

CHAPTER III

RESEARCH METHOD

A. Research Design

The type of research used in this research is census research. Census research is research that take one population group as a whole sample and using a structured questionnaire as the main data collection tool to get specific information.¹ Based on information, then this research is a type of census research with questionnaire assistance, where the respondents were all students of class VIII at SMP Negeri 6 Model Parepare.

B. Location and Time of Research

This research was conducted at Sekolah Menengah Pertama Negeri (SMPN) 6 Model Parepare. The location of this school is on Jl. Pendidikan Kelurahan Bukit Harapan, Kota Parepare, Sulawesi Selatan, 91132. This research was conducted during the COVID-19 outbreak so it was conducted online. The researcher examined seventh grade and eighth-grade students. In this study, researchers will provide questions to the sample via Google Form, because the current situation does not allow researchers to provide questionnaires directly due to the Covid-19 panic. This research will take a month.

A. Population and Sample

The population in this study were all students of class VIII at SMP Negeri 6 Model Parepare, totaling 60 students. While the sample in this study is total sample or all members of the population. This is because the research conducted

¹ Akbar & Usman. *Metode Penelitian Sosial*. (Jakarta: Bumi Aksara,2009)

is a census study where this method applies if members of the relatively small or easily accessible population.

Researchers used the Stratified Random Sampling technique to obtain representative data. In stratified random sampling, population elements are grouped at certain levels with the aim of sampling to be evenly distributed at all levels and the sample represents the character of all heterogeneous population elements. With Rasch Model data analysis technique, researchers distributed questionnaires to students via WhatsApp groups.

D. Instrument of the Research

1. Questionnaire

The success of research is largely determined by the instrument used, because the data needed to answer research questions. The main instrument for data collection in this study was a questionnaire that was formulated and designed based on variable indicators of the support of students' parents in the English learning process during the Covid-19 pandemic. Descombe states that a questionnaire is a way of collecting data using a list of questions designed to obtain information.

According to Descombe the questions in the questionnaire are divided into two types, namely open questions, and closed questions. Open-ended questions are short questions that require more elaboration to answer. Meanwhile, closed questions are questions whose answers have been provided and determined by the researcher, participants only choose one of the answers given. Generally, the answer choices consist of the answer "Yes" or "No",

"Male" or "Female", and so on.² This study used a closed questionnaire to find out how students' parents supported the learning process of English during the pandemic Covid-19.

The development of this instrument is based on a theoretical framework that has been prepared and further developed into indicators. The indicators are then translated into questionnaire items. The questionnaire used is a closed questionnaire, which is equipped with answer choices so that students just have to choose them. The answer to each research instrument uses a modified Likert scale with 4 alternative answers. The following is a grid of parent support variables:

Table 3.1 Parental support variable grid

No	Indikator	Grille	No. Item	Total
1	Emotional support in English learning	<ul style="list-style-type: none"> - Communication that occurs in the family. - The attention of parents to children 	2*,4*,5*,13*,15*,17,1 8*,21, 22,23,25	11
No	Indikator	Grille	No. Item	Total

² Descombe. M. "A Good Research Guide: For Small Scale Social Research". (London: McGraw Hill, 2007)

		when experiencing problems. - Parents' concern for children's learning outcomes.		
2	Cognitive support in English learning	- The form of assistance provided by parents - The advice given by parents	7*,11,12*	3
3	Material support in English learning	- A form of appreciation given by parents. - Instructions given by parents	1,3,8,14,19,20, 6,9*,10,16*,24	11
The total number of item				25

Source: David E. Jacobson. "Types and Timing of social Support"

*: negative value item number.

Table 3.2 Answer Alternative Score

Scale	An affirmative Statement	Negative Statement
	Score	Score
Always	4	1
Often	3	2
Sometimes	2	3
Never	1	4

A. Technique of Data Analysis

Data analysis in this case, the researcher will use the Rasch Model data analysis technique. Many researchers use this analysis, one of which is Wahyu Hidayat in his research entitled "Analysis of the National Character Senior High School Student by Using Rasch Model"³ and "Academic Dishonesty of Muslim Students Using Rasch Model Measurement".⁴ This model is a one-parameter item response theory (IRT) model that presupposes that each item is a difficulty parameter. This model also arranges abilities and items based on difficulty.⁵ The Rasch model also converts raw data to interval data with the same value between units and other units.

³ Wahyu Hidayat, Sri Mulianah, Mujahidah. *Analysis of the National Character Senior High School Students by Using Rasch Model. Indonesia*; INCRE, 2019.

⁴ Wahyu Hidayat, Nur Asmawati Lawahid. *Academic Dishonesty of Muslim Students Using Rasch Model Measurement. Bandar Lampung-Indonesia*; ICETLAWBE, 2020.

⁵ Bond, T.G & Fox, C.M., *Applying the Rasch Model: Fundamental Measurement in the Human Sciences. (New York: Routledge, Edisi Ke-3. 2015), p.56*

The basic principle underlying the Rasch model is the probability of the respondent to answer any item correctly based on the difficulty of the item and the respondent's ability. The following is an analysis with the Rasch model:

1. Reliabilitas Item dan responden (Item and Person Reliability)

The item reliability index means that the difficulty of the item is the same as other samples that have the same ability.⁶ Meanwhile, the reliability index of the respondents means that the individual abilities in this sample are consistent even though they are given another instrument that measures the same construct. The maximum reliability index value is one. This value indicates high reliability. The item and respondent reliability index received was ≥ 0.80 .⁷ This is in accordance with the opinion of Fischer (2007) that the item reliability index and respondents who were well received were > 0.80 . The reliability criteria, namely 0.94 (special).⁸

2. Polariti Item (Point Measure Correlation)

Polarity analysis or item suitability is an indicator used to show items used to move in one direction intended by the construct being measured. Polarity analysis uses the point measure correlation (PMC) analysis technique or point measure correlation, which is a technique to produce items that actually match the measured construct. The PMC 1.0 value indicates that all respondents with low ability answered the item

⁶ Right, B. D., & Linacre, J. M. *Reasonable Mean-Square Fit Values. (Rasch Measurement Transactions, 1994)*, p. 370-371.

⁷ Bond, T.G & Fox, C.M. *Applying the Rasch Model: Fundamental Measurement in the Human Sciences.* (New York: Routledge, 2015), p.45

⁸ Fisher, W.P.J. *Rating Scale Instrument Quality Criteria. Rasch Measurement Transactions* (21(1) 2007). p.95.

incorrectly and all respondents with high ability answered the item correctly. The index of PMC values received is between 0.4 and 0.85.⁹ Meanwhile, Alagumalai et al. (2005) categorized PMC values into five, namely: >0.4 (special), $0.3 - 0.39$ (good), $0.20 - 0.29$ (sufficient), $0.00 - 0.19$ unable to distinguish, and <0.00 (need to re-check items).¹⁰



⁹ Azrilah A.A., Mohd Saidfudin M. & Azami Z. *Asas Model Pengukuran Rasch: Pembentukan Skala dan Struktur Pengukuran*. (Bangi: Universiti Kebangsaan Malaysia. 2013), p.76

¹⁰ Alagumalai, S., Curtis, D.D. & Hungi, N. (editors). *Applied Rasch Measurement: Book of Exemplars. Papers in honour of John P. Keeves*. (Dordrecht: Springer. 2005), p24