

## The Relationship between Students' Perceptions on Online Slack Application and Their Motivations in Writing Skill

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**Abstract.** This present study aims to investigate the correlation between students' perceptions of Slack application and their motivations in writing skills. An analysis of the research literature in perception and motivation as Wei and Elias (2011) theory revealed that students' perceptions of classroom environment play an essential role in promoting students' motivation in learning a language. A quantitative correlation was used in this present study. Thus, the data were collected by employing close-ended questionnaires towards Likert Scale technique. However, this study was conducted at one university in Tasikmalaya. The findings show that the correlation coefficient of  $r_{xy}$  is 0.77. According to the strength of the correlation table, the  $r_{xy} = 0.77$  lies between 0.75 and 0.99 which means there is a correlation between students' perceptions of online Slack application and their motivations in writing. This study suggested that Slack Application can be used as an alternative to facilitate students' engagement in classroom activities.

**Keywords:** ICT, Slack application, students' motivation, writing skill

**Abstrak.** Tujuan dari penelitian ini adalah untuk menyelidiki hubungan yang ada antara persepsi siswa tentang aplikasi Slack dan motivasi mereka dalam keterampilan menulis. Analisis literatur penelitian dalam persepsi dan motivasi sebagai teori Wei dan Elias (2011) mengungkapkan bahwa persepsi siswa tentang lingkungan kelas memainkan peran penting dalam mempromosikan motivasi siswa dalam belajar bahasa. Korelasi kuantitatif digunakan dalam penelitian ini. Dengan demikian, pengumpulan data dilakukan dengan menggunakan kuesioner tertutup terhadap teknik Skala Likert. Namun penelitian ini dilakukan di salah satu Universitas di Tasikmalaya. Hasil penelitian menunjukkan bahwa  $r_{xy}$  memiliki koefisien korelasi sebesar 0,77. Berdasarkan tabel kekuatan hubungan,  $r_{xy} = 0.77$  berada di antara 0.75 dan 0.99 yang berarti hubungan tersebut sangat kuat. Studi ini menyarankan bahwa Slack Application dapat menjadi cara lain untuk memfasilitasi keterlibatan siswa dalam kegiatan kelas.

**Kata kunci:** aplikasi Slack, ICT, keterampilan menulis, motivasi siswa,

## INTRODUCTION

In the era of the 21<sup>st</sup> century, schools have begun implementing technology such as using media and devices in the classroom to create a better experience in education. Technology is necessary for today's modern education, it was revealed that the use of technology and tools, the learning and interactivity of students increases (Raja & Nagasubramani, 2018).

According to the development of technology, ICT has been taught in global education which can be assumed as an important key to face digitalized era. Fast developments of technologies have affected all areas of our life, it changes the habit and flexibility of the education environment (Verma, 2011). This is in line with Meenakshi (2013) who argues that ICT in education can empower teachers and learners in making significant contributions to teaching and learning achievement.

In the new era of education, there are so many educational institutions that have begun looking for new models of teaching to fulfill the following objectives, such as improve the quality of education and learning process. Wardono, et.al. (2018) states that new technological instruction in education can be impacted to the needs of the students, to provide more effective learning activities, and to promote the environment that motivates the students in learning activities.

Teaching and learning by ICT give teachers more choice in teaching processes that is unavailable in the traditional classroom. Besides, using ICT in teaching activity can explore existing curriculum to learners on such levels; regional, national and international (Verma, 2011; Halki & Politis, 2014). Then, the best way to maintain the connection between online educators and the use of ICT is through ensuring that technology in learning should be “delivered” by teachers who have fully qualified and interested in teaching online, such as in a web-based environment (Yang & Chang, 2012; Cowie & Jones, 2009). It can be assumed that the use of technology is important to get more speed access into the world of knowledge. The use of technology is highly expected that can help teachers and students to access the knowledge quickly and easily (Ahmadi, et.al., 2011; Salehi, et.al, 2015).

In this new era of education, the use of ICT can create more pedagogical aspects in which the ICT will improve the effective teaching and learning activities (Jamieson-Procter et al., 2013 in Ghavifekr & Rosdy, 2015). This is similar to Anastasiades and Zaranis (2017) who stated that ICT is an assistant of students’ learning activity that can improve students’ skills including critical thinking, critical knowledge, responsibility, cross-cultural understanding, and knowledge construction.

Concerning the role of online technology in teaching and learning, ICT can be assumed as a tool to support and enhance the existing curriculum that enables more effective delivery of the curriculum. Ramezani, et al., (2010) argue that ICT or technology in classroom activities is a cognitive mind tool in providing more knowledge and experience to the students.

There are three dimensions of ICT in education related to the use of flexibility. The first is intended, the second is implemented and the last one is achieved. The intended means the process of classroom activities in terms of target achievement, and processes of teaching and learning related to the national curriculum (Print, 1993 as cited in Ghavifekr & Rosdy, 2015). At the classroom level, the intended refers to the goals of the learning target or the objectives of a lesson plan. However, the implemented refers to learning opportunities for students and achieved refers to the goals of students’ knowledge based on the use of ICT in teaching and learning activities (Ghavifekr & Rosdy, 2015).

Several applications are related to the tools of ICT which are usually used in teaching and learning activities, such as Scholar, GC or Google Classroom, Edmodo, Siakad Cloud, or known as the integrated system of cloud in education, Slack Application, etc. All of them are related to the online application as it is included in ICT categories. Thus, incorporation between education and entertainment is also good to attract students to learn more conscious

with dynamic teaching techniques by the teachers. Parveen and Rajesh (2011) assert online application becomes indispensable in teaching and learning activities.

Furthermore, many applications can help students to improve their learning competencies, one of them is to help the students in learning English. In another sense, English has become one of the important subjects in school because English is one of the most important lessons in the national curriculum in Indonesia. Thus, one of the hardest levels in English learning is learning to write. In learning writing, students do not only learn the structure of the text but also learn how to use the lexis and grammar of the text (Hyland, 2003; Ardiansah, 2015; Hidayati, 2018). Besides, the focus of this present study is to know the effect of online application as a part of ICT's tool in learning English writing.

Several studies have been analyzed the use of online applications in learning writing. Rodriguez, et.al (2012) argue that using an online application in classroom activities is an effective way to improve students' writing competencies. However, digital applications can shape students' critical thinking in writing, for example in generating ideas, editing, revising, and finishing their writing product (Azmi, 2017; Agca & Ozdemir, 2013). It can be assumed that online application is one of the current ways to increase the students' motivation and perception to learn English writing effectively and pleasurably.

Furthermore, online applications in learning English writing were able to help students in developing new skills and critical ideas, as well as dealing with complex problems and managing the processes required to complete the given tasks (Anastasiades & Zaranis, 2017). More general, using an online application in an ESL classroom can improve and enhance students' language acquisition and substantially motivate them to continue their learning, and stimulate their creativity in English learning (Azmi, 2017; Salehi, et.al. 2015; Alvarez & Bassa, 2013).

This study focused on one application that is Slack Application used by the students and the impact on their motivation in writing skills. Heryandi, et.al. (2020) state that Slack application is one of ICT's parts which can help the students to improve their writing skill and helps the students to directly respond teacher's correction. This way can be assumed as a simultaneous process in improving students' English competence as foreign language learning. Similarly, Aghaee and Keller (2016) state that *Slack Application* is a system in facilitating students to get more communication directly with the teacher classroom activities, enhance collaborative learning with other students, and improve the quality of learning activities especially in learning English writing.

Furthermore, *Slack Application* refers to computers and people in-network or called CMC (Computer-Mediated Communication). It means this application can support content communication, task, and planning in the system apps (Tylor, et.al, 2012). Besides, Slack application is an application that supports the teacher in giving the material, assignment, and can improve their teaching practices (Perkel 2017; Gofine & Clark 2017; Heryandi, 2020). Thus, an approach to the online application in learning writing perspective can enable students to develop new knowledge, skills, and competencies that deal with several rules of writing aspect in their learning activities (Atai & Alipour, 2011; Yastibas & Yastibas, 2015).

In respect to the mentioned points above, this present study is sought to find answers to the questions which were formulated in the following questions:

1. How do the students perceive Slack application in learning English writing?

2. Is there any relationship between students' perceptions of the use of Slack application and their motivations in writing skills?

The advantages of this research are giving solutions for education issues and concepts, sharing experience in teaching and learning by using ICT in classroom activities, especially in teaching writing by using online media.

## METHOD

This research constitutes a quantitative approach. The quantitative approach tested some variables such as X and Y to find the natural phenomenon of the research (Creswell, 2014; Malik & Hamied, 2016). This study employs a correlational design. The correlational design investigated and measured the degree of association between two or more variables or sets of scores (Creswell, 2009 in Creswell, 2014). However, Lomax and Li (2008) explain that descriptive correlation research is a bit more complicated because it identifies the important variables which have a relationship among those variables in comparison with descriptive research.

Moreover, the statistical population includes faculty members in one university in Tasikmalaya, West Java, in which there were three grades in one semester i.e., class MN 3A which consists of 28 students, class MN 3B which consists of 26 students, and class MN 3C which consists of 22 students. The classes consist of 35 male students and 41 female students, so the total numbers of the population were 76 students.

In this present study, 32 students were taken randomly from the population as the samples of this research, consisting of 16 male and 16 female students (50%: 50%). The samples were chosen by using a simple random sampling technique. The samples were expected to be representative and can abridge the researcher to identify and generalize the data.

To collect the data, questionnaires were used in this present study. The questionnaire was divided into two categories. First, the questionnaire for measuring the dependent variable or the students' perceptions on Slack application and second questionnaire for measuring the independent variable or the motivations of students in learning writing. It occurred because there were two variables of the research (bivariate). Furthermore, there were 10 statements in the first set of questionnaires (dependent variable) and 12 statements in the second questionnaires (independent variable) that lead into the gap of this present study which should be revealed.

Thus, closed-ended question is measured by Likert Scale technique. The selection appeals intent to qualitative design that consists of *Strongly Agree*, *Agree*, *Uncertain*, *Disagree*, *Strongly Disagree* (Dornyei, 2007; Likert, 1932 as cited in McLeod, 2008; Malik & Hamied, 2016).

**Table 1** The Calculation for Likert Scale Categories

Positive Statements		Negative Statements	
Strongly Agree	= 5	Strongly Agree	= 1
Agree	= 4	Agree	= 2
Uncertain	= 3	Uncertain	= 3
Disagree	= 2	Disagree	= 4
Strongly Disagree	= 1	Strongly Disagree	= 5

The research data were measured statistically by Pearson’s measurement scales. As the data were in the form of interval scale and because there was always a possibility that the result of the study will show no relationship between the variables, the following Pearson Product Moment Correlation was used (Subana, et.al, 2000):

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$$

**Figure 1** Pearson’s Measurement Scales

In which:

- $r_{xy}$  = Correlation Coefficient
- $X$  = Students’ perception on *Slack* application
- $Y$  = Students’ motivations in Writing skill
- $N$  = Number of Subjects
- $\sum xy$  = Number of product for each score from x and y

To interpret the relative amount of the variation in students’ perceptions that was due to the relationship with the motivation of the students in learning writing by Slack application, the determination coefficient was calculated by SPSS V.26. It equals the square of the correlation coefficient and is therefore labeled  $r^2$ . Thus, the overview of the calculation for interval data was calculated by the stipulation of the relationship strength according to the table below.

**Table 2** The Strength of Coefficient Relationship

Coefficient	The Relationship Strength
0	There is no relationship
0.00 – 0.25	Very feeble relationship
0.25 – 0.50	Relationship is adequate
0.50 – 0.75	Solid relationship
0.75 – 0.99	Very solid relationship
1	Relationship is perfect

To compute the validity of the questionnaire, an analysis method was used in which the correlation coefficient of the options of each scale by the total scale was obtained. It was meant that the data needed to be calculated and be analyzed descriptively.

## RESULT AND DISCUSSION

This section elaborates the result of research questions regarding students' perspective of Slack application and the relationship between students' perception and their motivation in writing skills.

First, students' perspectives of Slack application in learning English writing. To answer the first research question in this present study, the set of questionnaires was delivered to the students in order to figure out students' perception toward the use of *Slack Application* in learning English writing. However, the questionnaires consisted of 10 questions. It was asked to 32 students as the sample of this present study.

The participants were anonymous as ethical principles in this present study. The anonymity of participants must be conducted to minimization of harm to the participant (Stake, 2010; Malik & Hamied, 2016). It can be argued that anonymity must be assured to protect their participants' identities and the location of the research from unwanted exposure.

According to the data gained from the participants, the data were displayed in the tables to be calculated to get the main findings of this present study. Hereunder, the collection of the data was taken from the first questionnaire and the second questionnaire can be seen in table 3 and table 4.

**Table 3** Summary of Subjects' Choice on 1<sup>st</sup> Enclosure  
(Questionnaire for Measuring the Dependent Variable)

		Total_X			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	28	1	3.1	3.1	3.1
	33	1	3.1	3.1	6.3
	35	2	6.3	6.3	12.5
	36	5	15.6	15.6	28.1
	37	1	3.1	3.1	31.3
	38	4	12.5	12.5	43.8
	39	3	9.4	9.4	53.1
	40	4	12.5	12.5	65.6
	41	3	9.4	9.4	75.0
	42	1	3.1	3.1	78.1
	43	1	3.1	3.1	81.3
	44	2	6.3	6.3	87.5
	45	1	3.1	3.1	90.6
	47	2	6.3	6.3	96.9
	50	1	3.1	3.1	100.0
	Total		32	100.0	100.0

(Calculated by SPSS V.26)

**Table 4** Subjects' Choice on 2<sup>nd</sup> Enclosure  
(Questionnaire for Measuring the Independent Variable)

		Total_Y			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	36	1	3.1	3.1	3.1
	39	1	3.1	3.1	6.3
	42	1	3.1	3.1	9.4
	44	1	3.1	3.1	12.5
	45	3	9.4	9.4	21.9
	46	4	12.5	12.5	34.4
	47	3	9.4	9.4	43.8
	48	5	15.6	15.6	59.4
	49	2	6.3	6.3	65.6
	50	4	12.5	12.5	78.1
	52	1	3.1	3.1	81.3
	53	1	3.1	3.1	84.4
	54	1	3.1	3.1	87.5
	56	1	3.1	3.1	90.6
	58	1	3.1	3.1	93.8
	60	2	6.3	6.3	100.0
	Total		32	100.0	100.0

(Calculated by SPSS V.26)

From the obtained data, it was found that all of the samples agree that the *Slack* application has the potential influence on improving students' writing skills. It is in line with Aghae and Keller (2016), who argue that the application of *Slack* gives the students to facilitate their best communication with the teacher correction, improve collaborative classroom learning, and improve the quality of students' writing skills. *Slack* application as a media in teaching and learning can give direct feedback from the teachers in correcting students' writing, so the students can directly revise their writing and it helps to improve their writing skills automatically.

Furthermore, it also found some disagreement on students' statement in using the application of Slack in students' writing processes. The students agree that some difficulties were coming from the facilities of the device, the intensity of learning using the application, and the system of Slack itself. Ke and Suzuki (2011) also write that there were some difficulties in conducting online application to classroom practices in education, such as the quality of device, infrastructure, facilities, and the skill of the tutor or teacher itself.

Moreover, to answer the second research question regarding the relationship between students' perceptions on the use of Slack application and their motivations in writing skill, validity, and reliability were used in this present study. The correlation coefficient showing the degree of the relationship between those two variables (X and Y) were investigated and calculated.

**Table 5** Correlation results

		Students' Perceptions	Students' Motivations
Students' Perceptions	Pearson Correlation	1	.771**
	Sig. (2-tailed)		.000
	N	32	32
Students' Motivations	Pearson Correlation	.771**	1
	Sig. (2-tailed)	.000	
	N	32	32

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

(Calculated by SPSS V.26)

From the result of the computation above, the  $r_{xy}$  there is the correlation coefficient between the perceptions of students on *Slack* application and their motivations in writing competence is 0.77. According to the strength of the relationship table above the  $r_{xy}= 0.77$  exist between 0.75 and 0.99 which means the relationship is very strong.

In conclusion, the results of questionnaires and calculation provided a positive correlation between the use of *Slack* application and students' writing skill as mediating variables between interactional teaching and English as foreign or second language learning. Thus, the online application of *Slack* would change the mindset of education pragmatism, and also it can be used to improve students' writing skills and motivation to the sub of English learning especially in English writing. Mbangwana, (2008), Wei and Elias (2011) stated that an online classroom environment can promote students' motivation and feedback among students in the classroom.

According to the research findings, the present study concludes that there found a significant correlation between the use of *Slack Application* and *Students' Writing Skill* in the language classroom. Aghaee and Keller (2016) also stated that the *Slack Application* could help the students and the teachers in finding the best communication in learning practices, and it is suitable for the students to improve their writing skills. In line with Halki and Politis (2014), they argue that by implementing the application in online learning, the teacher can make those specific teaching scenarios, so it can promote students' cooperativity to a higher degree of learning.

The results of the questionnaires provided the positive relationship between the use of *Slack* application and the motivation to the students' writing skill in learning English as the main subject in the national curriculum in Indonesia. Thus, an online application would help to change the philosophy of teaching and learning processes. Mbangwana (2008) states that the integration and the connection of ICT and several online applications in teaching and learning have the potential changes in pedagogical approaches in the era of technology in education.

In this present study, several difficulties were found in the online teaching and learning practices, such as the internet access, device facilities, and intensity of learning through the application. It needs more effort as the change of educational mindset in teaching and learning processes in this new technological era. It also needs more concentrated as the

improvement and increasing trend and new technological era in education which should be followed by device and facilities itself (Compton, 2009).

Moreover, Ajjan and Hartshorne (2008) as cited in Cao, et, al. (2013) stated that the integration of ICT in classroom practices provides the participants more value and new experience in their teaching and learning processes in which they have control over their teaching and learning progress. It is similar to Hrastinski (2008) who said that online application as a part of the ICT system could support the teacher progress in their teaching and also could empower their teaching practices.

From those several assumptions, it can be concluded that using an application in teaching and learning seems as changing the education mindset. (Hsu & Sheu, 2008) said that changes in teaching philosophy in the new era of technology can increase students' skill, new knowledge, more motivation, and achievement in their process of learning process it could be another way in the new trend of education processes.

## CONCLUSION

According to the result of this present study, it can be concluded that the use of Slack application affects the students' knowledge and also improve students' motivation in their writing skills. The result of questionnaires gives positive value in using an online application in their learning processes. Moreover, the use of online applications could contribute to the new trend in the teaching paradigm by changing the setting of traditional to modern teaching and learning (Compton 2009; Heryandi, et.al, 2020).

According to Meenakshi (2013), teacher's empowering and significant achievement in teaching and learning can be improved by the use of the online application, such as by the use of Slack application in classroom practices. However, Amin (2013) also states that the increased flexibility of education can be promoted by online application, learners have the potential to access new knowledge and new experience.

Several researchers argue that ICT in education has a potential account to create students' participation in a wide range of activities, and could be another tool in promoting students' skills and competence (Shahsavari & Hoon, 2010). Ke and Suzuki (2011) also argue that a new era of technology in education can be built by using an online application and can be assumed as a new trend in teaching and learning. In line with William and Lutes (2013) who said that using an online application in classroom activities needs more concern and effort because it is can be another teaching method in this era. It can be concluded that technology in classroom activities can be another teaching method that can help the students to maximize their achievement and their knowledge in learning activities.

According to this present study, it is suggested that Slack application can be another way to facilitate the students' engagement in classroom activities. Similar to Clark and Mayer (2011) who said that the fact of online application is another way of teaching, known as blended learning technique which can be used as another accommodation in classroom practices, and several previous studies have shown that it is very useful in teaching practices.

In conclusion, Slack application is a part of ICT as media in teaching activities, especially in the language classroom. It boosts autonomous learning, maximizes target outcomes and achievement, motivates learners, and helps them to improve their skills in English learning,

especially in learning writing (Agca & Ozdemir, 2018). Even though, it needs more concentration for teachers and learners beyond technical support and software specific to face the new trend in education (Compton, 2009).

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