The Connection Between Students' Grammar Mastery of Simple Past Tense and Their Speaking Ability in Recount Text at SMP Muhammadiyah 10 Sidoarjo

[Hubungan Antara Penguasaan Tata Bahasa Siswa dalam Simple Past Tense dan Kemampuan Berbicara Mereka dalam Teks Recount di SMP Muhammadiyah 10 Sidoarjo]

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Abstract. Learning English, like other languages, consists of receptive skills including listening and reading and productive skills such as reading and speaking. One of the most challenging components of acquiring a language is speaking skills. This study aims to establish whether a correlation exists between SMP Muhammadiyah 10 Sidoarjo students' knowledge of the simple past tense and their speaking abilities in the recount text throughout the 2022/2023 academic year. This research is a quantitative correlative type of research. This research is quantitative correlational in nature. Students in class XI at SMP Muhammadiyah 10 Sidoarjo Indonesia were the subject of this investigation, which consisted of 45 students. The researcher gave two types of tests, namely a grammar test and a speaking test. The grammar test carried out in the form of a multiple-choice written test. While the speaking test carried out orally by instructing students to tell their past activities directly. Data were analysed using Pearson r-product moment correlation. Based on the research, it found that there is positive correlation between students' simple past tense grammar mastery and their speaking ability in recount text.

Keywords - simple past tense; grammar mastery; recount text; speaking ability.

I. INTRODUCTION

Gunantar asserted that English has evolved into a global language used not just by native speakers but also by non-native speakers [1]. According to McKay, "As a global language, English is utilized for international communication between countries and as a language of broader communication within multilingual communities" [2].

According to Marijana, learning English, like other languages, consists of receptive skills, including listening and reading, as well as productive skills, such as reading and speaking [3]. Sadiku stated that Four skill-building activities in the language classroom serve multiple purposes, including scaffolded support and opportunities to generate new ideas, contexts for using the language in real-world information exchanges, evidence of their own abilities (proof of learning), and most crucially, confidence in the world [4].

Speaking is one of the most essential abilities for language learners should acquire. This is because most of the communication we do is oral, according to Palmer [5]. According to Jati, speaking is a skill to properly and correctly employ language to convey ideas, feelings, and opinions to impart or receive information and expertise from other communicators [6]. As one of the necessary language abilities, speaking is a skill that is quite complicated to master. This is in line with what was expressed by Fattah, besides the importance of speaking skills, but some still have difficulty in their speaking performance [7].

Brown stated that speaking is a skill that can be observed directly and empirically [8]. Speaking in class involves interaction between students and teachers as well as between fellow students [9]. So, it can be ascertained if, in speaking, it always involves both parties, namely the information provider and the information receiver. Brown further said that speaking consists of some basic types, such as imitative, intensive, responsive, interactive, and extensive [8]. Each basic type of speaking has its own function and purpose according to its usage. Brown also stated that there are six elements to effective speaking that have to comprehend, it included pronunciation, grammar, vocabulary, fluency, comprehension, and task [8]. Meanwhile, Harris stated that there are five components that have to be concerned in speaking ability, those are comprehension, grammar, vocabulary, pronunciation, and fluency [10].

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He also stated that the classification to determine the level of ability to speak consisted of excellent, good, average, and poor.

There are several things that need to be mastered before we can start to speak well and fluently. According to Socheath, several things need to be considered in learning speaking skills, these include Vocabulary, Part of Speech, Pronunciation, Expression, Sentence Structure, Grammar (Tense), Other skills- listening, reading, writing, as well as nonverbal communication such as eye contact, gesture, and facial expression etc [11]. In addition, Chastain revealed that speaking is a productive talent involving a number of components, including grammar, sociolinguistics, strategy, and discourse [12]. Meanwhile, Mazouzi stated learners should pay attention to grammatical structures, vocabulary, and pronunciation when speaking to ensure the accuracy and fullness of language form [13]. From the explanation, the conclusion can be drawn that speaking is a process that necessitates numerous aspects and skills to master.

Grammar is essential because it is a component of language that allows a person to be able to express ideas, opinions, and feelings, both spoken and written. Richards and Schmidt define grammar as a description of a language's structure and how its linguistic components interact, such as words and phrases combined to make a sentence [14]. Morenberg's statement reveals that if a student has a good mastery of grammar, then they will be able to compose words into an understandable sentence [15]. Besides that, Latha said that grammatical competence could assist speakers in appropriately applying and perceiving the English language's morphology, leading to fluency [16]. Therefore, grammar can be said to have an important role in learning speaking skills.

Fluency and accuracy are critical components of a communicating approach, according to Leong and Ahmadi [17]. Speaking requires accuracy to convey opinions or thoughts to be more easily understood. According to Tuan and Mai, learning English through speaking must include an aspect of accuracy. Furthermore, several components, such as grammar, pronunciation, and vocabulary, are required to achieve speaking accuracy [18]. EFL students should understand words and sentences. Leong stated that They need to comprehend how words are broken down into distinct sounds and how sentences are emphasized in various ways [17]. As a result, accuracy and fluency are essential when conversing with others because they can understand each other.

There are several issues that students frequently encounter when learning grammar and speaking. Some students are quite capable of mastering grammar, but they struggle to master speaking skills. Some people struggle to master their speaking skills because they are concerned about making grammatical errors when communicating in English. Some students are afraid of making grammatical errors and pronunciations when they are about to speak, according to Soraya [19]. Some students who are good at speaking also have good grammar skills.

According to Yulianti, in speaking skills, students must express their ideas and knowledge in a certain type of text [20]. Based on the 2013 curriculum English syllabus, there are several types of texts that must be studied by 8th-grade students in junior high school. One type of text is recount text. A recount text, as stated by Saragih, is one that tells the order of occurrences that occurred in the past. Recount also gives the reader a description of when and what happened [21].

To be able to pour their ideas and thoughts into a recount text and then say it in the form of a conversation. Students are required to know the linguistic and structural characteristics of the narrative text. According to Dirgeyasa, a recount text's general structure generally includes orientation, the record of the events, and re-orientation [22]. Meanwhile, according to Gerot and Wignel, the language features of recount texts include a focus on specific participants, using the past tense, the use of material processes, and a focus on temporal sequences [23]. The simple past is used to define events happened in past, according to Taufiq [24]. From the statement above, to be able to communicate in recount text, students must master the simple past tense.

Based on the observation conducted at SMP Muhammadiyah 10 Sidoarjo, researchers conducted interviews with two English Teachers. Based on the interview, students have some difficulties in speaking in recount text. These difficulties include learning the simple past tense; students experience difficulties in determining when to use the appropriate simple past tense; besides that, students also experience difficulties in determining whether V2 is regular or irregular. Teachers also said that in speaking performance in recount text, some students experienced difficulties in using the correct tense according to the type of text. Students sometimes still do not use the simple past properly and correctly in telling things in the past. Besides tenses, Husna stated that students' speaking skills are also influenced by self-confidence and imperfect pronunciation [25].

Several previous studies are thought to be relevant to this topic. The first is the one by Alharthil entitled "Investigating the Relationship Between Vocabulary Knowledge and FL Speaking Performance" [26]. The purpose of this study is to offer empirical information obtained to evaluate a measure of useful vocabulary knowledge and how well it connects with and predicts speaking success. The second is the research conducted by Wulantari et al. l, entitled

"The Correlation Between Students' Grammar Mastery and Their Speaking Ability of Eleventh Grade Students at SMA Negeri 2 Mendoyo in the Academic Year Of 2019/2020" [27]. The result revealed that a correlation exists between a student's command of grammar and his or her speaking abilities in the SMA Negeri 2 Mendoyo for the 2019/2020 school year. The third study is by Sarip Hidayatullah [28], entitled "The Correlation Between Students' Grammar Mastery and Their Speaking Accuracy at The First Semester of The Tenth Grade of SMAN 01 Leming Pesisir Barat in The Academic Year of 2016/2017". This study found a correlation between students' understanding of grammar and their speaking correctness in the first semester of tenth grade at SMAN 1 Lemong Pesisir Barat during the 2016-2017 school year.

The research gap and novelty of this study in comparison to other studies are as follows: In the first study undertaken by Alharthil [26], vocabulary knowledge and its connection with speaking ability are investigated. At the same time, this study's objective is to determine if there is a connection between grammar proficiency and speaking ability. In the second study done by Wulantari and colleagues [27], the connection between students' grasp of grammar and their speaking abilities was investigated. The difference lies in this study's general focus on grammar and speaking skills. In contrast, our study focuses on the command of the simple past tense and the capacity to talk in recount texts. In the third study done by Hidayatullah [28], the relationship between students' grasp of grammar and their speaking correctness was investigated. While the focus of this study is on mastery of the simple past tense and the capacity to talk in recount texts, other studies have focused on mastery of the present tense.

According to the above explanation, the researcher considers that this problem deserves to be investigated and considers the benefits that will be obtained from this research activity, both for the researchers themselves and for English Subject Education actors, namely all teachers and students who are directly or indirectly involved in this study. Therefore, the researcher submitted research entitled: The Connection Between Students' Grammar Expertise of Past Simple and Their Recount Text Speaking Ability at SMP Muhammadiyah 10 Sidoarjo. The objective of this research is to find the connection between students' grammar mastery in simple past tense and their speaking ability in recount text at SMP Muhammadiyah 10 Sidoarjo.

II. METHOD

This study employs a quantitative research methodology. According to Cresswell, A quantitative approach examines the relationship between multiple variables to test an objective theory[29]. The researcher employed a correlation research design in this study. This is due to the researcher's goal of determining the connection between pupils' mastery of grammar in simple past tense and their speaking abilities in recount text. According to Wallen and Fraenkel, correlation research is research that seeks to discover how two or more variables are related to one another, as well as their causes and effects [30].

This study was conducted at SMP Muhammadiyah 10 Sidoarjo during the 2022/2023 academic year. SMP Muhammadiyah 10 Sidoarjo is on the Sungon highway in Suko, Kec. Sidoarjo, and Kab. Sidoarjo. Two kinds of instruments were used by researchers to collect data. The instrument consists of a simple past tense grammar mastery test and a speaking ability test in recount text. The population were consisted of 45 eight grade students.

The simple past tense grammar mastery test is carried out in writing by giving students multiple choice questions consisting of four answer choices, namely (A, B, C, and D). Students are required to select the answer they think is correct. The questions consist of three types of sentences, namely affirmative, negative, and interrogative. This is in accordance with what Azar disclosed [31]. This is also in accordance with the opinion of Taufiq and Mandarini that the simple past consists of affirmative, negative, interrogative and negative interrogative [32]. To determine the validity of the grammar mastery instrument, The researcher conducted try out to determine the instrument's validity and reliability, according to Arifin [33]. The researcher uses Pearson Bivariate correlation. After that, the researcher conducts a reliability test to establish whether the device can be relied upon or reliable. The researcher employed the Alpha Cronbach formula to determine the reliability of the instrument [33]. The instrument is valid if $r_{count} > r_{table}$. Assessment in this test is done by awarding one point for each successful response and 0 points for incorrect responses. This test is used to measure students' grammar skills in simple past tense.

The speaking ability test in recount text was carried out orally to determine students' speaking ability in recount text. The test was conducted in collaboration between researcher and the teachers. Students are instructed to share their experiences about what activities they did in the last semester break. Students are welcome to share their experiences during the holidays with a duration of 2-3 minutes. To make the speaking test valid, the researcher asked for opinions from experts about the validity of the speaking test to be tested. The assessment is carried out using the theory from Brown [34], which divides six scales to evaluate speaking accuracy. Those are pronunciation, grammar, vocabulary, fluency, comprehension, and task.

After carrying out two types of tests to measure students' grammar mastery in the simple past tense and to measure their speaking ability in recount text, the researcher analyzed students' scores from both tests using r-Product moment. According to Kurtz and Mayo, the Pearson product-moment coefficient of correlation is a pure number that ranges between + 1.00 and -1.00, expressing the degree of relationship between two variables[35]. Meanwhile, according to Sugiyono, Product-moment correlation is used to find correlation and support the relationship hypothesis when the data sources for the two or more variables are the same if the data for the two or more variables are presented as intervals or ratios [36]. Cahyaning stated that, without considering the influencing variables or influencing variables, correlation analysis is only employed to prove the existence of a connection between two variables [37]. This analysis is done to see if there is a connection between a student's ability to speak in recount texts and their mastery of the simple past tense grammar. According to Sugiyono, Supranto and Cahyaning, the equation for calculating the correlation coefficient is stated as follows [38][37][36].

$$R_{xy} = \frac{n.\Sigma xy - (\Sigma x).(\Sigma y)}{\sqrt{(n.\Sigma x^2 - (\Sigma x)^2)(n.\Sigma y^2 - (\Sigma y)^2)}}$$
 Df = n-2

Description:

Rxy : the product-moment correlation index value "r"

n : amount of students

 Σxy : the sum of scores x and y

 Σy : the sum y-scores Σx : the sum x-scores

After calculating the "r" product moment correlation index number between x and y variables, The following stage involves interpreting the "r" value. The following metric is utilized by Sugiyono to interpret the value of r [39][36].

 The interval of the correlation coefficient
 Interpretation

 0,80 - 1,000
 Very high

 0,60 - 0,799
 High

 0,40 - 0,599
 Enough

 0,20 - 0,399
 Low

 0,00 - 0,199
 Very low

Table 1. Correlational Value Interpretation

The above table explains the Correlational Value Interpretation; there are five interpretation categories, according to Sugiyono[36]. The Very Low category denotes a very weak correlation between two variables. A low category indicates that the correlation between variables is not particularly weak. Enough category indicates that the correlation between variables is in the middle, not weak but not strong. A high category shows that the correlation between variables is strong enough. A high category indicates a highly significant correlation between variables.

III. FINDINGS AND DISCUSSION

A. Findings

This research was conducted at SMP Muhammadiyah 10 Sidoarjo, which is located at Jalan Raya Sungon, Suko, Kec Sidoarjo and Kab. Sidoarjo in the 2022-2023 academic year. There are two types of instruments used in this study; the first is the simple past tense grammar mastery test which is an Examination consisting of multiple-choice questions consisting of four answer choices, namely a, b, c, and d, in each question and consists of 29 questions. The second instrument is a test of students' speaking ability in recount text which is carried out orally where students are required to tell their experiences during the school holidays. The simple past tense grammar mastery test is used to measure students' ability to master grammar, especially in the simple past tense. While the recount text speaking ability test is employed to gauge students' ability to speak, especially in the context of recount text.

There are three results in this study; they are students' grammar mastery in simple past, students' recount text speaking ability and the relationship between students' simple past tense grammar mastery and students' ability to speak in recount text.

1. Students' Grammar Mastery in Simple Past Tense

A multiple-choice exam containing 29 questions in total was administered to students to assess students' grammar mastery in the simple past tense. Each accurate item earns one point, while each erroneous thing earns zero points. The maximum score is $3.45 \times 29 = 100.05$, rounded to 100.

Based on the appendix, the students' grammar mastery result is observable in the descriptive statistic table below:

Table 2. Descriptive Statistic of Simple Past Tense Grammar Mastery

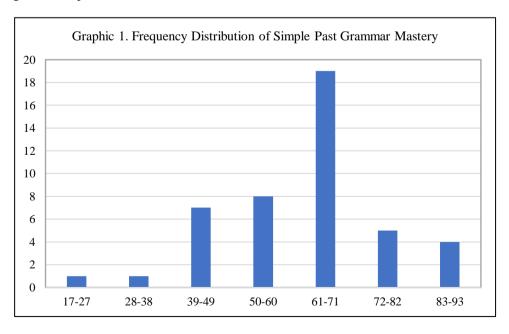
n	Min	Max	R	Mean	K	I
45	17	93	76	62,023	7	11

According to the statistics description table above, the least student score in the simple past tense grammar mastery test is 17, the maximum score is 93, the range of values is 76, the number of classes is 7, and the class length is 11.

Table 3 Frequency Distribution for Simple Past Tense Grammar Mastery

Class Interval	Frequency	Percentage
17-27	1	2,22 %
28-38	1	2,22 %
39-49	7	15,56 %
50-60	8	17,78 %
61-71	19	42,22 %
72-82	5	11,11 %
83-93	4	8,89 %
Total	45	100 %

Based on the frequency distribution of simple past grammar mastery, it is known that the class with the highest mastery of grammar has a frequency distribution with a range of 61-71, 19 students, and a percentage of 42.22 per cent.



According to the frequency distribution table 3 and the frequency graphic 1 above, 1 student received a score 17-27, 1 student received a score 28-38, 7 students received a score 39-49, 8 students received a score 50-60, 19 students received a score 61-71, 5 students received a score 72-82, and 4 students received a score 83-93. The overall average was 62,023. It denotes that the pupils' simple past tense grammar mastery was in the medium range.

In the students' simple past tense grammar mastery variable, three levels of categorization were carried out, namely low, moderate, and high. With the three-level categorization guide formula according to Azwar[40][41]. The purpose of categorization is to divide individuals into distinct categories based on their measured attributes along a continuum. [40].

Table 4. Simple Past Tense Grammar Mastery Categorization

Class Interval	Frequency	Percentage	Category
Score < 47,451	6	13,33 %	Low
$47,451 \le Score < 76,451$	33	73,33 %	Moderate
76,451 ≤ Score	6	13,33 %	High

According to the above data, the students' simple past tense Grammar Mastery Score, which is 13,33% of it, falls under the high category. (6 students), the moderate category is 73,33 % (33 students), and the low category is 13,33 % (6 students). As a result, it can be said that the student's mastery of grammar falls into the "moderate" group at the value range of 47,451 to $76,451.47,451 \le \text{Value} < 76,451$.

2. Students Recount Text Speaking Ability

To assess pupils' speaking ability in recount text, The speaking ability test in recount text was carried out orally. Students are instructed to share their experiences about what activities they did in the last semester break. Students are welcome to share their experiences during the holidays with a duration of 2-3 minutes.

Based on the appendix, the speaking ability of students' results are exhibited in the descriptive statistic table below:

Table 5. Descriptive Statistic of Recount Text Speaking Ability

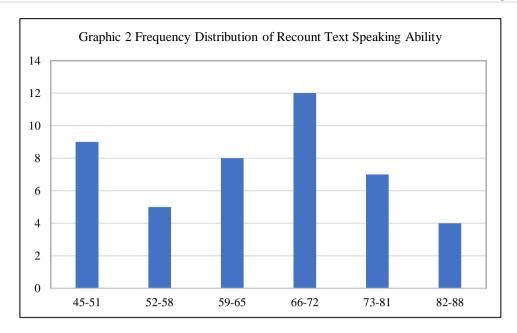
n	Min	Max	Range	Mean	K	I
45	45	87	42	64,778	7	6

According to the statistics description table above, the least student score in the simple past tense grammar mastery test is 45; the maximum score is 87, the range of values is 42, the number of classes is 7, and the class length is 6.

Table 6. Frequency Distribution for Simple Past Tense Grammar Mastery

Interval Class	Frequency	Percentage
45-51	9	20.00 %
52-58	5	11.11 %
59-65	8	17.78 %
66-72	12	26.67 %
73-81	7	15.56 %
82-88	4	8.89 %
Total	45	100.00 %

Based on the frequency distribution of simple past grammar mastery, it is well known that the interval class, which has a total of 12 students and with percentage of 26,67%, has the largest frequency distribution of grammar mastery, with a range of 66 to 72.



According to the frequency distribution table 4 and the frequency graphic 2 above, 9 students received a score 45-51, 5 students received a score 52-58, 8 students received a score 59-65, 12 students received a score 66-72, 7 students received a score 73-81, 4 students received a score 82-88, The overall average was 64,778. It denotes that the pupils' recount text speaking ability was in the medium range.

In the recount text speaking ability variable, three levels of categorization were carried out, namely low, moderate, and high. With the three-level categorization guide formula according to Azwar[40][41]. The goal of categorization is to divide students into distinct groups along a continuum based on the characteristics that are being measured [40].

Table 7. Recount Text Speaking Ability Categorization

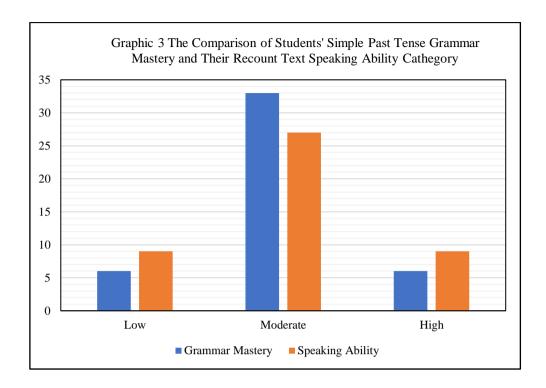
Class Interval	Frequency	Percentage	Category
Score < 52,7108	9	20 %	Low
$52,7108 \le Score < 76,8447$	27	60 %	Moderate
76,8447 ≤ Score	9	20 %	High

Based on the preceding table, the Grammar Mastery Score, which falls within the high category, is 20 % (9 students), the moderate category is 60 % (27 students), and the low category is 20 % (9 students). Therefore, it can be concluded that the students' mastery of grammar falls within the moderate cathegory at the interval $52,7108 \le \text{Value} < 76,8447$.

According to the preceding table, the Grammar Mastery Score falls into three categories: high (20%), moderate (60%) and low (20%). The high category includes nine students, the moderate category includes 27 students, and the low category includes 9 students. As a result, it can be said that the student's mastery of grammar falls into the moderate group at the interval $52,7108 \le \text{Value} < 76,8447$.

3. The Comparison Between Students' Simple Past Grammar Mastery and Their Speaking Ability in Recount Text

To make it easier to compare the scores of students' grammar mastery and students' score of speaking ability, the researcher presents the results of the comparison of the two in a bar chart which can be seen below:



From the comparison chart above, The difference between the number of students in each category. In this study, the data is divided into three categories, namely, low, moderate, and high. The graph indicates that there are 6 students who have the low ability in mastering simple past tense grammar, and there are 9 students with inadequate speaking ability in recounting text. In the moderate category, there were 33 students in the grammar mastery variable and 27 students in the speaking ability variable. Besides that, there are 6 students with high grammar mastery skills in simple past tense and 9 students with high speaking skills in recounting text.

4. Analysis of Correlation

In this study, the researcher employed the product moment correlation formula for analyzing the connection. This correlation technique is used to identify relationships and validate the relationship hypothesis between two interval- or ratio-based variables, and The two sources of variable data are identical [36]. The researcher proposed the hypothesis that there is a positive connection between students' simple past tense grammar mastery and students' recount text speaking ability at SMP Muhammadiyah 10 Sidoarjo.

a. Normality Test

First, the research data is checked for normality before performing a correlation analysis to establish the connection between the two variables. According to Nuryadi et al., a test of normality is a process used to evaluate whether data is from a population with a normal distribution. or is in a normal distribution[33][42]. According to Aunillah, data normality is particularly significant since data with a normal distribution might represent a research population[33]. Meanwhile, Sugiyono said that by assuming that the data for each study variable to be investigated follows a normal distribution, Data could be analyzed using parametric statistics [36]. As a result, before employing parametric statistical analysis tools, researchers must first establish whether the data to be examined has a normal distribution or not.

The test of normality was performed on research data, specifically the simple past tense grammar mastery and recount text speaking ability tests administered to 45 students in VIII-A and VIII-B classrooms. The researcher employed the Liliefors normality test to assess the normality of research data. According to Nuryadi et al. and Udin, the normality test lilies can be calculated using

the formula $L_{count} = Max [F(Zi) - S(Zi)][33][42]$. The researcher also carried out a normality test with the SPSS application with the Kolmogorov-Smirnov Test with lilies Significance Correction.

The outcome of the basic simple past tense grammar mastery test normality test:

Table 8. Normality Test Results of Simple Past Tense Grammar Mastery Test

Statistic	Statistic Score
Population Size	45
Mean	62,023
Standard Deviation	14,572
$L_{ m count}$	0,11605
$L_{ m table}$	0,13208

Based on the outcomes table of the Liliefors normality test calculation for simple past tense grammar mastery data above, an average value of 62,023 was reached with a total of 45 pupils. The calculation also shows that $L_{count} = 0,11605$ and $L_{table} = 1,251[43]$ with a significance level of = 0.05. Based on these results, it is possible to determine whether $L_{count} < L_{table}$, which may be interpreted if hypothesis H0 is accepted, implying that the simple past tense grammar mastery test variable data is normally distributed.

The outcome of the Simple past tense grammar mastery normality test using SPSS:

Table 9. The output of Normality Tests

	Kolmogorov-Smirnov ^a			Shap	piro-Wilk	ζ
	Statistic	df	Sig.	Statistic	df	Sig.
Grammar_Mastery	0.120	45	0.100	0.969	45	0.270

a. Lilliefors Significance Correction

According to the above calculation, it was obtained that the value of Asym Sig. = 0,100. Because of the Asymp. The value of significance is 0,100 > 0.05; then, the data distribution is considered normally distributed. The following are the findings of the normality test on the data recount text of the speaking ability test:

Table 10. The Outcomes of the Normality Test of Recount Text Speaking Ability Data

Statistic	Statistic Score
Population Size	45
Mean	65
Standard Deviation	12,0669
L _{count}	0,09346
L_{table}	0,13208

According to the table of results of the normality test computation for Liliefors data simple past tense grammar mastery above, with 45 students in total, the mean value of 65 was obtained. From the calculation, it is also known that the value of $L_{count}=0.09346$ and $L_{table}=0.13208[43]$ with a significance level $\alpha=0.05$. based on these data, it is known if $L_{count} < L_{table}$, which can be interpreted if hypothesis H_0 is approved, which means that the simple past tense grammar mastery test variable data is normally distributed.

The outcome of the recount text speaking ability normality test using SPSS:

Table 11. The output of Normality Tests

	Kolmogorov-Smirnov ^a				piro-Wil	k
	Statistic	df	Sig.	Statistic	df	Sig.
Speaking_Ability	0.119	45	0.121	0.955	45	0.077

a. Lilliefors Significance Correction

According to the above calculation, it was obtained that the value of Asym Sig. = 0.121. Because of the Asymp. The significance value is 0.121 > 0.05; then, the data distribution is considered normally distributed.

b. Homogeneity Test

According to Nuryadi, the homogeneity test is a statistical test procedure that determines whether or not several sets of research data have the same variance. [42]. Or it can be said that homogeneous data means that the data set has the same characteristics. The homogeneity test also serves to provide certainty that the data sets analyzed in a series of analyzes come from populations whose diversity is not much different[42]. In addition, according to Usmadi, homogeneity of variance tests is needed before making comparisons of two or more groups so that distinctions are not caused by variations in fundamental data, such as the inhomogeneity of the groups being compared[44].

Homogeneity test in this research used the Harley test. The homogeneity test of variance with the Harley formula can be used if the number of samples between groups is the same[44]. With decision criteria are as follows:

- H_0 is accepted if $F_{count} < F_{table}$ with $\alpha = 0.05$ and dk = n 1
- H_0 is rejected if $F_{count} > F_{table}$ with $\alpha = 0.05$ and dk = n 1

Table 12. Result of Homogeneity Test

Statistics	Varia	able	
	Grammar Mastery	Speaking Ability	
Sample Size	45	45	
Variance	212,3454	145,6111	
F _{count}	1,45	583	
Ftable	1,6509		
Decision	$F_{\text{count}} < F_{\text{table}}, H_0 \text{ is accepted};$	the data was homogenous	

From the homogeneity test calculation table with Harley's theory, by making a comparison between the largest variant and the smallest variant, it is known that the value of $F_{\text{count}} = 1.4583$. In addition, it is also known that the F_{table} value is obtained from table $F_{0.05(44.44)}$. F_{table} value = 1.6509. By comparing the values of F_{count} and F_{table} , it is known if the value of $F_{\text{count}} < F_{\text{table}}$. So the conclusion can be drawn that the variable data on grammar mastery and speaking ability are homogeneous.

The researcher also uses *Lavene* Homogeneity Test to determine the homogeneity of grammar mastery and speaking ability variable data using the SPSS program. The decision criteria of *the Lavene* Homogeneity Test are as follows:

- If the value of significance is > 0.05, then the distribution of the data is homogeneous.
- If the value of significance is < 0.05, then the distribution of the data is not homogeneous

The outcome of the *Lavene* Homogeneity test using SPSS:

Levene df2 Statistic df1 Sig. Result of Grammar Test Based on Mean 0.270 88 0.605 and Speaking Test Based on Median 0.296 0.588 1 88 Based on the Median and with 0.296 80.213 0.588 adjusted df Based on trimmed mean 0.273 1 88 0.603

Table 13. The output of the Lavene Test for Homogeneity of Variances

According to the results of the Levene test for homogeneity calculation table above, The obtained significance value was 0.605. Because the value of significance is 0,605 > 0.05, then the distribution of the data was regarded as homogeneous.

c. Hypothesis Test

To determine the connection between students' simple past tense grammar mastery and students' recount text speaking ability, the researcher employed the Correlation of Pearson Product Moment. Because, Sugiyono stated that The product-moment correlation is used to discover relationships and demonstrate the relationship hypothesis between the two variables if the data for the two variables are in the form of intervals or ratios and the data sources for the two or more variables are the same [36]. This is in accordance with Cahyanings' statement that analysis of correlation is used solely to establish the association between two variables[37]. The two variables are students' simple past tense mastery of grammar as x variable and students' recount text ability to speak as y variable.

The hypothesis:

- H₀: There is a connection between students' simple past grammar mastery and students' recount text speaking ability.
- H₁: There is no connection between students' simple past grammar mastery and students' recount text speaking ability.

The test criteria of decision:

- H_0 is accepted if $r_{count} > r_{table}$ at $\alpha = 0.05$ and n = 45 and dk = (n-2) = (45-2) = 43
- H_0 is rejected if $r_{count} < r_{table}$ at $\alpha = 0.05$ and n = 45 and dk = 43

The calculation of Pearson product-moment correlation:

$$\begin{array}{ll} n = 45 & \Sigma x = 2793 \\ \Sigma y = 2915 & \Sigma x^2 = 182691 \\ \Sigma y^2 = 195207 & \Sigma xy = 188014 \end{array}$$

•
$$\Gamma_{xy} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{(n \sum x^2 - (\sum x)^2)(n \sum y^2 - (\sum y)^2)}} = \frac{45 \cdot 188014 - 2793 \cdot 2915}{\sqrt{(45 \cdot 182691 - 2793^2)(45 \cdot 195207 - 2915^2)}}$$

$$= \frac{8460630 - 8141595}{\sqrt{(420246) \cdot (287090)}}$$

$$= \frac{319035}{\sqrt{120648424140}}$$

$$= \frac{319035}{347344,820229}$$

$$= 0.918496$$

• $r_{\text{table}} = r_{((0.05):43)} = 0.301$ (obtained from table *Product moment* r value[36])

The output of the SPSS program's Pearson Product Moment Correlation calculation:

Table 14. The Output of Pearson Product Moment Correlation Calculation

		Grammar Mastery	Speaking Ability
Grammar Mastery	Pearson Correlation	1	.918**
	Sig. (2-tailed)		0.000
	N	45	45
Speaking Ability	Pearson Correlation	.918**	1
	Sig. (2-tailed)	0.000	
	N	45	45

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Table 15. Result of Product Momment Correlation

Product Moment Correlation (rcount)	$r_{\text{table}}(r_{((0,05);43)})$	Category
0,9184	0,301	Very High

The Pearson Product Moment Correlation calculation reveals the connection between variable x (the mastery of simple past tense grammar) and variable y (recount text speaking ability. It was obtained that the value of the product moment " r_{count} " value was 0,918496, which was then rounded to 0,918. Meanwhile, the value of the r_{table} obtained 0,301. From the calculation was also found that the value of $r_{count} > r_{table}$, which is 0.918 > 0,301. Because $r_{count} > r_{table}$, H_0 is accepted. This indicates that there is a connection between students' simple past tense mastery of grammar and their recount text abilities to speak at SMP Muhammadiyah 10 Sidoarjo.

Furthermore, to identify the category of connection between the two variables, the result of the Product Moment Correlation (r_{count}) calculation is classified into the *Product Moment* Correlation Interpretation table. From the results of this classification, it was found that the value of $r_{count} = 0.918$ is in the value interval between 0.80 - 1.000 with a Very High interpretation value. So, It can be said that there is a connection between the two variables, with a very high interpretation value.

B. Discussion

This section presents a discussion by the researcher of the findings of the research that has been done. This study aims to determine whether a connection exists between students' simple past tense mastery of grammar and students' recount text speaking ability at SMP Muhammadiyah 10 Sidoarjo. Based on the findings in the study, a positive connection was found between students' simple past tense mastery of grammar and students' recount text speaking ability. The research was conducted with a population of 45 students from VIII-A and VIII-B classes in the 2022-2023 academic year.

To measure students' mastery of grammar variables in the simple past tense, the researcher gave students written grammar tests. The written test consists of 29 multiple-choice questions consisting of four choices for each question. The questions contain material about grammar, especially containing simple past tense material. The results of the written test measuring grammar abilities found that 1 student scored 1-17, 1 student scored 28-38, 7 students scored 39-49, 8 students scored 50-60, 19 students scored 61-71, 5 students scored 72-82, and 4 students scored 83-93. The results of the grammar mastery test were then grouped into three categories based on the scale expressed by Azwar[40], [41]. The categories are high, moderate, and low. From the research results, it was found that 6 students (13.33%) received low scores, 33 students (73.33%) received moderate scores, and 6 students (13.33%) received high scores. Thus, it can be determined that the student's mastery of grammar was in the moderate category, with an average score of 62.023.

Another variable examined in this study is students' recount text speaking ability. To measure students' ability to speak in recount text. A speaking test, which was carried out orally, was held by the researcher. Students are required to tell their experiences during school holidays in English in front of the class. Each student is required to share their experiences with a minimum duration of 2 minutes and a maximum duration of 3 minutes. Then an assessment of students' speaking abilities in recount text was carried out in collaboration with the teacher. The assessment was carried out based on the Speaking Ability assessment criteria by Brown; the assessment criteria included pronunciation, grammar, vocabulary, fluency, comprehension, and tasks[34]. From the results of the oral speaking examinations that have been conducted, it was found that 9 students (20%) scored 45-51, 5 students (11.11%) scored 52-58, 8 students (17.78%) scored 59-65, 12 students (26.67%) scored 66-72, 7 students (15.56%) scored 73-81, 4 students (8.89%) scored 82-88. Then the data on the results of the speaking test were grouped into 3 categories according to Azwar [37], [38]. The categories consist of high, moderate, and low. After grouping, it was found that 9 students (20%) were included in the low category, 27 students (60%) were in the moderate category, and 9 students (20%) were in the high category. Consequently, it is possible to conclude that the students' grammar mastery was in the moderate category, with an average score of 64.7778.

After getting the test results data from both variables, the researcher conducted a correlation analysis. First, the two data variables were subjected to a normality test to determine if the data were distributed normally. Obtained was normally distributed or not. This is important because, before employing parametric statistical analysis tools, researchers must first establish whether the data to be examined has a normal distribution or not. The Liliefors test of normality was used in this research. On the test of normality for the grammar mastery variable, $L_{count} = 0.11605$ and $L_{table} = 1.251$ with a significance level of = 0.05 were obtained. Based on these results, it is possible to determine whether $L_{count} < L_{table}$, which may be interpreted if hypothesis H_0 is accepted, implying that the simple past tense grammar mastery test variable data is normally distributed. Furthermore, the researcher also conducted a normality test on the speaking ability variable. from these tests, the value of $L_{count} = 0.09346$ and $L_{table} = 0.13208$ with a significance level $\alpha = 0.05$ is obtained, based on these data, it is known if $L_{count} < L_{table}$, which can be interpreted if hypothesis H_0 is approved, which means that the simple past tense grammar mastery test variable data is normally distributed.

Furthermore, the researcher also conducted a Homogeneity test to determine whether multiple sets of research data have the same variance. The test of homogeneity in this study used the Harley test and the *Lavene* test, which was carried out using Excel and SPSS calculations. In the Harley test, it was found that the value of $F_{count} = 1.4583$. In addition, it is also known that the F_{table} value is obtained from table $F_{0.05(44.44)}$. F_{table} value = 1.6509. By comparing the values of F_{count} and F_{table} , it is known if the value of $F_{count} < F_{table}$. So, it can be concluded that the variable data on grammar mastery and speaking abilities are homogeneous. Whereas in the *Lavene* Test using SPSS, it was found that a significance value of 0.605 was obtained. Because the value of significance is 0.605 > 0.05, then the distribution of the data was considered homogeneous.

To find out the connection between the two variables, namely students' simple past tense grammar mastery and students' recount text speaking ability, the researcher used *Pearson Product Moment*. According to the calculations that have been done, it was obtained the value of the product moment " r_{count} " value was 0.918496, which was then rounded to 0.918. Meanwhile, the value of the r_{table} obtained from the calculation was also found that the value of $r_{count} > r_{table}$, which is 0.918 > 0.301. Because $r_{count} > r_{table}$, H_0 is accepted. This indicates that there is a connection between students' simple past tense mastery of grammar and their recount text speaking abilities at SMP Muhammadiyah 10 Sidoarjo. Furthermore, to ascertain the category of connection between the two variables, the Product Moment Correlation (r_{count}) calculation results are classified into the Product Moment Correlation Interpretation table. From the results of this classification, it was found that the value of $r_{count} = 0.918$ is in the value interval between 0.80 - 1.000, with a very high interpretation value. So, the two variables can be concluded to have a positive connection with the interpretation value category was very high.

IV. CONCLUSION

According to the findings of the research conducted at SMP Muhammadiyah 10 Sidoarjo, with the population being all eighth-grade students. It was found that students' grammar mastery in simple past tense with a percentage of 73.33 percent, it was in the moderate range. and students' speaking ability in recount text was also in the moderate category with a percentage of 60%. In addition, the conclusion is that there is a positive connection between student's grammar mastery and their speaking ability in simple past tense and the connection between the two variables is in a

very strong category. This is reflected in the correlation coefficient's result value (r_{xy}) of 0.918 which is greater than the value (r_{table}) of 0.301 and the r_{xy} value which lies in the range of 0.80 - 1.000. So, it can be concluded that there is a very strong positive connection between students' grammar mastery in simple past tense and their speaking ability in recount text at SMP Muhammadiyah 10 Sidoarjo. It means that the higher the students' mastery of grammar in the simple past tense, the better the student's ability to speak in recount text and the lower the level of the mastery of students with simple past tense grammar, the less their ability to speak in recount text. This is consistent with proposed theory by Tuan and Mai that, grammar is required to achieve speaking accuracy [18]. In addition, this is also in accordance with the theory of Gerot and Wignel that, recount texts' linguistic characteristics include using the past tense [23].

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REFERENCES

- [1] D. Angga Gunantar, "LANGUAGE CIRCLE: Journal lof Language and Literature X/1 (THE IMPACT OF ENGLISH AS AN INTERNATIONAL LANGUAGE ON ENGLISH LANGUAGE TEACHING IN INDONESIA," vol. 1, no. April, pp. 141–151, 2016, [Online]. Available: http://journal.unnes.ac.id
- [2] L. Alsagoff, S. L. Mckay, G. Hu, and W. A. Renandya, *Principles and Practices for Teaching English as an International Language*. Oxford: Oxford University Press., 2002.
- [3] A. M. Marijana Ivančić, "Receptive_and_productive_language_skills (1)." pp. 1–14, 2014. [Online]. Available: https://www.academia.edu/15220943/Receptive_and_productive_language_skills_in_language_teaching
- [4] L. M. Sadiku, "The Importance of Four Skills Reading, Speaking, Writing, Listening in a Lesson Hour," *Eur. J. Lang. Lit.*, vol. 1, no. 1, p. 29, 2015, doi: 10.26417/ejls.v1i1.p29-31.
- [5] E. Palmer, *Teaching The Core Skills Of Listening & Speaking*. Alexandria: ASCD, 2014. [Online]. Available: https://repository.uinjkt.ac.id/dspace/bitstream/123456789/33731/1/SITI MUALIYAH-FITK-PBI.pdf COPY.pdf WATERMARK.pdf
- [6] A. J. Laksana, "The Effectiveness of Using Chain Story Game in Teaching Speaking (an Experimental Research at The Eighth Grade Students of SMP Negeri 1 Jatilawang in The Academic Year 2015/2016)," pp. 5–17, 2016, [Online]. Available: http://repository.ump.ac.id/2221/3/CHAPTER II_ANITA JATI LAKSANA_PBI%2716.pdf
- [7] shiamaa abd E. F. Torky, "The Effectiveness of a Task- Based Instruction program in Developing the English Language Speaking Skills of Secondary Stage Students A thesis Supervised by," *Ain shams Univ. women's Coll. curricula Methods Teach. Dep.*, pp. 1–254, 2014, doi: 10.1200/JCO.2005.05.4296.
- [8] H. D. Brown, *Language Assessment Principles and Classroom Practices*, vol. 4, no. 1. San Francisco: Longman, 2004. [Online]. Available: https://evelintampubolon.files.wordpress.com/2016/09/h_douglas_brown_-_language_assessment.pdf
- [9] K. Azlina, Eliwarti, and Novitri, "A study on the speaking ability of the second year students of SMK Telkom Pekanbaru," *J. Online Mhs. Fak. Kegur. dan Ilmu Pendidik. Univ. Riau (JOM FKIP UNRI)*, pp. 1–13, 2015, [Online]. Available: https://media.neliti.com/media/publications/206186-none.pdf
- [10] D. P. Harris, *Testing English as a Second Language*. New York: Mc. Graw. Hill Book Company, 1974. [Online]. Available: http://kin.perpusnas.go.id/DisplayData.aspx?pId=27222&pRegionCode=JIUNMAL&pClientId=111
- [11] M. Socheath, "Simple Ways to Improve English Speaking in Teaching and Learning," *Leksika*, vol. 4, no. 2, pp. 66–67, 2010, [Online]. Available: https://core.ac.uk/download/pdf/234097557.pdf

- [12] J.-P. Berwald and K. Chastain, *Developing Second Language Skills: Theory to Practice*, Second., vol. 61, no. 4. Boston, 1977. doi: 10.2307/324832.
- [13] S. Mazouzi, "Analysis of some factors affecting learners' oral performance a case study: 3 rd year pupils of Menaa's middle schools," *A Diss.*, pp. 1–95, 2013, [Online]. Available: http://archives.univ-biskra.dz/bitstream/123456789/4772/1/PEOPLE1.pdf
- [14] J. C. Richards and R. W. Schmidt, "Longman Dictionary of Language Teaching and Applied Linguistics," *Longman Dict. Lang. Teach. Appl. Linguist.*, 2013, doi: 10.4324/9781315833835.
- [15] M. Max, *Doing Grammar*, Fifth. New York: OXFORD UNIVERSITY PRESS, 2014.
- [16] B. M. Latha and P. Ramesh, "Teaching English as A Second Language: Factors Affecting Learning Speaking Skills," *Int. J. Eng. Res. Technol.*, vol. 1, no. 7, pp. 1–6, 2012, [Online]. Available: https://www.ijert.org/research/teaching-english-as-a-second-language-factors-affecting-learning-speaking-skills-IJERTV1IS7046.pdf
- [17] L. Leong and S. M. Ahmadi, "An Analysis of Factors Influencing Learners' English Speaking Skill," *Int. J. Res. English Educ.*, vol. 2, no. 1, pp. 34–38, 2017, [Online]. Available: https://ijreeonline.com/article-1-38-en.html
- [18] N. H. Tuan and T. N. Mai, "Factors affecting students' speaking performance at Le Thanh Hien high school," *Asian J. Educ. Res.*, vol. 3, no. 2, pp. 8–23, 2015, [Online]. Available: http://www.multidisciplinaryjournals.com/wp-content/uploads/2015/03/FACTORS-AFFECTING-STUDENTS'-SPEAKING.pdf
- [19] R. Soraya, "THE CONTROBUTION OF GRAMMAR MASTERY TOWARD SPEAKING ABILITY OF SECOND YEAR STUDENT AT MAN 2 MODEL PEKANBARU," (*Doctoral Diss. Univ. Islam Negeri Sultan Syarif Kasim Riau*), 2012, [Online]. Available: http://repository.uin-suska.ac.id/9486/1/2012_2012331.pdf
- [20] Y. Yulianti, S. Sudarsono, and E. Susilawati, "the Use of Video Blog To Teach Speaking of Recount Texts," *J. Pendidik. dan* ..., 2018, [Online]. Available: https://jurnal.untan.ac.id/index.php/jpdpb/article/view/25781%0Ahttps://jurnal.untan.ac.id/index.php/jpdpb/article/viewFile/25781/75676576853
- [21] N. Saragih, R. Silalahi, and H. Pardede, "The Effectiveness of Using Recoount Text to Improve Writing Skill For Grade III Students of Kalam Kudus Elementary School 2 Pematangsiantar," *IOSR J. Humanit. Sci.*, vol. 19, no. 1, pp. 6–14, 2014, [Online]. Available: https://dupakdosen.usu.ac.id/bitstream/handle/123456789/64805/Effectiveness.pdf?sequence=1&isAllowed=y
- [22] I. W. Dirgeyasa, "Genre-Based Approach: What and How to Teach and to Learn Writing," *English Lang. Teach.*, vol. 9, no. 9, p. 45, 2016, doi: 10.5539/elt.v9n9p45.
- [23] L. Gerot and P. Wignel, "Making Sense of Functional Grammar," in *Making sense of functional grammar*, B. N. P. S. Khajati, Ed. Queensland: AEE Publishing, 1994, p. 191. [Online]. Available: https://www.academia.edu/36344944/MAKING_SENSE_OF_FUNCTIONAL_GRAMMAR_GEROT_WIGNELL_CHAPTER_1
- [24] W. Taufiq, *Advanced English Grammar for EFL Learners*, Septi Budi. Sidoarjo: UMSIDA PRESS, 2018. doi: 10.21070/2018/978-602-5914-08-9.
- [25] Z. F. Husna, "The Influence of Students' Pronunciation and Self-Confidence on Their Speaking Ability," UIN Walisongo Semarang, 2021. [Online]. Available: https://eprints.walisongo.ac.id/id/eprint/14397/1/SKRIPSI_1703046106_ZUMALA_FAJRIYATUL_HUSN_A.pdf
- [26] T. Alharthi, "Investigating the Relationship Between Vocabulary Knowledge and FL Speaking Performance," *Int. J. English Linguist.*, vol. 10, no. 1, p. 37, 2019, doi: 10.5539/ijel.v10n1p37.
- [27] I. P. A. A. Putra, N. P. M. D. Pendit, and N. P. Wulantari, "The Correlation Between Students' Grammar Mastery and Their Speaking Ability of Eleventh Grade Students at SMA Negeri 2 Mendoyo in the

- Academic Year Of 2019/2020," *J. Mhs. Pendidik.*, vol. 3, no. 1, pp. 61–61, 2021, [Online]. Available: http://jurnal.ikipsaraswati.ac.id/index.php/mahasisya-pendidikan/article/view/267
- [28] S. Hidayatullah, "The Correlation Between Students' Grammar Mastery and Their Speaking Accuracy at The First Semester of The Tenth Grade of SMAN 01 Lemong Pesisir Barat in The Academic Year of 2016/2017," State Islamic University of Raden Intan, 2018. [Online]. Available: http://repository.radenintan.ac.id/4611/1/SKRIPSI FIX.pdf
- [29] J. W. Creswell, "A Framework for Design. Research design: Qualitative, quantitative, and mixed methods approaches," *Polit. Sci. Polit.*, vol. 44, no. 04, pp. 183–233, 2003.
- [30] N. E. Wallen, Jack R. Fraenkel, "How to Design and Evaluate Research in Education," *New York McGraw-hill*, vol. 7, p. 429, 2012, doi: 10.1007/978-1-4899-7993-3 80736-1.
- [31] B. S. Azar and S. A. Hagen, Understanding and Using English Grammar, Fifth. 2019.
- [32] W. Taufiq and V. Mandarani, *Let 'S Learn Progressively*. Sidoarjo: UMSIDA PRESS, 2016. [Online]. Available: http://eprints.umsida.ac.id/6414/1/buku lets learn english.pdf
- [33] A. Arifin, Moch. Bahak Udin By; Aunillah, *Buku Ajar Statistik Pendidikan*. Sidoarjo: UMSIDA PRESS, 2022. doi: https://doi.org/10.21070/2021/978-623-6292-33-4.
- [34] H. D. Brown, "anguage Assessment: Principles and Classroom Practices," Pearson Longman, 2004, pp. 1–61. [Online]. Available: https://www.academia.edu/8014898/2_Assessing_Speaking_excerpts_from_by_H_D_Brown_Language_Assessment_Principles_and_Classroom
- [35] A. K. Kurtz and S. T. Mayo, "Pearson product moment coefficient of correlation." Statistical Methods in Education and Psychology," New York: Springer-Verlag Inc, 1979, pp. 192–193. doi: 10.1007/978-1-4612-6129-2 8.
- [36] Sugiyono, *Statistika Untuk Penelitian*, vol. 12. Bandung: CV Alfabeta, 2007. [Online]. Available: https://www.academia.edu/36006415/Dokupdf_com_ebook_statistik_untuk_penelitian_by_prof_dr_sugiyon o
- [37] W. Sulistiyowati and C. C. Astuti, *Statistika Dasar Konsep dan Aplikasinya*, Second. Sidoarjo: UMSIDA PRESS, 2017. [Online]. Available: https://press.umsida.ac.id/index.php/umsidapress/article/view/978-979-3401-73-7/787
- [38] J. Supranto, Statistik Teori dan Aplikasi. Jakarta: Erlangga. Jakarta: Erlangga, 2008.
- [39] Sugiyono, Metode Penelitian Pendidikan. Bandung: CV. Alfabeta, 2013.
- [40] S. Azwar, Metode Penelitian. Yogyakarta: Pustaka Pelajar, 2012.
- [41] S. Azwar, "Kelompok Subjek Ini Memiliki Harga Diri Yang Rendah"; Kok, Tahu...?," *Bul. Psikol.*, vol. 1, no. 2, pp. 13–17, 1993, doi: 10.22146/bpsi.13160.
- [42] Nuryadi, T. D. Astuti, E. S. Utami, and M. Budiantara, *Buku Ajar Dasar-dasar Statistik Penelitian*. Yogyakarta: Sibuku Media, 2017. [Online]. Available: http://eprints.mercubuana-yogya.ac.id/id/eprint/6667/1/Buku-Ajar_Dasar-Dasar-Statistik-Penelitian.pdf
- [43] S. Landau and B. S. Everitt, *A Handbook of Statistical Analyses Using SPSS*, vol. 11, no. Book Review 2. New York: Chapman & Hall/CRC, 2004. doi: 10.18637/jss.v011.b02.
- Usmadi, "Pengujian Persyaratan Analisis (Uji Homogenitas dan Uji Normalitas)," *Inov. Pendidik.*, vol. 7, no. 1, pp. 50–62, 2020, [Online]. Available: http://eprints.umsb.ac.id/246/1/Usmadi R16 UM Sumbar.pdf

Conflict of Interest Statement:

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.