



## Empowerment Model of Pregnant Women in Stunting Prevention Efforts

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### ABSTRACT

The purpose of this study was to analyze the influence of empowerment and perceptions on the behavior of pregnant women and to formulate a model for empowering pregnant women in an effort to prevent stunting. The explanatory survey descriptive research method was quantitative in nature. The samples were pregnant women in the second and third trimesters of 220 respondents. The instrument used a questionnaire with a Likert scale, tested content validity on 12 experts, used CVI (Content Validity Index) Aiken's V and reliability with Cronbach Alpha. How to take samples with proportional random sampling. Analysis conducted with multiple linear regression tests by using the Lisrel program SEM analysis. The results showed that the empowerment of pregnant women was in the good category (40.9), the perception of the category was quite good (14.5), the behavior was in the good enough category (39.5). Model fit with Chi-Square=1.20, RMSEA= 0.040, p-value= 0.070, NFI=0.96, NNFI=0.92, PNFI=0.93, GFI=0.95, AGFI=0.94, PGFI=0.94. Empowerment has a significant positive effect on behavior t value 4.39 and contributes 46%. Perception has a significant positive effect on behavior t value 4.03 and contributes 42%. Conclusion empowerment has a significant positive effect on behavior. Perception has a significant positive effect on the behavior of pregnant women. Empowerment models for pregnant women can be recommended as a solution to prevent stunting.

**Keywords:** *Empowerment, Perception, Behavior, Pregnant Women, Stunting*

### INTRODUCTION

Stunting is a problem that requires serious handling because it contributes greatly to the decline in the quality of human resources, it is feared that Indonesia's human resources will experience a decline in quality in the future. Stunting will also increase the risk of degenerative diseases in adulthood (1).

The Sustainable Development Goals (SDGs) are development that maintains continuous improvement of the community's economic welfare, maintains the sustainability of people's social life, environmental quality and development that guarantees justice and implementation of good

governance to improve the quality of life from one generation to the next. The goals of the SDGs are stated in the UN Resolution which is a global action plan to protect and develop the earth and all people in it along with building prosperity and peace for all by 2030 (2).

The Indonesian government is highly committed to the 2030 agenda and has integrated the SDGs into the national development planning process. The government's commitment to implementing the SDGs is reflected in the National Medium-Term Development Plan (RPJMN) and various efforts being made to mainstream SDGs into the 2020–2024 RPJMN. One of the RPJMN that is aligned with the SDGs is the prevention of stunting which is part of the sustainable development goals, especially the second goal. The second goal 2 of the SDGs is to find sustainable solutions to end hunger and all forms of malnutrition by 2030 and achieve food security (3).

Efforts to accelerate stunting reduction require the involvement of all elements of society, both government and non-government. The importance of family empowerment, active participation of all members of the community is needed in the sustainability and success of the program. Once the importance of empowering women, especially pregnant women as the target of specific interventions to accelerate the reduction of edits. So that the intervention is focused on families, especially families of 1000 HPK. Without support and a supportive environment, the intervention will not run optimally, the lack of support can affect perceptions and attitudes in carrying out stunting prevention behavior (1). With the role of empowering pregnant women, it is hoped that it can improve the nutritional status of pregnant women. Mothers are active in health efforts, especially related to nutrition so that they can reduce the incidence of stunting. Women's

empowerment is also very closely related to the decision-making process in the household which has an impact on the nutritional status of mothers and children (4).

Perception plays an important role in influencing behaviour because it functions as a predictor or basis for behaving. Individuals who do not have perception or understanding will act without direction or even not act at all even though they are faced with a stimulus that is harmful to them. Improving and increasing the perception of pregnant women is the first step in increasing prevention behaviour. The perception of pregnant women is thought to be a determinant of behaviour in preventing pregnancy complications, as is Lawrence Green's behavioural theory that perception is a predisposing factor for the occurrence of certain behaviours.

## METHOD

This research method was descriptive explanatory survey which was quantitative in nature with a cross sectional approach. The instrument used a questionnaire with a Likert scale. The questionnaire was tested for content validity on 12 experts, using Aiken's V CVI (Content Validity Index). The reliability test used Cronbach Alpha. Sampling was carried out from members of the population of pregnant women from 12 sub-districts, each sub-district has proportional representation. Sampling technique used proportional random sampling. The number of samples was 220 respondents. The analysis in this study used multiple linear regression tests using the SEM analysis of the Lisrel program. Researchers analysed the influence of empowerment and perceptions on the behaviour of pregnant women and formulated a model for empowering pregnant women in preventing stunting. Latent variables and indicators are shown in Table 1 below:

**TABLE 1:** Latent variables and research indicators

Latent Variable		Indicators
Exogen	Empowerment of pregnant women	X1.1=Inputs X1.2=Planning X1.3=Implementation

		X1.4=Monitoring X1.5=Outputs
Endogen	Perceptions of pregnant women about primary prevention of stunting (Y1)	X2.1=Absorption X2.2=Understanding X2.3=Evaluation
	Behavior of pregnant women in efforts to prevent primary stunting (Y2)	Y2.1=Anc Y2.2=Consumption of nutritious food Y2.3=Method of taking iron tablets Y2.4=Class of pregnant women

## RESULTS AND DISCUSSION

### *Characteristics of respondents*

This research was conducted on 220 respondents with characteristics as shown in Table 2 below:

**TABLE 2:** Distribution of frequency characteristics of respondents based on age, education, occupation and gestational age.

Characteristics	Frequency (f)	Percentage (%)
Age:		
<20 years	4	1,8
20-35 years	190	80,4
>35 years	26	11,8
Total	220	100
Education:		
Elementary School	9	41,1
JHS	25	11,4
SHS	149	67,7
University	37	16,8
Total	220	100
Occupation:		
Civil servant	8	3,6
Private	70	31,8
Entrepreneur	25	11,4
Farmer	18	8,2
Housewives	91	41,4
Etc	8	3,6
Total	220	100
Parity:		
Primigravida	101	45,9
Multigravida	119	54,1
Total	220	100

Source: Primary data processing, 2022

Table 2 can be concluded that the characteristics of respondents based on age, the majority aged > 20-35 years (80.4%). Healthy reproductive age at this age is safe for pregnancy and childbirth, while age  $\leq$  20 years and  $\geq$  35 years are high risk groups for pregnancy and childbirth. Other studies have suggested that women with age are at risk of increasing the incidence of anaemia in pregnancy (5). This is in accordance with

Sjahriani and Faridah (6) which states that maternal age can affect the incidence of anemia in pregnant women.

Education of most respondents is high school (67.7%). One's education affects knowledge, perception, behaviour. This means that the higher the respondent's formal education level, the more information and open-mindedness a person has (7). Respondents will more easily receive

information and then be able to absorb and evaluate every stimulus that is well received, so that it can influence decision making in stunting prevention behaviour. A person's educational level influences the process and ability to think so that they are able to capture new information and are sensitive to change (5,8).

Characteristics of the majority work as housewives as much as 91 (41.4%). Mothers who don't work have more time to make ANC visits and more time to access information about pregnancy, childbirth, postpartum and new born. Doing heavy work during pregnancy is one of the reasons for the reduced ability of the body to meet the nutritional needs of pregnant women and the fetus they contain (9).

Most parity is multigravida 119 (54.1%). Parity of pregnant women can affect the health of pregnant women, especially in third trimester pregnant women who will face childbirth. Primigravidas feel anxious because they often hear stories about the scary process of childbirth (10), whereas multigravida mothers already have an idea about pregnancy and childbirth from previous pregnancies. So that during pregnancy tend to be more mentally and psychologically prepared (11).

The variables in this study include exogenous and endogenous variables. Exogenous variables are empowerment and perception while endogenous variables are the behaviour of pregnant women. The descriptive analysis of empowerment can be seen in Table 3.

**TABLE 3:** Distribution of the frequency of empowering pregnant women

Variable	Score	Category	Total (n)	Percentage (%)
Empowerment of Pregnant Women	118,4-136,4	Excellent	40	18,2
	100,3-118,3	Good	90	40,9
	82,2-100,2	Sufficient	64	29,1
	64,1-82,1	Poor	17	7,7
	46,0-64,0	Worst	9	4,1
Total			220	100

Source: Primary data processing, 2022

Table 3 above shows the empowerment variables in the good category. Score 100.3-118.3 for 90 respondents (40.9%). This indicates that respondents have a good view of empowerment

based on input, planning, implementation and output. Furthermore, the empowerment variables with their indicators/manifests are explained in Table 4 below:

**TABLE 4:** Descriptive analysis of empowerment variable indicators

Variable	Indicator	Score	Category	n=220	%
Y1.1	Input	17,4-20,4	Excellent	58	26,4
		14,3-17,3	Good	68	30,9
		11,2-14,2	Sufficient	53	24,1
		8,1-11,1	Poor	30	13,6
		5,0-8,0	Worst	11	5,0
Y1.2	Planning	17,4-20,4	Excellent	2	0,9
		14,3-17,3	Good	13	5,9
		11,2-14,2	Sufficient	71	32,3
		8,1-11,1	Poor	104	47,3
		5,0-8,0	Worst	30	13,6
Y1.3	Implementation	43,2-50,4	Excellent	39	17,7
		35,9-43,1	Good	85	38,6
		28,6-35,8	Sufficient	62	28,2

		21,3-28,5 14,0-21,2	Poor Worst	16 18	7,3 8,2
Y1.4	Monitoring	21,4-25,4 17,3-21,3 13,2-17,2 9,1-13,1 5,0-9,0	Excellent Good Sufficient Poor Worst	59 86 49 18 8	26,8 39,1 22,3 8,2 3,6
Y1.5	Output.	17,2-20,4 13,9-17,1 10,6-13,8 7,3-10,5 4,0-7,2	Excellent Good Sufficient Poor Worst	112 87 15,0 1 5	50,9 39,5 6,8 0,5 2,3
Total				220	100

Source: Primary data processing, 2022

Table 4.7 shows that the input indicators in the good category are 68 (30.9%). The good category in the input here can be seen from the facilitator giving enthusiasm, providing counselling to mothers about stunting prevention, funding and infrastructure by providing leaflets or books about stunting prevention. Planning indicators in poor category 104 (47.35). This is shown by the officers not identifying activities according to the needs of pregnant women, planning activities without looking at the needs of pregnant women and not involving mothers in planning activities. In the implementation indicators, the majority are in the good category, 85 (38.6%). This is shown from the competency of the facilitator who masters the material, conveys the material in an interesting and easy to understand manner. Skills in communicating with pregnant women. Able to turn on the atmosphere so it is not boring. Involve

pregnant women in activities and accompany mothers during activities. On monitoring in the good category 86 (39.1%). This can be seen in the presence and participation in counselling and training activities without coercion and the activities are carried out routinely. At the output the majority is Excellent 112 (50.9%). This can be seen from the increasing awareness of pregnant women that pregnant women are increasingly aware of stunting prevention, pregnant women are increasingly aware and more enthusiastic about preventing stunting. Pregnant women also don't feel burdened with what to do to prevent stunting.

Perception with its indicators/manifest includes: Absorption, understanding and evaluation. Perceptual descriptive analysis can be seen in Table 5 below.

**TABLE 5:** Descriptive Analysis of Pregnant Women's Perception Variables

Variable	Score	Category	Frequency	Percentage
Pregnant woman perception	69,4-75,4	Excellent	60	27,3
	63,3-69,3	Good	58	26,4
	57,2-63,2	Sufficient	76	34,5
	51,1-57,1	Poor	22	10,0
	45,0-51,0	Worst	40	1,8

Source: Primary data processing, 2022

Table 5 shows that the perceptions of pregnant women which include absorption, understanding and evaluation are in the Sufficient category 76 (34.5%). The mother's perception that is quite good is shown by pregnant women who are able

to absorb, understand and evaluate quite well about ANC visits, consumption of nutritious foods, how to take iron tablets and classes for pregnant women. Improving and increasing the perception of pregnant women is the first step in

increasing prevention behaviours. Perception is built from sensory experiences absorbed from everyday experiences (12). Furthermore, the

descriptive analysis of the manifest variable indicators is explained in table 6 below:

**TABLE 6:** Descriptive analysis of the variable indicators of perceptions of pregnant women

Variable	Indicator	Score	Category	f	%
X2.1	Absorption	23,4-25,4	Excellent	54	24,5
		21,3-23,3	Good	74	33,6
		19,2-21,2	Sufficient	63	28,6
		17,1-19,1	Poor	22	10,0
		15,0-17,0	Worst	7	3,2
X2.2	Understanding	23,4-25,4	Excellent	48	21,8
		21,3-23,3	Good	51	23,2
		19,2-21,2	Sufficient	81	36,8
		17,1-19,1	Poor	35	15,9
		15,0-17,0	Worst	5	2,3
X2.3	Evaluation	23,2-25,4	Excellent	71	32,3
		20,9-23,1	Good	57	25,9
		18,6-20,8	Sufficient	67	30,5
		16,3-18,5	Poor	16	7,3
		14,0-16,2	Worst	9	4,1

Source: Primary data processing, 2022

In Table 6 it can be concluded that the majority absorption indicators are in the good category 74 (33.6). The majority understanding indicator is quite good 81 (36.8%). Evaluation indicators in the Excellent category 71 (32.3%). Absorption is classified as quite good category of 63 (28.6%). This shows that efforts to prevent stunting are not easy to do, this is related to the accuracy of ANC visits, consumption of nutritious food, how to take iron tablets and classes for pregnant women. In accordance with the research of Aged (13) that social perception reflects an individual's understanding of an object in the form of other people or social reality. Individual understanding begins with the absorption of stimuli by the senses, including the senses of sight and hearing. Understanding is classified as good enough category of 81 (36.8%). Research shows that mothers who perceive their pregnancy as vulnerable, try to find solutions, one of which is through participation and attendance in Pregnant Women Classes (14). Conversely, pregnant women who have negative perceptions that are perceived as an unpleasant situation will have an impact on reluctance and non-compliance for various reasons. The same thing also happened in

other developing countries such as India and Pakistan (15,16).

The evaluation indicators in the Sufficient category are 67 (30.5%). Evaluation is an assessment, comparing the understanding or understanding that has just been obtained with the criteria or norms that are subjectively owned by individuals. After the respondent obtains knowledge and information regarding stunting prevention, the respondent then understands the program and evaluates it according to the respondent's experience. One strategy to increase positive perceptions related to stunting prevention is through preventive promotive activities and a persuasive approach that is able to convince pregnant women to prevent stunting, as well as an explanation that the benefits received are greater than the hassle and dangerous risks that might occur.

The behaviour of pregnant women with their indicators/manifests includes: visits to ANC, consumption of nutritious food, how to consume iron tablets, class of pregnant women. Descriptive analysis of the behaviour of pregnant women can be seen in Table 6 below.



**TABLE 7:** Frequency distribution of pregnant women's behavior variables

Variable	Score	Category	Frequency	Percentage
Behaviour of pregnant woman	88,4-100,4	Excellent	34	15,5
	76,3-88,3	Good	85	38,6
	64,2-76,2	Sufficient	87	39,5
	52,1-64,1	Poor	13	5,9
	40,0-52,0	Worst	1	0,5

Source: Primary data processing, 2022

Table 6, it can be concluded that the behaviour variables of pregnant women included in the Sufficient category 87 (39.5%). This shows that it is quite well done by pregnant women. Respondents have a fairly good view of the behaviour of pregnant women and indicate gaps

in perceptions of pregnant women regarding healthy behaviour during pregnancy. Stunting occurs due to prolonged malnutrition in the early period of life (17,18). The behaviour of pregnant women with their indicators/manifestations is explained in Table 7 below:

**TABLE 8:** Distribution of frequency indicators of pregnant women's behavior variables

Variable	Indicators	Score	Category	f	%
Y2.1	ANC Visiting	22,2-25,4	Excellent	76	34,5
		18,9-22,1	Good	104	47,3
		15,6-18,8	Sufficient	31	14,1
		12,3-15,5	Poor	7	3,2
		9,0-12,2	Worst	2	0,9
Y2.2	Consume nutritious food	22,2-25,4	Excellent	72	32,7
		18,9-22,1	Good	94	42,7
		15,6-18,8	Sufficient	41	18,6
		12,3-15,5	Poor	12	5,5
		9,0-12,2	Worst	1	0,5
Y2.3	How to consume TTD	22,8-25,4	Excellent	79	35,9
		20,1-22,7	Good	47	21,4
		17,4-20,0	Sufficient	47	21,4
		14,7-17,3	Poor	39	17,7
		12,0-14,6	Worst	8	3,6
Y2.4	Pregnant class	21,6-25,4	Excellent	21	9,5
		17,7-21,5	Good	60	27,3
		13,8-17,6	Sufficient	63	28,6
		9,9-13,7	Poor	26	11,8
		6,0-9,8	Worst	50	22,7

Source: Primary data processing, 2022

Table 7 above shows that ANC visits are in the good category at 104 (47.3%). Integrated ANC is quality and comprehensive antenatal care provided to all pregnant women (19). ANC is important for assessing the state of maternal and fetal health in early pregnancy, preventing unwanted complications during pregnancy, preventing maternal and child deaths, improving the health of mothers and their babies, to foster

good husband, wife and child relationships. Antenatal care encourages family interaction and bonding between husbands, wives and their babies (20). Prevention of stunting starting from pregnancy is important in order to reduce the prevalence of stunting. The nutritional status of pregnant women, even before pregnancy will determine the growth of the fetus. so that the ANC examination is one of the prevention of

stunting (21). This research is also in line with Serceskus (22) research in Turkey that participation in antenatal classes increases beliefs and perceptions of readiness for childbirth.

Consumption of nutritious food is classified as good category by 94 (42.7%). Maternal health and nutritional conditions during pregnancy affect fetal growth and the risk of stunting. Fulfilment of nutrition for pregnant women is very important during pregnancy. Balanced nutrition can reduce the risk of stunting. In fulfilling nutrition during pregnancy, the behaviour of pregnant women is influenced by perceptions, this is in accordance with research that nutrition assistance can affect knowledge, attitudes and actions of mothers in meeting nutritional needs during pregnancy (23). Consumption of nutritious food in this study is related to the amount, type and variety of food regularly 3 times a day consuming five food groups. This is in accordance with what was stated by Siregar et al (24) the incidence of stunting can occur during pregnancy due to insufficient nutritional intake during pregnancy, inappropriate eating patterns, and low food quality resulting in stunted growth. Based on this, it can be concluded that malnutrition in pregnant women increases infant and child mortality, causes sufferers to get sick easily, lacks cognitive abilities, and has suboptimal posture due to stunting.

How to take iron tablets is in the Excellent category with 79 (35.9%). Compliance with consuming iron tablets is the obedience of pregnant women in carrying out recommendations from health workers (23). Compliance with taking iron tablets can be measured from the accuracy of how to consume iron tablets, the accuracy of the amount consumed, and the frequency of consumption per

day. In non-pregnant conditions, the need for iron can be met from a healthy and balanced diet (25). Mothers who comply with how to consume iron tablets can increase their iron in order to prevent anaemia which will have an impact on the process of pregnancy and birth (26). These results are linear with the results of Mithra's study in India that practice and adherence to consuming iron tablets in pregnant women are influenced by their perceptions of side effects when taking these tablets, even though the mother knows the benefits to be obtained if iron tablets are consumed regularly (15).

Class for pregnant women, in the Sufficient category. Classes for pregnant women are appropriate educational facilities for pregnant women, namely by providing information according to the needs of pregnant women, interventions in emotional and motivational aspects so that pregnant women can empower themselves and share information (27). Classes for pregnant women are starting to experience developments in terms of material needs, methods used and participants and providing interventions in emotional and motivational aspects services that allow pregnant women to empower themselves (28,29). In addition, interaction and sharing of real experiences between class participants of pregnant women can be a means of increasing empirical knowledge, changing attitudes and behaviour in a direction that supports the health and well-being of pregnant women (30).

The result of this multivariate normality test is one p-value. The criterion is if the p-value > 0.05 then the data is normally distributed, if the p-value < 0.05 then the data is not normally distributed. The results of the multivariate normality test are in Table 9 below.

**TABLE 9:** Multivariate normality test results

Skewness			Kurtosis			Skewness and Kurtosis	
Value	Z-Score	P-value	Value	Z-Score	P-value	Chi-Square	P-Value
2.814	3.971	0.070	7.846	2.953	0.000	8.427	0.067

Source: Lisrel 8.8 output



In the multivariate normality test in Table 9 above, the data can be said to be normally distributed because the P-Value Skewness and Kurtosis > 0.05. In this study, it was 0.067.

Analysis of the measurement model is a test of the validity and reliability of the observed variables (indicators/manifest) in the SEM model in the LISREL 8.8 program, which can be carried

out using the Confirmatory Factor Analysis (CFA) measurement model. The results of the CFA show that all standardized factor weight coefficients (standardized loading factors) have all exceeded the required cut off value of  $\geq 0.05$ . This indicates that each indicator has been able to measure the construct used in the study. As shown in Figure 1 and Table 9 below:

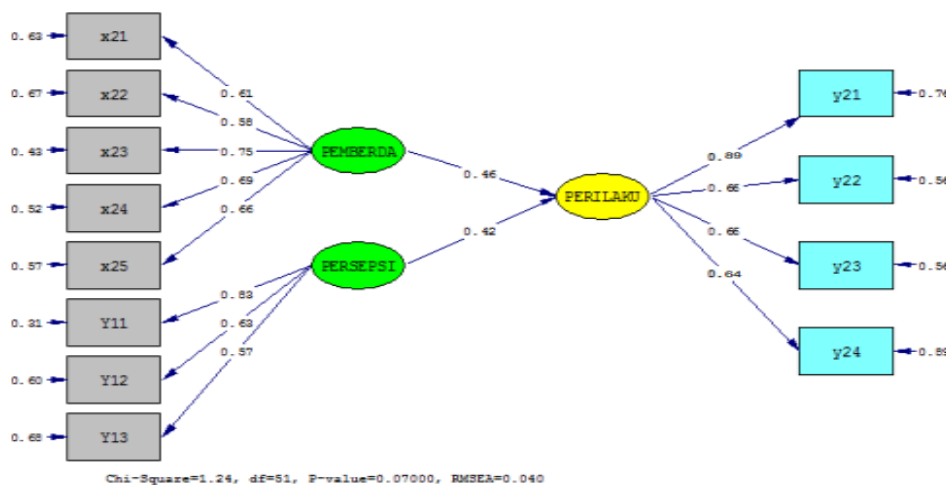


FIGURE 1: Path diagram overall model standardized solution.

Analysis of the validity of the measurement model is carried out by checking whether the t-value of the observed variables in the model meets the good requirements, which is greater than the critical value, namely > 1.96, and the standardized loading factors of the observed variables in the model meet the good requirements. . Igbaria et al (1997) stated that standardized loading factors > 0.50 were very significant, and > 0.30, the related variables

could be categorized as significant. The next step is the reliability analysis of the measurement model, which is carried out by calculating the Construct Reliability (CR) value from the processing of standardized loading factors and error variance values. The results of data processing of the validity and reliability of the observed variables (manifest) are presented in Table 9.

TABLE 10. Validity and reliability test results of indicator/manifest variables

Latent variable	Indicator Code/manifest	t-value	Standardized loading factor $\geq 0,50$	Composite Reliability CR $\geq 0,70$	Information
Empowerment (X1)	X1.1	9,24	0,61	0,85	Reliable valid valid valid valid
	X1.2	8,66	0,58		
	X1.3	12,03	0,75		
	X1.4	10,77	0,69		
	X1.5	10,16	0,66		
Perception (X2)	X2.1	11,84	0,83	0,81	reliable valid

	X2.2	9,03	0,63		valid
	X2.3	88,15	0,57		valid
Behaviour of Pregnant Women (Y1)	Y1.1	8,85	0,89	0,83	reliable
	Y1.2	5,75	0,66		valid
	Y1.3	5,76	0,66		valid
	Y1.4	3,84	0,64		valid

Source: Lisrel output, primary data processing, 2022

Based on Table 9, all manifest/indicator variables have a loading factor  $\geq 0.50$ , which means they are valid variables for measuring indicators of latent variables. Furthermore, from the CR (Composite Reliability) measurement of the three variables  $\geq 0.70$ , which means that all variables are reliable/reliable as indicators that represent latent variables. Based on the analysis of the measurement equation model, the t-value of each manifest variable/indicator is  $\geq 1.96$ , which

means it has a significant positive effect with a loading factor  $\geq 0.5$  and construct reliability  $\geq 0.70$ . This means that each indicator proved to be valid and reliable is an indicator that represents latent variables. The entire model produces output that describes the relationship between estimates, t-values, and standardized solutions. The following is the path diagram of the t-value model presented in the image below.

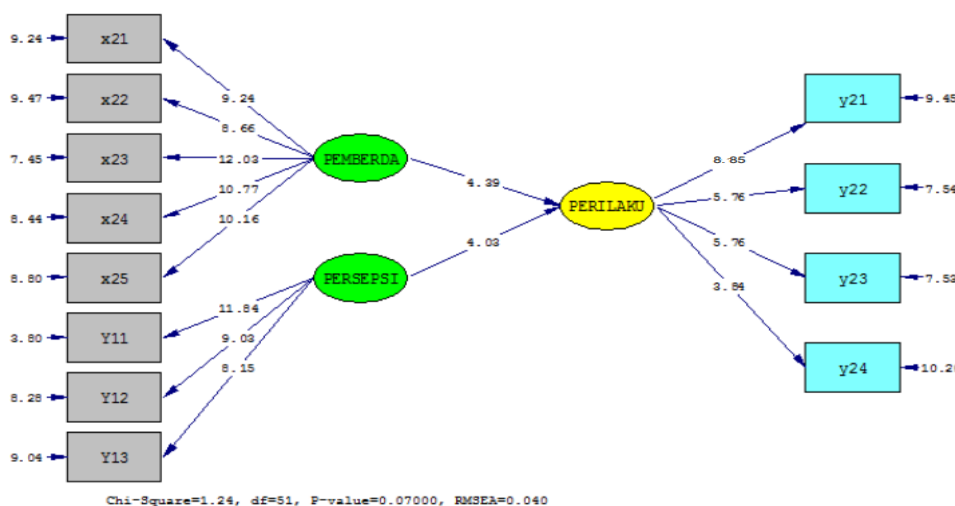


FIGURE 2: Path diagram of the overall model t-value.

The results of the model fit test indicate the model is fit with the data. This can be seen from the following criteria.

TABLE 11: Evaluation of Goodness of Fit

Goodness of fit	Criteria	Hasil	Keputusan
Chi-Square	<2	1,200	Fit
RMSEA	$\leq 0,08$	0,040	Fit
p-value	>0,05	0,070	Fit
NFI	>90	0,96	Fit
NNFI	>90	0,92	Fit
PNFI	>90	0,93	Fit

CFI	>90	0,95	Fit
IFI	>90	0,95	Fit
AGFI	>90	0,94	Fit
PGFI	>90	0,91	Fit

Source: Lisrel 8.8 output

In this study, testing of the model was carried out to find out how the direct effect of empowerment on behavior, the influence of perception on the behaviour of pregnant women.

**TABLE 12:** Structural model testing

Hipotesis	t-value >1,96	Standardized Coefficient >0,05	Keterangan
X1-Y1	4,29	0,46	Signifikan
X2-Y1	4,03	0,42	Signifikan

In table 11 it is known that both hypotheses have a t-value  $\geq 1.96$ . This means that it has a significant positive effect.

#### ***The effect of Empowerment on the behaviour of pregnant women***

The results of the analysis show that there is a positive and significant effect of empowerment on the behaviour of pregnant women. The t-value =  $4.29 \geq 1.96$  which means it has a positive and significant effect with a loading factor of  $0.46 > 0.05$ . The direct effect of the empowerment variable on the behaviour variable of pregnant women is 0.46. This means that if the empowerment variable is increased by 1 then the behaviour variable of pregnant women is expected to increase by 0.46. This is in accordance with previous research, there are 5 factors that influence the success of the community empowerment program, namely (1) planning and socialization (2) mentoring and providing motivation to the target group, (3) training on the use of yard produce supports diversification of food consumption, (4) monitoring and evaluating program implementation and its impact, (5) the importance of promotion and marketing aspects (31). Empowerment is a process by a certain person, community or organization to gain power or empowerment (32). Communities have an important meaning in preventing stunting, community understanding of stunting prevention

can determine the success of prevention programs (33). Community empowerment has long been a solution in overcoming problems in various fields, including the health sector. During pregnancy, women's empowerment plays an important role in the health of the mother and the fetus in her womb. Empowerment of women/pregnant women can increase the husband's involvement in obtaining antenatal care. It is very important to involve husbands in antenatal care because this has a psychological effect on pregnant women. Apart from that, according to Green's theory, a person's behaviour is also influenced by reinforcing factors and in the case of pregnant women, husbands play a role as reinforcing factors. This shows that the empowerment of pregnant women plays a role in the health of the baby to be born. This is in accordance with research (34). which states that empowering women at the household and community level has the potential to reduce stunting and underweight cases in developing countries. Empowerment of pregnant women is an easy way to get information about pregnancy care so that pregnant women tend to behave healthily.

#### ***The influence of perceptions on the behaviour of pregnant women***

The t-value =  $4.03 > 1.96$  with a loading factor of  $0.42 > 0.05$ . The results showed that the perception variable proved to have a positive and

significant effect on the behaviour of pregnant women. The direct effect of the perception variable on the behaviours variable of pregnant women is 0.42. This means that if the perception variable is increased by 1 then the behaviour variable of pregnant women is expected to increase by 0.42. The mother's perception in preventing stunting is the mother's assessment and/or interpretation regarding stunting prevention, whether it provides positive or negative benefits which will have an effect on her behaviour. In the theory of behaviour change in the health belief model developed by Rosenstock, it is explained that changes in a person's behaviours focus on perceptions and beliefs about something that will directly affect decision making that feels good for him, after a person weighs the pros and cons (14). The better (positive) the mother's perception of stunting prevention efforts will give rise to encouragement to dig up various information needed to increase understanding and later be able to change her behaviour. Mothers who perceive their pregnancy as vulnerable, try to find solutions, one of which is through participation and attendance in Pregnant Women Classes (14). Conversely, pregnant women who perceive negatively, for example in terms of consuming Fe tablets as an effort to prevent anaemia and are perceived as an unpleasant situation by pregnant women because they cause nausea, constipation, abdominal pain and other side effects, will have an effect on reluctance and non-adherence to consume these Fe tablets. regularly for various reasons. This condition also occurs in India and Pakistan (15,16). Improving and increasing the perception of pregnant women is the first step in increasing prevention behaviours.

### CONCLUSION

Based on the descriptive analysis of empowerment variables in the good category, the perceptions and behaviour of pregnant women are in the Sufficient category. Empowerment and Perception influence primary stunting prevention behaviour. Empowerment models for pregnant women can be recommended as a solution for primary stunting prevention.

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