



Improving Indonesian EFL Learners' Motivation Through Computer Assisted Learning (CALL)

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Abstract

It has been argued that technology can improve learners' motivation. Furthermore, technology integration has been regarded one of motivational strategies or techniques to improve learners' positive attitudes. In this regard, one of motivational strategies that can be given to learners is incorporating CALL (Computer Assisted Language Learning) to EFL (English as a Foreign Language) classrooms. Therefore, the present research analyzed the effects of CALL on a group of Indonesian EFL learners' motivation. In order to obtain the results, the present re-search conducted a quasi-experimental study toward 40 college students. In addition, a set of questionnaires adapted from Taguchi, Magid & Papi (2009) as well as semi-structured inter-views were used as research instruments. In addition, English tests will be given to the respondents to see the effects of CALL on the improvement of learners' achievements. The results of present study suggest the positive effects of CALL on learners' motivation. In addition, learners' achievement also improved after being intervened with CALL. Nevertheless, the use of CALL needs to be supported by teachers who are capable enough to provide suitable materials that suit learners' need. Thus, it seems important for teachers to be provided with prior sufficient training on how to use CALL effectively.

INTRODUCTION

Technology seems to have a positive effect on EFL learning. The point is shown on numerous studies on the impacts of technology integration toward EFL classes (Bull & Ma, 2007; Harmer, 2007; Larsen-Freeman & Anderson, 2011). The use of multimedia technology in EFL learning can improve learning independence and help learners to overcome difficulties which might happen in traditional classrooms (Crystal, 1997; Miranty & Rachmawati, 2016; Sari, 2020). In addition, the appropriate use of technology based EFL learning can be beneficial to learners (Clements &

Sarama, 2003). The above points how the benefits of technology in EFL classrooms.

CALL (Computer Assisted Language Learning) can be considered as one of techniques to integrate technology in EFL learning. As claimed by Butler-Pascoe & Ellen (1997), CALL can create a language learning environment that helps learners to practice target language. Furthermore, teachers are encouraged to motivate learners to find activities that can support language learning from computer technology (Harmer, 2007; Genç İter, 2015). Studies toward the use of CALL in writing classes show its positive effects in motivating, creating conducive learning environment and improve the quantity and quality of their writing skills (Bialo & Sivin-Kachala, 1996; Goldberg, Russell, & Cook, 2003; Lam & Pennington, 1995; Stepp-Greany, 2002). In addition to learners' motivation, several studies indicate positive attitudes of learners toward CALL (Akbulut, 2008; Bebetos & Antoniou, 2009; Brown & Vician, 2004; Mahmoudi et al, 2012). The above findings suggest positive impacts of CALL on learners' motivation and attitudes.

Despite numerous studies on the effects of CALL on EFL learning, there seems to be a lack of studies which investigate Indonesian EFL learners' motivation and attitudes toward CALL. The present study aims to investigate the effects of CALL on EFL learners' attitudes and motivation. In addition to fill the void, the present study aims to provide deeper insights to educators, researchers and other policy makers on the impacts of technology in EFL learning, especially in Indonesian EFL learning context. Specifically, the present study is guided by this research question, what are the effects of CALL on attitudes and motivation of a group of EFL learners in Bekasi, Indonesia?

RESEARCH METHODOLOGY

The present study uses a quasi-experimental method to obtain its data. Respondents consist of 40 college students in a private university in Bekasi, Indonesia and took Basic Reading and Writing class. They are divided into experimental and control classes. Both classes were given a set of questionnaires adapted from Taguchi, Magid, & Papi (2009) before and after the treatment which consist of seven sessions. For experimental class, each session is integrated with computer assisted instruction. They were also given weekly tasks which needed to be finished and submitted via internet. The questionnaires use a Likert scale with following responses: (1) Strongly disagree, (2) Disagree, (3) Agree, and (4) Strongly agree.

Before the questionnaires were distributed, a pilot study was conducted to see the validity and reliability of the questionnaires was conducted by using Pearson product moment and Cronbach's Alpha ($>0,65$) to measure the questionnaires. In this regard, $r=0.811$, $p<0,05$ and $N=4$. Following are the results of pilot study.

Table 1. Result of Pilot Study

Variable					
		1.	2.	3.	
Criterion measures	Pearson Correlation	1.000**	1.000**	1.000**	
	Sig. (2-tailed)	.	.	.	
	N	4	4	4	
Ideal L2 self	Pearson Correlation	4.	5.	6.	
		1.000**	1.000**	1.000**	
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	4	4	4	
Ought-to L2 self	Pearson Correlation	7.	8.	9.	
		1.000**	1.000**	1.000**	
	Sig. 2 tailed	0.000	0.000	0.000	
	N	4	4	4	
Family influence	Pearson Correlation	10.	11.		
		0.816	0.816		
	Sig. (2-tailed)	0.183	0.183		
	N	4	4		
Instrumentality	Pearson Correlation	12.	13.	14.	
		0.845	0.845	0.845	
	Sig. (2-tailed)	0.154	0.154	0.154	
	N	4	4	4	
Attitudes to learning English	Pearson Correlation	15.	16.		
		0.816	0.816		
	Sig. (2-tailed)	0.183	0.183		
	N	4	4		
Linguistic confidence	Pearson Correlation	17.	18.	19.	20.
		.997**	.997**	.997**	0.904
	Sig. (2-tailed)	0.002	0.002	0.002	0.095

	N	4	4	4	4
Learning interest	Pearson Correlation	21.	22.	23.	
		.995**	0.855	0.916	
	Sig. (2-tailed)	0.005	0.144	0.083	
	N	4	4	4	

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

In addition to the questionnaires, semi-structured interviews were given to four respondents. Due to the mixed nature of the present study, obtained data will be treated differently. While quantitative data will be analyzed using SPSS 23, qualitative data will be coded based on different categories. Besides questionnaires and interviews, English tests will be given before and after treatment to see learners' improvement.

RESULTS AND DISCUSSION

Results

Table 2. Questionnaire's results

	Before <i>Treatment</i>						After <i>Treatment</i>					
	Experimental class			Control class			Experimental class			Control class		
Variables	Mean	Med	Std. Dev	Mean	Med	Std. Dev	Mean	Med	Std. Dev	Mean	Med	Std. Dev
Criterion measures	3.41	3.00	.618	3.38	3.00	.650	3.47	3.00	.514	3.23	3.00	.832
Ideal L2 self	3.82	4.00	.393	3.77	4.00	.439	3.65	4.00	.493	3.54	4.00	.877
Ought to L2 self	3.00	3.00	1.000	3.23	3.00	.725	3.18	3.00	.883	2.54	3.00	.519
Family influence	3.06	3.00	.748	2.69	3.00	.751	3.00	3.00	.866	2.77	3.00	.439
Instrumentality	3.82	4.00	.393	3.85	4.00	.376	3.59	4.00	.507	3.31	3.00	.630
Attitudes toward language learning	3.41	3.00	.618	3.31	3.00	.751	3.00	3.00	.000	3.08	3.00	.760
Linguistic confidence	3.94	4.00	.243	3.85	4.00	.376	3.82	4.00	.393	3.46	4.00	.877
Learning interest	3.53	4.00	.514	3.62	4.00	.506	3.59	4.00	.507	3.23	3.00	.832

Before treatment, the most salient variables among the experimental class are linguistic confidence ($M = 3.94$), the ideal L2 self ($M = 3.82$), and instrumentality

(M= 3.82). After treatment, although those variables decreased in points; linguistic confidence (M= 3.82), the ideal L2 self (M= 3.65) and instrumentality (M= 3.59), they are still the most salient ones. On the other hand, the least salient variables are ought to L2 self (M= 3.00) and family influence (M= 3.06). Next, the experimental class did not show a significantly high level of interest toward English learning (M= 3.53), attitudes toward language learning (M= 3.41), and criterion measures (M= 3.41) before treatment. However, after treatment the experimental class experienced an increase in attitudes toward language learning (M= 3.59). In addition, criterion measures experienced an increase (M= 3.47). On the other hand, learning interest's points dropped drastically (M= 3.00) while the ought to L2 self (M= 3.00) and family influences (M= 3.00) are still the least salient variables.

Before treatment, the most salient variables in the control class are instrumentality (M= 3.85), linguistic confidence (M= 3.85), and ideal L2 self (M= 3.77). After treatment, those variables are still the most salient ones but experienced decreasing points; they ought to L2 self (M= 3.54), linguistic confidence (M= 3.46), and instrumentality (M= 3.31). Before treatment, the least salient variables are family influence (M= 2.69), the ought to L2 self (M= 3.23), and attitudes toward language learning (M= 3.31). After treatment, those variables are still the least salient one; ought to L2 self (M= 2.54), family influence (M= 2.77), attitudes toward language learning (M= 3.08). However, control class shows relatively high level of learning interest (M= 3.62) and criterion measures (M= 3.38). Nevertheless, both variables experienced decreasing points after treatment as criterion measures and learning interest got similar points (M= 3.23).

In addition, English tests were conducted to see the effects of CALL on learners' achievements.

Table 3. English tests' results.

	Experimental class		Control class	
N	Before	After	Before	After
Average scores	397	424	375	321

Discussion

Table 2 indicates that experimental class has a slightly higher level of motivation than the control class, before and after treatment. Although both classes experience declines after treatment, experimental class experienced lesser

decline than control class. Questionnaire' results also indicate how experimental class has relatively high level of linguistic confidence, has a clear vision on ideal L2 speakers, and instrumental motivation on learning English. In addition, experimental class shows a significant increase in English test' results. Although before treatment experimental class has shown higher scores in test results, they do not show decrease like control class does. Based on the results of questionnaires and tests, experimental class shows better performance than control class. The weight of evidence suggests that CALL has positive effects on learners' motivation and achievements.

As suggested by the above paragraph, CALL seems to have positive effects on learners' motivation. Several studies also suggest similar findings. A study Genç & Aydin (2010) on learners' motivation and the use of CALL on English learning suggests a positive correlation between the level of learners' motivation and the use of CALL. In addition, Anderson & Speck (2001) remark that the use of technology on language classrooms can motivate and make students get more involved. Boualem's (2015) study on the effects of software such as Microsoft Power point on motivation of a group of foreign language learners in Algeria indicates an increase in the level of motivation and English. A study of Tavakoli, Lotfi, Biria, & Wang (2019) on the effectiveness of CALL-mediated task-based learning on learners' motivation for L2 reading suggest positive effects of CALL on learners' motivation. Numerous studies also suggest that the use of CALL in language classrooms can influence learners' motivation and attitudes positively (Başöz & Çubukçu, 2014; Fatemi Jahromi & Salimi, 2013; Tuncok, 2010). Besides, Al-Jarf's (2004) study on the effects of web-based and traditional writing classes on learners' writing skills show that web-based writing class has better impacts than traditional one. The above studies suggest that CALL has positive effects on learners' motivation and achievements.

Despite points mentioned in the previous paragraphs, it is still possible that the increase in learners' motivation cannot be attributed solely to CALL' integration to English classrooms. Nevertheless, the interviews' results indicate that the respondents are more motivated to learn English due to CALL. In addition, the interviews' results indicate factors which motivate the respondents to use computers in English classrooms. Following are the comments of respondents regarding their motives to use computers for learning English.

"Firstly, data (for learning English) is more available. Secondly, the materials are easier to be understood and thirdly I think the presentation is more attractive than regular textbooks." Student 1

"My main motivation is easier to be...learned, especially (If I use) computers. More flexible. (It) can be accessed everywhere and every time from any device. Its presentation is also good, attractive. (It) can be understood faster, once (I see it) and can be accessed everywhere and (I like learning from) traditional and modern (methods to be balanced) so I like writing and computer..." Student 3

The above comments indicate that the respondents are motivated to use computers for learning English because they can access materials easily. By connecting their devices to internet, learners can access learning materials faster than using textbooks. In addition, attractive presentation is one of factors which motivates the respondents to use computers.

Similarly, a study of Ellinger et al (2001) on the use of internet in language classrooms indicates that it can inspire students, improve students' motivation and enhance enthusiasm. Ababneh & Lababneh's (2013) study on the effects of internet on writing skills of EFL learners in elementary schools suggests that internet has positive effects on writing skills. It is indicated on how students can use more diverse vocabulary and write complex paragraphs after internet was integrated to English classrooms. In its classroom research on a group of students in Advanced English Speaking, Kung (2003) also found that the use of internet can help students find different types of speeches in English. In addition to the accessibility, attractive presentation becomes one of factors which motivate the respondents of present study. The findings of Liu's (2013) study on factors which affect learners' acceptance toward Moodle (Modular Object-Oriented Dynamic Learning Environment) suggest similar conclusion. It can be said that accessibility and attractive presentation motivate learners to learn English.

Despite their relatively high level of motivation due to CALL' integration, most respondents of present study said that they do not mind to learn English without computers as long as several requirements are met. Following are respondents' comments:

"Umm, first is teacher, teachers should be able to explain well, don't ramble, just straight to the materials, and the textbooks, they should have attractive visuals." Student 1

"Yes, I can learn English without using computers. How can I as a college student get interested to learn English without using computers? First, in my

opinion teachers should be friendly to students and teachers should have interesting teaching methods. That way we can be interested to learn English without using computers." Student 3

The above comments show that despite learners' motivation toward CALL, they can still learn English without computers as long as teachers deliver lessons in ways that can motivate learners to learn English. In this sense, strategies that teachers take to motivate learners can be considered as motivational strategies. Teachers with suitable motivational strategies can be regarded as important as CALL in influencing learners' motivation. Kung (2003) also emphasizes the importance of teachers toward learners' motivation. Furthermore, key success of foreign language learning lies on how efficient teachers can guide students and supportive teaching strategies (Mutlu & Eröz-Tuğ̃a, 2013; Segura & Greener, 2014). Although CALL can im-prove learners' motivation (Chapelle & Jamieson, 2008; Motteram, 2013), it should be ac-companied by the presence of teachers who can support learners in using computers for language learning. As argued by Abunowara (2016), hardware and software are not the only ones that affect learning success but also in teachers' ability to plan, design, and implement effective educational activities. It can be said that with or without computers, teachers need to have suitable motivational strategies to improve learners' motivation.

CONCLUSION AND SUGGESTION

CALL (Computer Assisted Language Learning) is one of motivational strategies that can be used to Indonesian EFL learners to improve their motivation. Nevertheless, there is a lack of studies which analyze the effects of CALL on EFL learners' motivation, especially one that specifically investigate in the context of Indonesian EFL learners. The present study aims to analyze the effects of CALL on motivation of a group of EFL learners in Indonesia. The pre-sent study uses a quasi-experimental method toward 40 college students to obtain its data. The respondents are divided into two classes; experimental and control classes. While control class is given traditional English language lessons, experimental class is given CALL-integrated English lessons for seven weeks. The present study uses two research instruments; questionnaires and semi-structured interviews. The questionnaires are adapted from Taguchi, Magid, & Papi (2009) and given before

and after the treatment to both classes. On the other hand, the interviews were conducted to four respondents to provide deeper insights on how CALL can affect learners' motivation. In addition, English tests are given before and after the treatment to see the effects of CALL on learners' achievements. The questionnaires' results suggest that both classes experienced decreasing points, however, experimental class' points do not experience decreasing points as significant as control class. In addition, the results of English tests show that the achievements of experimental class increased after treatment. The interviews' results also indicate that the respondents were more motivated to learn English when lessons were integrated with computers. The weight of evidence suggests that CALL has positive impacts on learners' motivation. Nevertheless, the respondents noted that CALL needs to be implemented by experienced teachers to ensure teaching effectiveness.

Although the present study has tried to minimize its limitations, it is one without limitations. First, the results of present study would reflect the population better if it had more respondents. Second, the present study would have deeper discussions if it had diverse re-search instruments such as student journals or classroom observation. Third, the present study would have better insights if data gathering period was conducted longer. Nevertheless, the present study can still be a milestone of similar studies. Next study can also analyze the effects of CALL on learners' retention and demotivation. In addition, further studies can ana-lyse the effects of CALL on learners from different groups of learners.

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