THE CORRELATION BETWEEN SOCIAL MEDIA ACTIVENESS AND VOCABULARY MASTERY OF THE ENGLISH DEPARTMENT STUDENTS OF UNIVERSITAS RIAU

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Abstract

The aim of this research is to discover the correlation between social media activeness and vocabulary mastery of the English department students of Universitas Riau. The population of the research is all third-year students of the English department of Universitas Riau. The number of samples is 117 students. The research instruments are 1) a questionnaire, and 2) a test. The questionnaire is for the data on social media activeness while the test is for the data on vocabulary mastery. To analyze the data, the researchers employed IBM SPSS Statistics 25. The data analysis revealed that the mean score of the student's social media activeness is 20.2, classified as 'high' level, whereas the mean score of the student's vocabulary mastery is 69.3, categorized as 'good' level. Additionally, the research finding showed the correlation coefficient of the two variables is 0.480, denoting a positive and moderate correlation. Also, the determinant coefficient is 0.2304, which implies social media activeness has a 23% influence on the students' vocabulary mastery, leaving the other 77% to other factors. Having discovered that there is a moderately significant correlation between social media activeness and vocabulary mastery, it is suggested that the students need to start utilizing their social media well and wisely. Besides providing entertainment, social media can be a great platform for students to improve their English vocabulary mastery.

INTRODUCTION

The advancement of technology has a tremendous impact on society. As can be seen in reality today, many people, especially teenagers and adults, spend time more on screens than on their surroundings (Twenge & Campbell, 2018; Suryani & Soedarso, 2021). This phenomenon likely happens because almost everything right now, starting with business to education, can be done online via social media. As a matter of fact, social media now has become the most important tool to possess in order to 'survive' the digital era that is currently happening around the world (Damota, 2019).

There have been quite many definitions of social media by experts. Poore (2016) defined social media as all forms of digital technologies employed to facilitate communication and information by using an internet connection. Meanwhile, Dewing (2010) and Kaplan and Haenlein (2010) described social media as a set of web-based and mobile-based applications and services that allow people to generate content, exchange information, and communicate with others. On the whole, social media refers to the collective online digital platforms and services that let people interact, communicate, and share anything with everyone in the world. With internet services available almost everywhere, people now can access their social media anytime to do anything they want (Akram & Kumar, 2018).

The term 'social media activeness' generally means how active someone is on social media. Mieczkowski, Lee, and Hancock (2016) defined social media activeness as how integrated social media is into people's daily lives. This integration can be measured through their time spent on social media, frequency of checking social media, attitude towards social media, and their presentation for accessing social media (Kurniawan, 2019).

Although social media surely has its drawbacks, such as stirring laziness and negligence among its users, it still holds some good benefits, for example being an effective tool for learning (Steinert & Dennis, 2022). Using social media might be a good alternative for students since they study in the way they like to spend their time; playing with their gadgets. Moreover, utilizing social media encourages students to be more creative, dynamic, and research-oriented in learning (Ansari & Khan, 2020). In addition, with social media, students are the ones who take control of their own learning. That means they get to be the ones who decide *what*, *when*, *where*, and *how* they want to study (Nummenmaa, 2007; Suryani & Soedarso, 2021).

In this era of globalization, English is important to learn. As the main language of the international world, English is considered to be the lingua franca of international business, education, science, technology, and even entertainment. This language is so valuable that learning it offers a guarantee of a better future career for its non-natives (Crystal, 1997).

The reason is that the ability to communicate with it ensures the availability of opportunities for employment, travel, higher education, and just generally better life. To learn a language is to learn all of its basic skills. These language skills are reading, listening, speaking, and writing. However, to master these four main skills, there is one language component that plays a big role in the mastery of them all, namely vocabulary.

Vocabulary is the list of words that individual speakers of a language might use (Hatch & Brown, 1995). There are two types of vocabulary; receptive vocabulary and productive vocabulary. Receptive vocabulary is the words that learners know and understand their meanings in context but cannot produce. It is the type of vocabulary that learners grasp in their reading but do not use in their speaking and writing. Meanwhile, productive vocabulary is those words that learners understand the meanings of and know how to pronounce or use in their speaking and writing. The word 'productive' here implies that learners produce the words, which makes this vocabulary type as an active process.

Unlike the previous definition, Ur (1996) described vocabulary as 'lexical items' rather than 'words'. The term 'items' is preferred because an item may be represented by more than a single word. For instance, the compound words *good-looking*, *runner-up*, and *father-in-law* are made up of two or three words, but each has one specific meaning. Also, idioms like *all ears* and *a cup of tea* are multi-word items whose meanings cannot be deduced from a simple analysis of every word. That means the meaning when the word stands alone completely differs from when it stands together with other words.

Vocabulary represents the most important ability for language learning. Because a language basically consists of words, vocabulary becomes the major component of English proficiency (Renandya & Richards, 2002). That means it is a device to enhance other language skills, such as listening, speaking, reading, and writing. The more English words we know, the better we understand what we hear or read and the easier we know what to say and write (Listiyaningsih, 2017; Areta & Purwanti, 2021). Vocabulary mastery focuses more on contexts rather than meanings. As defined by Nation and Newton (1997), vocabulary mastery is not merely about knowing the words and what they mean, but it is more about understanding how the words sound and how they are used in contexts. Recognizing a word by sight and sound and knowing its literal definition are two different things from knowing how to use the word correctly and understanding it when it is heard or seen in various contexts (Miller & Gildea, 1987).

In regard to English vocabulary, social media might come in handy to accelerate its mastery (Dehghan, Rezvani and Fazeli, 2017; Hartshorne, 2018; Flores-González et al., 2019; Kamal, 2019; Mozes, 2020; Fahdin, 2020). From YouTube, for instance, English students can learn the spelling and pronunciation of words. Spelling is the written form while pronunciation is the verbal form. Both are better and easier to understand and memorise via demonstration videos, and YouTube is where they can find them. Mozes (2020) conducted research on the influence of YouTube on young students' English

vocabulary. The findings revealed that 88% of the students remembered the words and were able to speak and write them in general contexts. This then proved that the students indeed memorised the words taught from the videos faster and that there was a relevant influence of YouTube on their vocabulary. By exposing students to the vocabulary frequently in the ways they like, their acquisition of it becomes natural and helps them memorise the words better (Mozes, 2020).

If students want to study and learn grammar, students can go to Facebook. There are many English learning groups on Facebook that are open to the public where the members can have discussions and share their knowledge with one another. Flores-González et al. (2019) held a study examining the impact of using Facebook for vocabulary learning. The outcomes revealed that the vocabulary achievement of students had improved from the pre-test to post-test (4.46 > 3.43). Also, 98% of the participants totally agreed that Facebook helps them learn not only vocabulary but also English in general. They agreed that this SMP allows them to learn new words in such an authentic and natural way because the words are found in meaningful contexts where they also learn the parts of speech and their grammatical forms.

Instagram and TikTok, on the other hand, are good for learning modern English vocabulary, for instance, collocations, lexical relations, slang words, and idioms (Kamal, 2019; Fahdin, 2020; Rahman, 2021). The reason for this is that the active users of those social media platforms (SMPs) are mostly young people. Also, the fact that students nowadays open their SMPs so frequently every day makes social media a practical facility in which students can be exposed to English easier (Napitupulu, 2013). The more often the students are exposed to English, the more familiar they become with it, and the quicker their English vocabulary develops.

Considering the importance of vocabulary mastery for English learning and the advantages of social media as its learning medium as explained previously, this research aims to find whether or not there is a significant correlation between social media activeness and vocabulary mastery of the English department students of Universitas Riau. For this reason, the research question is *'Is there any significant correlation between social media activeness and vocabulary mastery of the English department students of Universitas Riau*?'.

METHODOLOGY

This research is intended to investigate the correlation between social media activeness and English vocabulary mastery. As a result, its design is correlational research; a study to verify and measure the relation or connection between variables (Cozby & Bates, 2004). There are two variables operated: social media activeness and vocabulary mastery. The following are the hypotheses of the research.

- The null hypothesis (Ho): There is not any significant correlation between social media activeness and vocabulary mastery of the English department students.
- The alternative hypothesis (Ha): There is a significant correlation between social media activeness and vocabulary mastery of the English department students.

The research data was collected online via Google Forms in April 2022. The population is the third-year students of the English department of Universitas Riau. These students are from the batch 2019, which means they were in their sixth semester in the department at the time. There are 117 students in total, and because the researchers applied the total sampling technique, all the students were involved and used as the research samples.

To collect the data, there are two instruments were used: a questionnaire and a test. The questionnaire was adapted from Kurniawan's (2019) and particularly to discover the students' activeness on social media. The test was utilized as the second instrument to measure the students' vocabulary mastery. The vocabulary tested in the test follows the characteristics of the words that are often found on social media, which are modern and mostly non-formal. In short, they are the words that are often used and found in people's daily lives (Atmawati, 2016; Gultom & Rahmadini, 2019; Utami, Rokhman & Mardikantoro, 2021).

After the data was collected, they were later analyzed using a computer program, IBM SPSS Statistics 25. The researchers first described the data of each variable before explaining the correlation analysis between the two variables as follows:

1. *The Normality Test*: to see if the sample data came from a population with a normal distribution. The basic decision-making in the normality test is that if the P-value is greater than the α, the data distribution is normal, but if it isn't, then the distribution of the data is not normal.
2. *The Linearity Test*: to determine whether the relationship between variables is linear or not. Same with normality tests, if the value of deviation from linearity is greater than 0.05, the relationship between both variables is linear. However, if it is lower than 0.05, then the relationship between both variables is not linear.
3. *The Correlation Analysis*: to test the hypothesis. The researchers used the Pearson Product Moment Correlation through IBM SPSS 25. After that, the correlation coefficient is classified using the table of correlation levels by Sugiyono (2009) below.

Table 1. The Level of Correlation

Correlation Coefficient	Interpretation
0.00 – 0.20	Very low correlation
0.21 – 0.40	Low correlation
0.41 – 0.70	Moderate correlation
0.71 – 0.90	High correlation
0.91 – 1.00	Very high correlation

4. *Determinant Coefficient*: to see the percentage of social media activeness contribution to the student's vocabulary mastery. In studying a correlation, it is necessary to discover how much variable X influences the value of variable Y. Thus, computing determinant coefficients is important to see the percentage of social media activeness influence on students' vocabulary mastery. The following formula was used to calculate it.

$$R = r^2 \times 100\%$$

Where: R = Determination coefficient
r = Correlation coefficient

FINDINGS

Descriptive Statistics Analysis

1. *Social Media Activeness*

Table 2. Descriptive Statistics of Social Media Activeness

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Social Media Activeness	117	9	15	24	20.21	2.055
Valid N	117					

Table 2 shows that the range score of the student's social media activeness is 9 with a minimum score of 15 and a maximum one 24. The mean score of the data is 20.21 while the standard deviation is 2.05. Using the formula by Azwar (2012), the classification of the student's social media activeness can be seen as follows.

Table 3. Classification of Students' Social Media Activeness

Score	Classification	Frequency	Percentage
20 < X	Very High	55	47%
18< X ≤ 20	High	38	32.5%
16< X ≤18	Average	20	17.1%
13< X ≤16	Low	4	3.4%
X ≤ 13	Very Low	0	0%
Total		117	100%

From Table 3, it can be seen that there are fifty-five students (47%) on the category of 'very high' social media activeness, thirty-eight students (32.5%) on the 'high' level of social media activeness, twenty students (17.1%) on the 'average' level of social media activeness, and four students (2.5%) on the 'low' social media activeness level. As a whole, with an average score of 20.2, it can be inferred that the social media activeness level of the English department students of Universitas Riau is *High*.

2. *Vocabulary Mastery*

Table 4. Descriptive Statistics of Vocabulary Mastery

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Vocabulary Mastery	117	62.2	32.4	94.6	69.288	11.4003
Valid N	117					

Table 4 exhibits that the range score of the student's vocabulary mastery is 62.2. The lowest score is 32.4 while the highest one is 94.6. The mean score of the data is 69.3 while the standard deviation is 11.4. Following the categorization of ability level by Riduwan (2011), the category of the student's vocabulary mastery can be seen below:

Table 5. Students Vocabulary Mastery Category

Score	Classification	Frequency	Percentage
81 – 100	Very Good	26	22.2%
61 – 80	Good	65	55.6%
41 – 60	Mediocre	24	20.5%
21 – 40	Poor	2	1.7%
0 – 20	Very Poor	0	0
Total		117	100%

From Table 5, it can be seen that out of 117 students, twenty-six students (22.2%) belong to the 'very good' level class, sixty-five students (55,6%) are on the 'good' level class, twenty-four students (20,5%) belong to the 'mediocre' level class, and two students (1,7%) is on the 'poor' vocabulary mastery level class. Fortunately, there are no students on the 'very poor' level. With an average score of 69.3, it can be confirmed that the English department students of Universitas Riau have '*Good*' vocabulary mastery.

Correlation Analysis

1. *The Normality Test*

A properly distributed sample population is required for a number of statistical tests. If a group of data is found not to follow a normal distribution, then the results of the test will be unreliable. The following is the output of the normality test using SPSS:

Table 6. Normality Test Output

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		117
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	9.99880760
Most Extreme Differences	Absolute	.083
	Positive	.070
	Negative	-.083
Test Statistic		.083
Asymp. Sig. (2-tailed)		**.200[c,d]**

a. Test distribution is Normal.

As can be seen from the output, the P-value or Asymp. Sig. is 0.200. The data can only be confirmed as normal if the P-value is greater than the α (0.05), and 0.200 > 0.05. Therefore, the data distribution of this research is *normal*.

2. *The Linearity Test*

Linearity test is a requirement in correlation analysis. Its purpose is to determine whether the relationship between variables is linear or not. Similar to normality tests, the variables are declared as linear if the value of deviation from linearity is greater than the α (0.05).

Table 7. Linearity Test Output

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Vocabulary Mastery * Social Media Activeness	Between Groups	(Combined)	4337.4	9	481.94	4.80	.000
		Linearity	3479.1	1	3479.1	34.7	.000
		Deviation from Linearity	858.37	8	107.30	1.07	**.390**

Based on the ANOVA table, the value of deviation from linearity is 0.390, which means it is greater than 0.05. Owing to this, it can be concluded that there is a linear relationship between social media activeness and vocabulary mastery of the English department students of Universitas Riau.

3. *The Correlation Analysis*

As specified early, to discover the correlation between the students' social media activeness and their vocabulary mastery, the data from both variables were statistically computed by using the Pearson Product-moment formula through SPSS Statistics 25.

Table 8. Correlation Analysis

Correlations

		Social Media Activeness	Vocabulary Mastery
Social Media Activeness	Pearson Correlation	1	**.480****
	Sig. (2-tailed)		.000
	N	117	117
Vocabulary Mastery	Pearson Correlation	**.480****	1
	Sig. (2-tailed)	.000	
	N	117	117

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

Based on the SPSS output above, it is discovered that the correlation coefficient of the students' social media activeness and vocabulary mastery is 0.480. Using the interpretation of the correlation level by Sugiyono (2009), the two variables have a moderate level of correlation. For this reason, the null hypothesis (Ho) is rejected. Also, the correlation can also be confirmed as *positive* because the coefficient is greater than 0 and closer to +1 (Fenton & Nail, 2012). In short, there is a positive and moderately significant correlation between social media activeness and vocabulary mastery of the English department students of Universitas Riau.

4. *Determinant Coefficient*

In studying a correlation, it is important to find the coefficient of determination (R). This analysis is to know how much variable X influences the value of variable Y. Here is the calculation of the coefficient of determination:

$$R = r^2 \times 100\%$$

$$R = (0.480)^2 \times 100\%$$

$$R = 0.2304 \times 100\%$$

$$R = \mathbf{23.04\%}$$

The result of R-value is 23.04%, which means social media activeness has twenty-three per cent contributions to English vocabulary mastery of the English department students of Universitas Riau. From that point, it is worth mentioning that another seventy-seven per cent (77%) of the student's vocabulary mastery is contributed by other factors

DISCUSSION

There is only one research question in this study: *'Is there any significant correlation between social media activeness and vocabulary mastery of the English department students of Universitas Riau?'*. To answer this research question, there are two parts to the discussion. The first part is a brief summary of the data from each variable, and the second part is the correlation analysis and conclusion.

The first variable of the research is the students' social media activeness. The data on this variable was gained from the questionnaire. As presented previously, the mean score of the social media activeness of the students is 20.2. Using a formula by Azwar (2012), this score is classified as "high level". Owing to this, it can be inferred that the social media activeness of the English department students of Universitas Riau is high. In other words, the students are highly active on their social media because they access it frequently.

A study by Tezer and Yildiz (2017) discovered a similar result. They found the frequency of young adults' internet use is every day and claimed that the internet has become a very important aspect of their lives. In addition, Kolhar, Kazi, and Alameen (2021) also revealed that a great number of university students spend at least six hours on social media daily, indicating that spending a lot of time on social media has become a common habit of people today.

The second variable is the students' vocabulary mastery. The data of this variable was obtained from the vocabulary test. According to the finding, the mean score of the student's vocabulary mastery is 69.3. This score is in the range of "good level" category. Thus, it can be determined that the vocabulary mastery of the English department students of Universitas Riau is good. Simply put, the students are considered to have good English vocabulary mastery.

For the correlation analysis to test the hypothesis, the researchers employed IBM SPSS 25. As shown in the previous section, the correlation coefficient of the two variables is 0.480. This number, conforming to the correlation level by Sugiyono (2009), is considered a moderate correlation. With this finding, Ho is then rejected and Ha is accepted. Also, because the coefficient is greater than 0 and close to +1, the type of correlation is confirmed as positive. That means both variables move in the same

direction; the higher students' social media activeness is, the better their vocabulary mastery will be and vice versa.

This deduction backs up the findings of studies by Napitupulu (2013) and Refri (2013). They found that students in adolescent age who frequently use social media tend to have a superior ability to learn a language accidentally. Admittedly, many studies on L1 and L2 development indicate that the majority of vocabulary learning happens naturally when students try to understand new words from what they hear or read in contexts. Simply put, they do not mean to learn the new words; they do not plan to, but they naturally and incidentally do it. This is called incidental vocabulary learning (Hatch & Brown, 1995), and actually how most English students learn their vocabulary through social media. As claimed by Zarei (2009), social media supports the base of vocabulary learning for foreign students due to its traits, such as understandable, interesting, relevant, and contextual. While scrolling through Instagram or Facebook or other SMPs, the students usually will encounter many English words. If interested and motivated, they would try to guess the meanings, comprehend the context, and then memorise the words.

Furthermore, the determinant coefficient (R square) of the correlation is 0.2304. This number denotes that social media activeness has twenty-three per cent (23%) influence on the student's vocabulary mastery. As a result, it can be settled that the other seventy-seven per cent (77%) of the students' vocabulary proficiency is influenced by other factors. Generally, these other factors that influence students' vocabulary learnability are divided into two major types; intralexical factors and extralexical factors.

Intralexical factors, defined by Laufer (1997), are the factors that arise from the word itself, for example, the phonological elements (pronounceability and length), the grammatical characteristics (parts of speech, inflectional complexity, and derivational complexity), the semantics features (abstractness), and multiple meanings. On the contrary, extralexical factors are not directly related to the internal elements of a word, and rather outside of it (Takac, 2008). These factors, for instance, are the memory skills of students, the influence of the first/mother language, and individual differences (belief, attitude, motivation, learning environment, experience, field of study, and class level). In relation to this research, social media activeness is clearly included in the individual differences factor, specifically the students' attitude and learning environment because social media allows students to get exposed to the English language as much and close as possible to real-life situations. On the whole, it is correct to assume that there are still many other factors that affect the students' vocabulary proficiency besides their social media activeness.

In summary, this study managed to prove that there is a moderately significant and positive correlation between social media activeness and English vocabulary mastery of the English department students of Universitas Riau. With the determination coefficient of 0.2304, social media activeness is revealed to have about twenty-three per cent

influence on the students' vocabulary mastery, leaving the other seventy-seven per cent to other factors.

CONCLUSION AND SUGGESTIONS

Conclusion

Based upon the findings of this research, there are several conclusions that can be drawn. Firstly, the analysis of the data from the questionnaire showed that the social media activeness of the English department students of Universitas Riau is *high*. To put it simply, students are *highly* active on their social media. Secondly, in accordance with the data analysis of the test, it was found that the vocabulary mastery of the English department students of Universitas Riau is *good*. In other words, the students have *good* English vocabulary mastery. Lastly, because the correlation coefficient is 0.480, the null hypothesis (Ho) is rejected and it can be deduced that *there is a moderately significant and positive correlation between social media activeness and vocabulary mastery of the English department students of Universitas Riau*. With 0.2304 as the coefficient of determination, it can be concluded that the students' social media activeness contributes about twenty-three per cent to their vocabulary mastery, leaving the other seventy-seven per cent to other factors.

Suggestions

Having made the conclusions, the researchers would like to give some suggestions. For English teachers, the researchers would like to suggest they start finding a way to implement social media platforms as a teaching medium. Using social media proves to be effective in order to increase students' motivation and mood in the teaching and learning process. For English students, the researchers would suggest and encourage them to start utilizing social media well and wisely. Not only providing entertainment, but social media can also actually be a great place or platform for students to learn many things, including English vocabulary. Other researchers, researchers would like to suggest they continue conducting other studies concerning the use or function of social media for other parts of English learning. As known to be fluent in the English language, there are many other elements, such as phonology, grammar, semantics, etc., that need to be mastered by English learners. Therefore, with social media being flexible and adaptable for all styles of learning, there are still many areas of English that could become an interesting topics for research.

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