

# THE EFFECTIVENESS OF GRAMMARLY APPLICATION ON STUDENTS' ACCURACY IN WRITING

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## Abstract

*This research aims to know whether any significant difference in writing scores between students who use Grammarly application and do not use Grammarly application. The method in this study used quantitative research. The design of this research was quasi-experimental design. There was two group used in the research; the experimental group and control group. The research instrument was in the form of writing test. The data analysis was using ANCOVA by using Statistical Package for the Social Science (SPSS). The result shows that there is a significant difference score on students' writing before and after using Grammarly application. It shows that the experimental group's mean result is higher than the control group. The experimental group displayed 74.333 mean, and the control group displayed 57.001, it means that the experimental group gives more good results than the control group. In addition, the result shows that the value of significance (sig.2-tailed) was 0.000. It indicates the value of significance is .000 lower than 0,05. This value indicates that the experimental group and control group scores are significant. The result significant of the value indicated that the null (H0) is rejected and the alternative hypothesis (Ha) is accepted. Based on the findings from this research, it is proved that using Grammarly checker give advantages in writing and gives the significant result on the students writing ability in X MIPA 1 of Senior High School 3 Bangkalan academic year 2021/2022.*

**Keywords:** Grammarly Application, Writing, Accuracy in Writing

## Abstrak

*Penelitian ini bertujuan untuk mengetahui apakah ada perbedaan yang signifikan dalam nilai menulis antara siswa yang menggunakan aplikasi Grammarly dan yang tidak menggunakan aplikasi Grammarly. Metode dalam penelitian ini menggunakan penelitian kuantitatif. Desain penelitian ini adalah quasi-experimental design. Ada dua kelompok yang digunakan dalam penelitian ini; kelompok eksperimen dan kelompok kontrol. Instrumen penelitian berupa tes menulis. Analisis data menggunakan ANCOVA dengan menggunakan Statistical Package for the Social Science (SPSS). Hasil penelitian menunjukkan bahwa terdapat perbedaan skor yang signifikan pada kemampuan menulis siswa sebelum dan sesudah menggunakan aplikasi Grammarly. Hal ini menunjukkan bahwa rata-rata hasil kelompok eksperimen lebih tinggi dari pada kelompok kontrol. Kelompok eksperimen menunjukkan rata-rata 74,333, dan kelompok kontrol 57,001, artinya kelompok eksperimen memberikan hasil yang lebih baik dari pada kelompok kontrol. Ditambah lagi, hasil menunjukkan bahwa nilai signifikansi (sig.2-tailed) adalah 0,000. Hal ini menunjukkan nilai signifikansi .000 lebih rendah dari 0,05. Nilai ini menunjukkan bahwa skor kelompok eksperimen dan kelompok kontrol signifikan. Hasil signifikan dari nilai tersebut menunjukkan bahwa nol (H0) ditolak dan hipotesis alternatif (Ha) diterima. Berdasarkan temuan dari penelitian ini, terbukti bahwa penggunaan Grammarly checker memberikan keuntungan dalam menulis dan memberikan hasil yang signifikan terhadap kemampuan menulis siswa di kelas X MIPA 1 SMA Negeri 3 Bangkalan tahun ajaran 2021/2022.*

**Kata Kunci:** Aplikasi Grammarly, Menulis, Ketepatan Dalam Menulis

## A. INTRODUCTION

One of the most important language skills nowadays is writing skill. Through written language, people can express their ideas, feeling and opinions to others with a text. Writing also considered as the most difficult language skills Compared to other language skills, and the most challenging to learn. This skill needs a lot of practice and habituation (Munawwaroh, 2016) Not just the capacity to put words together into a sentence, but must also be aware of the preposition, grammar, context, and other factors. Improving grammar abilities is one approach to increase writing skills. Since writing skill is the most difficult language skills and the difficulties that occur in writing activity makes student become less enthusiasm in learning writing (Vitalis et al., 2021).

Another difficulty that most of EFL learners experience in learning English is accuracy. Accuracy refers to student's ability to produce language that is target-like and error-free. To acquire

accuracy in term of vocabulary mean to select appropriate word in the contexts. Some EFL learners often applying the similar words in various contexts. So, they should be able to use words correctly in the right context (Razavi, 2016). The researcher found that the students of SMAN 3 Bangkalan often do mistake in writing such as writing is seen as a challenging talent for a number of reasons, including limited grammar, difficult word choice, and fear of making mistakes. Also, they often do misspelling, misplaced the punctuation, ignored the capitalization and they were lazy and bored if the researcher asked them to write something. In addition, some of them were unsure about what to write. As result, developing structural accuracy is particularly important in writing task because the student has time to focus on written text with the goal final version.

Technology has now become an important part of our daily lives. Technological advances development has spread in many sectors, including education. The existence of technology offers significant advantages to the development of education itself. Technology has changed and offered new ways in teaching and learning process become more interesting, and easy (Dewi Nuro', 2019). In learning English as a foreign language, it is needed tools and media to help the students learning a language effectively. Technology can be used as a tool to support language learning to become effective and positive if it is used correctly likewise, the use of technology in writing (Dewi Nuro', 2019). The students need technology as a tool to identify mistakes and other language errors in their writing. One of the technology that can help students learning activities, especially language learners, is an application to check grammar. As a result, the existence of a grammar checker in writing is incredibly helpful in identifying mistakes and other language errors in their writing. Today, the development of online grammar checkers is seen as the solution to this problem (Perdana, 2019).

A grammar checker can be sed as tool to enhance grammar accuracy. A grammar checker can help student to find grammar errors in the text because the tool automatically recognizes and provides feedback toward the error. It can easily fix spelling mistakes, grammar mistakes and other punctuation mistakes like an apostrophe, comma, etc (Vitalis et al., 2021). So, this application is highly recommended for students to help the in writing. Grammar checker process helps students think about their writing. Grammar checker also detect spelling errors of the words. To determine whether statements are grammatically correct these days. The students could apply online grammar checkers such as Grammarly (Razali et al., 2018). To minimize students' accuracy and difficulties in learning writing skills, implementing this application in teaching writing give alternative solution to build students' knowledge because this application can detect language errors in their writing so, students can find and correct the wrong sentences (Umu & Hotmaria, 2018). The students write their writing then consult their writing produce to Grammarly. This application was choosen because it easy to use and can be opened by smartphones and computer. Students can learn how to using Grammarly as an online grammar checker due to this study.

There are so many grammar checkers that are used to identify mistakes and other language errors in writing, such as Paper Rater, Language Tool, White Smoke, Pro Writing Aid, Grammarly, etc. In this research, the researcher choses Grammarly for grammar checker. The researcher chooses this grammar checker because Grammmarly is good tool that can helps students identify mistakes and others language errors in their writing. Also, Grammarly application is effective to help teachers and learners in correcting EFL writing (Ghufron & Rosyida, 2018). A popular online grammar checker called Grammarly is free for private users. It can enhance vocabulary by identifying and correcting contextual errors. By using Grammarly, the learners can easily fix spelling mistakes, grammar mistakes and other punctuation mistakes like an apostrophe, comma splice, etc. Another advantage is the tool helped to improve the learners writing style and also includes some other powerful features in premium edition, such as vocabulary improvement and plagiarism detection (Dewi Nuro', 2019).

This research was believed to be success since there were a number of researchers who conducted research using Grammarly Checker Application. Ghufron & Rosyida (2018), according to the study's findings, students whose work is assessed using Grammarly make significantly errors than students whose work is assessed by a teacher. This application is shown to be more effective to reduce the errors in term of vocabulary usages (diction), language use (grammar), and mechanics of writing (spelling and punctuation). On the other hand, it is less successful to increase the quality and structure of students' EFL writing. Moreover, another study conducted by Dewi Nuro' (2019), Writing Quality of the Fourth Semester of English Department at IAIN Tulungagung. The result of this research confirmed that there is significant effect of using Grammarly checker towards x students' writing quality of the

fourth semester of English department at IAIN Tulungagung. The last study was conducted by Vitalis et al. (2021), application in checking grammar in writing narrative text. This research was presented using a qualitative approach. The result, the respondent said that they are quite satisfied with the effectiveness of the Grammarly application for correcting their writing's grammar.

## B. RESEARCH METHOD

The method in this study used quantitative research. The design of this research was quasi-experimental two group pre-test and post-test design. There was two group used in the research; the experimental group and control group. The researcher using quasi-experimental design because to see the effectiveness of Grammarly application on students' accuracy in writing. Students from SMA NEGERI 3 Bangkalan made up the population of this research. In this research, the researcher chooses 1 class students of X MIPA 1 as the sample. The totals of students in this class are 32 students. The researcher uses the systematic sampling method to divided one class which consist of 32 students into 2 groups containing 16 students each group. The two groups were given a pretest, then they were given a treatment and finally they were given a posttest.

Table 1. Research design

Group	Pretest	Treatment	Posttest
Experimental group	X1	T1	X2
Control group	Y1	T2	Y2

Note;

X1: Pretest of the experimental group

Y1: pretest of the control group

X2: posttest experimental group

Y2: posttest control group

T1: treatment in teaching writing using Grammarly checker

T2: treatment in teaching writing without using Grammarly checker

In data collection, the researcher used a test. The test is used to know the students writing skill achievement before and after being given treatment. The test technique is the main technique for collecting data. In research, the researcher will use two tests, pre-test, and post-test. A pre-test was given before the introduction of a treatment to know the students' writing ability. After the pre-test, the researcher gave the treatment for control group and experimental group in teaching writing. Finally, the post-test was given and asked them to do the test individually. The researcher asked the students to writing, to know to the students' writing ability. The post-test is used to know the differences in students learning results after given the treatment.

In this research, the researcher will take 2 aspects of Dewi's scoring rubric (2018) namely grammar and mechanics to assess the students' writing score because the writing accuracy that researcher will assess is grammar and writing mechanics. Grammar is the foundation for spoken or written language. The mechanics of writing are the standards for capitalization, punctuation, and spelling. The scoring rubric will be as follows:

Table 2. Modified Dewi's Scoring Rubric

<b>Grammar</b>		
Score	Indicators	
5 (Excellent)	No errors, full control of the complex structure	
4 (Good)	Almost no errors, good control of the structure	
3 (Average)	Some errors, fair control of structure	
2 (Poor)	Many errors, poor control of the structure	
1 (Very poor)	Dominated by errors, no control of the structure.	
<b>Writing Mechanic</b>		
Aspect	Score	Indicators
Spelling	- 5 (Excellent)	- Mastery of spelling
	- 4 (Good)	- Few errors in spelling
	- 3 (Average)	- Fair number of spelling error

	- 2 (Poor) - 1 (Very Poor)	- Requent errors in spelling - No control over spelling
Punctuation	- 5 (Excellent) - 4 (Good) - 3 (Average) - 2 (Poor) - 1 (Very Poor)	- Mastery of punctuation - Few errors in punctuation - Fair number of punctuation error - Requent errors in punctuation - No control over punctuation
Capitalization	- 5 (Excellent) - 4 (Good) - 3 (Average) - 2 (Poor) - 1 (Very Poor)	- Mastery of capitalization - Few errors in capitalization - Fair number of capitalization error - Requent errors in cpitalization - No control over capitalization

$$\text{SCORE} = \frac{\text{The number gotten}}{\text{The maximal score}(20)} \times 100 = 100$$

Validity and reability tests are needed in this study to determine the validity and reability of the test that given to students. This research uses content validity which means how far the measuring device is able to accommodate adequate coverage of the research topic. For the reability, used Intra Rater to find the reabilities that were calculated on a computer using IBM SPSS 22.

Researchers used SPSS and ANCOVA calculations to analyze data for this study to know the significant effect on the students' writing score who use Grammarly checker and students who do not use Grammarly checker. There are four steps in this analyzing data: normality test, homogeneity of variance test, colleration test, and ancova analyzing.

### C. RESULT AND DISCUSSION

#### Result

In the data description, the researcher describes the result of the pre-test and post-test from the sample. The result is used to obtain evidence of the effectiveness Grammarly application on students' accuracy in writing at tenth grade of Senior High School 3 Bangkalan students in the academic year 2021/2022. The sample of the research is 32 students of X MIPA 1. In the first plan, the researcher took 32 students as the researcher sample, but in the time the researcher takes the data, there were some students who could not participate in this study. There are students who are absent and other students joined Olympiad competition. At first, each group contain 16 students, but the control group students who cannot join this study were 1 student and the experimental group 1 student. So, the researcher decided to take only 15 students for the sample to make the sample data between the control group and experimental group odd. The total of sample of this research is 30 students. The researcher uses the systematic sampling method to divided one class which consists of 30 students into 2 groups containing students in each group. This method is used because many students do not have devices that support it, the other reason is because students have entered the final exam time (limited time), so many teachers are busy teaching and pursuing their students' incomplete grades, so the researcher can't take the class to make this study and the researcher are only allowed. To take data during English lesson hours, where subjects are held once a week. So, the researcher uses this method to not interfere with the class condition. The first group is the experimental group which is selected by selecting students with even attendance numbers and the second group is the control group which is selected by selecting students with an odd attendance number.

#### Validity and Reability

Table 3. Content validity

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Capitalization	10.0667	5.168	.886	.795	.870
Grammar	10.0000	8.000	.659	.506	.947
Spelling	9.8667	5.913	.866	.817	.872
Punctuation	9.6667	5.540	.908	.833	.856

The researcher tested the instrument to validity the test using Product Moment Pearson Correlation with SPSS. Validity of each question can be identified by looking at the corrected item-total correlation. For the question can be said valid if the value over than r table. The r table formula

was  $DF=N= 30$ , look for in the distribution of the value of the r table of significance 5% and result r table was 0,361 and all the item total correlation were more than 0,361. It means that all the instrument was valid.

Table 4. Reability Table

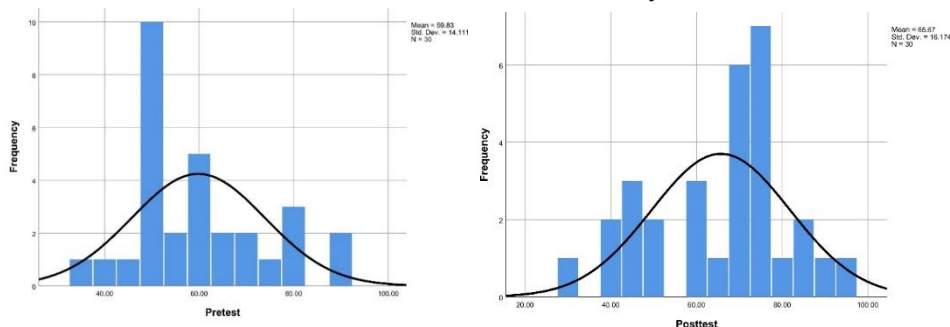
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Futhuremore, for the reability look at the Cronbach's Alpha based on standardized items. The question can be said realible if the value were more than r table which r table was 0,361 and all the score were more than r table . It can be inferred that all the question was realible.

### Normality Test

The normality test is done to find out if the distribution of the data is spread normal or not. The results above show that both pre-test and post-test data one wave curve which indicated th distribution is spread normally.

Table 3. Test of Normality



### Homogeneity of Variance test

The homogeneity of variance test is done to know both of pre-test and post-test data have equal mean scores. The result above, mentions the significant value is .949. Equal variances can be assumed if  $p > 0.05$ . Based on the table above, the values were higher than 0.05. It meant that scores passed the homogeneity of Variance test.

Table 4. Correlation data

		Pretest	Posttest
Pretest	Pearson Correlation	1	.707**
	Sig. (2-tailed)		.000
	N	30	30
Posttest	Pearson Correlation	.707**	1
	Sig. (2-tailed)	.000	
	N	30	30

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### Correlation test

There are 2 ways to indicate the correlation. The first is look at the sig value. If the sig value is lower than 0.01 then there are no correlation between the data. The second is look at the pearson corelate value. If the corelate value is not higher than 0.8 then the data is not highly corelate.

Table 5. Correlation data

**Correlations**

		Pretest	Posttest
Pretest	Pearson Correlation	1	.707**
	Sig. (2-tailed)		.000
	N	30	30
Posttest	Pearson Correlation	.707**	1
	Sig. (2-tailed)	.000	
	N	30	30

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**ANCOVA Analyzing**

After the assumption needed for the ANCOVA Analyzing is fulfilled from the test above. Now is the time for the researcher to do the ANCOVA analysis. See the table below for the analysis result.

Table 6. Descriptive Statistics

Dependent Variable: Posttest

group	Mean	Std. Deviation	N
Experimental	75.6667	9.79553	15
control	55.6667	15.22060	15
Total	65.6667	16.17434	30

The table above shows the mean and standard deviation of the post-test. This result is not yet compared with the pretest. The result shows the result means the experimental group show better results than the control group. And the experimental group spread is more narrowed than the control group.

Table 7. Test Between Variable Subject

Tests of Between-Subjects Effects						
Dependent Variable: Posttest						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	6004.078 <sup>a</sup>	2	3002.039	51.217	.000	.791
Intercept	736.992	1	736.992	12.574	.001	.318
Pre	3004.078	1	3004.078	51.252	.000	.655
group	2213.609	1	2213.609	37.766	.000	.583
Error	1582.589	27	58.614			
Total	136950.000	30				
Corrected Total	7586.667	29				

The results above inform the difference between pretest and posttest. In the intercept row, the “sig” value gives a result .001 which is less than 0.5 and it mean that there is variations between experimental group and control group. Then, In the group row, the “sig” value gives a result of .000 which is less than 0.05 and it is the mean experimental group, and the control group shows significant results. For the detail about which way the significance is. Look at the table below.

Table 8. Estimates

Dependent Variable: Posttest

group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Experimental	74.333 <sup>a</sup>	1.986	70.259	78.407
control	57.001 <sup>a</sup>	1.986	52.927	61.075

a. Covariates appearing in the model are evaluated at the following values: Pretest = 59.8333.

In the table above, the experimental group also displayed 74.333 mean, and the control group displayed 57.001, it means that the experimental group gives more good results than the control group.

Table 9. Pairwise Comparison

**Pairwise Comparisons**

Dependent Variable: Posttest

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
Experimental	control	17.332 <sup>*</sup>	2.820	.000	11.545	23.119
control	Experimental	-17.332 <sup>*</sup>	2.820	.000	-23.119	-11.545

Based on estimated marginal means  
<sup>\*</sup>. The mean difference is significant at the .05 level.

From the table above we can interpret that the experiment group gives 17.332 more mean scores than the control group. The experimental group result in the upper bound is 23.119 points better than the control group.

**Discussion**

The researcher analyzed all the data in SPSS version 26. The data was taken from a total of 30 students; 15 students from the control group and 15 students from the experimental group. Based on the table the sig. (2 tailed) was 0.000. It indicates the value of significance is .000 lower than 0.05. This value indicates that the experimental group and control group scores are significant. From the results above, the researcher can decide the alternative hypothesis (Hi) was accepted and the null hypothesis (Ho) was rejected. Therefore, there was a significant difference score on students’ writing before and after using Grammarly checker. Based on the data, the score result of post-test is higher than the pre-test. The analysis with ANCOVA also conducted the result from table 8 shows that the experimental group's mean result is higher than the control group. The experimental group displayed 74.333 mean, and the control group displayed 57.001, it means that the experimental group gives more good results than the control group. For the detailed difference between both groups look at table 7, in this table look at the experimental x control group row, the mean difference between the group is 17.322, and the standard deviation error is 2.820 which indicates the score between students in each group is spread widely. It can be concluded that the use of Grammarly checker is effective towards students in writing.

Besides, the students’ score in the pre-test and post-test of the experimental group that was carry out on 19 May 2022 and 24 May 2022, shows that the score average (mean) from 61.67 to 75.67, it means the students got good improvement in their writing after giving treatment or using Grammarly Checker.

Moreover, in the pre-test, the researcher found many students’ mistake in their writing. The most common mistake such as Mechanic and Grammatical error. The mechanic in writing such as punctuation, spelling, and capitalization. The students often do mistake in capitalization and punctuation. Most of students ignored capitalize. They even ignored to capitalize the first word of the sentence such as the name of people, animal, date, city, and country. Meanwhile, the most common punctuation mistakes that students often did is missing commas. While the grammatical mistake that students often did, such as error in using verb, missing subject, and missing be in the simple predicate.

Then, the result of the post-test of the experimental group showed that there is an good improvement in the students’ writing score after the students got. It shows that there is a difference value between the pre-test and post-test even though control group not higher than the experimental group.

Grammarly application is such a smart tool to help students correct punctuation, spelling, style, grammatical error, and sentence structure of their writing. Grammarly cheecker automatically detecting grammar, spelling, punctuation, word choice and mistake (Moore, 2018). Based on the findings from this research, it is proved that using Grammarly checker give advantages in writing and gives the significant result on the students writing ability in X MIPA 1 of Senior High School 3 Bangkalan academic year 2021/2022. The result shows significant on students’ scores in writing because Grammarly application can help students fix the mechanic and the grammatical error in their writing easily. It offers a great way for students to correct their writing and it also shows the way to make a correction. Grammarly application is effective towards student students’ writing accuracy that indicated with correct mechanic and grammar.



## **D. CONCLUSION AND SUGGESTION**

### **Conclusion**

Based on the data analysis and discussion above, it can be concluded that Grammarly application is effective towards students' accuracy in writing. The result shows that there is significant difference students' writing score before and after using Grammarly application. The data shows that there are differences mean the score, before treatment 61.67 and after treatment is 75.67. The analysis with ANCOVA also conducted the result that the experimental group's mean result is higher than the control group. The experimental group displayed 74.333 mean, and the control group displayed 57.001.

Therefore, the result shows that the value of significance (sig.2-tailed) was 0.000. It indicates the value of significance is .000 lower than 0,05. This value indicates that the experimental group and control group scores are significant. Also, the reliability result was .917 which means the category of instrument was very reliable. The result of significance value indicates that the null hypothesis (Ho) is rejected and the alternative hypothesis (H1) is accepted. This shows that Grammarly application is effective and great tool to be used for X MIPA 1 students of SMA Negeri 3 Bangkalan.

### **Suggestion**

For the teacher, the results of this analysis can help the English teacher solve the students' writing related difficulties, like grammatical error, wrong punctuation, wrong spelling, and etc. The English teacher can use Grammarly checker application as a tool in teaching English, especially in teaching writing to help the students fix writing mechanics and the grammatical error in their writing easily. Grammarly checker is a good tool for writers to improve their writing, and it also demonstrates how to establish a connection.

For students X MIPA 1 SMA Negeri 3 Bangkalan, the researcher assumed that this study will help students in identifying grammatical errors in their writing, and encourage them to learn correct grammar, spelling, and punctuation. Using the Grammarly checker while writing.

For future researchers, this study can serve as motivation for future researchers to create a different version of Grammarly Checker. Future researchers can also use this study as a guide to support some of the sources they will need. Moreover, future researchers were advised by the researcher to conduct their studies using different research designs and methodologies.

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