

RESEARCH STUDY

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The Effect of the Emo-Demo Method on Mothers' Knowledge, Motivation, and Self-Efficacy Regarding Exclusive Breastfeeding Practices in the Sumowono Community Health Center Working Area

Pengaruh Metode Emo-Demo terhadap Pengetahuan, Motivasi, dan Self-Efficacy Ibu Mengenai Praktik Pemberian ASI Eksklusif di Wilayah Kerja Puskesmas Sumowono

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ABSTRACT

Background: Breast milk is the main source of nutrition for newborns up to six months of age. Data from Statistics Indonesia (BPS) shows a decline in the number of infants receiving exclusive breastfeeding in Central Java. This study aimed to see the effect of the Emo-Demo method on mothers' knowledge, motivation, and self-efficacy regarding exclusive breastfeeding practices in the Sumowono Community Health Center Working Area.

Objectives: This study aimed to determine the effect of the application of the Emo-Demo method on mothers' knowledge, motivation, and self-efficacy regarding exclusive breastfeeding practices in the intervention and control groups.

Methods: The study employed a quasi-experimental pretest-posttest control group design, involving 71 respondents: 43 mothers in an intervention group and 28 mothers in a control group. The research instruments included an interview guide, research questionnaires, Emo-Demo method modules, a microtoise, and a digital scale. Data was analyzed using univariate and bivariate methods (Mann-Whitney and Wilcoxon tests).

Results: The Emo-Demo method improved mothers' knowledge and motivation, implying that there were significant effects on both knowledge (<0.001) and motivation (<0.001) between groups. In contrast, there were no significant effects on self-efficacy (0.070) and exclusive breastfeeding practices (0.439) between groups.

Conclusions: The Emo-Demo method was effective in measuring the knowledge and motivation of mothers in the Sumowono Community Health Center Working Area.

INTRODUCTION

Infants primarily derive nutrition from breast milk through a breastfeeding process since birth, with exclusive breastfeeding lasting until the age of six months without supplementing with additional fluids or food¹. The World Health Organization (WHO) also recommends that breast milk be given to infants from birth to the first six months of life, and breastfeeding can be continued until the child reaches the age of two years². The micro- and macronutritional content of breast milk play an important role in the optimal growth and development of infants. Mothers's failure to practice exclusive breastfeeding may cause the infants to be malnourished. Gupta, Dadhich, and Suri (2015) reported that of the 136 million infants born each year, 2 million do not receive exclusive breastfeeding.

Based on the 2021 Basic Health Research (Riskesdas) data, the percentage of infants who received exclusive breastfeeding in Indonesia declined by 12% from the previous year to 52.5%. In 2022, there was another decline of 1.74% to 69.7%^{3,4}. Data from Statistics Indonesia also shows a decline in the percentage of exclusively breastfed children under six months.

The Sumowono Community Health Center is located in Sumowono District, Semarang Regency, a highland area predominantly comprising agricultural and plantation land. Its working area houses a large population of breastfeeding mothers of infants aged 0-5 months, but the rate of exclusive breastfeeding for infants under six months is still relatively low⁵. The problem of exclusive breastfeeding needs to be addressed as early as possible by increasing the

knowledge, motivation, and self-efficacy of mothers⁶. High knowledge influences the practice of exclusive breastfeeding, making children healthy and intelligent^{5,7,8}. High motivation can also increase exclusive breastfeeding⁹. In addition, high self-efficacy encourages mothers to continue breastfeeding¹⁰. Improving the behavior of mothers in the practice of exclusive breastfeeding can be beneficial for these three factors⁵.

The Emotional Demonstration (Emo-Demo) method is an educational technique extended by the Global Alliance for Improved Nutrition (GAIN) since 2014 based on the Behavior-Centered Design (BCD)^{3,11}. It aims to change behavior through an innovative approach that touches emotions positively, thus encouraging behavioral changes for the better¹². Coming with six modules and 24 categories, this method is suitable for educating mothers and the community, with a level of effectiveness in increasing the prevalence of exclusive breastfeeding having been reported in some studies^{12,13}. Therefore, it is the intention of the researcher to explore how this method makes a difference in the knowledge, motivation, and self-efficacy of mothers regarding the practice of exclusive breastfeeding in the Sumowono Community Health Center Working Area, Semarang Regency, Central Java.

METHODS

This study was conducted in the Sumowono Community Health Center Working Area for two months using a quantitative approach with a quasi-experimental design to evaluate the effect of the implementation of an intervention for at least two months among breastfeeding mothers with infants aged 0-5 months. The study sample consisted of 71 respondents, who were divided into two groups: 43 mothers in an intervention group and 28 mothers in a control group. The sample was obtained with the cluster sampling technique based on the name of the village and the population size of the village, coupled with the simple random sampling or systematic sampling technique. The sample size was determined using the formula for estimating the difference between two population means to ensure that the sample was sufficiently representative and could be used to detect the expected effect. The pretest-posttest control group design was employed, which allowed the comparison of data before and after the intervention and the analysis of the effect of the intervention in the context of the control group which did not receive any treatment¹⁴.

Variables such as maternal knowledge, motivation, and self-efficacy were measured using a questionnaire specifically designed for this study, namely the Breastfeeding Self-Efficacy Scale Short Form (BSES-SF), whose reliability and validity had previously been tested¹⁵. In addition, the practice of exclusive breastfeeding, as a dependent variable, was evaluated using another questionnaire and in-depth interviews exploring each respondent's breastfeeding history. This study also considered the Emo-Demo method as a precursor variable, which was designed to increase maternal knowledge, motivation, and self-efficacy and to

provide insights into how these variables would affect the practice of exclusive breastfeeding.

Data management in this study involved several steps, namely data collection by interviews and pretest-posttest questionnaire surveys, data processing with SPSS, and the cleaning, coding, scoring, description, and interpretation of data. Coding and scoring produced interpreted data, with each variable of respondent characteristics given a numeric code: ten variables were coded either 0 and 1, where higher scores indicated better data distributions, and variables of religion, education, occupation, and nutritional status were coded >2 and scored according to a specified category.

In data analysis, the chi-square test was performed to examine differences in demographic characteristics between the intervention and control groups, including variables such as age, education, and occupation. This test is important to ensure that two different groups are equal in baseline characteristics that may affect the outcome of a study. This test helps validate the results obtained by ensuring that the observed differences are not due to unintended demographic differences.

The Mann-Whitney test was applied to compare the intervention and control groups in terms of three independent variables, namely knowledge, motivation, and self-efficacy. This test was chosen because of its ability to handle data that does not meet the assumption of normality, thus providing a more precise analysis. The comparison results were considered significant if the p-value obtained was <0.05. A p-value <0.05 indicates a significant difference between the groups being compared, thus strengthening the validity of the findings in the context of this study.

Next, the Wilcoxon test was used to evaluate changes in the three independent variables based on the pretest and posttest results in each group. This test is designed to handle paired data and measures significant changes over time, with p-values <0.05 indicating significant results. This test determines whether the changes that occur in the intervention or control group are large enough to be considered statistically significant.

By utilizing a combination of the Mann-Whitney and Wilcoxon tests, this study aimed to provide a comprehensive analysis of the effect of the Emo-Demo method on the three variables under study. This approach ensured that each measured change was analyzed in depth, allowing for accurate interpretation of the results in a relevant statistical context.

This study has obtained approval from the Health Research Ethics Committee of the Faculty of Public Health, Universitas Diponegoro, as stated in a letter certifying the passage of an ethical review (No. 31/EA/KEPK-FKM/2024). This letter was issued on January 25, 2024 and is valid for one year until January 25, 2025. This approval process ensures that the study has met the established health research ethical standards.

RESULTS AND DISCUSSIONS

Respondent Characteristics

This study involved a number of breastfeeding mothers of infants aged 0-5 months, who were divided

into two groups based on the treatment received. The intervention group, consisting of 43 mothers with various educational backgrounds, breastfeeding experiences, and motivation levels, received a treatment using the Emo-Demo method to increase positive emotions and confidence in providing exclusive breastfeeding. The control group, consisting of 28 mothers, did not receive

any special treatment but shared similarities in age, nutritional status, and family support characteristics with the intervention group. This division aimed to evaluate differences in knowledge, motivation, and self-efficacy related to exclusive breastfeeding between the two groups, taking into account various characteristics of the respondents.

Table 1. Characteristics of Breastfeeding Mothers

Variables	Intervention Group		Control Group		p-value
	n	%	n	%	
Religion					
Islam	35	81.4	23	82.1	1.000 ^a
Christianity	7	16.3	5	17.9	
Buddhism	1	2.3	-	-	
Age (Years) (Median, Min-Max)	30.00 (20-46)		27.50 (21-43)		0.176 ^b
<35 Years	34	79.1	23	82.1	
≥35 Years	9	20.9	5	17.9	
Number of children					
1	12	27.9	15	53.6	0.045 ^{c*}
>1	31	72.1	13	46.4	
Last Education					
Elementary School/Equivalent	11	25.6	-	-	0.016 ^{c*}
Junior High School/Equivalent	16	37.2	14	50.0	
High School/Equivalent	12	27.9	12	42.9	
Diploma/D1/D3/D4	1	2.3	-	-	
Bachelor/S1/Master/PhD	3	7.0	2	7.1	
Occupation					
Civil Servant	2	4.7	1	3.6	0.325 ^a
Private Employee	4	9.3	-	-	
Merchant	5	11.6	2	7.1	
Housewife	30	69.8	25	89.3	
Other	2	4.7	-	-	
Economic Level					
<Minimum Wage of Semarang Regency	25	58.1	19	67	0.461 ^a
≥Minimum Wage of Semarang Regency	18	41.9	9	32	
Breastfeeding Experience					
No	13	30.2	17	39.3	0.022 ^{b*}
Yes	30	69.8	11	60.7	
History of Exclusive Breastfeeding					
Exclusive Breastfeeding	30	69.8	23	82.1	0.372 ^b
No Exclusive Breastfeeding Experience	13	30.2	5	17.9	
Nutritional Status (BMI) (Mean ± SD)					
	23.86 ± 4.024		23.16 ± 3.535		0.927 ^c
<17.0	1	2.3	-	-	
17.0-18.4	2	4.7	3	10.7	
18.5-25.0	27	62.8	16	57.1	
25.1-27.0	7	16.3	6	21.4	
>27.0	6	14.0	3	10.7	
IMT					
Abnormal	15	34.9	13	46.4	0.469 ^b
Normal	28	65.1	15	53.6	
Source of Information					
Less Exposed	13	30.2	4	14.3	0.210 ^b
Exposed	30	69.8	24	85.7	
Family Support					

Variables	Intervention Group		Control Group		p-value
	n	%	n	%	
Insufficient Support	24	55.8	10	35.7	0.157 ^b
Sufficient Support	19	44.2	18	64.3	
Health Facilities					
Inadequate Availability	19	44.2	5	17.9	0.042 ^{b*}
Adequate Availability	24	55.8	23	82.1	
Infant Age (Months) (Median, Min-Max)					
	3.53 (0-5)		2.43 (0-5)		
0-2	10	23.3	14	50.0	0.324 ^c
3-5	33	76.7	14	50.0	
Infant's Gender					
Male	23	53.5	19	67.9	0.339 ^b
Female	20	46.5	9	32.1	

a: Fisher's Exact Test, b: Chi-Square, c: Independent T-Test, *) Significant (p-value<0.05), n: total number

Table 1 shows that the variables religion, age, occupation, and economic level did not significantly differ between the intervention and control groups (p-value>0.05). However, there were significant differences in terms of the number of children (p-value=0.054) and education level (p-value=0.016). The intervention group tended to consist of mothers with more than one child, while mothers in the control group generally had one child. In addition, the control group showed a higher level of education than that of the intervention group, which might be related to differences in social and economic factors between the two groups.

Other maternal characteristics, such as the history of exclusive breastfeeding and nutritional status based on height and weight, did not show any significant differences before the intervention. However, there was a significant difference in breastfeeding experience, where the intervention group had more mothers with sufficient breastfeeding experience (p-value=0.022) than the control group. This might be due to the difference in the number of children between the two groups, where the intervention group generally had more children.

Further analysis revealed that the variables information sources (p-value=0.210) and family support (p-value=0.157) did not significantly differ between the two groups. However, there was a significant difference in access to health facilities (p-value=0.042), indicating that maternal access to health facilities had an important influence in increasing exclusive breastfeeding. The availability and quality of health facilities can play a key role in providing the support needed for effective breastfeeding practices.

Regarding infant characteristics, such as gender and age, no significant differences were found between the two groups at baseline (age: p-value=0.324; gender: p-value=0.339). This indicates that the distribution of these infant characteristics was relatively uniform between the intervention and control groups, confirming that these factors did not significantly affect the intervention outcomes. This strengthens the validity of the comparison of results between the two groups, ensuring that infant variables were not differentiating factors affecting the study results.

Comparison of Total Scores of Mothers' Knowledge, Motivation, and Self-Efficacy between the Intervention and Control Groups on Pretest and Posttest

The total scores obtained for the variables maternal knowledge, motivation, and self-efficacy were analyzed by comparing the results of the Mann-Whitney test between the intervention and control groups. The process began with an initial measurement (pretest) to determine the conditions of each variable in both groups at baseline before the intervention was administered. Only the intervention group was given a special treatment, while the control group was not. This differentiation was aimed to assess the specific effects of the intervention. After the completion of the intervention, a final measurement (posttest) was taken, and the results are compared to see changes in scores. These results were analyzed in depth to produce an interpretation that could describe the effectiveness of the intervention given.

Table 1. Comparison of Total Scores of Knowledge, Motivation, and Self-Efficacy between the Intervention and Control Groups at Pretest and Posttest

Variables	Pretest		p-value ^a	Posttest		p-value ^a
	Intervention n=43	Control n=28		Intervention n=43	Control n=28	
Knowledge	22.00 (14-24)	21.00 (17-23)	0.515	24.00 (19-25)	24.00 (23-25)	0.433
Motivation	13.00 (11-14)	13.00 (11-14)	0.163	20.00 (19-20)	20.00 (19-20)	0.184
Self-Efficacy	13.00 (11-14)	13.00 (11-14)	0.163	13.00 (12-14)	13.00 (11-14)	0.076

a: Mann-Whitney Test, n: total number

The analysis results in Table 2 show that there were no significant differences in the three variables between the two groups, both on pretest and posttest. In the intervention group, there was a more significant increase in scores compared to the control group, as analyzed using the Mann-Whitney test. The variables maternal knowledge and motivation showed more prominent differences, indicating a more effective intervention effect on this group. The variable self-efficacy also increased, but the difference was smaller than those of the preceding two variables. In conclusion, maternal knowledge, motivation, and self-efficacy did not show significant changes between the intervention and control groups before and after the intervention was carried out, suggesting that the intervention implemented did not produce significant differences in improving the three variables between the two groups.

Several factors might have influenced these results, including social, cultural, and environmental factors that were not measured in this study. External factors such as local social norms, cultural values, and environmental conditions might have significant effects on maternal knowledge, motivation, and self-efficacy simultaneously. These factors might have served as mitigators of the impact of the intervention, thereby blurring the expected differences between the intervention and control groups. In addition, variations in social support, access to information sources, and the

individual characteristics of respondents might have also played a role in mitigating the effectiveness of the intervention, possibly leading to results that did not show any significant changes.

Although the intervention was designed to improve the three variables, the results showed no significant changes, implying the possible contribution of unmeasured external factors to the results of the study. Therefore, further, more in-depth research is needed to evaluate the impact of the intervention more comprehensively, with a consideration of contextual and external factors that may affect the results of the study.

Comparison of Differences in Pretest and Posttest Scores on Mothers' Knowledge, Motivation, and Self-Efficacy between the Intervention and Control Groups on Pretest and Posttest

The differences between the posttest and pretest scores on the variables maternal knowledge, motivation, and self-efficacy between the intervention and control groups were compared. These differences informed on the extent to which each variable increased, especially in the intervention group after the administration of the intervention. The comparison analysis aimed to evaluate the effectiveness of the Emo-Demo method in improving the three variables. The results of the comparison reflect the level of change achieved by the intervention group compared to the control group.

Table 2. Comparison of Differences in Pretest and Posttest Scores on Mothers' Knowledge, Motivation, and Self-Efficacy Scores between the Intervention and Control Groups on Pretest and Posttest

Variables	Group Type		p-value ^a
	Intervention	Control	
Knowledge	3.00 ((-5)-7)	3.00 (1-7)	0.351
Motivation	6.00 (5-9)	7.00 (5-9)	0.547
Self-Efficacy	0.00 ((-1)-2)	0.00 ((-1)-3)	0.785

a: Mann-Whitney Test, *) Significant (p-value<0.05)

Table 3 presents data on the differences between the posttest and pretest results for the variables maternal knowledge, motivation, and self-efficacy in the intervention and control groups. The analysis was conducted using the Mann-Whitney test. The results reveal that there were no significant differences between the two groups in these three variables. Although increases were observed in these variables in both groups, the differences between the intervention and control groups did not reach statistical significance.

These findings suggest that while the intervention might have played a role in increasing maternal knowledge, motivation, and self-efficacy, the effects were not large enough to produce significant differences between the intervention and control groups. In other words, there might be factors beyond the intervention that might have influenced the outcomes measured. These factors might include contextual elements such as the social environment, support from family or community, and the individual characteristics of each participant that might have played a larger role in determining the final outcomes.

These findings highlight the need for further consideration of the contextual factors that might influence the results of the study. Further research that takes into account a wider range of contextual factors, and perhaps adjusts or extends the duration of the intervention, may be needed to further evaluate how the intervention may affect these variables with more significant differences more effectively.

Differences in Total Scores of Pretest and Posttest on Mothers' Knowledge, Motivation, and Self-Efficacy between the Intervention and Control Groups on Pretest and Posttest

The differences in total pretest and posttest scores in this study were determined to measure changes that occurred after the intervention. The pretest scores were used as a basis for comparison, while the posttest scores reflected the results of the implementation of the Emo-Demo method on the intervention group. By comparing the two sets of scores, to what extent the intervention had succeeded in increasing the measured variables could be measured, providing an overview of

the level of effectiveness of the method in influencing the intervention group.

Table 3. Differences in Total Scores of Pretest and Posttest on Mothers' Knowledge, Motivation, and Self-Efficacy between Intervention and Control Groups on Pretest and Posttest

Group Type	Variables	Median (Min-Max)		p-value ^a
		Pre-Test	Post-Test	
Intervention	Knowledge	22.00 (14-24)	24.00 (19-25)	<0.001*
	Motivation	13.00 (11-14)	20.00 (19-20)	<0,01*
	Self-Efficacy	13.00 (11-14)	13.00 (12-14)	0.070
Control	Knowledge	21.00 (17-23)	24.00 (23-25)	<0.001*
	Motivation	13.00 (11-14)	20.00 (19-20)	<0.001*
	Self-Efficacy	13.00 (11-14)	13.00 (11-14)	0.439

a: Wilcoxon Signed Rank Test, *) Significant (p-value<0.05)

Table 4 shows the results of the comparison between pretest and posttest scores for maternal knowledge, motivation, and self-efficacy in the intervention and control groups. The differences in these scores were analyzed using the Wilcoxon test, which was used to assess the significance of changes or improvements that occurred in the intervention group that received the treatment with the Emo-Demo method compared to the control group that received no treatment. The results of the Wilcoxon test provide insights into whether the Emo-Demo method was effective in improving maternal knowledge, motivation, and self-efficacy, as well as the extent to which this intervention could affect these three variables compared to the control group. The results of this analysis is expected to provide valuable information about the effectiveness of the Emo-Demo method and help understand the dynamics following the intervention.

The Wilcoxon test yielded a p-value of 0.001 (p-value<0.05), indicating a significant difference in maternal knowledge between pretest and posttest in the intervention group. This finding indicates that the Emo-Demo method had a significant positive impact on maternal knowledge of breastfeeding. These results are in line with the research by Andriana et al. (2022), which also found a significant difference in maternal knowledge after training with the Emo-Demo method, with a p-value<0.05. This confirms the consistency of the findings and the effectiveness of the Emo-Demo method in increasing maternal knowledge of breastfeeding.

Knowledge is the result of a learning process driven by curiosity and can be obtained from various sources¹³. Emotional demonstration, or Emo-Demo, is an educational method that aims to change behavior with an innovative and effective approach. This method is designed to influence the audience in a way that touches emotions and creates a fun learning experience. The Emo-Demo is very effective in this context because it touches feelings, especially the feelings of mothers, thus increasing mothers' involvement and understanding of the material being taught^{16,17}.

Several factors, including education level, can influence the level of maternal knowledge. Higher education usually contributes to a better understanding of a piece of information, either internally or externally, or through training such as those that apply the Emo-Demo method. Based on Table 1, respondents in the

intervention group tended to have lower education levels, with 11 respondents (25.6%) only having an elementary school/equivalent education. Meanwhile, the control group was dominated by respondents of higher education levels, with 14 respondents (50.0%) having a junior high school/equivalent education. The low level of education of the respondents in the intervention group might have affected their maternal knowledge. However, training applying the Emo-Demo method significantly increased knowledge, confirming the effectiveness of this method despite the varying educational challenges faced by the respondents in the intervention group.

Aside from education level, the knowledge of mothers in this study was also influenced by various other factors, including breastfeeding experience and access to health facilities. Mothers who had previous breastfeeding experiences tended to have a better understanding of the breastfeeding process and could evaluate and improve their skills from one experience to the next. These experiences allowed them to be more prepared and effective in facing the challenges of breastfeeding their next child. In addition, access to adequate health facilities also played an important role in improving maternal knowledge. Health facilities provide the information, training, and support needed for exclusive breastfeeding practices, allowing mothers to obtain accurate and relevant knowledge. The combination of personal experience and support from health facilities contributes significantly to the establishment and improvement of maternal knowledge about breastfeeding practices, allowing mothers to better understand and implement effective strategies in practicing exclusive breastfeeding.

Similar to knowledge, the Wilcoxon test yielded a p-value of 0.001 (p-value<0.05) for motivation, indicating a significant difference in the level of maternal motivation between pretest and posttest in the intervention group. In other words, the Emo-Demo method was effective in increasing maternal motivation, which is important for encouraging better implementation of breastfeeding practices.

According to Aisyah and Ni Wayan, who explored differences in mothers' motivation, motivation is an internal drive that influences a person to achieve a goal or carry out an action, either consciously or unconsciously¹⁸. In the context of exclusive

breastfeeding, maternal motivation is not only influenced by internal factors, such as self-confidence and level of knowledge, but also by external factors, including age, family support, and access to health facilities. These factors interact with each other to shape and modulate the level of maternal motivation, which ultimately contributes to mothers' decision to implement or maintain exclusive breastfeeding practices. By understanding the influence of these factors, we can better direct interventions to improve motivation and support mothers in practicing exclusive breastfeeding.

Mothers' knowledge plays an important role in influencing their motivation to exclusively breastfeed their children. The higher the level of knowledge and insight that mothers have regarding the benefits and practices of exclusive breastfeeding, the more likely they are to feel motivated and committed to exclusively breastfeeding their children. This knowledge is often influenced by the final level of education achieved by the mothers. In this study, most mothers had a basic educational background, which directly influenced their understanding and motivational drive in exclusively breastfeeding their children. Higher education usually correlates with better knowledge and, in turn, can increase mothers' motivation to implement exclusive breastfeeding practices more consistently and effectively.

This study was conducted in a village where strong social stigma emphasizes the obligation of mothers to exclusively breastfeed their children. In this social context, mothers' motivation to exclusively breastfeed is influenced not only by oppressive social norms but also by previous breastfeeding experiences and the number of children they have. Mothers who have had a positive breastfeeding experience, in terms of success or others, tend to be more motivated to continue the practice of exclusive breastfeeding. This experience gives them confidence and a sense of accomplishment that encourage them to maintain the practice. In addition to breastfeeding experience, the number of children also plays an important role in maternal motivation. Mothers who have more than one child often feel more experienced and more confident in carrying out breastfeeding practices, thus increasing their motivation to exclusively breastfeed their next child.

The availability of adequate health facilities in the village also contributes greatly to maternal motivation. Good health facilities provide not only practical support and access to important medical information but also ongoing education on the benefits of exclusive breastfeeding. Well-functioning health facilities can offer the training, counseling, and practical support needed to overcome the challenges to exclusive breastfeeding. In addition, in-depth knowledge of the benefits and techniques of breastfeeding strengthens mothers' beliefs and increases their motivation to continue practicing exclusive breastfeeding. In other words, personal experience, support from health facilities, and a strong understanding of the benefits of exclusive breastfeeding work synergistically to increase mothers' motivation. This allows mothers to continue

learning, facing challenges, and implementing breastfeeding practices consistently, despite social pressures and other external factors.

In contrast to other variables, this study found that maternal self-efficacy showed no significant difference between pretest and posttest, with a p -value > 0.05 . This means that despite the implementation of the intervention with the Emo-Demo method, no statistically significant change in the level of maternal self-efficacy was observed¹⁹. These results indicate that the Emo-Demo method might not be effective enough in increasing mothers' self-efficacy in this context, or that other factors might have influenced the results obtained.

These findings differ from those of previous research by Ni Wayan Armini et al., which showed a significant difference in maternal self-efficacy after the implementation of an intervention with the Emo-Demo method (p -value < 0.05). They found that the Emo-Demo method effectively increased maternal self-efficacy, as shown by a significant difference between scores before and after the intervention. This difference in results might be due to various factors, such as differences in the research context, intervention design, or characteristics of the samples studied. This study suggests that, although the Emo-Demo method has been shown to be effective in several studies, in the context of this study, its impact on maternal self-efficacy might not be as strong as expected. This highlights the need for a more in-depth evaluation of the factors that influence the effectiveness of the intervention and the need to adjust the intervention approach to better suit the specific context and characteristics of participants.

Self-efficacy refers to an individual's belief in his or her ability to control and carry out the actions required in a particular situation²⁰. In the context of this study, the absence of a significant difference in self-efficacy between pretest and posttest might be influenced by several factors. One possibility is that the level of mothers' self-efficacy was already quite high before the intervention was carried out. If mothers had already felt confident in their ability to provide exclusive breastfeeding, then the effect of the intervention might not be large enough to produce significant changes in their self-efficacy.

In addition, environmental factors that support exclusive breastfeeding might also play a role in reducing the expected differences in self-efficacy. For example, if mothers already had strong support from their families, health facilities, and communities, they might already feel optimally supported and confident in their ability to breastfeed. This supportive environment might include access to information resources, previous training, and positive experiences in breastfeeding, which together might have influenced mothers' levels of self-efficacy before the intervention. These factors might have reduced the impact of the intervention, especially for mothers who already had high self-confidence and adequate support. They might not feel a significant increase in self-efficacy after receiving the intervention. This suggests the need for a further evaluation to adjust the intervention to provide more substantial results. In

addition, it is important to assess contextual factors that may influence the effectiveness of the intervention.

The lack of a significant difference in maternal self-efficacy might also be influenced by the specific characteristics of the area where the study was conducted. The Sumowono Community Health Center is located in a village. Mothers in villages often exhibit characteristics that are significantly different from those of mothers who live in big cities, especially in terms of local customs and habits. In villages, traditions and social norms are often deeply rooted, providing deep emotional and practical support for mothers in the practice of exclusive breastfeeding. These local customs and habits can create an environment that supports and strengthens mothers' self-confidence, increasing their self-efficacy from the start.

In addition, strong social support from the local community can also play a major role in strengthening maternal self-efficacy. Rural communities often have close-knit social support structures, where families, neighbors, and community groups help and encourage each other in breastfeeding practices. This support, along with local norms and customs, can build maternal confidence in exclusive breastfeeding even before interventions.

With a strong foundation of social support and pre-existing self-confidence, the impact of interventions, such as one that uses the Emo-Demo method, may not be significant. Therefore, the results of this study highlight the importance of considering contextual factors and regional characteristics in evaluating the effectiveness of interventions, as well as assessing how local traditions and community support may influence the expected outcomes of intervention programs.

Overall, mothers' knowledge and motivation showed significant differences between the intervention and control groups. This indicates that the Emo-Demo method had a positive impact on mothers' knowledge and motivation. Different results were obtained for mothers' self-efficacy, with no significant difference between the two groups. Statistical data analysis showed an increase in this variable, but not significant. Furthermore, the results of pretest and posttest showed that there was no significant difference in mothers' knowledge, motivation, and self-efficacy between the intervention and control group.

This study faced several significant limitations, one of the most striking of which was related to the implementation of the Emo-Demo method in the field. The Emo-Demo method was designed to improve mothers' knowledge, motivation, and self-efficacy in the practice of exclusive breastfeeding, but its implementation requires a relatively long time to achieve optimal results. In the context of this study, the time available was very limited, so that the long-term monitoring needed to measure the full impact of the intervention could not be carried out. Especially for self-efficacy, this time limitation was very influential, because self-efficacy often requires time and consistency to show significant changes. This time limitation has the potential to reduce the effectiveness of the Emo-Demo method in optimally influencing mothers' self-efficacy. If the time given is not long enough to accommodate the

internalization process and the necessary attitude changes, then the expected effects of the intervention may not be clearly visible in the short term.

Therefore, it is important to consider that the results of this study may not fully describe the long-term impact of the Emo-Demo method. This time limitation must be taken into account when assessing the outcomes and effectiveness of the intervention. To obtain a more complete and accurate picture of the effectiveness of the Emo-Demo method, further studies with a longer duration are needed. Such studies can help evaluate the long-term effects of the method, provide a deeper understanding of how it functions under different conditions, and help identify whether it can indeed produce significant changes in maternal self-efficacy.

CONCLUSIONS

In this study, the Emo-Demo method was proven to be effective in increasing mothers' knowledge and motivation about exclusive breastfeeding. However, there was no significant difference in self-efficacy between the intervention and control groups. Factors such as previous breastfeeding experience, number of children, and health facility support might have influenced these results. Further analysis of these factors is needed to fully understand the impact of the Emo-Demo method on self-efficacy.

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CONFLICT OF INTEREST AND FUNDING DISCLOSURE

All authors expressly confirm that they have no conflict of interest.

AUTHOR CONTRIBUTIONS

SZTA: responsible for data curation, formal analysis, investigation, project management, provision of resources, software, and writing the initial draft; DRP and MZR: involved in conceptualization, funding acquisition, methodology, provision of resources, supervision, validation, and review and editing of the manuscript.

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