THE INFLUENCE OF 'QUIZIZZ' MEDIA WITH TEAMS GAMES TOURNAMENT MODEL ON DIGITAL LITERACY IN SOCIAL STUDIES

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Abstract. *Digital-native learners, well-versed in technology, require deliberate attention to equip them to navigate challenges in an increasingly complex technological landscape via enhanced digital literacy skills. This research was conducted to explain whether or not there is an effect of using E-Learning Media 'Quizizz' with the Cooperative Learning model: Teams Games Tournament on Students' Digital Literacy in Social Studies Learning at SMP Negeri 4 Setu, Bekasi. This type of research is experimental research with a quantitative approach. This research uses a one-shot case research model. Researchers anticipate a substantial impact on the digital literacy abilities of Grade IX students based on this research's sample. The research employed purposive sampling to gather data through questionnaires, tests, and documentation. Data analysis using the independent sample t-test yielded a significance value of 0.000, indicating a rejection of Ho and acceptance of Ha, confirming the impact of E-Learning tool 'Quizizz' with the Cooperative Learning model Teams Games Tournament on students' digital literacy in social studies education.*

Keywords: *Digital Literacy, ICT, Teams Games, Tournament Model, Quizizz*

1. INTRODUCTION

Education plays a crucial role in enhancing human resources and preparing individuals to confront the technological advancements of modern society. Every learner must acquire proficiency in technology, as this proficiency fosters a generation well-versed in technological literacy. A nation's progress hinges significantly on the extent of its population's mastery of digital technology (Kadi & Awwaliyah, 2017). In this regard, mastery of technology needs to be mastered so that learners can filter the information they get (National Education Association, 2014). In addition, the learning process by utilizing technology can be interesting, better and more effective for students (Apriliyani & Khotimah, 2021).

Various methods and approaches can be employed to meet the educational requirements of 21st-century students through the implementation of social studies learning principles and strategies Gagne in (Supardan, 2015, pp. 8-9) Effective learning can be achieved through diverse models and digital learning resources derived from digital information. Furthermore, the utilization of digital application tools represents both a hope and a challenge for educators (Djaja, 2016, p. 17). Employing educational application media aims to enhance teacher-student interactions, foster greater efficiency, boost student engagement, motivation, and participation, and cultivate digital literacy skills, particularly in utilizing digital tools for meaningful purposes.

To optimize social studies learning through e-learning digital media technology, it is crucial to enhance infrastructure and ICT facilities for both students and teachers to access information effectively. Moreover, there is a need to encourage educators in adopting online learning systems. Another important thing is to master the ability to add technological dimensions to build and present the integration of technological,

pedagogical, and content knowledge Mishra & Kohler in (Gunawan, 2018, p. 4). This can be implemented in learning components including planning, implementation, learning media, and evaluation and follow-up of learning activities for students.

Concerns that the level of digital literacy among Indonesian students is low (Pratama, Hartini, & Misbah, 2019), p.9. Based on observations among social studies teachers at SMP Negeri 4 Setu, it is evident that teachers possess the capability to utilize technology-based learning resources. However, the actual application of these resources in teaching remains suboptimal due to concerns over their utility and the perceived negative impact of students bringing smartphones to school. Furthermore, there is a lack of variety and innovative teaching approaches, particularly in the use of online learning tools. Consequently, many students at SMPN 4 Setu express boredom during classes, describing learning as passive. Additionally, students enthusiastically report spending approximately 5-6 hours playing online games on their devices.

In this case, teachers must be digitally literate to facilitate students with classroom activities that are packaged with the integration of 4C skills consisting of Critical Thinking, Collaboration, Communication, Creativity. (Purba, Silalahi, Julyanthry, & Grace, 2022, p.1486). In response to this situation, educators must focus on activities that foster knowledge and skills development. For instance, educators can introduce educational games as part of meaningful learning experiences, aiming to channel students' gadget use away from mere online gaming. An effective approach is integrating subject matter with applications like the Quizziz Game, aligning with the core competencies of social studies for junior high school students.
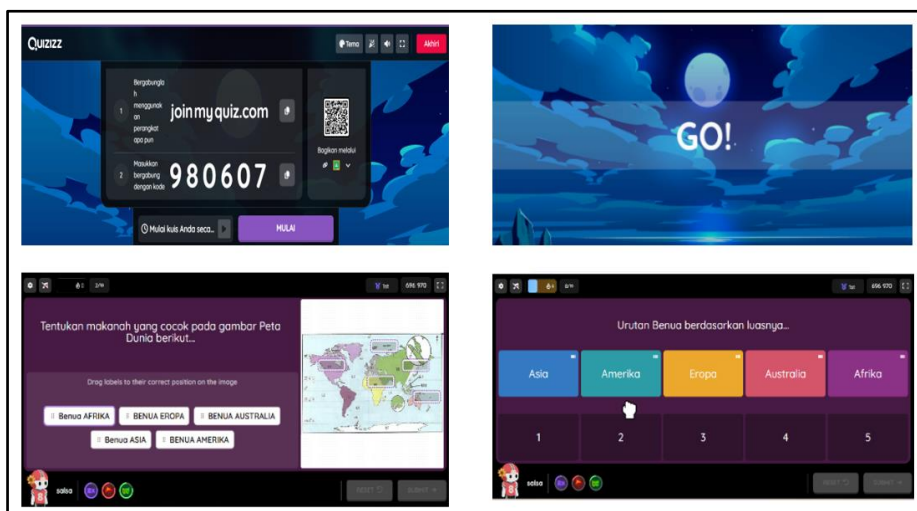

Figure 1. Quizizz Media Display
(Source: Author, 2024)

Quizziz is a web tool to create interactive quiz games for use in classroom learning. The use of Quiziz is done because it is easy to use, attracts attention, is fun and can improve the teacher's ability to innovate teaching in social studies learning and the ability to utilize technology and information media.

The utilization of technology and information media (digital literacy) is part of the 21st century skills that must be mastered. Digital literacy is a new challenge in media literacy (Restianty, 2018, p. 74). The importance of digital literacy is mastered to support performance and daily activities. Digital literacy is the ability to understand and use various information from various digital sources. (Trilling & Fadel, 2009, p. 65) outlines the Skill Set of the 21st Century Knowledge, namely: 1) Learning and innovation consists of critical thinking and problem solving, communication and collaboration, creativity and innovation; 2) (ICT) Digital Literacy Skill which consists of information literacy, media literacy and ICT literacy; 3) Career and life skills consisting of flexibility and adaptability,

initiative and self-direction, social and cross-cultural interaction, productivity and accountability, leadership and accountability.

Digital literacy is the skill of using media effectively so that individuals can find out relevant places and information (Buckingham, 2015, p. 23). The term digital literacy became familiar around 2005 (Davis & Shaw, 2011). It was introduced by (Gilster, 1997, p. 3) Digital literacy is the ability to use information technology from digital devices efficiently to be utilized in various fields such as education, career and daily life. The media literacy movement is designed to increase individual control and needs to be introduced to the legal basis of the media used as knowledge that media literacy activities are protected by the basic law. (Hana Silvana, 2018, p. 151). In this case, digital literacy is needed in order to have a critical attitude in absorbing every information and interaction.

Based on research by the Indonesian Digital Literacy Activist Network (JAPELIDI, 2017) According to research by the Indonesian Digital Literacy Activists Network Indonesia ((JAPELIDI), 2017), students in Indonesia are classified as low in digital literacy, this is due to the fact that digital literacy development and training activities in various cities are still low. Given that all children have the right to compulsory education, learning at school is the right place to develop digital literacy skills (ICT). (Tondeur, 2007, p. 962). Thus, digital literacy skills are vital for students to master, so that the younger generation as the nation's successor, in addition to excelling in using technology, students can utilize digital media appropriately and be able to withstand the influences of the times due to the wrong slang in using digital technology. Thus, learners' digital literacy skills lead to accessing information efficiently and effectively, evaluating information critically and competently, and using information accurately and creatively.

2. LITERATURE REVIEW

2.1 Learning Media

One of the tools needed when teaching and learning in the media. The media used as an instrument or instrumentality on learning stimulus information and attitude to maximize the learning process. Media uses have expanded and interactive learning, such as the existence of a computer, laptop, smartphone, and the internet. According to the national education association in (Nurseto, 2011, p. 20) media learning is a means of communication in print and easy-listening including technology hardware. In the meantime, (Schramm, 1977, p. 22) argued that media learning of a message is the technology used for the purpose of learning. Through learning media educators are expected to be more innovative in delivering materials in learning as well as helping students in understanding the materials and examples provided by the educator

2.2 The application of educational games Quizizz

One of technological innovations that learning be effective, interactive, interesting, pleasing and can help educator in carrying out the evaluation to the stages of making an assessment of students are using quizizz platform. Quizizz application to ease teachers at the school in primary and secondary education (Aini, 2019, p. 5). In the learning Quizizz usage in the teaching process successfully created learning to be easy with various features or elements available (Pitoyo, 2019, p. 22). Quizizz is an educational online learning medium initiated by ankit and deepak in 2015 while teaching mathematics remedials at a school in bangalore city, India which is currently the base of quizizz.inc. Quizizz opened publicly in 2016 (Official Website 'Quizizz', 2020).

2.3 Teams Games Tournament Model

Based on grouping of teaching Cooperative study model included in the social teaching model (Joyce, Weil, & Calhoun, 2011, hal. 295). The cooperative learning type teams games tournament (TGT) is one type of learning model cooperative that puts students in group study of 5 to 6 different with the ability of people students. Teams

Games Tournament had the uniqueness in dimension excitement for learners obtained from the use of the game (Slavin, 2015, p. 154). There are five learning steps using team games tournament model, first step is the presentation stage in the classroom, learn in a group or team, Academic games, group matches and awards (team recognition).

2.4 Digital Literacy

Digital Literacy is skill using digital media effectively so that individuals should get knowledge and information that is relevant (Buckingham, 2015, p. 23). Introduced by (Gilster, 1997, p. 3), by digital literacy is the ability to use information technology from digital devices efficiently to be used in such fields as education, career and everyday life. Digital literacy included the necessary skills for 21st-century students (Trilling & Fadel, 2009, p. 65). Digital literacy skills included in the 21st century proficiency includes information media and technology skills (information media skills) includes (a) information literacy/information literacy, (b) media literacy and (c) ict or information and communication technology literacy (digital literacy). A part of the literacy digital media designed to improve the control of individuals as well as the legal basis should be introduced to medium used as knowledge that the media in protect by basic laws (Hana Silvana, 2018, p. 151). On the basis of the above, digital literacy were really knowledge and the ability to use some digital technology, which aims to find a means of communication, evaluate, making information and use it properly, wise, smart, careful, right to us law.

2.5 Social Studies

Social studies is a program of education that is the whole point of talking about human problems and both physical and social environments. Social studies designed by developing knowledge, The understanding and ability of analysis of social circumstances in society (Ningsih, 2017, p. 129). The social studies is a comprehensive program that includes four dimensions that include: (1) the dimension of knowledge (knowledge); (2) the dimension of skills (skills); (3) the dimension of values and attitudes (values and attitudes); and (4) the dimension of action (action). To facilitate students at junior high school, teachers could prepare the right kind of classroom dimension education supported by a mastery of social studies class. Mastery and development of the dimensions and structure of social studies learning is very important for teachers because high school students are expected to have the ability to think abstract and partial or specialist as well as analytical thinking (Sapriya, 2017, pp. 48-56). Social studies has a role to develop any learning through plan arranged with the design of learning and learning activities determined by teachers for students. Education social class studies social phenomena related to life and social behavior. National Council For the Social Studies in (Ridwan, 2014, p. 29), had definitions is the integrated study of the social sciences and humanities to promote civic competence. Within the school program, social studies provides coordinated, systematic study drawing upon such disciplines as anthropology, archaeology, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology, as well as appropriate content from the humanities, mathematics, and natural sciences. The primary purpose of social studies is to help young people make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world. On the purpose of sense teached social studies program at a school to students is knowledge to help and support, skill, contained in a student competency to be achieved and identify social problems in the public at large to overcome them and skillful that has about the sensitivity of the positive and socially responsible attitude among fellow / and created students can be good citizens. In this digital age, students should be able to adapt to the new still care about each other, and to say hello to each other from afar what is done by others.

3. RESEARCH METHODS

This research utilized a quasi-experiment given that the research population was participants who could not be fully controlled. Pre-experiments involve assigning (but not randomly assigning) participants to groups, but rather taking several existing classes and making one of the classes the experimental group (Creswell, 2015, p. 607).

The research focuses on using E-Learning Quizizz media and Cooperative Learning model: Teams Games Tournament (independent variable) on Digital Literacy Skills (dependent variable) in social studies learning class IX SMPN 4 Setu in Bekasi District. The design used is The One-Shot Case research. This form of research design was chosen because in this research design aims to expose a group that is given treatment or treatment and then observed so that the results can be seen. (Fraenkel, Wallen, & Hyun, 2012, p. 269). This research design can be described as follows.

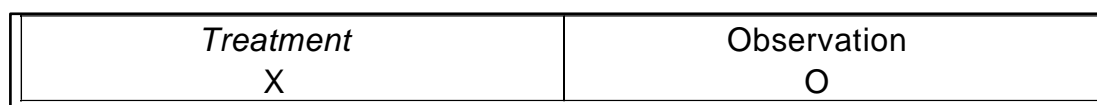| *Treatment*	Observation
X	O

Figure 2.
(Source: Fraenkel, Wallen, & Hyun, 2012, p. 269)

Description:

X = Giving treatment (treatment)
O = Observation after treatment (can be post-test)

The purpose of the research was to determine the effect of students' digital literacy competencies using a one-shot case research design. In this research design, the group is observed or given a posttest only after being treated with Quizizz media-assisted learning with the Teams Games Tournament (TGT) learning model.

Research instruments contain various questions and possible responses to certain answers that are determined or developed before the research is carried out. (Creswell, 2015, p. 27). For this research, researchers utilized Quizizz media to conduct an online quiz containing 20 questions focused on Grade IX social studies topics. The research sample included 26 Grade IX students selected through purposive sampling criteria. Data collection consisted of administering a multiple-choice test comprising 20 questions. For this research, researchers utilized Quizizz media to conduct an online quiz containing 20 questions focused on Grade IX social studies topics. The research sample included 26 Grade IX students selected through purposive sampling criteria. Data collection consisted of administering a multiple-choice test comprising 20 questions.

In this research, data analysis is an activity after data is obtained from all samples or data sources. Data analysis is managed by instrument tests including using validity tests, using Pearson and reliability tests using Cronbach's alpha. Furthermore, the prerequisite test uses the normality test tested with Shapiro wilk and the hypothesis is tested with the T-test. With $H0$ states that there is no average difference between the two samples and Ha states that there is a significant difference. Data analysis was carried out using SPSS 26 at a significance level of 5% or 0.05.

4. RESULT AND DISCUSSION

Measurement of E-Learning Quizizz media on learners' digital literacy is assessed using an attitude scale instrument. There are 20 statements with a scoring range of 1 to 4. Each learner will get a minimum score of 1 and a maximum of 4 on each statement. So the maximum score obtained by learners is 80. The results of measuring the application of E-Learning Quizizz media can be explained through the following table:

Table 1. Recapitulation of the score of the results of the influence of E-learning Quizizz

Category	Interval (Score)	Frequency (f)	Percentage
Very Low	1-20	-	0%
Low	21-40	-	0%
Medium	41-60	-	0%
High	61-80	39	100%

(Source: research results, 2024)

According to Table 1, all students' scores are classified as high. Converting these measurement results into values using the aforementioned formula yields the following data: 1 person scored 62, 3 people scored 64, 7 people scored 68, 6 people scored 70, 8 people scored 73, 6 people scored 75, 7 people scored 77, and 1 person scored 78.
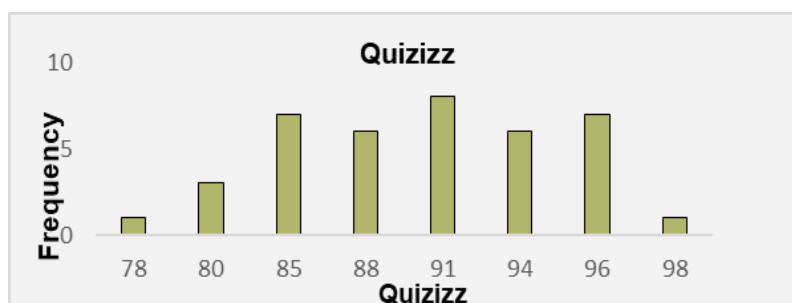

Figure 3. Graph of the results of the influence of E-learning Quizizz Media
(Source: research result, 2024)

Students' digital literacy skills are evaluated through a questionnaire comprising 20 statements, each scored on a scale from 1 to 4. Each statement allows students to achieve a minimum score of 1 and a maximum of 4. Thus, students can attain a maximum score of 80. The measurement outcomes for the respondents are detailed in the table below.

Table 2. Recapitulation of Digital Literacy Score

Category	Interval (Score)	Frequency (f)	Percentage
Very Low	1-20	´-	0%
Low	21-40	-	0%
Medium	41-60	3	17%
High	61-80	36	83%

(Source: research result, 2024)

Converting the measurement results into numerical values using the aforementioned formula yields the following data: 1 person scored 69, 1 person scored 71, 1 person scored 74, 3 people scored 75, 4 people scored 78, 3 people scored 79, 5 people scored 81, 4 people scored 85, 6 people scored 88, 8 people scored 91, 2 people scored 94, and 1 person scored 98.
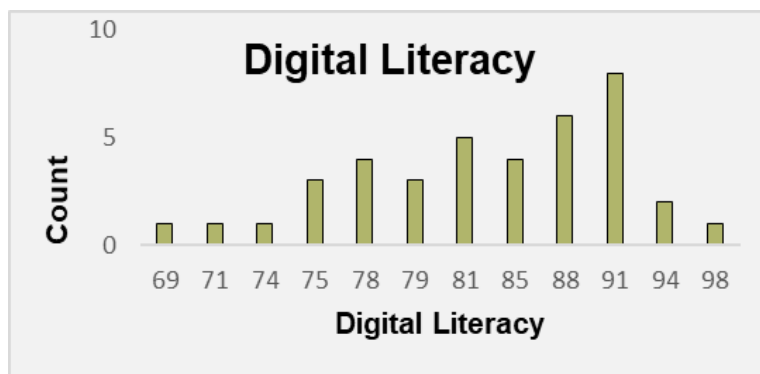
Figure 3. Graph of digital literacy assessment results
(Source: research result, 2024)

From table 2 above, it is evident that in the Quizizz media assessment, all students scored in the high category, totaling 39 individuals or 100%. Regarding students' digital literacy skills in the final test as shown in Table 3, 3 learners (17%) are classified in the medium category, while 34 learners (73%) are classified in the high category. The scores obtained by students related to quizizz media and digital literacy skills were processed using the SPSS 26 application:

Table 3. Model Summary of the effect of e-Learning Quizizz Media with Digital Literacy Skills
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.715a	.631	.623	5.72666

a. Predictors: (Constant), Teams Games Tournament, Quizizz

(Source: research result, 2024)

According to Table 3, the correlation coefficient (R) between students' attitudes toward Quizizz media and their digital literacy skills is 0.715. Meanwhile, the coefficient of determination (R Square) of 0.631 indicates that Quizizz media influences digital literacy skills by 63.1%.

Table 4. ANOVA of the effect of Quizizz media with Digital Literacy Skills
ANOVAa

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	637.349	1	818.675	50.570	.000b
	Residuals	480.240	36	12.784		
	Total	1417.590	38			
a. Dependent Variable: Digital Literacy						

(Source: research result, 2024)

In table 4.7 that the value of Fcount = 50.570 with a significance level of 0.000 which is less than 0.005 (Sig. <0.005), then this regression model can be used to predict the digital literacy ability variable.

Table 5. Coefficient of influence of Cooperative Learning Teams Games Tournament Model with Students' Digital Literacy Skills

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-30.244	15.611		2.179	.024
	Teams Games Tournament	1.415	.246	.792	5.467	.000

a. Dependent Variable: Digital Literacy

(Source: research result, 2024)

In table 5 column B, the constant value (a) is - 30.244, while the digital literacy value (b) is 1.415. So the regression equation can be written:

$$Y=-30.244 +1.415X$$

From the above equation, it is known that the constant value (a) of -30.244 means that if the Cooperative Learning Teams Games Tournament Model = 0, then the effect of learning on digital literacy skills is obtained by 30.344. From the equation above, it can be concluded that every 1% increase in Cooperative Learning Teams Games Tournament Model learning, the value of students' Digital Literacy skills increases by 1.415.

If $_{Thitung}$ > $_{Ttabel}$ with a significance level <0.005, then Ho is rejected and H1 is accepted. From the table above, it is known that the value of $_{thitung}$ = 5.467 while $_{Ttabel}$ = 2.179 and significance = 0.000. Because 5.467 > 2.179 and Sig. < 0.005 then Cooperative Learning: Teams Games Tournament has an effect on Digital Literacy.

Analysis of the Effect of Quizizz Media with Teams Game Tournament (TGT) Model on Students' Digital Literacy

As it has been explained that E-Learning Quizizz media is very influential on Digital literacy. In this section, it will be discussed how the effect of E-learning Quiziz media with Teams Games Tournament Cooperative Learning Model on Digital literacy. The data that has been collected is processed using the SPSS application. 26

Table 6. Model Summary of the Effect of E-learning Quiziz Media with Teams Games Tournament Cooperative Learning Model on Digital Literacy

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.851ᵃ	.724	.719	5.72666

a. Predictors: (Constant), Quizizz, Teams Games Tournament

(Source: research result, 2024)

Based on table 6 above, it can be seen that the R value or the magnitude of the correlation / relationship between E-Learning Quiziz media with the Teams Games Tournament Cooperative Learning Model on Student Digital literacy is 0.851, while the R Square (R) value of 0.724 shows the magnitude of the effect of Quiziz media with the Teams Games Tournament (TGT) Cooperative Learning Model on Student Digital literacy is 72.4%.

Table 7. ANOVA of the Effect of E-learning Quiziz Media with Cooperative Learning Teams Games Tournament Model on Digital Literacy

ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1180.240	1	1180.240	65.570	.000b
	Residuals	37.349	36	32.784		
	Total	1217.590	38			

a. Dependent Variable: Digital Literacy
b. Predictors: (Constant), Quizizz, Teams Games Tournament

(Source: research result, 2024)

In table 7 above that Fhitung = 65.570 with a significance level of 0.000 which is less than 0.005 (Sig < 0.005), then this regression model can be used to predict the learning variable of the Cooperative Learning Teams Games Tournament model on Digital Literacy.

Table 8 Table of Coefficient of Effect of E-learning Quiziz Media with Cooperative Learning Teams Games Tournament Model on Digital Literacy
Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.244	5.611		1.479	.080
	Teams Games Tournament and Quizizz	.008	.001	.919	8.066	.000

a. Dependent Variable: Digital Literacy

(Source: research result, 2024)

In table 8 column B, the constant value (a) is 15.244, while the digital literacy value (b) is 0.008. So the regression equation can be written:
$$Y= 15.244 + 0.009\ X_1\ X_2$$

From the above equation, it is known that the constant value (a) of 15.244 means that if the E-learning Quizizz Media = 0, then the effect of the Cooperative Learning

Teams Games Tournament Model, the effect of learning on students' digital literacy skills is obtained at 15.244. From the equation above, it can be concluded that every 1% increase in Cooperative Learning Teams Games Tournament Model learning, the value of students' Digital Literacy skills increases by 0.008.

To test the hypothesis, viz:

H_0 = There is no significant effect between e-learning media Quiziz with Cooperative Learning model: Teams Games Tournament on **Digital Literacy**.

H_1 = There is a real influence between e-learning media Quiziz with Cooperative Learning model: Teams Games Tournament on **Digital Literacy**.

If T_{hitung} > T_{tabel} with a significance level <0.005, then Ho is rejected and H1 is accepted. From the table above, it is known that the value of tcount = 8.066 while T_{tabel} = 1.749 and significance = 0.000. Because 8.066 > 1.749 and Sig. < 0.005 then learning e-learning media Quiziz with Cooperative Learning model: Teams Games Tournament model has an effect on Digital Literacy.

(Silalahi, et al., 2022, p. 152) said that the ability of digital literacy owned by individuals is based on knowledge, as well as awareness of the development of an increasingly transformed era. Increasing digital literacy can be improved by increasing students' abilities through increasing knowledge, awareness, and ethics.

Thus the magnitude of the influence of e-learning quizizz media with the Cooperative Learning Teams Games Tournaments model is 57.8%. The remaining 42.2% is influenced by other factors. Each increase in e-learning quizizz media with the Cooperative Learning Teams Games Tournaments model by 1%, the digital literacy value of students increases by 1.244. In learning with e-learning quizizz media through the Cooperative Learning Teams Games Tournaments model, being a facilitator, trainer, advisor and intermediary is a role that must be carried out by educators to get optimal results in accordance with accessing, creating, analyzing and ethical searching for student digital information.

CONCLUSION

From this research, it can be inferred that utilizing Quizizz media with the Teams Game Tournament (TGT) Model positively impacts students' digital literacy in social studies education at SMP Negeri 4 Setu. This approach fosters engaging and comprehensible learning experiences, making lessons enjoyable and promoting ethical and prudent use of online platforms. Therefore, integrating Quizizz media with the Teams Game Tournament model enhances students' digital literacy skills, offering a viable method for implementing social studies education.

REFERENCES

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