THE USE OF SMARTHONES AS EXTRAMURAL ENGLISH LEARNING TO ENRICH EFL LEARNERS' VOCABULARY

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Abstract

Smartphone has long been considered as a double-edged sword which has both positive and negative effects. Instead of banning the use of smartphones, a smart teacher has to be able to encourage EFL learners to use smartphones wisely to facilitate their learning. Smartphones enable the learners to use the language in a real situation outside the classroom, which is called Extramural English Learning. This kind of situation is believed to contribute to learners vocabularies. Learners' ability to use various kinds of vocabulary, especially English academic words, will make a positive contribution to their writing. Employing a correlation design, the aim of the research was to investigate the correlation between the use of smartphones as extramural English learning and learners' vocabularies focusing on English academic words. Questionnaire and writing test were used as instruments to collect the data from 35 undergraduate students of English department in East Java, Indonesia. The results of the data analysis by using Pearson Correlation confirmed the significant positive correlation between the use of smartphones as extramural English learning and learners' vocabularies that indicated the benefit of extramural activities with smartphones on enriching learners' vocabulary. Further, the pedagogical implication was also discussed.

Key words: *smartphone, extramural English, English academic words, EFL learners, vocabulary*

Abstrak

Smartphone telah lama dianggap sebagai pedang bermata dua yang memiliki dampak positif dan negatif. Alih-alih melarang penggunaan smartphone, seorang guru yang cerdas harus mampu mendorong pembelajar EFL untuk menggunakan smartphone dengan bijak untuk memfasilitasi pembelajaran mereka. Smartphone memungkinkan pembelajar untuk menggunakan bahasa dalam situasi nyata di luar kelas, yang disebut sebagai Pembelajaran Bahasa Inggris Ekstramural. Situasi seperti ini diyakini berkontribusi pada kosakata peserta didik. Kemampuan pembelajar untuk menggunakan berbagai macam kosakata, terutama kata-kata akademis bahasa Inggris, akan memberikan kontribusi positif pada tulisan mereka. Menggunakan desain korelasi, tujuan dari penelitian ini adalah untuk meneliti hubungan antara penggunaan smartphone sebagai pembelajaran bahasa Inggris di luar sekolah dan kosakata pelajar yang berfokus pada kata-kata akademik bahasa Inggris. Kuesioner dan tes menulis digunakan sebagai instrumen untuk mengumpulkan data dari 35 mahasiswa S1 jurusan Bahasa Inggris di Jawa Timur, Indonesia. Hasil analisis data dengan menggunakan *Pearson Correlation* menunjukkan adanya korelasi positif yang signifikan antara penggunaan smartphone sebagai pembelajaran bahasa Inggris ekstramural dan kosakata pelajar yang menunjukkan manfaat kegiatan ekstramural dengan smartphone dalam memperkaya kosakata pelajar. Selanjutnya, implikasi pedagogis juga dibahas dalam artikel ini.

Kata kunci: *smartphone, Bahasa Inggris ekstramural, kata akademis Bahasa Inggris, pembelajar EFL, kosa kata*

Introduction

Nowadays, the use of smartphones has become part of EFL learners' everyday life. The facilities provided by smartphones enable learners to browse and surf cyberspaces freely to get much information that can broaden their knowledge or the other way around, traps them with inappropriate information. This situation engenders these electronic tools to be considered as a double-edged sword that has both positive and negative effects on learners. Instead of banning the use of smartphones, which then leads to disobedience, a smart teacher has to be able to encourage EFL learners to use smartphones wisely to facilitate their learning.

Some studies have investigated the effect of mobile assisted language learning (MALL), focusing on the use of smartphones, on learning performance

(Machmud & Abdulah, 2017) and motivation, and in informal language learning context (Jurkovič, 2018). Most studies on the use of smartphones address on the informal and instructured language learning while studies examine its use outside the classroom is limited. Yet, the greatest potential on the use of smartphones in language learning is when learners engage in multiple forms of informal learning such as playing games, using language learning apps, or watching YouTube videos, in which those activities are chosen by the learners themselves, not the instructor (Godwin-Jones, 2017; Oxford et al., 2014). Smartphones will enable the learners to use the language in a real situation outside the classroom, which is called Extramural English Learning. This kind of situation is believed to contribute to learners' vocabularies.

Introduced by Sundqvist in 2009, extramural English has other closely related established terms. Sundqvist refers extramural English to "English outside the walls," which means every activity related to English that the learners come in contact with or are involved in outside of the school area (Huang, 2016). The activities are considered as extramural English when they give the students experience to English. In addition, Jakobsson (2018) uses the term Out-of-Class Learning which refers to the activities that make the learners engage in the use of English anywhere at the present time. As an example, learners learn English as they play or watch something which has spoken or written instruction in English, such as TV-shows, commercial, movies, cartoons, media, literature, gaming, as well as using the internet for YouTube and other sites (Jakobsson, 2018). Related to learn English through media, principally gaming and computer used, Wilde and Eyckmans (2017) use the term Incidental Language Learning to refer to the similar activities. Wilde and Eyckmans (2017) define Incidental Language Learning as the learning of language without any formal instruction given. Language learning can also happen as the learners use media during their daily that they have some interactions with English language.

Several studies have proved that extramural English has a considerable impact on English proficiency. The earliest study was conducted by Sundqvist (2009) that introduced the term, extramural English. The study found a connection between the time spent on English-mediated activities outside of school and English oral proficiency and vocabulary. Focusing on investigating Computer-Assisted Language Learning (CALL) in extracurricular/extramural context, the finding of a study by Sylven and Sundqvist (2017) shows positive correlations between playing digital gameplay and the proficiency of L2 vocabulary. Additionally, playing video games can be called as a kind of extramural, one of CALL activities. This finding is in line with the argument of

Fleckenstein (2018). She states that more vocabularies are attained by students who spend much time on extramural English activities. The finding of Sylven and Sundqvist's study (2017) also identified the spectacle of learning outside of the classroom is not something new the current era. It has been experienced by the students through their amusing daily activities in which they learn vocabularies subconsciously.

In line with the findings of Sundqvist (2009) and Sylven and Sundqvist (2012) above, a study by Amaliah (2018) also found a prospective correlation between students' proficiency, extramural English habit, and attitudes toward English. Involving learners from the same grade, the study found that learners who have frequent exposure to productive extramural English use, particularly on playing online games have a greater English proficiency and positive attitude toward English. Following the study, Olsson collaborated with Sylven (2015) conducted a longitudinal study investigating and comparing the English use of 230 CLIL and non-CLIL students. This study also investigated the impact of their extramural English activities on the academic vocabularies that they use in their writing. The results show a significant difference on the use of English in which CLIL students use a greater amount of English vocabulary than non-CLIL students. Additionally, male CLIL students use academic vocabulary in their writing with the highest proportion. However, a significant impact of extramural English on the academic vocabulary progress was not found.

Studies on former paragraphs investigated extramural English related to various circumstances. Those studies analyzed extramural English associated to proficiency of vocabulary (Sylven and Sundqvist, 2017), association of students' proficiency, extramural English habit, and attitude toward English (Amaliah, 2018), and extramural English activities on the academic vocabularies use in writing (Olsson and Sylven, 2015). Compare to the previous studies, this study investigates students' extramural on the academic vocabulary in writing course as Olsson and Sylven (2015) but it is not comparison investigation one. In addition, this study uses Coxhead's AWL which has not been applied by the studies.

Regarding social media use as an activity included in extramural English learning, some studies have revealed the benefit of watching TV programs and listening to music on language acquisition. Jensen (2017) finds that those activities are beneficial for the acquisition of L2 vocabulary proficiency. Other studies show that using the internet (Olsson, 2016) and teachers' effort in showing various ways of engaging with English provide more opportunity for learners to acquire specific vocabularies (Huang, 2018). For example, by using

the internet, learners get the chance to have an exchange with other people from other countries that use English as first or second language. When teachers integrate technology and media in teaching, learners are able to get more access to information. The use of video game does not only entertain and give pleasure but also provides an extra chance for learners to practice the materials they have learned.

Various studies have shown that learning receptive vocabulary is easier than learning productive vocabulary. Maskor and Baharudin (2016) discuss some possible reasons for the condition. Firstly, learners must understand the words with deep meaning which takes in pronunciation, meaning, spelling, frequency, sound structure, syntax conferring to context. Secondly, learners must know the word based on the perspective of meaning, knowledge, and collocation. Additionally, because of productive vocabulary method use that the words pronounced can be examine for accuracy (Hashim, Majid, Arshad, and Obeydi, 2018). Unfortunately, the accuracy of productive vocabulary itself seems unimportant because learners are required to memorize new words without applying them productively (Zhang, Li, Jiao, Ma and Guan, 2016). In this way, digital resources can be used to engage learners in communicative tasks and use the vocabulary actively (Kirmizi and Kömec, 2019). One of the media that can be used to assign digital resources is smartphones. It can be used to access YouTube and other sites easily and enjoyably.

Referring to some extramural activities investigated in the previous studies reviewed above and relating those activities with the use of smartphones, which is closely related to learners' daily life nowadays, this study is aimed to investigate the correlation between the use of smartphones as extramural English learning and learners' vocabularies. The research focuses on the written productive vocabulary, especially the academic vocabulary that is classified into domain-specific vocabulary and general vocabulary. Regarding domain-specific vocabulary, this type of vocabulary consists of content-specific words that appear in various disciplines. On the other hand, general academic vocabulary consists of words that are used across all grades (Elleman et al, 2017). Although this research focuses on written productive vocabulary, but domain-specific academic vocabulary also involves learning occurs during oral communication (Fitzgerald, 2019). In this study, the Academic Word List (AWL) proposed by Coxhead (2000) is used as the standard reference in defining academic vocabulary.

Involving three main activities and nineteen extramural activities under the main activities, this study is also aimed to investigate more detail about the

correlation between each extramural activity and learners' vocabulary. Thus, this study was conducted considering the following research questions:

1. Is there any significant positive correlation between the use of smartphones as extramural English learning and learners' vocabularies usage?

2. Which of the extramural activities correlate significantly with learners' vocabulary usage?

Research Methods
Research Design

This research employed a correlation design to investigate the relationship between two variables, namely using smartphones as extramural English learning and students' use of English academic words in writing. Quantitative correlation is considered as the most effective method to give information about the strength of the relationship between variables (Ary et al., 2010, p. 350).

Participants

The participants of this research were 35 undergraduate students of the English Department at a private university in East Java, Indonesia. They included 4 males (11,43%) and 31 females (88,57%). All of the participants of the research were in their third semester and were taking an essay writing class. Unlike the previous studies by Sylven & Sundqvist (2012) and Olsson & Sylven (2015), investigating the effects of gender/ gender differences is beyond the scope of this study due to the marked difference in the number of male and female participants, in which female participants greatly outnumbered male participants.

Instruments and Data Collection

A questionnaire was used to collect data about learners' frequency in using smartphones as extramural English learning with a Likert scale. The questionnaire consists of three main activities: (1) browsing the internet such as reading articles in English, reading news in English, etc. (2) using a social media account which involves updating status on Facebook, Twitter or Instagram in English, giving comments on other's status in English, etc. and (3) searching for entertainment, for instance watching English movies, listening to English songs, playing games with English instruction, etc. The first main activity of extramural English involved nine specific extramural activities. The second one involved four particular extramural activities, and the last main activity consists of six more detailed extramural activities. Those activities are adapted from Sylven and

Sundqvist (2012) and Olsson and Sylven (2015). The scale from 1 to 5 was used to represent the frequencies of doing extramural activities and to enable statistical analysis:

5   = Always
4   = Usually
3   = Sometimes
2   = Seldom
1   = Never

To guarantee that the data collected are accurate and consistent, the validity and reliability need to be ensured. Thus, the validating process was carried out on construct validity and content validity. Two experts were involved in the construct validation process. The two experts were also involved in checking the content validity, that was the relevancies of each item with the dimension, variables, and sub-variables presented in the blueprint of the test. After the validating process, some revisions on the test were done based on the experts' suggestion. The revision process was then followed by a tryout of the instrument. The result of the tryout showed valid and reliable results.

The next instrument used in this research is an essay writing test. This test is used to know the amount of English academic words that learners used in their writing. The test asked the learners to compose a comparison and contrast essay individually; the students may choose free topic among some topics, namely sports, countries, animals, or foods. The test instruction has been validated by two senior lecturers who are expert in teaching writing. Through the content validation process, the result indicates that there should be a minor revision in the instruction that deals with the words length limitation in writing the essay. It is essential since the focus of this research is on the number of academic words used in the essay. Three raters then checked the academic words that appeared in learners' writings by using the Academic Word List (AWL) proposed by Coxhead (2000).

Data Analysis

The data analysis of obtained data from the instruments is intended to answer the research problems. There are two steps involved in the data analysis. The first step is concerned with the test of the fulfillment of assumptions required for running a correlation analysis before analyzing the correlations of variables under investigation. The second step deals with hypothesies testing.

Since the statistical assumptions of normality and linearity are met, the hypotheses testing is conducted by employing the Pearson Correlation test. The Pearson Correlation is conducted to assess the relationship between two continuous variables. The two variables in this study refer to adult EFL learners' extramural English and their vocabulary in writing. When the *p*-value or significant value of the correlation is less than the α value .05, it means that the correlation between the two variables is significant. Thus, further interpretation of the direction and degree of the correlation should be presented. The interpretation of the direction and the degree of correlation is made by looking at the coefficient of Pearson Correlation and interpreting the value.

Results and Discussion
Results

The assumptions which need to be tested in this correlational design include the assumption of normality and the assumption of linearity. The results of the assumption tests showed that the data are normally distributed and have a linear regression. Since both of the assumptions are fulfilled, further data analysis is conducted by using the Pearson Correlation. This process of data analysis is conducted to test the research hypotheses.

The descriptive analysis of the data from thirty-five questionnaires collected from the participants of the research reveals the frequencies of smartphone usage in three main activities that are considered to be extramural English learning. The activities are browsing the internet, using social media, and searching for entertainment. The descriptive results of three main activities in the questionnaire are presented in Tables 1, 2, and 3.

Table 1. Browsing the Internet

Extramural English Activity	(1)	(2)	(3)	(4)	(5)	∑f
Read articles in English	0	6	19	9	1	110
Read novels in English	6	23	6	0	0	70
Read e-books in English	0	17	12	6	0	94
Read blogs in English	1	5	19	10	0	108
Read news in English	1	11	18	3	2	99
Surf English websites	2	7	18	5	3	105
Read emails in English	7	17	9	1	1	77
Write emails in English	5	25	3	2	0	72

Translate words/ sentences into English or vice versa	2	2	14	14	3	119

From nine extramural English activities that are included in browsing the internet with a smartphone, only four activities are included in high frequency. Based on Table 1, the activity with the highest frequency is translating words/sentences from or into English with a frequency of 119. The next is reading articles in English with the frequency of 110. The other two activities are reading blogs in English and surfing English websites with the total frequency of 108 and 105 respectively. The learners do Reading news in English and reading blogs in English with the total frequency 99 and 94. While reading e-mails, writing e-mails, and reading novels have the lowest total frequency of 77, 72, and 70 respectively.

Table 2. Using Social Media

Extramural English Activity	(1)	(2)	(3)	(4)	(5)	∑f
Update my status on Facebook, Twitter or Instagram in English	3	6	17	7	2	104
Follow people, organization, and so on of English native speaker, on Twitter or Instagram.	3	7	13	7	5	109
Give comments on other's status in English	3	11	15	5	1	95
Do discussion through Whatsapp in English	0	16	9	10	0	99

The result of the questionnaire in using social media with smartphones presented in Table 2 shows that two specific activities belong to high frequency. The highest frequency activity is following people, organization, and so on of English native speaker, on Twitter or Instagram with the frequency, 109. It is followed by updating status on Facebook, Twitter, or Instagram in English with

the total frequency of 104. Doing discussion through WhatsApp in English and giving comments on other's status in English are in the third and fourth place with the total frequency of 99 and 95 respectively.

The questionnaire also informs that all specific extramural activities in searching for entertainment with smartphones are included in high frequency. The highest frequency with the total 149 is listening to English songs. The second and third places are downloading/ searching for lyrics of English songs and playing games (with English instruction) with the frequency of 143 and 131 for each. The next is watching videos in English and watching English movies with 127 and 120 respectively. Watching movies with English subtitles has the lowest total frequency with 117. The complete output of descriptive analysis on extramural English activities in searching for entertainment with smartphones is presented in Table 3.

Table 3. Searching for entertainment

Extramural English Activity	(1)	(2)	(3)	(4)	(5)	∑f
Watch English Movies	0	3	19	8	5	120
Watch movies with English subtitles	2	4	13	12	4	117
Listen to English Songs	0	0	6	14	15	149
Watch videos in English	0	3	13	13	6	127
Download/ search for lyrics of English songs	0	3	5	13	14	143
Play games (with English instruction)	1	6	6	10	12	131

The descriptive analysis on the result of the essay writing test of 35 learners as the participants of the research was the next analysis done by the researchers. The result of the analysis shows the various number of academic words used by EFL learners in their writing. The academic word usage varied from the lowest amount of 1 academic word to the highest amount of 27 academic words with a mean of 7.63 and Standard Deviation of 5.912. The output of the descriptive analysis of academic word usage is presented in Table 4.

Table 4. Academic Word Usage

	N	Min.	Max.	Mean	SD
Academic Words	35	1	27	7,63	5,912
Valid N (listwise)	35				

After analyzing the data from the questionnaire and essay writing test descriptively, the researchers analyzed the data statistically by correlating them. The output of correlation analysis by using SPSS presented in Table 5 shows the Pearson Correlation (R) value 0.465. With N = 35 and df = 33, the R table is 0.3338, which means that the R-value is higher than the R-table. The correlation table also shows the sig. (2-tailed) 0.005, which is below the alpha value (α = 0.05). Those numbers indicate the significant positive correlation between the use of smartphones as extramural English learning and learners' vocabularies in their writing focusing on English academic words.

Table 5. Correlations

		Academic Words	Extramural English
Academic Words	Pearson Correlation	1	,465[**]
	Sig. (2-tailed)		,005
	N	35	35
Extramural English	Pearson Correlation	,465[**]	1
	Sig. (2-tailed)	,005	
	N	35	35

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

The more detailed analysis was further conducted to know the correlation between each of the extramural activities in three main activities. The result of the analysis reveals that from the total of 19 extramural activities appeared in the questionnaire (nine extramural activities in browsing the internet, four extramural activities in using social media, and six extramural activities in searching for entertainment) only five extramural activities correlate significantly to the number of learners' academic words in their writing. They are translating words/sentences from/ into English (R=0.364, sig.=0.32), watching English movie (R=0.419, sig.=0.012), watching movie with English subtitle (R=0.433, sig.=0.009), listening to English songs (R=0.351, sig.=0.039), and watching video in English (R=0.381, sig.=0.024).

Discussion

The results of data analysis by using Pearson Correlation reported in finding shows a significant positive correlation between the use of smartphones as extramural English learning and learners' usage of English academic words in their writing (R=0.465, sig.=0.005). The positive correlation means that the more the learners do extramural activities with their smartphones, the more they use academic words in their writing which indicates the more academic words they have learned. The finding of the study corroborates the findings of, Sylven & Sundqvist (2017), and Amaliah (2018) which show the benefit of extramural English for younger learners' English proficiency. Further, the finding of this study also reveals that extramural English is beneficial not only for young learners but also for adult EFL learners.

However, the significant correlation between extramural activities and the number of academic words used in learners' writing are not found in all kinds of extramural activities done in three main activities. A further analysis that correlated each of extramural activities with the number of academic words shows that only five extramural activities correlate significantly to the number of academic words which means that those five activities are beneficial for learners' acquisition of English academic words. These five extramural activities are included in high-frequency activities done by the participants. The activities are translating words/sentences from/ into English with the total frequency 119, watching English movies (120), watching movies with English subtitles (117)), listening to English songs (149), and watching videos in English (127). These findings are in line with the previous findings that watching films (or in this study is movies) contributes to and benefits for language acquisition (Jakobsson, 2018; Jensen, 2017) and, depending on the content of the films, this extramural activity benefits for learners in acquiring specific vocabularies (Huang, 2018).

Some earlier studies which involved various kinds of extramural writing (i.e., writing on Facebook or Twitter in English and writing a letter, an email, or a text message in English), extramural reading (i.e., reading books in English and reading other things in English), and watching films in English (Jensen , 2017; Olsson, 2016), and also playing games (Jakobsson, 2018; Wilde and Eyckmans, 2017) have proven that the frequencies of those extramural activities correlate significantly with young learners L2 proficiency (Sylvěn & Sundqvist, 2017) and with the proportion of academic vocabulary used by students at their early stage of secondary school (Olsson & Sylvěn, 2015). However, Olsson & Sylven (2015) further found that the correlation is no longer statistically significant at a higher level. The detailed analysis of 14 other extramural activities in this study shows that there is no significant correlation between those activities with the number

of academic words used by EFL learners. Seven out of fourteen extramural activities are included in low-frequency activities done by the participants. They are reading novels in English (70), reading e-books in English (94), reading news in English (99), reading emails in English (77), and writing emails in English (72), giving comments on others' status in English (95), doing discussion through WhatsApp (99). While the rest seven extramural activities are included in high-frequency activities. These seven activities include reading article in English (110), reading blogs in English (108), surfing English websites (105), updating status on social media (104), following people, organization, etc. on social media (109), downloading/searching for lyrics of English songs (143), and playing games (131). Unlike the significant correlation found in 4 extramural activities with high frequency presented in the previous paragraph, these 7 extramural activities do not correlate significantly with the amount of academic words. Apparently, the high frequency of the activities is not associated with the high number of academic words used in writing which means that those extramural activities do not contribute to the learners' academic words acquisition significantly. Those findings confirm the finding of Olsson & Sylven (2015) that the frequency of extramural activities does not correlate significantly on higher-level learners. However, other factors might also influence this situation. One of the possible factors that appear in this research is the types of articles, blogs, websites the learners read, and the community the learners join or follow. As academic words occur most often in written academic texts and less in the newspapers (and so forth) and fictions, Coxhead (2000) suggests learners to read academic textbooks to be more focused on developing their academic word knowledge.

Conclusion

Overall, the use of smartphones as extramural English learning correlates significantly and positively to EFL learners' vocabulary which shows the benefit of extramural activities with smartphones to enrich learners' vocabulary. Learners' ability in using various kinds of vocabulary, especially the English academic words will give a positive contribution to their writing. However, only five out of nineteen extramural activities correlate significantly to learners' vocabulary usage while the other fourteen do not have any significant correlation. This situation is caused by the types of articles, blogs, websites the learners read, and the community the learners join or follow. Highlighting the situation, the pedagogical implications of this research suggest teachers and lecturers to encourage their students to read more academic articles, blogs, and websites. Furthermore, teachers and lecturers need to provide various sources in English

to support students' extramural activities such as the recommendation of English movies, novels, blogs, and websites. For future researchers, it will be better to develop the research about extramural English activities in another design, for instance, experimental research to gain the effect of extramural English to writing skills or other English skills.

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