THE INTERPLAY BETWEEN LEARNING MEDIA, MOTIVATION AND LEARNING OUTCOMES: INSIGHTS FROM INDONESIAN EFL CONTEXT

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Abstract

Received: 09 November 2020
Revised: 11 Desember 2020
Accepted: 18 Februari 2020

The objectives of the study are to explore the impact of English comic learning media towards English's learning outcomes, the impact of learning motivation towards English's learning outcomes, and the interaction effect between English comic learning media and learning motivation towards English's learning outcomes. The method of research is experimental with 2x2 factorial design. Data collection techniques are multiple choice and questionnaires. Population of the study are 175 students. Sample of the study are 60 students. Random sampling are used for gaining sample. The researcher used SPSS 22.0 version to analyze data. The conclusions of this study are: (1) There is a significant impact of English comic learning media towards English's learning outcomes because significant value is $0.000 < 0.05$.(2) There is a significant impact of learning motivation towards English's learning outcomes because significant value is $0.000 < 0.05$. (3) There is a significant interaction impact between English comic learning media and learning motivation towards English's learning outcomes because significant value is $0.004 < 0.05$.

Keywords: English Learning Outcomes; Comic; Learning Motivation

INTRODUCTION

Revolution of industrial 4.0 era needs four skills, for instance, collaboration, communication, critical thinking, and creative thinking. They are the most important because they can support to modern workers to solve the problems of working (Ridwan, 2019). Communication is a skill for communicating activity to share ideas in all of aspects (Marlina & Jayanti, 2019). Skill of communication can be used to express and give some opinions(Susanti & Risnanosanti, 2019). The effective learning that improves communicative skills is learning that develops the students in discussing, presenting, and problem solving (Ridwan, 2019). Students can use communication skill for expressing all their thoughts both verbally and in writing to enhance their competencies in instruction activities and challenge the competition of the 21st century (Raniah, 2018). Communication is the ability to rejuvenate, enhance, discuss, and develop ideas. It can help the people to publish ideas in public (Yulian, 2018). English is communication skill used by students to compete in industrial revolution 4.0 era because it is the most important aspect to support the carrier in this era.

In Indonesia, students learn English as foreign language. Teachers sometimes used conventional method for teaching students in the classroom. Therefore, students are getting bored for studying English. (Suwastomo, 2016), the results of conventional

method in English vocabulary teaching can make some students are bored. The solution for reducing the negative effect from using the conventional method of English learning is learning media used. (Fatimah et al., 2019), the use of instructional media for teaching is really important helping teachers to deliver the material and create interesting activities in the classroom. (Rokhayani & Utari, 2014), the benefits of learning media can be shown as follow as: Learning media can increase learning motivation of the students and make the students to be more attention in learning. It will create the materials of learning to be so clearer that the students will understand. The students also will master objectives of teaching. The students are enthusiasm when teachers teach. Students will do more activities for learning because they not only listen , but also observe, read, and demonstrate. (Puspitasari & Panggabean, 2016), the use of media can encourage and facilitate the students in learning English. It can help to select and organize the subject content, and standardize the learning instruction. The use of Learning media makes the classroom atmosphere more enjoyable, and creates interaction between teacher and student.

One of learning media which teacher can use for teaching English is English comic. (Azizah, 2018), comics is media can increase student‟ vocabulary achievement, because comics as other reading.(Cimermanová, 2015), comic is a sequence of images that aim to convey information and produce aesthetic value.(Sarma, 2018), comic is a medium used to express ideas through images and comics can be combined with text or visual information. Comics can be developed into educational comics. It helps students in understanding the material (Fadhila & Widodo, 2019). Education comic cultivates a positive attitude of the students. It can be an alternative guidebooks (Putri, 2018). In a previous study, the objective of the utilization of comic education is to improve students' learning outcomes through the images (Kamil et al., 2017).

English comic is a source of excellent teaching material and allows teachers and students to explore language in a creative and innovative way to learn English language (Sarma, 2018). The teacher trainees whose a positive perspective on using English digital comic to help the students for improving their writing skills (Yunus et al., 2012). Using English comic as a learning media is effective in teaching speaking narrative text (Puspitasari & Panggabean, 2016). Comics, movies and cartoons are tools for transmitting comprehension, skill, and even usefulness in education. Mainly, to grow knowledge and thinking skills of English lesson (Rodriguez & Perez, 2010). English comic for teaching has encouraged the students to provide innovation and performance to create better students' English language competence and ground breaking classroom situation in English learning (Fatimah et al., 2019).

Using comic has increased the positive effects in vocabulary mastery and motivation for reading English text (Cimermanová, 2015). Comics can be a motivation for reluctant readers and an effective tool for literacy and language learning (León, 2019). Using comic with novice has improved the skills of reading skills of learners (Cimermanová, 2015). All the learners of English subject that used comics, regardless of proficiency and text level, performed better on reading comprehension (León, 2019). The analysis of t-test has showed that t account > t table or 2.36 > 1.68 at the level of alpha 0.05. (Kamil et al., 2017). It means that (Ha) is accepted. Therefore, comic is effective learning media in improving reading recount text. Using comic with novice has improved vocabulary development (Cimermanová, 2015). Comic media can improve vocabulary achievement. It means that teaching using comic can improve student's vocabulary mastery(Suwastomo, 2016). There was a significant impact of using English comics towards students‟ vocabulary achievement(Zahra, 2016). English comic has promoted students' speaking skill(Fatimah et al., 2019). English learning through

English comic can improve the students' s speaking skills (Puspitasari & Panggabean, 2016).

The previous study just showed the contribution of English comic in increasing the skills of English separately. Therefore, this study aims to explore the impact of English comic learning media towards English's learning outcomes, the impact of learning motivation towards English's learning outcomes, and the interaction effect between English comic learning media and learning motivation towards English's learning outcomes. Based on objectives of study, the research questions are:

1. Is there any significant impact of English comic learning media towards English's learning outcomes?
2. Is there any significant impact of learning motivation towards English's learning outcomes?
3. 3. Are there any interaction impact between English comic learning media and learning motivation towards English's learning outcomes?

METHODS

The method of the study was an experimental factorial design that can be seen as follow:

Table 1.
Experimental Factorial Design

Learning media	Learning media	
	A1 (English comic)	**A2 (Book)**
Learning motivation		
B1(High learning motivation)	A1B1	A2B1
B2(Low learning motivation)	A1B2	A2B2
Sum	A1	A2

Source: Researcher (2020)

Which:
A1: Students who studied with English comic
A2: Students who studied with book
B1: Students whose high learning motivation
B2: Students whose low learning motivation
A1BI: Students whose high learning motivation and studied with English comic
A1B2: Students whose low learning motivation and studied with English comic
A2BI: Students whose high learning motivation and studied with book
A2B2: Students whose low learning motivation and studied with book

The population of study were students of Senior High School in Bekasi. The number of population were 175 students. Sample of the study were 60 students. The researcher used random sampling to determine sample of this study. 30 students were experiment class and 30 were control class. The researcher used multiple choice for measuring English learning outcomes and questionnaires with Likert scale for collecting learning motivation data. Before questioners were used for collecting learning motivation data, the researcher did validity and reliability test with SPSS 22.0 version. There were 30 items before testing validity and reliability. After testing validity and reliability, there

were 25 items of questionnaires. The researcher used SPSS 22.0 version to analyze data. Tuckey test will be used if there is interaction effect between English comic learning media and learning motivation towards English's learning outcomes.

RESULTS & DISCUSSION

Results

The result of descriptive statistics can be seen as follow:

Table 2.
Descriptive Statistics Result

No	Descriptive Statistic	A1	A2	A1B1	A1B2	A2B1	A2B2	B1	B2
1	Mean	14.27	6.50	18.67	9.87	8.87	4.13	13.77	7.00
2	Median	12.50	6.50	19.00	10.00	9.00	4.00	11.50	6.50
3	Mode	12	3	14	12	9	3	9	3
4	Std deviation	5.552	2.838	4.169	2.232	1.552	1.506	5.864	3.464
5	Variance	30.823	8.052	17.381	4.981	2.410	2.267	34.392	12.000

Source : Data Collection

Based on descriptive statistics result, the researcher explains the descriptive analysis as follow:
(A1)   Learning outcomes of students who studied with English comic
        Mean 14.27, median 12.50, mode 12, Std deviation 5.552, and variance 30.823.
(A2)   Students who studied with book
        Mean 6.50, median 6.50, mode 3, Std deviation 2.8328, and variance 8.052.
(B1)   Students whose high learning motivation
        Mean 13.77, median 11.50, mode 9, Std deviation 5.864, and variance 34.392.
(B2)   Students whose low learning motivation
        Mean 7.00, median 6.50, mode 3, Std deviation 3.464, and variance 12.000.
(A1BI) Students whose high learning motivation and studied with English comic
        Mean 18.67, median 19.00, mode 14, Std deviation 4.169, and variance 17.381.
(A1B2) Students whose low learning motivation and studied with English comic
        Mean 9.87, median 10.00, mode 12, Std deviation 2.232, and variance 4.981.
(A2BI) Students whose high learning motivation and studied with book
        Mean 8.87, median 9.00, mode 9, Std deviation 1.552, and variance 2.410.
(A2B2) Students whose low learning motivation and studied with book
        Mean 4.13, median 4.00, mode 3, Std deviation 1.506, and variance 2.267.

The result of normality test with One-Sample Kolmogorov-Smirnov Test can be seen as follow:

Table 3.
Normality Test With One-Sample Kolmogorov-Smirnov

		A1	A2	A1B1	A1B2	A2B1	A2B2	B1	B2
N		30	30	15	15	15	15	30	30
Normal Parameters	Mean	14.27	6.50	18.67	9.87	8.87	4.13	13.77	7.00
	Std. Deviation	5.552	2.838	4.169	2.232	1.552	1.506	5.864	3.464

Most Extreme Differences	Absolute	.158	.111	.135	.164	.134	.174	.181	.118
	Positive	.158	.111	.135	.132	.132	.174	.181	.118
	Negative	-.103	-.111	-.132	-.164	-.134	-.118	-.114	-.109
Kolmogorov-Smirnov Z		.868	.607	.524	.634	.520	.675	.994	.647
Asymp. Sig. (2-tailed)		.438	.855	.947	.816	.950	.753	.277	.796

Source : SPSS Output

Based on the table 3, the eight data groups in this study were from population that have the normal distribution because Sig value is bigger than 0.05.

The result of homogeneity test with Levene can be seen as follow:

Table.4
Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
9.379	3	56	.000

Source : SPSS Output

The results of the homogeneity test between the four data groups (A1B1, A1B2, A2B1, and A2B2) obtained Sig value of 0.000 < 0.05, it can be concluded that English learning outcomes data are not homogeneous.

The result of hypothesis test with SPSS 22.0 version can be seen as follow:

Table.5.
Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1653.650	3	551.217	81.547	.000
Intercept	6468.817	1	6468.817	956.993	.000
A	904.817	1	904.817	133.858	.000
B	686.817	1	686.817	101.607	.000
A * B	62.017	1	62.017	9.175	.004
Error	378.533	56	6.760		
Total	8501.000	60			
Corrected Total	2032.183	59			

Source : *SPSS Output*

Hypothesis 1

H0: There is no significant impact of English comic learning media on English's learning outcomes

Ha: There is a significant impact of English comic learning media on English's learning outcomes

Because significant value is 0.000 < 0.05. It means that H_0 is refused. Therefore, there is a significant effect of English comic learning media towards English's learning outcomes.

Hypothesis 2

H0: There is no significant impact of learning motivation towards English's learning outcomes.

Ha: There is a significant impact of learning motivation towards English's learning outcomes

Because significant value is 0.000 < 0.05. It means that H_0 is refused. Then, there is a significant effect of learning motivation towards English's learning outcomes.

Hypothesis 3
H0: There is no significant interaction effect between English comic learning media and learning motivation towards English's learning outcomes.
Ha: There is a significant interaction effect between English comic learning media and learning motivation towards English's learning outcomes.

Because significant value is 0.004 < 0.05. It means that there is a significant interaction impact between English comic learning media and learning motivation towards English's learning outcomes.

Because there is a significant interaction impact between English comic learning media and learning motivation towards English's learning outcomes, Tuckey test has been done by the researcher.

Table.6.
Tuckey Test

(I) KELOMPOK	(J) KELOMPOK	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
A1B1	A1B2	8.60	.963	.000	6.04	11.15
	A2B1	9.92	.932	.000	7.45	12.39
	A2B2	14.53	.947	.000	12.03	17.04
A1B2	A1B1	-8.60	.963	.000	-11.15	-6.04
	A2B1	1.32	.949	.509	-1.19	3.84
	A2B2	5.94	.963	.000	3.39	8.49
A2B1	A1B1	-9.92	.932	.000	-12.39	-7.45
	A1B2	-1.32	.949	.509	-3.84	1.19
	A2B2	4.62	.932	.000	2.15	7.09
A2B2	A1B1	-14.53	.947	.000	-17.04	-12.03
	A1B2	-5.94	.963	.000	-8.49	-3.39
	A2B1	-4.62	.932	.000	-7.09	-2.15

Source : *SPSS Output*

Hyphothesis 1, $H_0 : \mu11 = \mu12$
Because significant value is 0.000 < 0.05, H_0 is refused and H_1 is accepted. It means that there is a significant different between the students whose high learning motivation that studied with English comic and students whose low learning motivation that studied with English comic.

Hypothesis 2, $H_0 : \mu11 = \mu21$
Because significant value is 0.000 < 0.05, H_0 is refused and H_1 is accepted. It means that there is a significant different between the students whose high learning motivation that studied with English comic and students whose high learning motivation that studied with book.

Hypothesis 3, $H_0 : \mu12 = \mu22$
Because significant value is 0.000 < 0.05, H_0 is refused and H_1 is accepted. It means that there is a significant different between the students whose low learning motivation that studied with English comic and students whose low learning motivation that studied with book.

Hypothesis 4, $H_0 : \mu21 = \mu22$

Because significant value is $0.000 < 0.05$, H_0 is refused and H_1 is accepted. It means that there is a significant different between the students whose high learning motivation that studied with book and students whose low learning motivation that studied with book.

Discussion

1. There is a significant effect of English comic learning media towards English's learning outcomes

    The finding of study has shown that there is a significant effect of English comic learning media towards English's learning outcomes. Episcia (2018),English communicative competence can be improved by using role play with comic strips media. Bravo (2017), teaching through comic for basic reading skills helps develop reading skills in English faster in students. Spend time reading hours in English, it is extremely important factor when learning with it different skills develop. Dwi (2018), there are significant effect use comic and small group discussion strategy in student learning activities. Maryani, et all, (2019), there was an effect of the use of media comics without text and direct learning on the initial knowledge and writing skills of students.

    Learning English through comics can improve learning outcomes because students become interested in learning. Furthermore, students become creative and innovative students. Next, students can produce a comic that contains English sentences. Teachers can use comics to develop linguistic and spatial visual intelligence in students. Linguistic intelligence is developed through learning activities that teach students to write expressions in English. Meanwhile, spatial visual intelligence is developed by drawing and coloring. Comics give students the opportunity to read material that combines images with text to express satire, symbolism, viewpoints, drama, puns and humor in ways that are not possible with text alone.

    Comics contain strong visual and story elements. The visualized expression engages the reader emotionally so that it makes the reader continue to read it until the end. Students do not really like text books that are not accompanied by attractive pictures and illustrations. Empirically, students tend to prefer books that have pictures and are visualized in realistic or cartoon forms. The use of comics in learning is expected to increase students' learning motivation to read various kinds of books. Finally, students will improve their learning outcomes.

2. There is a significant effect of learning motivation towards English's learning outcomes.

    The study result was there is a significant impact of learning motivation towards English's learning outcomes. Wimolmas (2013), students who are motivated to learn will become effective English learners. Students are able to understand and master good knowledge if students whose the high learing motivation in learning. The function of learning motivaton is to stimulate students are enthusiasm for studying. Huang, et all, (2013), transforming students' learning motivation and building a harmonious learning atmosphere are suggested so as to enhance students' learning proficiency. Nalendra, et all, (2020), the position of learning motivation not only gives the direction of learning activities correctly, more than that with motivation someone will get positive considerations in his activities including learning activities. Motivation is a very important right in learning is as follows: a. Motivation gives a student enthusiasm in their learning activities. b. Motivations for actions as voters of

the type of activity that a person wishes to do c. Motivation provides clues to behavior.

Learning motivation is energy to carry out learning activities. Students whose high learning motivation, students will be enthusiasm for studying. Students will study actively in finishing assignments from teacher if they whose a good learning motivation. Motivation determines the level of success or failure of students' learning actions, because learning without motivation is difficult to succeed.

Learning motivation is encouragement from outside and inside students to solve their learning problems. Learning motivation is the desire of students to study with various kinds of learning activities that develop various kinds of intelligence. Intrinsic motivation is motif from internal factor. It is the natural action without any obvious external rewards. The students explore, learn, and actualize their potentials without forcing from their parents or teacher.

The ways of increasing intrinsic motivation are challenge, control, cooperation and competition, curiosity, and recognition. Challenge is the students are more motivated when they run goals of learning seriously. Control is the students want to control their goals of learning. Cooperation and competition are the students will be happy if they can help their friends in learning and compare their performances to their friends. Curiosity is the cognitive curiosity of the students in the process of learning. Recognition is the students enjoy to finish the task from teacher.

Extrinsic motivation is reward-driven action. The students will do something if they are given rewards or punishments. Extrinsic motivation doesn't always have a physic reward. It can also be given praise and fame for the students. Extrinsic motivation can be used for persuading someone to finish a task. Before giving a reward-based task, it's important to know if the students doing the assignment is motivated by the reward being offered. Extrinsic motivation may be a useful means to help students learn new competencies.

3. There is a significant interaction effect between English comic learning media and learning motivation towards English's learning outcomes.

The study showed that there is a significant interaction impact between English comic learning media and learning motivation towards English's learning outcomes. Amalia (2017), the use of picture and picture method by using vivocom fold book media can increase students' motivation and learning outcome of English.

Students who are taught with comic media and have motivation to learn will be enthusiastic and creative in learning. Furthermore, students will do their learning assignments well. Learning outcomes will increase because students are taught using comic book media and their learning motivation is increased. Students become active in learning because students are taught to make comics in English and read expressions contained in comics.

CONCLUSION

The following conclusions of this study are:
1. There is a significant impact of English comic learning media towards English's learning outcomes because significant value is 0.000 < 0.05.
2. There is a significant impact of learning motivation towards English's learning outcomes because significant value is 0.000 < 0.05.

3. There is a significant interaction impact between English comic learning media and learning motivation towards English's learning outcomes because sig value is 0.004 < 0.05.

The implications of the study results are 1. English teacher can use English comic learning media for improving English learning outcome.2. English teacher also should increase learning motivation of students through teaching students with the creative and innovative learning media. The limitation of the study is sample size. For future researchers, it is recommended to use more than one school for sample of the study.

ACKNOWLEDGEMENT

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