

## ANDRAGOGY APPROACH IN ACCELERATION OF STUNTING REDUCTION: SOCIAL SUPPORT AND COMMUNITY PARTICIPATION ANALYSIS

Daeng Ayub<sup>1</sup>, M. Jaya Adi Putra<sup>2</sup>, Lilis Karwati<sup>3</sup>, Muryanti<sup>4</sup>

<sup>1,2,4</sup> Universitas Riau, Pekanbaru

<sup>3</sup> Universitas Siliwangi, Tasikmalaya

*Corresponding author: muryanti@lecturer.unri.ac.id*

Article Info	Abstract
<p><b>Received:</b> 24 August 2024  <b>Accepted:</b> 25 October 2024  <b>Published:</b> 30 October 2024</p> <hr/> <p><b>Keywords:</b></p> <p>Andragogy approach; social support; community participation</p>	<p>This study examines the role of the andragogical approach, social support, and community participation in accelerating stunting reduction in Sibuaq Village, Tapung District, Kampar Regency. The objectives of the study are to assess the levels of these three factors and to analyze their influence on stunting reduction efforts. Specifically, the study aims to (1) evaluate the extent of the andragogical approach applied in stunting reduction, (2) measure the level of social support provided, (3) assess the level of community participation, and (4) determine the effects of social support and community participation on the andragogical approach in the context of stunting reduction. To do so, this study employs a quantitative design with a sample of 126 fertile couples from a population of 183 in the village. Data were analyzed using descriptive statistics to determine central tendencies and inferential statistics to explore relationships between the variables. The results show a significant positive influence of social support on the andragogical approach, accounting for 75.1% of the variance. Community participation also had a significant positive influence, explaining 73.7% of the variance. Additionally, combined social support and community participation had a significant impact on the andragogical approach, with a total effect of 75.3%. The findings suggest that enhancing social support and encouraging community participation are crucial for strengthening the andragogical approach in reducing stunting. These insights can inform policymakers and health practitioners in designing more effective stunting reduction programs.</p>

## INTRODUCTION

Stunting is a problem that affects the quality of human development, especially in Indonesia. The quality of Indonesian society is threatened in the future because in 2045 Indonesia will suffer the impact of population. The population in that year will consist of people aged 15 to 64 years, and the rest of the population aged 65 years and over. The life expectancy in all non-productive years is 68% with a population proportion of 9%. The productive age population plays an important role in improving the country's economy. Currently, the big problem is that the age of the next generation will be affected by stunting, and the ability to achieve a population bonus is a challenge for Indonesia itself. Small children who are already short will experience and participate in limited cognitive skills.

Apart from that, stunting also affects human productivity when economic growth increases, so it is certain that the poor population will increase due to the continuing decline in the competitiveness of human resources (BKKBN in Azizah, 2019, p. 202). According to the United Nations International Children's Emergency Fund (UNICEF) in Christina, et al (2022), one in three children experiences stunting. About 40% of children in rural areas experience stunting. For this reason, UNICEF supports a number of initiatives to create a national enabling environment for improving nutrition through the launch of the National Nutrition Awareness Movement (Scaling Up Nutrition - SUN), where this program includes the prevention of stunting. is carried out massively and continuously, this is demonstrated by the role of the government in accelerating the reduction of stunting rates by issuing Presidential Regulation Number 72 of 2021 for the national strategy to accelerate the reduction of stunting to become a reference in all sectors of ministries or institutions, provincial regional governments, district governments or city or village governments and stakeholders.

Many efforts have been made to accelerate the decline in growth rates towards the golden generation by 2024 and India's population growth by 2030 (Antarnews.com 2023). To overcome these problems, the role of parents is very important, because they are the pioneers of child growth and development. To train parents, the right method is needed because parents and adults are different from children. Andragogy, as proposed by Knowles (1980), emphasizes that adults are more self-directed and problem-solving-oriented compared to children, making the method more applicable in empowering parents to take active roles in stunting reduction. Previous research (Lewis & Bryan, 2021) has shown that andragogical principles, such as engaging learners in decision-making and focusing on experiential learning, are critical to developing skills in adult learners. Despite these insights, there is limited research on applying andragogy to health and parenting interventions, particularly in the context of public health challenges like stunting. Therefore, the research must be based on andragogy. Moreover, existing studies

on stunting reduction primarily focus on medical interventions and community-based health programs, with insufficient attention to the role of parent education in these efforts. By addressing this gap, this research seeks to explore how andragogy can enhance parental engagement in stunting reduction efforts, helping to create a more effective and sustainable approach to tackling this public health issue. Through principles of adult education, such as grouping learners based on their needs and abilities, and actively involving them in planning, learning processes, and evaluation, this study aims to develop a tailored strategy that empowers parents to contribute meaningfully to stunting reduction.

According to UNESCO in Daryanto (2017) adult education is the entire educational process that is organized whatever the content, level, method, whether formal or not, which continues or replaces the original education in schools, colleges and universities as well as job training, which makes people considered adults by society develops their capabilities, enriches their knowledge, develops their technical or professional qualifications and translates into changes in attitudes and behaviors in the double perspective of full personal development and participation in balanced and free social, economic and cultural development.

The points that are the principles or bases of the philosophy of the andragogy approach include: (1) equality, (2) participatory and (3) spontaneous. Then Maslow in Zainuddin Arif (2012) explains that each individual is obliged to satisfy his most basic needs (clothing and clothing), before being able to experience higher needs as a complement to these basic needs, namely security, social needs, self-autonomy. esteem and self-realization.

The selection of methods and techniques in andragogy requires careful consideration, considering that older students have different characteristics than other students. Therefore, guiding policies are also important in determining the direction of learning, especially in mature learning. Therefore, the indicators of this study are: (a) discussion method, (b) presentation method, (c) simulation method and (d) action method.

The problem of stunting can be caused by factors that affect child growth and development, such as parental patterns, breastfeeding (ASI), complementary feeding (MPASI), protein and mineral content, child immunization, infectious diseases, and genetic diseases in addition. Indirect factors come from outside such as socio-economic conditions in the family, mother's occupation, family income and mother's education (Nisa, 2018). In addition, environmental cleanliness and hygiene are also the main correlations to stunting problems (Mishra et al., 2019).

In addition to home factors, social support from the community also plays an important role in stunting in toddlers. Social support can cover various aspects ranging from access

to high-quality health services to financial empowerment programs for economically vulnerable families. Communities with social support systems are better able to help each other with things like meeting basic needs, nutritional education, and access to high-quality health services. Conversely, in communities without adequate social support, children under the age of five are particularly vulnerable due to lack of access to the resources needed to grow and develop (Chandra et al., 2021).

Social support can be in the form of emotional support from family, goods, information, and opportunities. Families can support mothers emotionally and psychologically. So that mothers can provide the right parenting patterns for their children, and prevent depression. A good parenting model for young children prevents delays and allows for good growth and development (Asnaningsih, 2018). Social support is a form of acceptance by a person or group of people towards someone, giving the impression that they are loved, cared for, respected, and helped (Akintolu & Letseka, 2021).

Social support plays an important role in individual development. For example, people who have good relationships with others. The indicators used vary, the purpose of this study is to determine the extent of social support, namely (a) emotional support, (b) price support, (c) material support; and (d) information support. One of the causes of the less optimal reduction in stunting in several areas is influenced by the minimal participation of the community in the success of this program, or in other words, minimal community participation. In terms of social participation, it is seen that many people still believe more in shamans and medicinal plants than in medicines (Surjaningrum et al., 2022). In addition, many people still do not understand the difference between malnutrition and stunting and are considered biased.

According to Cohen & Apoff in Khoironisa & Salomo (2019), community participation includes the decision-making process, project implementation and distribution of project benefits in development, as well as community participation in project evaluation. Meanwhile, the scope of participation in the implementation of a program ranges from the mobilization of resources and funds, administrative activities to the coordination and classification of programs based on a brief description, this is what causes community participation to be a determining element in the success of a program itself (Charungkaittikul & Henschke, 2017; Monofa, 2022; Zireva, 2023).

Community participation here can be individual or collective, organized or spontaneous, constant or sporadic, peaceful or violent, legal or illegal, effective or ineffective with all the indicators that influence community participation, both internal and external. Therefore, the indicators of community participation in this research include: (a) Participation in decision-making, (b) Participation in the implementation of the programs

created, (c) Participation in the Use of the Results, and (d) Participation in carrying out evaluations.

The busy life of working parents leads to low community involvement in stunting prevention as it results in a lack of attention to their children's nutritional intake, health and education. Therefore, it can be seen that social support and community participation are many factors that contribute to the achievement of a program to reduce stunting.

## **METHOD(S)**

### **Research Design**

The data in this study were obtained through a survey. Furthermore, the data obtained show the characteristics of the problems studied. The method used in this study was a descriptive method, and the research design used was a cross-sectional study (Pratto et al., 2006) and quantitative assessment. This design is particularly suitable for understanding the influence of social support and community participation on the andragogy approach in the context of stunting reduction. The descriptive method was selected to provide a detailed overview of the characteristics and prevalence of the variables being studied. This approach is effective for highlighting key trends and patterns in the data, which are crucial for understanding the dynamics of social support, community participation, and their impact on adult learning strategies. There were three main variables in this study, namely the andragogy approach (Y), social support (X1) and community participation (X2).

The andragogy approach (Y) is a way to facilitate adult learning by focusing on the development of adults to prepare or integrate them into their social work to accelerate spectrum reduction. The number of respondents' responses to a questionnaire compiled using indicators: (a) Discussion Method, (b) Demonstration Method, (c) Simulation Method, and (d) Practice Method.

Social support (X1) is the assistance that comes from individuals or groups to other individuals in both physical and psychological form, which creates individual comfort in facing various situations, which is measured based on the total score of the respondents' responses to the questionnaire compiled using indicators: (a) Emotional Support; (b) Reward Support; c) Material Support; and (d) Informational Support.

Furthermore, community participation (X2) is the behavior of a person or group of people who participate with their thoughts (suggestions, opinions) and get involved in physical

activities, which is measured based on the total score of the respondent's responses to the questionnaire compiled using the indicators: (a) participation in decision making, (b) participation in the implementation of the created program, (c) participation in the benefits, and (d) participation in carrying out evaluations.

### **Setting and Participants**

The population in this study were productive age couples in Sibuaik Village, Tapung District, Kampar Regency, totaling 183 out of 652 KK (Family Cards) in Sibuaik Village. Then the sample of this study was determined by stratified random sampling, and determined based on the representation considered from the size of the population for each sample group by referring to the Isaac & Michael (1981) table at 5% margin of error, and obtained with a total of 126 productive age couples.

### **Data Collection Method(s) and Analysis**

For data collection, a survey technique was employed to gather information from a sample of 126 respondents, drawn from a population of 183 fertile couples in Sibuaik Village. The survey was designed to capture respondents' perceptions and experiences related to the andragogy approach, social support, and community participation. The use of a survey allowed for standardized data collection across all participants, ensuring consistency in the responses. Additionally, the quantitative nature of the study enabled the application of statistical analyses to examine the relationships between the variables and assess the magnitude of their influence on the andragogy approach.

The data were analyzed through several steps that include data verification, data classification based on indicators, table creation for raw scores. Data were analyzed using descriptive statistics with a focus on the Mean value. In addition, data were also analyzed using inferential statistics to see the relationship between variables, the influence and the magnitude of the influence of the research variables. However, in processing data using the SPSS (Statistical Product and Service Solutions) version 25.0 program, so that reliability and total statistics can be known based on crosstabs in the statistics program. Analysis of research data on the stunting approach in accelerating stunting reduction analysis based on social support and community participation in Sibuaik village.

Then for the decision on the results of the descriptive statistical test data analysis, the interpretation of the Mean value uses the following measurement standards:

**Table 1.**  
*Mean Score Interpretation*

Scale	Interpretation
4.01 – 5.00	Very High
3.01 – 4.00	High
2.01 – 3.00	Low
1.00 – 2.00	Very Low

Next, the decision on the results of the inferential statistical test data analysis, the interpretation of the percentage of contribution between research variables, as well as the contribution of each indicator to the variable, uses an interpretation with the following measurement standards:

**Table 2 .**  
*Interpretation of the percentage of the influence scores between variables*

Scale %	Interpretation
75 -100	Very High
55 – 74	High
35 – 54	Mediocre
10 – 34	Low
01- 09	Very Low

This combination of a cross-sectional design, descriptive method, and survey-based data collection was chosen because it offers a comprehensive and systematic way to analyze the factors influencing adult education and stunting reduction in this context. The findings from this approach can provide valuable insights into how adult learners, specifically parents, can be supported to effectively contribute to public health efforts.

## **FINDINGS AND DISCUSSION**

### **Findings**

#### **Descriptive Statistical Analysis**

Descriptive statistical analysis includes analysis of mean values on the Andragogy Approach variable based on each indicator, namely; (a) Discussion Method, (b)

Demonstration Method, (c) Simulation Method, and (d) Drill Method, as described below:

**Table 3.**

*Mean Values of Andragogy Approach Variables Based on Indicators*

No	Indicators	Mean	Interpretation
1	Discussion Method	3.81	High
2	Demonstration Method	3.68	High
3	Simulation Method	3.80	High
4	Drill Method	3.70	High
	Mean	3.75	High

Table 3 explains the mean value based on the andragogy approach variable indicator. The discussion method has a higher mean value, which accounted for 3.81, followed by the simulation method with a mean of 3.80. The training method has a mean value of 3.70. Meanwhile, the demonstration method has the lowest mean value of 3.68. However, it can be seen that the andragogy approach in accelerating stunting reduction seen from each indicator is already classified as high with an overall average of 3.75.

Then the results of the descriptive analysis of social support will be explained based on each indicator, namely; (a) Emotional Support; (b) Appreciative Support; (c) Material Support; and (d) Information Support, as described below:

**Table 4.**

*The Mean Value of Social Support Based on Indicators*

No	Indicators	Mean	Interpretation
1	Emotional Support	3.67	High
2	Appreciative Support	3.67	High
3	Material Support	3.70	High
4	Information Support	3.62	High
	Mean	3.67	High

Table 4 explains the average value of social support in accelerating the decline in stunting in each indicator. The value of material support was higher, which was 3.70. It was followed by emotional support and appreciation with the same value of 3.67. Currently, information support has a value of 3.62. Overall, it can be seen that social support for accelerating the decline in stunting in each indicator was high with an average of 3.67.



The following are the results of the descriptive analysis of community participation in each indicator, namely: a) participation in decision-making, b) participation in the implementation of the designed program, c) participation in benefits, and (d) participation in evaluation.

**Table 5.**

*Mean Value of Community Participation Based on Indicators*

No	Indicators	Mean	Interpretation
1	Participation in Decision-Making	3.66	High
2	Participation in the Implementation of Programs Created	3.71	High
3	Participation in Benefits	3.72	High
4	Participation in conducting Evaluations	3.62	High
	Mean	3.68	High

Table 5 explains the average value of community participation in accelerating growth reduction in each variable. The percentage of participation using the highest average is known to be 3.72. After following the implementation of the designed program, the average was 3.71. Thus, participation in decision-making activities had an average of 3.66. Currently, the average level of participation in the review is 3.62. Overall, it can be seen that community participation in accelerating stunting reduction in each indicator was high, with an average of 3.68.

### Inferential Statistical Analysis

#### *Normality Test*

The normality test was conducted to determine whether the distribution of data for each variable was normally distributed. This test was conducted using the Kolmogorov-Smirnov normal test, if the significance value (sig) > 0.05 then the data is normally distributed. If the value is large (sig) < 0.05 then the data is not normally distributed. Details can be seen in Table 6.

**Table 6 .**

*Results of the Kolmogorov-Smirnov Normality Test for the Andragogy Approach (Y), Social Support (X1) and Community Participation (X2)*

One-Sample Kolmogorov-Smirnov Test			
	Y	X <sub>1</sub>	X <sub>2</sub>
N	126	126	126
Kolmogorov-Smirnov	.051	.074	.073
Asymp, Sig, (2-tailed)	.200 <sup>c,d</sup>	.083 <sup>c</sup>	.098 <sup>c</sup>

Based on Table 7, it is explained that the Kolmogorov-Smirnov normality test has a significance value; first, the Andragogy Approach (Y) with a value of 0.200 ( $0.200 > 0.05$ ), this means that the data is normally distributed. Secondly, the Social Support variable (X1) with a sig value of 0.083 ( $0.083 > 0.05$ ), means that the data is normally distributed. And the Community Participation variable (X2) with a sig value of 0.098 ( $0.098 > 0.05$ ), means that the data is normally distributed.

### **Linearity Analysis**

Linearity was tested using the assistance of the SPSS version 26.0 program. The linearity test for the Social Support variable (X), and the Andragogy Approach of female school principals (Y) was obtained as follows:

**Table 7.**

*Results of Linearity Test of Variance of Social Support Variables (X) and 21 Principals' Century Competence (Y)*

	<b>Sig</b>
Andragogy Approach Y* Social Support X1	0.641
Andragogy Approach Y* Community Participation X2	0.630

Based on Table 7, the significance value (sig) of the Deviation from linearity of the andragogy approach (Y) with social support (X1) is 0.641, which is greater than 0.05. It can be concluded that there is a significant linear relationship between the andragogy approach variable (Y) and social support (X1). Furthermore, the significance value (sig) of the deviation from linearity of the andragogy approach (Y) with community participation (X2) is 0.630, which is greater than 0.05. It can be concluded that there is a significant linear relationship between the andragogy approach variable (Y) and community participation (X2).

### **Hypothesis Testing**

The results of the analysis requirements test show that the score of each research variable has met the requirements for use in further statistical analysis, namely hypothesis testing.

#### **Hypothesis 1**

The hypotheses to be tested are

$H_0: \rho_{x1,y} \leq 0$  There is no significant and positive influence of social support on the andragogy approach in accelerating the reduction of stunting in Sibuk Village, Tapung District, Kampar Regency.

$H_1: \rho_{x1,y} > 0$  There is a significant and positive influence of social support on the andragogy approach in accelerating the reduction of stunting in Sibuaik Village, Tapung District, Kampar Regency.

**Table 8.**

*Hypothesis Test of Community Participation (X2) against Andragogy Approach (Y)*

Variable	R	t	R, Square	Sig	Interpretation
X2-Y	0.859	4.097 18.655	0.737 (73.7%)	0.000	Very Significant

Based on Table 8, the Pearson correlation test between Community Participation (X2) and the Andragogy Approach (Y) has a Pearson correlation of 0.859, with a significance value obtained of 0.000, where the P value/sig is  $0.000 < 0.05$ , meaning that there is a very significant relationship between the two variables. Then in the Community Participation (Y) table on the Andragogy Approach (X2), a probability value is also obtained, which is used to determine whether the hypothesis is accepted or rejected. If the probability value is greater (sig,  $> 0.05$ ), then  $H_0$  is accepted and  $H_1$  is rejected, while if the probability value sig, is 0.000, Sig value,  $0.000 < 0.05$  then  $H_0$  is rejected and  $H_1$  is accepted so that Community Participation (X2) has a significant effect on the Andragogy Approach (Y). In the table, it is also known that the t-value of the Community Participation variable is 18.655. Because the t-value of  $18.655 > t\text{-table } 1.657$ , it can be concluded that the hypothesis is accepted, meaning that there is an influence of Community Participation (X2) on the Andragogy Approach (Y). Table 8 also explains the magnitude of the influence given by Community Participation on the Andragogy Approach. R square ( $r^2$ ) = 0.737 or 73.7% is obtained, meaning that the magnitude of the influence of the Community Participation variable on the Andragogy Approach is 73.7%, while the remaining 26.3% is determined by other factors that are not part of the study.

## Hypothesis 2

The hypotheses to be tested are

$H_0: \rho_{x2,y} \leq 0$  There is no significant and positive influence of community participation on the andragogy approach in accelerating the reduction of stunting in Sibuaik Village, Tapung District, Kampar Regency.

$H_1: \rho_{x2,y} > 0$  There is a significant and positive influence of community participation on the andragogy approach in accelerating the reduction of stunting in Sibuaik Village, Tapung District, Kampar Regency.

**Table 9.***Hypothesis Test of Community Participation (X2) against Andragogy Approach (Y)*

Variable	R	t	R, Square	Sig	Interpretation
X <sub>2</sub> -Y	0.859	4.097 18.655	0.737 (73.7%)	0.000	Very Significant

Based on Table 9, the Pearson correlation test between Community Participation (X<sub>2</sub>) and the Andragogy Approach (Y) has a Pearson correlation of 0.859, with a significance value obtained of 0.000, where the P value/sig is 0.000 < 0.05, meaning that there is a very significant relationship between the two variables. In the Community Participation (Y) table on the Andragogy Approach (X<sub>2</sub>), a probability value is also obtained, which is used to determine whether the hypothesis is accepted or rejected. If the probability value is greater (sig, > 0.05), then H<sub>0</sub> is accepted and H<sub>1</sub> is rejected, meaning it is not significant, while if the probability value sig, is 0.000, Sig value, 0.000 < 0.05 then H<sub>0</sub> is rejected and H<sub>1</sub> is accepted so that Community Participation (X<sub>2</sub>) has a significant effect on the Andragogy Approach (Y). In the table, it is also known that the t-value of the Community Participation variable is 18.655. Because the t-value of 18.655 > t-table 1.657, it can be concluded that the hypothesis is accepted, meaning that there is an influence of Community Participation (X<sub>2</sub>) on the Andragogy Approach (Y).

Table 9 also explains the magnitude of the influence given by Community Participation on the Andragogy Approach. R square (r<sup>2</sup>) = 0.737 or 73.7% is obtained, meaning that the magnitude of the influence of the Community Participation variable on the Andragogy Approach is 73.7%. while the remaining 26.3% is determined by other factors that are not part of the study.

### Hypothesis 3

The hypotheses to be tested are

H<sub>0</sub>:  $\rho_{x_1x_2.y} \leq 0$  There is no significant and positive influence between social support and community participation together on the andragogy approach in accelerating the reduction of stunting in Sibuk Village, Tapung District, Kampar Regency.

H<sub>1</sub>:  $\rho_{x_1x_2.y} > 0$  There is a significant and positive influence between social support and community participation together on the andragogy approach in accelerating the reduction of stunting in Sibuk Village, Tapung District, Kampar Regency.

**Table 10.**

*Hypothesis Test of Social Support (X1) AND Community Participation (X2) on Andragogy Approach (Y)*

<b>Variable</b>	<b>R</b>	<b>T</b>	<b>F</b>	<b>R, Square</b>	<b>Sig</b>	<b>Interpretation</b>
X <sub>1</sub> ,X <sub>2</sub> -Y	0.868	3.246 2.811 2.137	187.641	0.753 (75.3%)	0.000	Very Significant

Based on Table 11, the Pearson correlation test between social support (X1) and community participation (X2) with the Andragogy Approach (Y) has a Pearson correlation of 0.859, with a significance value obtained of 0.000, where the P value/sig is 0.000 < 0.05, meaning that there is a very significant relationship between the two variables. Then in the table of social support (X1) and community participation (X2) towards the Andragogy Approach (X2), a probability value is also obtained which value is used to determine whether the hypothesis is accepted or rejected. If the probability value is greater (sig, > 0.05), then H<sub>0</sub> is accepted and H<sub>1</sub> is rejected, meaning it is not significant, while if the probability value sig, is 0.000, Sig value, 0.000 < 0.05 then H<sub>0</sub> is rejected and H<sub>1</sub> is accepted so that social support (X1) and community participation (X2) together have a significant effect on the Andragogy Approach (Y). It is also known that the t-value of social support is 2.811 and the variable of Community Participation is 2.137. Because the t-value of 2.811 > t-table 1.657, and t-value of 2.137 > t-table 1.657, it can be concluded that the hypothesis is accepted, meaning that there is an influence of social support (X1) and community participation (X2) together on the Andragogy Approach (Y).

The F test in Table 11 is used to see how much the variables of social support (X1) and community participation (X2) influence the Andragogy Approach as a variable (Y). It is known that the F count obtained is 187.641 with a significance value of 0.000 where this significance value is less than 0.05 so it provides a decision that social support and community participation together have a significant effect on the andragogy approach.

Table 11 also explains the extent of the influence given by social support and community participation. The obtained R square (r<sup>2</sup>) = 0.753 or 75.3% means that the influence of the variables of social support and community participation on the Andragogy Approach is 75.3%. while the remaining 26.3% is determined by other factors that are not part of the research.

## **Discussion**

### **a. Andragogy Approach in Accelerating Stunting Reduction**

The results of the descriptive analysis of the andragogy approach variables obtained an average value of 3.75 and a high category. These findings are reinforced by research by Kurniati, et al. (2022) that concluded the mental maturity of adults as people who are able to control themselves, the emergence of the deepest psychological needs, intelligence, they are driven by the need to see others and consider themselves as people who control themselves, rather than being led, forced, or manipulated by others.

Stunting is a problem that affects the quality of a person's growth. Stunting affects human productivity and economic growth so that the poor population will increase significantly because the competitiveness of human resources continues to decline (BKKBN in Azizah, 2019, 202). Stunting cannot be cured but can be prevented through strong cooperation and multi-party cooperation to solve this problem. Thus, this work can meet the need for health services.

To overcome these problems, the role of parents is very important, because they are the pioneers of child growth and development. To train parents, the right method is needed because parents and adults are different from children. Therefore, we must use andragogy-based studies.

### **b. Social Support in Accelerating Stunting Reduction**

The results of the descriptive analysis of social support in the high category, with an average of 3.67. This finding is reinforced by research by Kusumawardani, et al. (2022) suggesting that the social support received by mothers in caring for children in the group of stunted and non-stunted toddlers is included in the less category and social support is related to the mother's capabilities that affect stunting in children.

The presence of other people can care for each other, help, support and work together to face life's challenges, this assistance is called social support (Asnaningsih, 2018). Social support means being around, wanting, and knowing people who are loyal, respectful, and love us. Sarason found that social support is always influenced by two factors, namely the amount of social support resources available and the level of willingness to accept social support (Komalasari, 2012).

In this study, social support is the family's ability to provide informational support, material support, emotional support and appreciative support. Family information about feeding according to child needs, financial support and feeding children, emotional support when the child's appetite decreases, mothers to feed children, and appreciation of decoration success. Very useful for preventing accelerated stunting growth.

### **c. Community Participation in Accelerating Stunting Reduction**

The results of the descriptive analysis of community participation obtained an average value of 3.68 and a high category. This conclusion is reinforced by research by Wati et al. (2020) which shows that limited community participation in efforts to prevent stunting cannot be separated from the obstacles that befall the community, both external and internal. Internal obstacles between humans include age, gender, education, income and occupation. The obstacles that come from outside are the lack of cooperation with all sectors to overcome long-term growth.

Therefore, to increase awareness and concern for stunting, the entire community must work together to manage, prevent and overcome stunting. According to Tilaar (1997), a participatory society is a productive society, aware of its rights and obligations, aware of the law and determined to be independent. A participatory society has special characteristics, namely a society that understands the problems it faces and tries to solve them to realize a better life, an independent society, namely a society that is aware of its strengths and abilities, as well as problems caused by restrictions, and people who want to do it so that there are many reasons why the community has the opportunity to achieve prevention of stunting acceleration.

### **d. The Influence of Social Support on the Andragogy Approach in Accelerating the Reduction of Stunting**

Based on the results of the study, social support has a positive and significant effect on the andragogy approach to accelerating stunting reduction in Sibuaq Village, Tapung District, and the magnitude of the effect is 75.1% with a high interpretation, while the remaining 24.9% is determined by other factors that are not part of the study. This finding is reinforced by the research of Lintang Berliana (2024) which shows social support from the family with a positive frequency rate of 65 respondents (60.7%). The most frequently asked were 67 respondents (62.6%), then the results of the linear regression test were 0.00. This means that there is a relationship between social support from the family and parenting patterns in preventing stunting. The better the social support from the mother's family, the better the parenting patterns for toddlers, so that it can prevent stunting. In addition to specific and targeted treatment, the family also plays an important role in avoiding and overcoming the problem of stunting. Therefore, family strengthening programs are also important in preventing stunting. The family is one of the important

elements in community life that is very important in efforts to prevent and cure it in the short term. The family is the main teacher to prevent delays in all areas of life. Starting from the womb, babies, young children, teenagers, married people, pregnant women, and so on (Rusdianah & Widiarini, 2019).

The adult education approach to families in reducing stunting involves visiting families and intervening as early as possible. Thus, child growth can be seen. This is done because direct tracing is considered better than relying on socialization. For example, people underestimate the height, weight, and height of babies, which are ignored by the community, even though ignoring it can inhibit growth or accelerate stunting growth.

Atmojo et al (2020) found that some people or parents do not know or hear about education about stunting and what stunting is, let alone interventions from stunting. It has been explained in the previous discussion that two types of interventions are specific and sensitive. Intervention is an intervention carried out by the widespread health sector, where special interventions are carried out by health workers who contribute around 30%, while sensitive interventions are carried out by the general public and families (parents) who have a contribution of 70%.

It is very necessary and necessary to empower families through an andragogy approach about the importance of intervention for stunting, especially about sensitive interventions that parents must know about because parents are the main pillars that play a role in overcoming the problem of stunting.

#### **e. The Influence of Community Participation on the Andragogy Approach in Accelerating Stunting Reduction**

The results of the study showed that community participation had a significant and positive effect on the andragogy approach in accelerating stunting reduction in Sibua Village, Tapung District and the magnitude of the effect was 73.7% with a high interpretation, while the remaining 26.3% was determined by other factors that were not part of the study. These results are reinforced by research by Wati et al. (2020) which shows that limited community participation in reducing stunting cannot be separated from the obstacles that exist in society, both from outside and from within. Internal obstacles between humans include age, gender, education, income and employment. The obstacles that come from outside are the lack of cooperation with all sectors to overcome long-term growth.

The main factor that supports community involvement in reducing stunting is need. The desire of the community to contribute to reducing stunting is based on community



awareness of the short-term impacts that can affect the future of their children, so they participate in projects related to reducing stunting because the community does not need it, it causes short-term effects. For children who follow these needs, the community will leave things that hinder their participation, and the community will focus on participating in projects related to stunting.

According to Danin in Sutriyawan (2020), community participation is the behavior of a person or group of people who provide ideas (suggestions, ideas), physical activities, and financial assistance. The community's ability to participate affects the level of education. The higher a person's level of education, the easier it is for them to understand the health information provided, such as information on how to get a good diet or information on how to reduce stunting, so that the community can use the information they receive at any time.

Participation is a factor that drives the strong desire of the community to participate in reducing stunting. And that need will greatly determine the community's ability to help reduce stunting.

#### **f. The Influence of Social Support and Community Participation on the Andragogy Approach in Accelerating the Reduction of Stunting**

As the research results show, there was a significant and positive influence of social support and community involvement together on the andragogy approach to accelerate stunting reduction in Sibuaq Village, Tapung District and the magnitude of influence was 75.3% with high interpretation while the rest was 26.3 % determined by other factors which were not part of the research. This finding is further reinforced by the research of Kurniati et al. (2022) which concludes that the psychological maturity of adults as self-directed individuals fosters the emergence of very deep psychological needs, namely the desire to be seen and treated by others as a self-directed person, not being directed, forced and manipulated by others. As adults are not children, adult education cannot be equated to education for school-aged children.

Stunting is caused by several factors such as social support and community involvement. According to Kholifah & Sari (2020), social support can assist and monitor children's development and growth to prevent stunting in children. Social support is the ability of the family and community to provide time, care, and support in the form of physical, mental, and social support. Social support can cover various aspects from access to quality health services to economic empowerment programs for financially vulnerable families. Communities that have a strong social support system tend to be better able to help each other in things like meeting basic needs, nutrition education, and access to quality health services. On the other hand, in communities that lack adequate social support, children

under the age of five are vulnerable to stunting due to a lack of access to the resources needed to grow and develop optimally (Chandra et al., 2021; Tezcan, 2022). One of the causes of the less-than-optimal reduction in stunting is the lack of community participation in making this project a success, namely low community participation. Based on community participation, it is clear that shamans and medicinal plants are often more trusted than medicines. drugs (Surjaningrom et al. 2022). In addition, many people still do not understand the difference between malnutrition and menstruation, so it is considered wrong.

The andragogy approach is a learning theory that emphasizes mature learning. Unlike more popular educational approaches, andragogy emphasizes life experiences, inner motivation, and the autonomy of adults in the learning process. Andragogy or the adult education approach was pioneered by Malcolm Knowles. Knowles identified several main principles that govern adult education. The application of andragogy principles in empowerment, especially in adult learning and skills development, will increase the effectiveness of empowerment programs (Feezel, 2018; Hiryanto, 2017).

To reduce stunting, an andragogical approach can be effectively implemented by using the discussion method, which aligns with adult learning principles. Unlike children, adults are less involved in socializing for the purpose of learning; instead, their participation is more structured and goal-oriented, driven by specific needs. This structured approach is essential to ensuring that educational programs targeting stunting reduction are not only applicable but also relevant to adult learners' lives.

In academic settings, adults typically focus on fulfilling their personal and professional identities, with learning serving as a means to achieve these goals. Given that adults come from diverse cultural backgrounds, their learning needs are varied, especially when it comes to addressing personal or community-related problems like stunting. They may face barriers to learning, such as fear or reluctance, particularly if the instructor is younger or perceived as less experienced. This emphasizes the need for careful consideration of the social dynamics between educators and adult learners.

According to the study's findings, adopting an andragogical approach, particularly through discussion-based methods, can empower adult learners to take more active roles in stunting reduction efforts. By facilitating dialogue and encouraging peer learning, this method can help adults feel more confident and capable of contributing to community health initiatives. Additionally, the study highlights the importance of understanding the social and cultural contexts in which adults operate, as these factors significantly influence their motivation and engagement in learning.

The implications of these findings are crucial for policymakers. Educational interventions aimed at reducing stunting must take into account the unique needs and barriers faced by adult learners. Tailoring programs to their specific contexts, while fostering a supportive and inclusive learning environment, can increase the effectiveness of such interventions. Furthermore, educators working with adults should be trained in the principles of andragogy, ensuring that they can facilitate learning in a way that is respectful of adults' experiences and knowledge.

## CONCLUSIONS

The andragogy approach to reducing stunting can be influenced by social support and community participation. Social support influences the andragogy approach in accelerating stunting reduction in Sibuaik Village, Tapung District with a large influence of 75.1%. Then community participation influences the andragogy approach in accelerating stunting reduction in Sibuaik Village, Tapung District with a large influence of 73.7%. Social support and community participation together influence the andragogy approach in accelerating stunting reduction in Sibuaik Village, Tapung District by 75.3% with a high interpretation

The andragogy approach in reducing stunting includes several components, namely; discussion method, demonstration method, simulation method, and training method. Adults who grow as individuals and have mature self-concepts move from dependence in childhood towards independence or self-direction. Adults learn effectively by involving left and right brain activities, using their intelligence and emotions, and using various sources, methods, techniques, and learning experiences.

## REFERENCES

- Akintolu, M. & Letseka, M. (2021). The andragogical value of content knowledge method: the case of an adult education programme in kwa-zulu natal province of south africa. *Heliyon*, 7(9). <https://doi.org/10.1016/j.heliyon.2021.e07929>
- Arif, Z. (2012). *Andragogi [Andragogy]*. Bandung: Penerbit Angkasa.
- Asnaningsih, A. (2018). Family Support Social Influence Theory Based on Improved Roy Adaptation and Stress Coping Mechanisms in Post-Stroke Patients.
- Atmojo, J. T., et al (2020). Intervensi Gizi dalam Penanganan dan Pencegahan Stunting di Asia: Tinjauan Sistematis [Nutrition Interventions in Stunting Management and

Prevention in Asia: A Systematic Review]. *Jurnal Keperawatan Global*, 5(1), 26–30. <https://doi.org/10.37341/jkg.v5i1.90>

- Azizah, N. L. (2019). Mathematical Modelling On Transportation Method Application For Rice Distribution Cost Optimization. *CAUCHY: Jurnal Matematika Murni dan Aplikasi*, 5(4), 195-202.
- Berliana, L. (2024). Dukungan sosial keluarga untuk meningkatkan pola pengasuhan pada pencegahan stunting [Family social support to improve parenting patterns in preventing stunting]. *ijmus*, 5(1), 8-14.
- Chandra-Mouli, V., & Patel, S. V. (2017). Mapping the knowledge and understanding of menarche, menstrual hygiene and menstrual health among adolescent girls in low- and middle-income countries. *Reproductive Health*, 14(1), 30. <https://doi.org/10.1186/s12978-017-0293-6>
- Charungkaittikul, S. & Henschke, J. A. (2017). Applying andragogical concepts in creating a sustainable lifelong learning society. *International Journal of Adult Vocational Education and Technology*, 8(4), 38-51. <https://doi.org/10.4018/ijavet.2017100104>
- Christina, C., et al (2022). Pola Asuh Orangtua Dan Kurangnya Gizi Anak Penyebab Stunting Di Desa Karangduwur, Kalikajar, Wonosobo [Parenting Patterns and Lack of Child Nutrition Cause Stunting in Karangduwur Village, Kalikajar, Wonosobo]. *Jurnal Pengabdian Masyarakat Madani (JPMM)*, 2(2), 188-195.
- Daryanto & Hery Tarno. (2017). Pendidikan Orang Dewasa [Adult Education]. Yogyakarta: Penerbit Grava.
- Feezel, J. (2018). The Evolution of Communication Pedagogy. *Journal of Communication Pedagogy*, 1(1), 3–8. <https://doi.org/10.31446/jcp.2018.02>
- Hiryanto, H. (2017). Pedagogi, Andragogi dan Heutagogi Serta implikasinya dalam pemberdayaan masyarakat [Pedagogy, Andragogy and Heutagogy and their implications for community empowerment]. *Dinamika Pendidikan*, 22(1), 65-71. <https://www.antaraneews.com/infografik/3366849/penurunan-angka-stunting-2022>
- Isaac, S., & Michael, W.B. (1981). Handbook in research and evaluation. California: Edits
- Khoirunnisa, Nida, & Roy Valiant Salomo. (2019). Keterlibatan Masyarakat Dalam Program Rumah Tidak Layak Huni (RTLH) Di Desa Pabedilankulon Kecamatan Pabedilan Kabupaten Cirebon [Community Involvement in the Uninhabitable

House (RTLH) Program in Pabedilankulon Village, Pabedilan District, Cirebon Regency]. *JPSI (Journal of Public Sector Innovations)*, 4(1):1. doi: 10.26740/jpsi.v4n1.p1-7.

- Kholifah, S. N., & Sari, N. N. (2020). Hubungan dukungan sosial dengan pencegahan stunting pada ibu balita : studi perbandingan berbasis sintesis literatur [The relationship between social support and stunting prevention in mothers of toddlers: a comparative study based on literature synthesis]. *Jurnal Keperawatan*.
- Knowles, M. S. (1980). *The modern practice of adult education: From Pedagogy to Andragogy*. [Wilton, Conn.]: Association Press; Chicago: Follett Publishing Company.
- Komalasari, K. (2012). The living values-based contextual learning to develop the students' character. *Journal of Social Sciencies*, 8(2), 246–251.
- Kurniati, P., et al (2022). Model Proses Inovasi Kurikulum Merdeka implikasinya bagi siswa dan guru abad 21. *Jurnal Citizenship Virtues*, 2(2), 408–423. <https://doi.org/10.37640/jcv.v2i2.1516>
- Kusumawardani, D. A., et al (2022). Peran Dan Kapabilitas Ibu Dalam Mencegah Stunting Pada Anak Di Kabupaten Jember. *Jurnal Mitra Rafflesia*, 14(2). <https://doi.org/10.15797/concom.2019..23.009>
- Lewis, N. and Bryan, V. (2021). Andragogy and teaching techniques to enhance adult learners' experience. *Journal of Nursing Education and Practice*, 11(11), 31. <https://doi.org/10.5430/jnep.v11n11p31>
- Mishra, N. R., S. K., et al (2019). Projecting stunting and wasting under alternative scenarios in Odisha, India, 2015-2030: a Lives Saved Tool (LiST) based approach. *BMJ Open*.
- Monofa, A. (2022). Analisis Partisipasi Masyarakat Dalam Mengikuti Program Vaksinasi Sebagai Penanggulangan Covid-19 Di Desa Batembat Kecamatan Pace Kabupaten Nganjuk [Analysis of Community Participation in Participating in the Vaccination Program as a Countermeasure to Covid-19 in Batembat Village, Pace District, Nganjuk Regency], (4):1421–34.
- Nisa, L. (2018). Kebijakan Penanggulangan Stunting Di Indonesia [Stunting Prevention Policy in Indonesia]. *Jurnal Kebijakan Pembangunan*, 13(2):173–79.

- Pratto, F., Sidanius, J., & Levin, S. (2006). Social dominance theory and the dynamics of intergroup relations: Taking stock and looking forward. *European Review of Social Psychology*, 17(1), 271–320. <https://doi.org/10.1080/10463280601055772>
- Rusdianah, E., & Widiarini, R. (2019). Evaluasi Program Indonesia Sehat dengan Pendekatan Keluarga (PIS-PK): Studi Kasus di Tingkat Puskesmas [Evaluation of the Healthy Indonesia Program with a Family Approach (PIS-PK): Case Study at the Health Center Level]. *Jurnal Kebijakan Kesehatan Indonesia: JKKI*, 8(4): 175–183.
- Sarafino. (2002). *Health psychology: Biopsychosocial interaction*. Fifth Edition.
- Surjaningrum, E. R., et al (2022). Peta Potensi Pengentasan Stunting di Kota Surabaya [Map of Potential for Stunting Eradication in Surabaya City]. *Media Gizi Indonesia*, 17(1SP), 97–103. <https://doi.org/10.20473/mgi.v17i1SP.97-103>
- Sutriyawan, A., et al (2020). Prevalensi Stunting dan Hubungannya Dengan Sosial Ekonomi. *Jurnal Kesehatan*, 11(3), 353–360.
- Tezcan, F. (2022). Andragogy or Pedagogy: Views of Young adults on the learning environment. *International Education Studies*, 15(1), 136. <https://doi.org/10.5539/ies.v15n1p136>
- Tilaar, H.A. (1997). Pengembangan Sumber Daya Manusia Dalam Era Globalisasi.
- Wati, N. B., et al (2020). Partisipasi Masyarakat dalam Pencegahan Stunting di Kabupaten Garut [Community Participation in Stunting Prevention in Garut Regency]. *Jurnal Ilmiah Ilmu Administrasi Negara*, 7(2), 333–349.
- Zireva, D. (2023). Perspective chapter: online courses – an antidote to traditional andragogy. *Massive Open Online Courses - Current Practice and Future Trends*. <https://doi.org/10.5772/intechopen.1001361>