behaviors that the behavior is a function of:

a. A person's intention to act in relation to his health or health care (behavior intention)

b. Social support from the surrounding community (social-support)

c. The presence or absence of information about health or health facilities (accessibility of information)

d. Personal autonomy of the person concerned in terms of taking action or decision (personal autonomy)

e. Situations that make it possible to act or not act (action situation).

According to this concept, the health behavior of a person or society is determined by his intention towards the object of health, the presence or absence of support from the surrounding community, the presence or absence of health information, the freedom of the individual to make decisions or actions, and situations that allow him to behave or act or not behave or not act.

The following scheme of the concept of intention to behave is:



Fig. 1. Schematic theory of Behavior Intention (Kar, 1980), quoted from Notoatmodjo (2010)

## Selection of research locations

Bone Regency is a region that ranks second lowest in the consump-

tion of vegetables and fruit by the community, which is only  $\geq$ 5 portions per week from 24 regencies and cities in the province of South Sulawesi. In addition to Bone, the other districts that are in the lowest position are the

average consumption of vegetables and fruits per serving per day, namely Selayar, Tana Toraja, Luwu and Takalar Agency for Health Research and Development (Indonesia) (2013).

In Bone district, based on the results of a clean and healthy lifestyle survey in the work area of Timurung Health Center, Ajangale sub-district, data were obtained that in Timurung village there were vulnerable groups with a small amount of vegetables and fruits per day, namely: under two years, children, adolescence and the elderly. In this village, information was also obtained that only about 32.7% of households consumed vegetables and fruits every day. In addition there were results of the recapitulation of the self-examination survey related to the 10 clean and healthy lifestyle indicators in 2018 in the work area of Timurung Health Center, one of the indicators is low vegetable and fruit consumption from residents in two villages, Leppangeng and Amesangeng. Based on this, the two villages

were chosen as intervention villages and control villages.

#### **Research Model**

Krummel & Kris-Etherton (1996), describes that consumption behavior is influenced by various factors both from within themselves (internal) and from outside the individual or the environment (external). In this study the focus is on individual internal factors. Internal factors arise because of individual awareness, meaning that the mother decides behavior changes for herself after obtaining information that can increase her intention and awareness to act. In line with what was stated by that intention is a factor that becomes the starting point with the result that someone acts or behaves. Following is the chart of this research framework:



Fig. 2. Research framework

## Methodology

## Types and design of research

The type of research used was quasi-experiment with the design of the nonequivalent control group design (Campbell & Stanley, 1966; Kleinbaum et al., 1982). The use of the nonequivalent control group design due to this method is considered appropriate to measure strengthening of housewives' behavior related to their intentions and actions in providing a menu of vegetables and fruit for the family. The following is a research design picture:





Based on Figure 3, it can be explained that, O1 and O3 are the initial conditions for measuring the intentions and actions of housewives in preparing vegetable and fruit menus at the family level, before giving intervention to the treatment group. Whereas O2 and O4 are the final conditions for measuring the intentions and actions of housewives after the intervention group received treatment in the form of emotional demonstration method (X).

#### Population and sample

This research lasts for 6 months, starting from May 2018 to October 2018. The target population in this study were 649 people in Leppangeng and Amessangeng villages. The sample in this study was a number of housewives in two villages in the working area of Timurung Community Health Center that were determined by simple random sampling, using proportions on the Lameshow formula of 50% because there had been no previous similar studies referenced Lwanga & Lemeshow (1991). The total sample in this study was 84 people. Efforts to avoid dropping out, the number of samples studied was increased by 10%, with the result that the number of samples was 90 housewives divided into 2 groups, namely the intervention group as many as 45 people and the control group as many as 45 people.

The inclusion criteria from the subject of this study include:

- 1. Mothers domiciled in the research area
- 2. Minimum level of education is elementary school
- 3. Mother's age is 15-55 years
- 4. Capability to read and write

5. Married. While the exclusion criteria from the subject of this study were not following one of the data collection processes.

## **Description of Intervention**

The description of the implementation of the emotional demonstration education method can be seen in the following description:

1. Target: 45 housewives in the village of Leppangeng in the Puskesmas Timurung district, Ajangale district, Bone district.

- 2. Subjects:
- a. Definition of vegetables and fruit
- b. Types of vegetables and fruit
- c. Benefits of vegetables and fruit

d. Utilization of local vegetables and fruits (which are often found and consumed by the target)

e. Performed of emotional demonstration using tools and material for preparing menus for vegetables and fruit at the household level

3. Tools and materials:

a. Tools: 4 measuring cups, mortar and knife for peeling and cutting fruit b. Vegetable ingredients: Boiled clear vegetables (spinach + pumpkin) and spinach + pumpkin juice as the end result of metabolism in the body

c. Fruit ingredients: Banana, papaya, watermelon and oranges and papaya and watermelon juice

d. Fried ingredients

e. Solvent: Warm water

4. Duration: 45 minutes

5. Number of measurements: 2 times (Initial measurement  $\rightarrow$  1 week before intervention and final measurement  $\rightarrow$  1 month after intervention) 6. Method: Emotional demonstration

7. Media: Educational booklet on vegetable and fruit consumption with the emotional demonstration method

8. Frequency: One time each

#### Emotional demonstration stage

1. The facilitator explains the intent and purpose of emotional demonstration

2. The target is asked to move closer to the demonstration table

3. The facilitator encourages yells so that housewives enjoy the activity process

4. The facilitator then explains the functions of the tools and materials to be used

5. The target is asked to choose one of the fried foods most often served at home

6. The facilitator will prepare 3 containers requested by 3 housewives:

a. The first container contains vegetables that have been boiled and then ground using a tool pounder so that the texture becomes smooth

b. The second container contains fruit that has been peeled and sliced

c. The third container contains fried food

7. The next step is each container filled with warm water and let stand for a moment

8. While waiting for the contents of the container which seemed to slowly begin to mix with water, to trigger the enthusiasm of the participants, the facilitator again gave yells and interactive games

9. Next the facilitator shows each contents of the container to the participants while pressing using a spoon. This process is analogous to the process of metabolizing food in the body. Vegetables and fruits that have a smooth texture and contain fiber are more easily digested and absorbed so that it is good for health compared to fried foods that contain oil which is difficult to absorb by digestion and not good for health.

10. The facilitator again explains to the participants the impact that will occur if too often consume fried foods, fast food and the like.

11. At the end of the process, the facilitator again shows processed vegetables and fruits that are beneficial to the body, such as watermelon and papaya juice, and clear vegetable preparations, so that the target understands and is not saturated with repetitive processed menus. Further explanation is conveyed that vegetables and fruits can be consumed with various processed variations so that they can be appetizing and attractive to other family members.

## **Data Analysis**

Data analysis was performed to determine the frequency distribution and percentage characteristics of housewives, intention and action variables. The characteristics of housewives involved in this study in the intervention and control groups can be seen based on age, education level and number of family members, as follows:

Table I

Characteristics of housewives in the intervention and control group

	Group						
Inter	rvention	Сс	ontrol	р			
n	%	n	%				
11	24.44	4	8.89				
21	46.67	14	31.11	0.544			
9	20.00	17	37.78	0.544			
4	8.89	10	22.22				
31	68.89	32	71.11				
8	17.78	6	13.33	0.838			
4	8.89	5	11.11	0.838			
2	4.44	2	4.44				
3	6.67	4	8.89				
10	22.22	9	20.00				
10	22.22	12	26.67				
8	17.78	10	22.22	0.452			
6	13.33	6	13.33	0.453			
6	13.33	2	4.44				
2	4.44	1	2.22				
0	0.00	1	2.22				
	n 11 21 9 4 31 8 4 2 3 10 10 8 6 6 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	n % n %   11 24.44 4 8.89   21 46.67 14 31.11   9 20.00 17 37.78   4 8.89 10 22.22   31 68.89 32 71.11   8 17.78 6 13.33   4 8.89 5 11.11   2 4.44 2 4.44   3 6.67 4 8.89   10 22.22 9 20.00   10 22.22 9 20.00   10 22.22 9 20.00   10 22.22 9 20.00   10 22.22 12 26.67   8 17.78 10 22.22   6 13.33 6 13.33   6 13.33 6 13.33   6 13.33 2 4.44   2 4.44 1 2.22			

Based on the data in Table I, it shows that in the intervention group more mothers were in the age category of 25-34 years (47%), while in the control group the most were in the age group of 35-44 (38%), however the age characteristics of mothers in both groups were homogeneous (p >0.05). The education level of mothers in both groups was almost the same, namely 31 people (69%) in the intervention group and 32 people (71%) in the control group. Characteristics of education level in both groups were homogeneous (p > 0.05). The number of family members in the house owned by the mother was almost the same in the two groups, namely more with 3, 4 and 5 people. The characteristics of the number of family members in both groups were homogeneous (p > 0.05).

## Variable intention

The item statement for the intention variable consists of 5, concerning the intention of the housewife in providing a menu of vegetables and fruits at the household level, while the five items are:

1. I intend to provide vegetables and fruit for family consumption at home

2. I plan to provide vegetables and fruit every day for my family

3. I plan to provide vegetables and fruit every day for the family 3 times a day

4. I intend to provide a variety of vegetables and fruits so that the family is not bored with a menu of only one type of vegetable and fruit

5. I want my family to consume vegetables and fruit so they can get the vitamins they need

Distribution based on the results of measurements of initial intentions and final intentions can be seen in the following table:

Та	b	le	П

Distribution of housewives based on results of inter-group intentions measurement

Group	Measurement Time		Intention						
	measurement rime	N	Mean	SD	Range	Min	Max		
Initial intention Final intention	Initial intention	45	77.78	10.69	45	55	100		
	Final intention	45	85.67	12.59	75	25	100		
	Initial Intention	45	63.11	19.75	80	15	95		
Control Fi	Final Intention	45	61.44	17.04	80	20	100		

Table II shows that the increase in respondents' intention scores in the intervention group was 7.89 points. This increase was greater than the score of increase in intention in the control group which was only 1.67 points.

### Action Variable

Item questions for action variables include 4 things, related to the things that housewives do in providing a menu of vegetables and fruit, while the four items are:

1. How many times a day provides a vegetable menu for family consumption

2. How many times a day provides a fruit menu for family consumption

3. How many portions of vegetables and fruits are consumed by the family in a day

4. How many times a week serves fried foods for family consumption

Distribution based on the results of measurements of initial actions and final actions in the intervention group can be seen in the following table:

#### Table III

Distribution of housewives based on action questions in the intervention group

		Pre test				Post test			
Questions	ons True		False		True		False		
	n	%	n	%	n %	n	%	n %	
Question 1	16	35.6	29	64.4	30	66.7	15	33.3	
Question 2	10	22.2	35	77.8	39	86.7	6	13.3	
Question 3	6	13.3	39	86.7	35	10	77.8	22.2	
Question 4	23	51.1	22	48.9	39	6	86.7	13.3	

In Table III shows that from the 4 questions to measure the actions of housewives in providing a menu of vegetables and fruit, question 4 was the most answered question correctly by the mother at the pre-test, which was 51.1%. While in the post-test the most answered correctly were questions 2 and 4, namely 86.7%.

Distribution based on the results of measurements of initial actions and final actions in the control group can be seen in the following table:

### Table IV

Distribution of respondents based on action questions in the control group

-		Pre test				Post test			
Questions	1	True		True False		True		False	
	n	%	n	%	n %	n	%	n %	
Question 1	7	15.6	38	84.4	14	31.1	31	68.9	
Question 2	7	15.6	38	84.4	14	31.1	31	68.9	
Question 3	6	13.3	39	86.7	9	20.0	36	80.0	
Question 4	8	17.8	37	82.2	6	13.3	39	86.7	

Table IV shows that from the 4 questions to measure the actions of mothers in providing a menu of vegetables and fruits, question 2 was the most answered question correctly at 51.1% in the pre-test. Likewise, in the post-test the number most answered correctly was question 2 which was 44.4%.

Further data analysis using paired *t*-test on normally distributed data, for non-normally distributed data used Wilcoxon rank test (pre-post in the same group). In comparison of measurement between groups and equalization of variables from the two groups used unpaired *t*-test on data with normal distribution, however for data that are not normally distributed the Mann Whitney test is used.

### Variable Intention

The final condition of measuring the intention between the intervention and control groups can be seen in the following table:

## Table V

Results of final measurements of housewives's intentions intergroup

Intention	Mean	р
Intervention Post Test	62.23	0.000
Control Post Test	28.77	0.000

Table V shows that the final condition of the intention score of housewives in providing vegetable and fruit consumption was 62.23 points in the intervention group and 28.77 points in the control group. The final condition of the intention was statistically significant, meaning that the final condition of the mother's intention to provide vegetables and make a score at the household level was higher in the intervention group.

#### Action variable

The final condition for measuring actions between the intervention and control groups can be seen in the following table:

## Table VI Results of final measurements of housewives's actions intergroup

Action	Inter	Intervention		Control		Total	
Action	n	%	n	%	n	%	р
Good	39	86.67	3	6.67	42	46.67	0.000
Bad	6	13.33	42	93.33	48	53.33	0.000

Table VI shows that in the final condition, mothers who had good actions in providing vegetables and fruit in the intervention group were 39 people (86.67%) and 3 people (6.67%) in the control group. Only 6 people (13.33%) had bad actions in the intervention group at the end condition while in the control group there were still 42 people (93.33%) who had bad actions on the final condition of the measurement. The results of the statistical test show a value of p = 0.000, meaning that there are differences in the final actions of mothers between groups. The final act of housewives in the good category in providing vegetable and fruit menus in the intervention group was more than in the control group.

#### Comparison of results of initial and final intention measurements

Comparison of the results of the initial and final intention measurements between the intervention and control groups can be seen in the following table:

#### Table VII

Comparison of the initial and final measurements of housewives's intention intergroup

Group	Pre-test	Post-test	р
Intervention	55.43	62.23	0.003
Control	35.57	28.77	0.229

Based on the data in Table VII, it can be seen that there was an increase in the intention score of housewives in providing a menu of vegetables and fruits after the intervention. The increase in housewives' intention score in the intervention group was 6.8 points and this change was significant at the value of p = 0.003. In the control group, there was also a change in the score of intention of housewives at the initial measurement to the final measurement, however this change was in the form of a decrease in the score of 6.8. This means that interventions through strengthening the behavior of housewives in providing a menu of vegetables and fruits at the family level using the emotional demonstration method could strengthen the mother's intention to provide a menu of vegetables and fruits at the family level.

Table VIII Comparison of the initial and final measures of housewives's actions intergroup

Level Of Action	Pre-test		Post-test		р
Level Of Action	n	%	n	%	
Good	2	4.4	39	86.7	
Bad	43	95.6	6	13.3	0.000
Total	45	100	45	100	
Good	2	4.4	3	6.7	
Bad	43	95.6	42	93.3	1.000
Total	45	100	45	100	
	Bad Total Good Bad	Level Of Action n Good 2 Bad 43 Total 45 Good 2 Bad 43	Level Of Action n %   Good 2 4.4   Bad 43 95.6   Total 45 100   Good 2 4.4   Bad 43 95.6	Level Of Action n % n   Good 2 4.4 39   Bad 43 95.6 6   Total 45 100 45   Good 2 4.4 3   Bad 43 95.6 6   Total 45 100 45   Good 2 4.4 3   Bad 43 95.6 42	n % n %   Good 2 4.4 39 86.7   Bad 43 95.6 6 13.3   Total 45 100 45 100   Good 2 4.4 3 6.7   Bad 43 95.6 42 93.3

#### Comparison of results of initial and final action measures between groups

In Table VIII, it can be seen that there was an increase in the percentage of housewives who have good actions in providing a menu of vegetables and fruits after intervention in both groups, however the increase in the percentage of housewives in the intervention group was much greater, 82.3% (p = 0.000) compared to the control group which was only 2.3% (p = 1.000). This means that interventions through strengthening the behavior of housewives in providing a menu of vegetables and fruits at the family level using emotional demonstration methods could increase the percentage of mothers who have good actions in providing a menu of vegetables and fruit for the family.

#### Discussion

This study found that interventions through strengthening the behavior of housewives in providing a menu of vegetables and fruits at the family level using emotional demonstration methods could strengthen mother's intention. Intention in the consumption of vegetables and fruits for individuals or targets is expected to trigger behavior for consumption of vegetables and fruit. Intention is a function of important beliefs and or information about the tendency to show certain behaviors that lead to specific results. Intention could also be the best element in behavior. Ajzen state that "if you want to know what someone is going to do then the way to predict it is by knowing the person's intentions" (Ajzen, 2005). Research conducted by Dhaneswara in 2016 showed that intention is a determining factor for the target in consuming vegetables and fruits. When the intention was already in someone, then the intention will encourage changes in the behavior of someone who did not consume vegetables and fruit to consume it. Intention is a very large aspect of influence in encouraging behavior. Intention is considered to be a direct determinant of behavior and guides a person's behavioral control. Strong intention will encourage someone to bring up his behavior.

The results of Sari et al. (2017) found that the majority of adolescents had the intention to consume fiber according to their needs. However this intention has not been expressed in the form of action. An intention will be realized into real practice, if someone has the opportunity to consume fiber for their own needs. The relationship between intention and action depends on various aspects. There were many teenagers who were doubtful about fiber consumption, which was thought to be related to their economic limitations. This was one reason teenagers were not interested in consuming fiber, because they did not always have the ability to buy foods that contain fiber. Another reason regarding the consumption of this fiber is reluctance and lack of taste to always eat foods that contain fiber. On the other hand, there were those who assume that they have been suggested about several types of vegetables that have a taste that makes them less interested in consuming fibrous foods (vegetables and fruits).

This study also found that education strengthening the behavior of housewives in providing a menu of vegetables and fruits at the family level using emotional demonstration methods could increase the percentage of mothers who have good actions in providing a menu of vegetables and fruit

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for the family. Notoatmodjo (2010) suggests that actions can be divided into three levels based on their quality, namely:

### Guided response

Guided response is if someone has done something but still depends on the demands or use of the guide. The point is that after getting education, the target still needs guidebooks about choosing healthy and nutritious foods and then practicing them.

#### Mechanism

If someone has practiced something automatically, then the practice of mechanical action is called. This practice is carried out by the target after gaining knowledge and responding to it in order to choose healthy food.

#### Adoption

Adoption is an action that has developed. That is, what is done is not just a routine or a mechanism, but has made modifications, actions or quality behaviors. Understanding in this case that the target of education is indeed directly or indeed has done the habit before gaining knowledge about choosing healthy foods from various sources of information.

Some of the results of research related to the actions of mothers in providing a menu of vegetables and fruits at the household level, among others; research by Cullen et al. (2001), which states that the influence of maternal actions in providing vegetables and fruit for families has an important role because mothers were the determinant of food availability at the household level. The low availability of vegetables and fruit. Furthermore, a study conducted by Intansari in 2009, in Bekasi showed that only 62.5% of mothers were practicing fibrous feeding and only 54.2% of mothers understood the provision of vegetables but could not manifest in action.

## **Limitations and Future Research Directions**

Despite of theoretical and methodological strengths, the current study has some limitations which must not be overlooked. The sample was chosen with a random sampling technique, which is reliable for chosing respondents; however, amongst the chosen sample maximum mothers were the ones who did not pass the junior high school. Only 2-3 of them were college graduates. It is quite possible that the education level of mothers could affect the effectiveness of the proposed method. Along with, this study has also overlooked many factors (internal or external) which could hamper the action ability of housewives to provide their family with vegetable and fruit meals. In a nut shell, emotional education method is proved to be effective for mothers in Bandung region, yet this method must be implemented and tested in other regions to assess its effectiveness.

#### Conclusion

Based on the findings in the study, it was concluded that the use of emotional demonstration education methods can provide reinforcement of the intentions and actions of housewives in providing a menu of vegetables and fruit for the family. Thus it could be concluded that there was an increase in intention to provide vegetable and fruit menus to housewives who received education using the emotional demonstration method at 6.8 points, while those who did not get emotional demonstration education, instead experienced a decrease in intention scores of 6.8 points. There was an increase in the percentage of housewives who had good actions in providing a menu of vegetables and fruit after intervention in both groups, however the increase in the percentage of housewives in the category of good actions, who received education using a much greater emotional demonstration method, namely 82.3% compared to those who did not get emotional demonstration education increased only by 2.3%.

Based on these conclusions, the following important points are recommended:

1. Relevant parties such as health offices, health centers, and village level governments to collaborate in promoting community education efforts on the importance of providing a menu of vegetables and fruits at the family level with the main goal of housewives using the emotional demonstration method that is integrated into community movement programs, especially the movement to eat vegetable and fruit.

2. The health center and the sub-district government partner in disseminating or replicating in other villages related to the emotional demonstration method in education about the importance of providing a menu of vegetables and fruits at the family level, because this method proved to be successfully implemented in the intervention village.

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