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ANALYSIS OF THE INFLUENCE OF DEMOCRATIC PARENTING PATTERNS ON CHILDREN'S INTERPERSONAL COMMUNICATION USING SEM-PLS

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ABSTRACT

Humans are gregarious and lonely beings who must interact with one another to exchange thoughts, knowledge, or feelings. This can be done through written, oral, nonverbal, or gestural means. Interpersonal communication is the process of direct, in-depth communication between two people or a small group of people through distinctive touch and message exchange. Interpersonal communication is one of the communication skills that should be taught from an early age since effective communication is communication that other people can accept and understand. The process of direct, in-depth conversation between two or a small group of individuals via physical touch and message exchange is known as interpersonal communication. Particularly for kids between the ages of 10 and 12, when they are going through a phase of adjusting to their surroundings, including making friends, effective interpersonal communication is crucial. This study aimed to determine the effect of democratic parenting patterns on interpersonal communication in children aged 10-12 years. The research data were 59 children aged 10-12 years at SD Hidayatullah, Salak Village, Klawasi Village, Sorong City, Southwest Papua. This type of research is quantitative research with the PLS-SEM method. From the data analysis, it was obtained that the valid indicators were X.2, X.9, Y.2, Y.3, and Y.7. The results of the t-statistic value were 3.773, which was greater than the t-table value of 2.003 (3.773 > 2.003). This means that democratic parenting patterns of parents significantly influence interpersonal communication in children aged 10 to 12 years. The analysis results also obtained an f-square value of 0.237, which means that the democratic parenting pattern of parents has quite an effect on children's interpersonal communication.

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1. INTRODUCTION

The process of sharing ideas, information, or emotions amongst people by written, spoken, nonverbal, or gestural means is known as communication. Effective communication is that other people can accept and understand [21]. Since people are social beings that depend on one another, communication is essential amongst all individuals. Because people are both social and solitary beings, they need to communicate with one another to learn new things and grow. There are six types of communication, public communication, mass communication, interpersonal communication, group communication, intrapersonal communication, and organizational communication [25]. Face-to-face contact between two people is known as interpersonal communication, and it enables each party to directly perceive the reactions of others, both verbally and nonverbally. The most comprehensive and ideal kind of communication is seen to be interpersonal communication. Face-to-face communication, or interpersonal communication, enables each participant to directly observe the verbal and nonverbal responses of others. Interpersonal communication is the process of direct, in-depth communication between two people or a small group of people through distinctive touch and message exchange [22]. Only two people, such as a husband and wife, two friends, professors and students, parents, and kids, and so on, can communicate interpersonally. Interpersonal communication is the process of two or more people in a small group of people exchanging information and understanding one another [9].

Children must be taught how to communicate effectively and appropriately from an early age. Enhancing children's interpersonal communication skills and democratic parenting styles is one of the many ways parents may help them develop their abilities. Democratic parenting styles also place a high value on parents and children communicating in both directions. Children who are used to interacting with their parents in a home setting can develop the interpersonal communication skills necessary to interact with other people. Children between the ages of 10 and 12 are one segment of society that cannot avoid interpersonal communication activities. At that age, children are going through a phase of environmental adjustment, which includes making friends. Youngsters learn that communication is a key component of gaining acceptance in a group. They can also understand what other people are saying, and if they do not understand what their friends are saying, they often say something unrelated to what their friends are discussing, which makes them unpopular with their peers.

Good interpersonal communication is necessary for children between the ages of 10 and 12 since they are still becoming used to their environment and themselves. However, not all children can engage in interpersonal communication because some have communication difficulties. Children's lack of openness in discussion topics, their disregard for the other person, and their inability to concentrate when speaking with others are common issues. A lack of respect for classmates, a powerful sense of loneliness, and despair that impedes children's socialization skills due to parental emotional training are characteristics of interpersonal communication issues in children when they interact with their peers.

The impact of democratic parenting styles on children's interpersonal communication between the ages of 10 and 12 will be covered in this study. The Structural Equation Model (SEM) approach is one of several influence analysis techniques that can be applied in this situation. One modeling approach that is frequently used to deal with latent variables is the SEM method. Latent variables are those that are not directly observable. Covariance-based SEM, sometimes referred to as CB-SEM (Covariant Based-Structural Equation Model), and variance-based SEM, also known as Partial Least Squares Structural Equation Modeling (PLS-SEM), are the two variants of SEM. PLS-SEM is intended to construct predictive models and explain target outcomes as determined by in-sample and out-of-sample metrics, whereas CB-SEM is intended to test or validate a robust theoretical framework [9], [7], [13], [14], [15]. Furthermore, while CB-SEM is utilized for huge data, PLS-SEM can also be applied for little data. SEM, which is frequently used in social research, is based on variance [13]. Thus, to analyze the impact of democratic parenting styles on the interpersonal communication of children between the ages of 10 and 12, this study will address PLS-SEM. This research uses MIS Integral Hidayatullah students as a case study.

2. METHODS

Material and Data

The data used in this study were primary data of children aged 10-12 years at Hidayatullah Elementary School, Salak Village, Klawasi Subdistrict, Sorong City, Southwest Papua.

Table 1. Distribution of the study's population

Class	Gender		Total
	Men	Women	
5	11	20	31
6	17	12	29
Total			**59**

This study has an independent variable (X), parents' democratic parenting pattern, and a dependent variable (Y), students' interpersonal communication.

Table 2. Operational variables

No	Variable	Indicator	Description
1	Parents' Democratic Parenting Style	Controlled freedom	1. Freedom to make their own choices. 2. Provide direction and support when needed
		Reception	3. Parents show support and appreciation. 4. Support them in positive self-development
		Warmth	5. Give full attention. 6. Emotional support
		Discipline	7. Establish explicit guidelines. 8. Punish in moderation
2	Interpersonal Communication	Openness	9. Capable of verbalizing their emotions. 10. Be quite open to sharing your experiences
		Empathy	11. Capable of listening intently to what others are saying. 12. Capable of better comprehending the viewpoints of others
		Supportive Attitude	13. Demonstrate empathy for their friends' happiness or struggles. 14. Provide support when their friends or family members need it
		Positive Attitude	15. Convey ideas, feelings, and opinions honestly. 16. Build strong and supportive relationships with others

Research Method

The study is quantitative, and PLS-SEM is the data analysis technique employed. The data analysis methodology utilized in this research is the PLS-SEM. The stages of data analysis using PLS-SEM include (1) Analysis of the measurement model (outer model), (2) Analysis of the structural model (inner model), (3) Conversion of path diagrams to equations, and (4) Hypothesis testing.

Analysis of measurement models (outer model)

Verifying the validity and reliability of the measurement model is part of its evaluation. Convergent and discriminant validity checks are two types of validity checks. A measure of the strength of the

relationship between constructs and latent variables is called convergent validity. It is evident from the standardized loading factor value in the assessment of convergent validity. The standardized loading factor describes the degree of relationship that each measurement item (indicator) has with its construct. A loading factor value greater than 0.7 is nevertheless considered appropriate in empirical research experience. Consequently, a loading factor value less than 0.7 needs to be eliminated from the model. Furthermore, a discriminant validity check determines whether there is a correlation between a construct's questions and those that assess other constructs. The Average Variance Extracted (AVE) value is an additional indicator of convergent validity. The amount of variance or diversity of manifest factors that the latent construct can possess is indicated by the AVE value. For every research variable, the AVE value is more than 0.50. As a result, all research variables have demonstrated strong convergent validity [12], [17], and [19].

$$AVE = \frac{\sum \lambda_i^2}{\sum \lambda_i^2 + \sum_i var(\varepsilon_i)} \quad (1)$$

Next, use Cronbach's alpha and composite reliability (CR) scores to assess internal consistency reliability. Internal consistency is better measured by composite reliability than by Cronbach's alpha. Composite reliability is superior to Cronbach's alpha assessment in PLS-SEM because it does not assume the same boot of each indicator. The following formula can be used to express composite reliability:

$$CR = \frac{(\sum \lambda_i)^2}{(\sum \lambda_i)^2 + \sum var(\varepsilon_i)} \quad (2)$$

If the composite reliability number is greater than the 0.7 limit value, it is considered acceptable (CR > 0.7). The construct can be regarded as very dependable if the CR rating is more than 0.7.

Analysis of structural models (inner model)

We can utilize the path coefficient estimation along with the R^2, f^2, and Q^2 values to assess the inner model. The bootstrapping process yields the T value (T-value), which is then used to estimate the route coefficient. The following formula yields the Q^2 value [12], [17], [19]:

$$Q^2 = 1 - \frac{\sum_D E_D}{\sum_D O_D} \quad (3)$$

$$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2) \dots (1 - R_p^2) \quad (4)$$

where $R_1^2, R_2^2, \dots, R_p^2$ are the R-squares of endogenous variables in the equation model, D is the omission distance, E is the sum of squares of prediction errors, and O is the sum of square observations. The better the model, the closer the Q^2 value is to 1. The range is $0 < Q^2 < 1$. When the Q^2 the number is greater than zero, it indicates that the model is predictively relevant; when it is less than zero, it indicates that the model is not.

Conversion of path diagrams to equations

- Outer model (measurement model) of reflective relationship [21]:

$$x = \Lambda_x \xi + \delta_x \quad (5)$$
$$y = \Lambda_y \eta + \varepsilon_y \quad (6)$$

  The coefficient matrices Λ_x and Λ_y link latent variables with their indicators, δ_x and ε_y are residual measurement errors, and x and y are indicators associated with exogenous (ξ) and endogenous (η) latent variables.

- The structural model (inner model)

  A structural model uses theory to explain the link between latent variables, assuming that the variables have a causal and linear relationship. The structural model's mathematical equation can be expressed as follows:

$$\eta = \beta\eta + \Gamma\xi + \zeta \quad (7)$$

where ζ is the structural equation's error vector, η is the endogenous latent construct, ξ is the exogenous latent construct, and β and Γ are the coefficient matrices of the endogenous and exogenous variables.

Hypothesis testing

The bootstrap resampling method tests the hypotheses (ß, γ, and λ). The following statistical hypothesis [12] is supported by the test statistic, often known as the t-statistic or t-test:

a) Statistical hypothesis for the outer model:
   $H_1: \lambda_i \neq 0$
   $H_0: \lambda_i = 0$
b) Statistical hypothesis for inner model: exogenous latent variable versus 1 endogenous
   $H_1: \gamma_i \neq 0$
   $H_0: \gamma_i = 0$

3. RESULTS

Analysis of measurement models (outer model)

The validity and reliability tests are the two tests that make measurement model analysis. There are two types of validity tests in the measurement model, namely convergent validity, and discriminant validity.

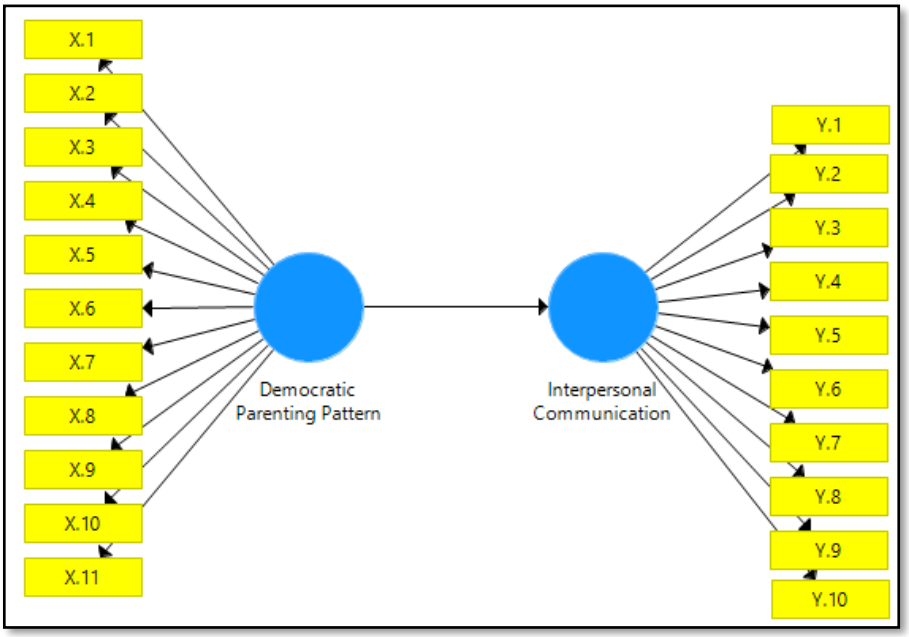

Figure 1. SEM-PLS path diagram

Convergent Validity

The loading factor and the Average Variance Estimated (AVE) value demonstrate the convergent validity test.

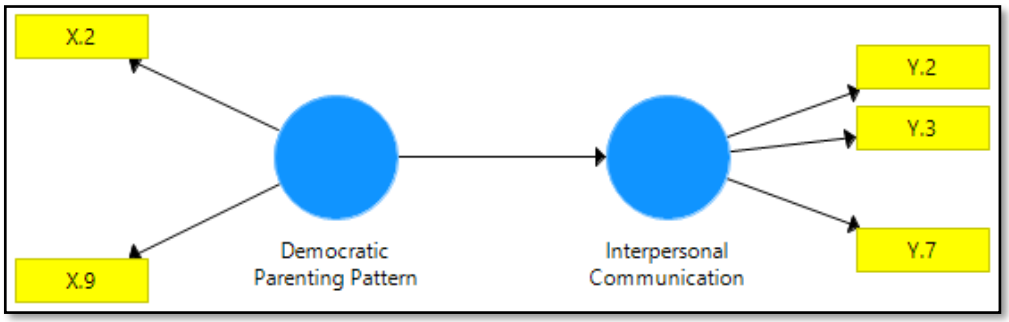

Figure 2. SEM-PLS path diagram with Loading Factor

It is evident from Figure 2 that several of the indicators have loading factor values below 0.7. Details of valid loading factors (higher than 0.7) are as follows:

Table 3. Loading Factor Values

Indicator	Outer Loading
X.2	0.765
X.9	0.823
Y.2	0.759
Y.3	0.809
Y.7	0.788

Table 4. Discriminant Validity

Construct	Interpersonal Communication	Democratic Parenting Pattern
Interpersonal Communication	0.786	
Democratic Parenting Pattern	0.438	0.795

Table 5. Outer model test results

Construct	CR	AVE
Interpersonal Communication	0.829	0.617
Democratic Parenting Pattern	0.774	0.631

Table 3 indicates that the loading factor value for indicators X.2, X.9, Y.2, Y.3, and Y.7 is higher than 0.6. Additionally, Table 5 displays the AVE value. According to Table 5, every build has an AVE value greater than 0.5. Examining the loading factor and AVE values has satisfied the convergent validation.

Discriminant Validity

According to the discriminant validity value in Table 4, all indicators have a cross-loading correlation value larger than 0.70 and a correlation on their constructions that is higher than the correlation on other constructs. Thus, discriminant validity is satisfied.

Reliability Test

The composite reliability value shows the results of the reliability test. If a construct's composite reliability (CR) value is higher than 0.7, it is deemed dependable. Table 5 demonstrates that every construct has a composite reliability value higher than 0.7, indicating that every construct is dependable.

Analysis of structural models (inner model)

R-square, F-square, and Q-square values can be used to examine the structural model. Look at this table.

R-square

Table 6. R-square Values

	R Square	R Square Adjusted
Interpersonal Communication	0.192	0.178

Table 6 indicates that the adjusted R square value is 0.192, meaning that democratic parenting practices can account for 19.2% of the interpersonal communication of children between the ages of 10 and 12 while other variables not included in the model (not observed) account for the remaining 80.8%.

Q-square

This is how the Q-square is calculated.

$Q^2=1-\left(1-R_1{}^2\right)\left(1-R_2{}^2\right)\left(1-R_3{}^2\right)...(1-R_n{}^2)$

$Q^2=1-(1-0{,}192)$

$Q^2=0{,}192$

As demonstrated by the $Q^2 > 0$ the score of 0.192, the model is predictively relevant.

F-square

Table 7. F-square Values

	Interpersonal Communication
Democratic Parenting Pattern	0.237

Table 7 indicates that the democratic parenting pattern construct has a f-square value of more than 0.35, indicating that it has a significant impact on the interpersonal communication of children between the ages of 10 and 12.

Conversion of path diagrams to equations

Conversion of path diagrams into equation form, namely:

Outer model
Interpersonal Communication = 0,765 X.2 + 0,823 X.9 + δ_x
Democratic Parenting Pattern = 0,759 Y.2 + 0,809 Y.3 + 0,788 Y.4 + ε_y

Inner model
Interpersonal Communication = 0,438 Democratic Parenting Pattern + ζ

Hypothesis testing

After that, perform five hundred repetitions of bootstrapping. The following outcomes were attained:

Table 8. Bootstrapping Result

	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Democratic Parenting Pattern → Interpersonal Communication	0.438	0.470	0.116	3.773	0.000

Table 8 shows that the democratic parenting pattern variable has a P-value of 0.000, which is less than 0.05. One could argue that interpersonal communication is significantly impacted by the democratic parenting pattern.

4. DISCUSSIONS

According to the study's findings, the variable of parenting patterns, which includes aspects such as controlled freedom, acceptance, warmth, and discipline, influences the variable of children's interpersonal communication, which includes aspects such as openness, empathy, supportive attitudes, and positive attitudes.

Based on the results of the hypothesis test research with 500 times bootstrapping, it produces a t-statistic value of 3.773, which is greater than the t-table value of 2.003, and a p-value of 0.000, which is smaller than 0.05, indicating that democratic parenting patterns influence interpersonal communication of children aged 10-12 years. These results are the same as the research conducted by Sari et al. (2021), which also examined the influence of democratic parenting patterns on the interpersonal Communication skills of children aged 10-12 years. The difference is that this study uses the PLS-SEM method, while Sari et al. uses the regression as the data analysis method.

Based on the results of the hypothesis test, the R-square value of the democratic parenting pattern variable on children's interpersonal communication is 0.192, and the original sample value is 0.438, which allows us to conclude that the coefficient value between democratic parenting and interpersonal communication has a positive value. This means that the higher the democratic parenting pattern is given, the higher the child's interpersonal communication. Democratic parenting patterns can influence children's interpersonal communication. This is following the factors that influence children's interpersonal communication, one of which is democratic parenting. Afiyah and Alucyana (2021) said that in the form of democratic parenting, in this parenting pattern, parents encourage their children to value independence and provide encouragement and praise but still provide limits and control over the actions that children do.

Furthermore, the influence is shown in the R-square value of 0.192, indicating that the democratic parenting style used by their parents' accounts for 19.2% of the variation in children's interpersonal communication skills. This means that parenting techniques that enable children to participate in decision-making and respect their perspectives help shape their ability to communicate effectively with others. These findings also show that 80.8% of the variation in children's interpersonal communication skills is impacted by factors other than the variables investigated in this study. These elements can include the educational environment, peer interactions, social media, personal qualities of children, genetics, and psychological considerations. Thus, while democratic parenting practices have a vital role, the development of children's interpersonal communication is still the consequence of the interaction of some complicated circumstances.

5. CONCLUSION

This study examines the democratic parenting patterns of parents who have children aged 10 – 12 years in Salak Village, Klawasi District, where based on the results of the study, it was found that there was a significant influence between democratic parenting patterns of parents on interpersonal communication of children aged 10-12 years in Salak Village. Although democratic parenting patterns of parents influence children's interpersonal communication, the influence is very small. Other aspects that influence children's interpersonal interactions can be observed and suggested for further research. In addition, for further research, mediating factors such as the environment or other factors that can increase children's self-confidence, especially children aged 10 – 12 years in Salak Village, Klawasi Subdistrict, Sorong City, Southwest Papua, can also be added.

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