

Investigating the Influence of YouTube Learning Videos and Mobile Learning Application on Economics Students' English Vocabularies

Tusyanah, Risma Nur Anissa, Fentya Dyah Rahmawati, Ashomatul Fadlilah, and Mar'atus Sholikah
*Department of Economics Education, L2 Building, The Faculty of Economics,
Universitas Negeri Semarang, Gunungpati Semarang 50229*

Keywords: English YouTube Videos, English Learning Mobile App, English Vocabularies

Abstract: English is needed in the global era because we are connected easily at the virtual world. In Indonesia, there are 104.96 million people phone internet users in 2017 (statista, 2017). Various applications are available at Play Store to ease the mobility. Users can download any applications they want such as games, social media, music, and or education. Mobile learning is useful since teachers and students can use for learning English and to build English skills anytime, anywhere on their mobile devices Furthermore; as published at fortune.com, the best and most famous app in 2017 was YouTube. Smartphone users are easily to watch learning video through YouTube. It can be positive if we maximize them for education. The objective of the study was to know the influence of using YouTube learning videos and mobile learning application on economics students' English vocabularies. Samples were taken by purposive random sampling, there were 91 economics students who agreed to use YouTube videos for learning English and installed English application and routinely used it for one semester. The results showed that the regression equation was $Y = 65.568 + 0.304 X_1 + 0.425 X_2 + e$. It means that: 1) partially, using YouTube videos gave influence on students' vocabularies for 5.19%, 2) partially, using mobile learning through English learning application gave influence on students' vocabularies for 9.55%, 3) and simultaneously, using YouTube videos and mobile learning through English learning application gave influence up to 21.1%. Some students said that it was easier for them to study via mobile app on their mobile devices because they bring mobile devices everywhere and they were not boring which had many features and levels. Thus; educators should consider the videos and the mobile application which can be used for students to learn English.

1 INTRODUCTION

Based on the survey conducted by statista in 2017, 104.96 million people were accessing the internet in Indonesia. Indonesian people like online activities include mobile messaging and social media. The most popular social network in Indonesia is Facebook with 48 percent of the population using the platform. It made Indonesia one of the biggest internet users in the world. There are various things offered by internet; they can be split into two broad areas; communications and information. It gives all information on politics, education, entertainment, social media and others. It makes people want smartphone to access the internet easily.

Based on Gray (2017), the most visited sites in the world are Google, YouTube and Facebook. Everyone likes YouTube since it provides various videos. Then, when people access applications on smartphone, the users can install any application at

Play Store. Google Play (previously Android Market) is a digital distribution service operated and developed by Google. Applications are available through Google Play either free of charge or at a cost. They can be downloaded directly on an Android device through the Play Store mobile app.

Along to the technology advancement, there are many changes our daily life. These changes should make changes on the teaching learning process since students are the active internet users. The millennial generations are more excited to get materials through ICT (the Information and Communication Technologies). It makes the educators are challenged to adjust the teaching strategy to teach and learn with ICT.

On the other hand, in Indonesia, English is deemed as a foreign language instead of a second language. However, as the local communities are becoming more global, so learning and mastering English has become a necessity (Tusyanah, et.al,

2016). If we want to get information, more information is in English. It is also useful for communicating. As we know that in the globalized era, more people can communicate more easily in English.

The objectives of the study were to know the influence of YouTube learning videos and English learning mobile application on students' vocabularies. It is important to be done since if the educators can teach in fun ways, students will be more excited to learn English more and more. Consequently; their English will be better.

YouTube is a video-sharing website that allows users to upload, view, and share video clips, offers access to new and dynamic opportunities for effective and non-traditional patterns of teaching and learning. Alwehaibi (2015) did a research on The Impact of Using YouTube in EFL Classroom On Enhancing EFL Students' Content Learning Huda Omar Alwehaibi, Princess Noura Bint Abdulrahman University, Saudi Arabia. The study shows positive gains for the experimental group students' outcomes as a result of the integration of video technology in instruction. YouTube should be considered as an effective instructional tool for enhancing content learning of EFL college students and as an important teaching resource in classrooms. Thus, the study hypothesis is:

H₁ Using the YouTube Learning Videos significantly influences students' English vocabularies

Furthermore; English learning mobile application is the second independent variable. There are diverse mobile applications at the Play Store in the smartphone. It is so easy to get any applications. It is just click the Play Store and then we can get the application by installing it. Although there are a lot of apps referring to learning English and students are easier to get these materials and resources, the reality is that the App market is like a jungle. There is too much software for students to choice and use.

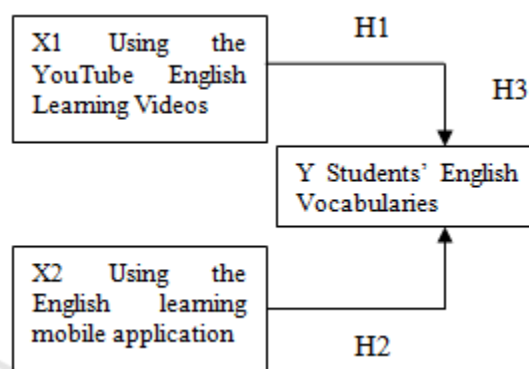
Then, Liu and He (2014) studied about Using Mobile Apps to Facilitate English Learning for College Students in China. They found that the new learning approach is effective and helpful for college students to improve English by using their mobile devices, as well as undergraduates are willing to use apps to learn English with self-regulated learning approach instead of traditional learning approach. Therefore; it is hypothesized that:

H₂ Using the English learning mobile application significantly influences students' vocabularies

Those two independent variables were expected to improve students' vocabulary acquisition. And the next hypothesis is:

H₃ Using the YouTube videos and mobile application simultaneously influence students' English vocabularies.

Based on the above description, the study proposed the theoretical framework as presented in Figure 1.



The Figure 1. Theoretical Framework

2 THE METHODS OF THE STUDY

This quantitative study used a survey research design to investigate the using of YouTube Learning Videos and English Learning Mobile Application on economics students' vocabularies. The population of the study was all Cooperative Education students on the first semester at Universitas Negeri Semarang; they were 125 students. 91 students were the samples calculated by Slovin formula. The data were collected by the questionnaires. The subjects responded on a four-point Likert type scale (1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree).

A quantitative research method was applied to determine whether the independent variables significantly influence dependent variable. The statistical package for the social sciences (SPSS) computer program version 21.0 was used for statistical analysis and to attain the statistic data for this study.

3 RESULTS AND DISCUSSION

91 students were selected to be the samples of the study. Those 91 students were required to use

YouTube English learning videos and English learning mobile application. Here they are the results.

3.1 Construct Validity

The data were tabulated, then it needs to be analysed the validity and reliability of the questionnaire. The concept of validity was formulated by Kelly (1927, p. 14 in Pavlov) who stated that a test is valid if it measures what it claims to measure. Here are the results of validity test.

Table 1: Explanatory Factor Loadings.

No	Statements	Factors loading
1	I understand if YouTube offers various learning videos	.457**
2.	I have YouTube application at my mobile device	.349**
3.	I usually watch or download YouTube videos via my internet data package	.538**
4.	I watch English Learning videos routinely	.632**
5.	I know all features at YouTube Website and how to use them	.574**
6.	I love learning English via YouTube videos	.553**
7.	My English is getting better by watching YouTube English videos	.601**
8.	I know there are many English mobile applications at Play Store	.542**
9.	I have mobile application to learn English at my mobile phone	.627**
10.	I use the English mobile application routinely	.648**
11.	I understand the features of the mobile application easily	.655**
12.	I am glad to learn English via mobile application	.667**
13.	My English is getting better by using English mobile application	.742**

As we can see at table 1, all items to measure independent variables were more than 0.05. It means all items were valid to be the questionnaire for obtaining the data.

3.2 Reliability Testing

Reliability refers to the repeatability of findings. Phelan and Wren (2005), Reliability is the degree to which an assessment tool produces stable and

consistent results. If the study were to be done a second time, it would yield the same results.

Table 2: Reliability Analysis

Variables	No. of items	No. of deleted item	g's α
YouTube Learning Videos	7	0	.710
English Learning Mobile Application	6	0	.824

As we can see at table 2, the independent variables' Cronbach's alpha were 0.710 and 0.824. The minimal value of reliability minimal was 0.7 (Ghozali, 2011). They were more than 0.7. It means the questionnaires were reliable.

3.3 Regression Analysis among Variables

The data were analysed by ANOVA and regression analysis. ANOVA was used to determine differences YouTube Learning Videos and English Learning Mobile Application on economics students' vocabularies Acquisition (H_1 and H_2). Regression analysis was used to determine the influence of differences YouTube Learning Videos and English Learning Mobile Application on economics students' vocabularies acquisition (H_3).

Table 3: Simultaneous Test Result (F test)

ANOVA ^a					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	385.443	2	192.721	13.016	.000 ^b
Residual	1302.997	88	14.807		
Total	1688.440	90			
a. Dependent Variable: Students_Vocab					
b. Predictors: (Constant), MobileApp, YouTube					

From the results of the analysis can be concluded that simultaneously, the variables X_1 (YouTube learning videos), X_2 (English learning mobile application), influenced the variable Y (Students' English vocabularies) because the significance was $0.000 < 0.05$.

3.3.1 Partial Test (t test)

Hypothesis testing (t) was used with SPSS 21 program was by comparing the significance of each

independent variable against the dependent variable with $\alpha = 5\%$. The results of partial test analysis can be seen from the table below:

Table 4: The Analysis Results of Multiple Linear Regression

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	65.568	2.956		22.178	.000
YouTube	.304	.139	.232	2.193	.031
MobileApp	.425	.139	.323	3.052	.003

a. Dependent Variable: Students_Vocab

Based on multiple linear regression analysis on the table above; the multiple linear regression equation was: $Y = 65.568 + 0.304 X_1 + 0.425 X_2 + e$ It means that:

1. Constant = 65.568; if the independent variables are considered constant or 0 then the average of English vocabularies was 65.568
2. Coefficient X_1 (Using YouTube learning videos Intelligence) = 0.304, it means if the YouTube learning videos variable increased by 1 point while the mobile learning application was 0, it would lead to an increase in English vocabularies for 0.304
3. Coefficient X_2 (English learning mobile application) = 0.425 If the English learning mobile application variable increased by 1 point while the YouTube learning videos variable was 0, it would lead to an increase in English vocabularies for 0.425

3.3.2 Coefficient Determination Test (R2)

Coefficient determination was to determine the magnitude of the relationship or the influence of independent variables (YouTube learning videos and learning motivation) to the dependent variable (learning achievement). The results of coefficient of determination both simultaneously and partially can be seen on the table below.

Table 5: The Result of Simultaneous Determination Coefficient

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.478 ^a	.228	.211	3.848

a. Predictors: (Constant), MobileApp, YouTube

Based on the summary model table above, it showed Adjusted R Square value was $0.211 = 21.1\%$. This result showed that 21.1%. Dependent variable of English vocabularies can be explained by the variation of the two independent variables; YouTube learning videos, and English learning mobile application. While the remaining 78.9% influenced by other factors which did not examine in this study.

Then, the magnitude of influence of each independent variable to the dependent variable can be known from the magnitude of coefficient determination partially of each variable. It can be seen in the following table:

Table 6: The Calculation Result of Partial Determination Coefficient

Model	Correlations			Collinearity Statistics	
	Zero-order	Partial	Part	Tolerance	VIF
(Constant)					
YouTube	.383	.228	.205	.782	1.278
MobileApp	.431	.309	.286	.782	1.278

Based on the above coefficients table, it was known that the magnitude of partial value on YouTube learning videos variable (X_1) = 0.228, so that the influence of YouTube learning videos variable to entrepreneur interest was $(0.228)^2 \times 100\% = 5.19\%$. The amount of partial value in English learning mobile application variable (X_2) = 0.309, so that the influence of Adversity Quotient variable to entrepreneur interest was $(0.309)^2 \times 100\% = 9.55\%$.

Based on the research results above, it can be stated that;

H₁ "YouTube Learning Videos significantly influenced students' English vocabularies" was accepted.

H₂ "English learning mobile application significantly influenced students' vocabularies" was accepted.

H₃ "YouTube videos and mobile application simultaneously influenced students' English vocabularies" was accepted.

It is interesting to get the results. Some students revealed that YouTube offered various videos which made them also accessed other videos which did not support their English vocabularies. They thought that accessing YouTube can release the pressure or stress by watching videos on entertainment and

happiness. Clifton and Mann (2011) found that the use of YouTube videos increased student engagement, critical awareness and facilitated deep learning. Furthermore, these videos could be accessed at any time of the day and from a place to suit the student. The best videos are also interesting and fun to watch. Here they are YouTube channels which students can access to improve their vocabularies; Speak English with MisterDuncan, BBC Learning English, VOA Learn English, Rachel's English, Easy English, Real English and Business English Pod (Konrad, 2017)

Then, mobile learning application give a significant influence on students' English vocabularies. Smartphone allows the user to use the application easily. They can use it anytime anywhere; thus some students said that they could manage their time more wisely in learning English by using mobile application than YouTube videos. Godwin (2011) studied on Mobile apps for language learning. He said that as personal devices, smartphones are ideal for individualized informal learning. The user determines which apps to acquire and how to use them. As language educators, we should encourage and assist the learner autonomy this enables and provide means for learners to combine formal and informal learning.

Sandberg & de Geus. (2011) studied on Mobile English learning for an evidence-based study with fifth graders. The results showed that the group which took the mobile phone home improved the most. However, when the additional learning time, spent apart from school, of this third group was controlled for, the superior performance of the group disappeared. The results indicate that students are motivated to use the application in their spare time and that this benefits their learning.

Mobile applications which are available at Play Store are so varied; Here are 5 of the best English apps that teachers and students can use for learning English and to build English skills anytime, anywhere on their mobile devices; Duolingo - Learn Languages for Free, Memrise: learn languages free, Learn Languages busuu, LearnEnglish Grammar (UK ed.) and Learn English with Babel.

If English YouTube videos and English Mobile Apps are compared to know the better media for students to learn English; so they answer is Mobile Application. Some students said that it was easier for them to study via mobile app on their mobile devices because they bring mobile devices everywhere and some applications can be accessed offline which made them easy to use them. Then, mobile applications were not boring because there were

many choices and levels. Just click which one was needed, they could use and access it.

On the other hand, some also said that some videos were boring. If they played three or five times, they would not play them again. In addition, some videos were heavy at the storage and data. Therefore; they preferred application to videos.

Thus; educators should consider the videos and the mobile application which can be used for students to learn English. They have to plan and set the learning process so the objectives of the learning can be achieved. However, if educators should choose videos or mobile app, they can use mobile app first.

4 CONCLUSION

It is concluded that simultaneously, variables of using YouTube learning videos and English learning mobile application influenced English students' vocabularies for 21.1%. Partially, there were two variables influencing English vocabularies; they were YouTube learning videos for 5.19%, and English learning mobile application variable for 9.55%.

Therefore; to improve students' English vocabularies, it needs to improve their teaching and learning process by showing YouTube learning videos and using mobile learning application since in the digital era, there are many technology which can be used to support students' preference in learning.

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