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The Influence of the RICOSRE Model on Science Literacy and Cognitive Learning Outcomes of the Immune System

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ABSTRAK

This research was motivated by the low scientific literacy and cognitive learning outcomes of students on the immune system, which have not yet met learning standards. This is due to the ineffectiveness of lecture methods and other models. The study aimed to examine the effect of the RICOSRE learning model on scientific literacy and cognitive learning outcomes. This research design used a non-equivalent pre-test-post-test control group design, with samples from experimental class XI 1 totaling 36 students and control class XI 2 totaling 35 students, taken by purposive sampling based on the results of students' daily test scores. Data were obtained from the pre-test and post-test scores of both classes. Data were analyzed using ANCOVA. The results showed an average post-test score of 80.14 for the experimental class, higher than 72.74 for the control class. The average post-test score for cognitive learning outcomes for the experimental class was 83.44, higher than 70.74 for the control class. The significance value for scientific literacy was 0.013 and for cognitive learning outcomes was 0.000, indicating a significant difference between the two classes. The RICOSRE learning model has a positive impact on students' scientific literacy and cognitive learning outcomes on the topic of the immune system. The RICOSRE learning model improves students' scientific literacy and cognitive learning outcomes and contributes as an innovative learning model that supports the development of scientific literacy skills.

Keywords: RICOSRE, science literacy, cognitive learning outcomes, immune system

INTRODUCTION

Biology education plays a vital role in helping us understand life and protect the environment. It encourages us to learn about nature, the environment, the interactions of living things, and the balance of nature. Education plays a vital role in life. Referring to Law No. 20 of 2003, education is a conscious and directed effort to create a learning atmosphere and learning activities so that students actively develop their potential to possess spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by themselves, society, the nation, and the state. Education is a conscious effort made by educators to shape personality and potential (Syafril, 2017) and to shape character in students (Ananda et al., 2018). Educators are one of the important elements in education, where educators are a key factor in improving the quality of education (Wuryaningsih, 2023). Educators must be able to plan and implement the learning process well, so that learning activities can run as well as possible. Educators have roles as demonstrators, motivators, evaluators, classroom managers, and facilitators (Akib, 2021). As facilitators educators can use innovative and creative learning models to maximize student activity and learning outcomes (Dayu, 2016).

A learning model is a description that encompasses all the stages that educators will apply to students throughout the teaching and learning process. An innovative learning model is an approach designed by educators with new ideas for implementing learning activities, enabling students to experience more positive behavioral changes. Innovative learning focuses on the students themselves, giving them the freedom to develop their knowledge independently (Sari, 2021). Innovative learning models are essential during the learning process, especially in subjects with abstract material, such as biology. Biology is a field of science that encompasses various abstract concepts and processes (Maryanti & Kurniawan, 2018).

Biology is a complex subject because it covers discussions related to all living things on earth. Biology is a subject that is often considered difficult to understand because it contains many scientific terms that are rarely used in everyday life (Syarah et al., 2021). In biology learning, there is material on the immune system that is studied in grade 11. The immune system material is studied in the second semester of grade 11. The immune system is a highly contextual learning topic because students have direct experience and events related to the immune system often occur in everyday life (Utami et al., 2018). The immune system material has characteristics that solve problems (Azka et al., 2016). The immune system material is considered quite difficult because it consists of many concepts (Fatimah, 2020) and covers a broad range of material (Puspita et al., 2017). In biology learning, there is material on the immune system that is studied in grade 11. The immune system material is studied in grade 11, the second semester. The immune system is a highly contextual learning topic, as students have direct experience and events related to the immune system frequently occur in everyday life (Utami et al., 2018). Immune system material has problem-solving characteristics (Azka et al., 2016). Immune system material is considered quite difficult because it consists of many concepts (Fatimah, 2020) and covers a broad range of material (Puspita et al., 2017).

Scientific literacy plays a crucial role for students because it empowers them to understand, evaluate, and utilize scientific knowledge in everyday life. By mastering scientific literacy, students can develop critical, logistical, and creative thinking when facing various challenges, and are able to make decisions based on scientific facts and evidence. Scientific literacy plays a crucial role in helping students understand natural and technological phenomena, as well as developing critical thinking and problem-solving skills (Pratiwi et al., 2019). Scientific literacy learning is crucial for students to understand what they are learning (Irsan, 2021). Scientific literacy is closely linked to students' cognitive learning outcomes. The relationship between scientific literacy skills and cognitive learning outcomes is positive, where increased scientific literacy skills are followed by improved cognitive learning outcomes (Nugraheni et al., 2017).

Cognitive learning outcomes describe the extent to which students understand the material they are studying, including knowledge or theories that involve the ability to remember or recognize facts, procedural patterns, and concepts that support the development of students' skills and intellectual abilities (Nurhayati et al., 2019). Cognitive learning outcomes can be used as an indicator of the achievement of learning activities, which are obtained through evaluations during or after learning activities, and are carried out continuously by educators (Febriani, 2017). Cognitive learning outcomes that are not optimal indicate that the learning being implemented is less than optimal. Students' cognitive learning outcomes that do not meet the minimum limit are due to several components such as minimal scientific literacy, less than optimal student activity during learning, understanding of educators' skills in delivering learning materials, students' lack of interest in participating in learning, and also the conventional learning model being implemented.

Based on observations, 39% of students met the minimum score set by educators, which was 70, while 61% of students still fell short of the minimum score. The maximum score achieved by students was 94, while the minimum score was 32, with an overall average score of 62. The learning model used hinders students' ability to analyze problems independently, resulting in suboptimal scientific literacy skills and cognitive learning outcomes that do not reach the expected level of mastery. The STAD and conventional learning models are less effective for abstract material, such as the immune system. Innovative learning models are needed to optimize scientific literacy and student learning outcomes.

One approach in an innovative learning model that has the potential to address these problems is the RICOSRE learning model. The acronym RICOSRE includes several stages, namely: Reading (reading), Identifying (identifying), Constructing (constructing), Solving (solving), Reviewing (reviewing), and Expanding (expanding) solutions to the problems faced. RICOSRE is a model developed from a learning approach based on problem solving, which allows students to be actively involved in the learning process (Mahanal & Zubaidah, 2017).

Based on the above background, to see the influence of the RICOSRE model on scientific literacy and students' cognitive learning outcomes, a study will be conducted "The Influence of the RICOSRE Learning Model on Scientific Literacy and Students' Cognitive Learning Outcomes on the Immune System Material at SMA Negeri 3 Temanggung".

METHOD

Quasi-experimental method is a research design used in the form of Pretest-Posttest Nonequivalent Control Group Design involving 2 classes, namely the control class and the experimental class where class XI-1 as the experimental class using the RICOSRE learning model and class XI-2 as the control class using the lecture method. This research was conducted at SMA Negeri 3 Temanggung with a total of 3 meetings on the immune system material. The instruments used were interview guide sheets, open modules, science literacy questionnaires, cognitive learning outcome questionnaires, item validation sheets, and syntax implementation sheets. Data were obtained from the pretest and posttest results of the experimental and control classes on the immune system material. The data analysis technique used the Analysis of Covariance (ANCOVA) hypothesis test. The ANCOVA hypothesis test is used if the test results show a normal data distribution and both populations have homogeneous variances. ANCOVA tests the effect of the learning model as an independent variable on science literacy and cognitive learning outcomes while still controlling the covariate variable in the form of initial abilities so that its effect can be seen more accurately without bias from other influencing variables.

RESULT AND DICCUSION

Result

Scientific Literacy

Descriptive statistics is a method for measuring characteristics and providing a general overview of collected data in a concise and structured manner. These statistics are used to calculate measures of central tendency such as the mean, median, and mode, as well as measures of data distribution such as standard deviation, range, and percentiles. The application of the RICOSRE model to the immune system material produces statistical calculations of scientific literacy in the experimental and control classes. The results of the descriptive statistical analysis of scientific literacy using the RICOSRE learning model for the immune system material are presented in Table 1.

Table 1 Results of Descriptive Statistical Analysis of Scientific Literacy

Descriptive Statistical Analysis	Scientific Literacy Ability			
	Experimental Class		Control Class	
	Pretest	Post-test	Pretest	Post-test
Mean	62,97	80,14	57,69	72,74
Minimum	40	53	33	53
Maximum	80	100	87	93

Based on the statistical analysis results in Table 1, the average pretest and posttest scores for the experimental and control classes were obtained. The average pretest and posttest scores for the experimental group, 62.97 and 80.14, were higher than the pretest and posttest scores for the control group, 57.69 and 72.74, respectively. This data indicates a significant difference in scores between the experimental and control groups.

Normality Test

Table 2. Results of the Scientific Literacy Normality Test

Test of Normality			
	$\mathbf{Kolmogorov-Smirnov^a}$		
	Df	Sig.	Information
Experimental Class Pretest	36	0,057	Normal
Experimental Class Posttest	36	0,062	Normal
Control Class Pretest	35	0,200	Normal
Control Class Posttest	35	0,053	Normal

From the results of the normality test presented in Table 2, it can be seen that the pretest and post-test significance values for the experimental class were 0.057 and 0.062, respectively. Both values exceed 0.05, so the data in the experimental class is normally distributed. In addition, the pretest and post-test significance values in the control class were 0.200 and 0.053. These two values also exceed the 0.05 significance limit, so the data in the control class also meets the assumption of normal distribution. Thus, it can be concluded that the data from the scientific literacy variable is normally distributed.

Homogeneity Test

Table 3. Results of the Homogeneity Test of Scientific Literacy

Test of Homogeneity of Variance		
		Significance Value
Pretest Science Literacy	Based on Mean	0,079
Post-test Scientific Literacy	Based on Mean	0,964

From the results of the analysis of the homogeneity test of scientific literacy in Table 3, it is known that the significance values of the pretest and post-test of scientific literacy are 0.079 and 0.964. Overall, the results of the homogeneity test show a sig value exceeding 0.05, meaning that the scientific literacy ability data has uniform variations.

Hypothesis Test Results

Table 4. Results of the ANCOVA Test of Scientific Literacy

Scientific Literacy	Sig. (2-tailed)	Information
Tests of Between Subjects Effects	0,013	There is a significant influence

The results of the hypothesis testing using the ANCOV test in Table 4 show a sig value of 0.013 in both classes. This value is less than the significance limit of 0.05. If the sig value is not greater than 0.05, H1 is accepted and H0 is rejected. This means there is a significant difference between the scientific literacy skills of students in the experimental and control classes.

Cognitive Learning Outcomes

Descriptive statistics

The results of descriptive statistical testing are based on the cognitive learning outcomes of students in the experimental and control classes using the RICOSRE learning model. The results of the descriptive analysis regarding the immune system material in the control and experimental classes are presented in Table 5.

Table 5. Results of Descriptive Statistical Analysis of Cognitive Learning Outcomes

Descriptive Statistical Analysis	Cognitive Learning Outcomes			
	Experimental Class		Control Class	
	Pretest	Post-test	Pretest	Post-test
Mean	47,33	83,44	45,14	70,74
Minimum	28	64	24	44
Maximum	68	100	64	96

The statistical analysis results in Table 5 show the average pretest and posttest scores for the experimental and control classes. The average pretest and posttest scores for the experimental class, 47.33 and 83.44, were higher than the pretest and posttest scores for the control class, 45.14 and 70.74, respectively. These data demonstrate a significant difference between the two classes.

Normality Test

Table 6. Results of the Normality Test for Cognitive Learning Outcomes

Tests of Normality			
	Kolmogorov – Smirnov[a]		
	Df	Sig.	Information
Experimental Class Pretest	36	0,200	Normal
Experimental Class Posttest	36	0,149	Normal
Control Class Pretest	35	0,200	Normal
Control Class Posttest	35	0,200	Normal

Based on the results of the normality test in Table 6, the pretest and posttest significance values for the experimental class were 0.200 and 0.149, respectively. If the significance value is greater than 0.05, the data are normally distributed. The pretest and posttest significance values for the control class were 0.200 and 0.200, respectively. If the significance value is greater than 0.05, the data are normally distributed. Based on the data above, it can be concluded that the data on the cognitive learning outcome variable is normally distributed.

Homogeneity Test

Table 7. Results of the Homogeneity Test of Cognitive Learning Outcomes

Test of Homogeneity of Variance		
		Significance Value
Cognitive Learning Outcomes Pretest	Based on Mean	0,314
Cognitive Learning Outcomes Posttest	Based on Mean	0,461

From the results of the homogeneity test analysis of cognitive learning outcomes in Table 7, the pretest and posttest significance values were 0.314 and 0.461, respectively. Overall, the homogeneity test results show a significance value exceeding 0.05, meaning that the cognitive learning outcome data has uniform or homogeneous variations.

Hypothesis Test Results

Table 8. Results of the Ancova Test of Cognitive Learning Outcomes

Cognitive Learning Outcomes	Sig. (2-tailed)	Information
Tests of Between Subjects Effects	0,000	There is a significant influence

Based on the hypothesis testing using the ANCOV test, Table 8 shows a sig value of 0.000 for the second class. This value is less than the significance limit of 0.05. If the significance value is less than 0.05, H1 is accepted and H0 is rejected. It can be concluded that there is a significant difference between the learning outcomes of students in the experimental and control classes.

DICCUSION

Scientific Literacy

The RICOSRE model is one of the constructivist models where the RICOSRE learning model positions students as the focus of learning and educators as facilitators, guiding and directing teaching and learning activities in the classroom. Educators as facilitators in group discussion activities help students so that discussion activities do not deviate from the discussion (Beku et al., 2023). Jean Piaget stated that in constructivism theory, children actively build their cognitive world through two main processes, namely organizing innate tendencies to integrate processes into a coherent system and adjustment (adaptation) in individual development (Bustomi et al., 2024). Meanwhile, Lev Vygotsky's constructivism study emphasizes the importance of sociocultural learning processes, where social interaction and communication with others and the internalization of cognitive tools are key in forming students' mental constructions through the zone of proximal development (Arafah et al., 2023). Vygotsky's paradigm encompasses two main ideas: that the development of ideas occurs through a process of intellectual inquiry influenced by the individual's historical and cultural context, and that new knowledge is formed through cultural symbols that help children think, socialize, and solve problems according to their cognitive development (Muzakki et al., 2021).

The syntax of the RICOSRE learning model includes reading the provided problem (reading), identifying the problem and determining the focus of the problem (Identifying the Problem), formulating an investigation, selecting a strategy, and building a solution (Constructing the Solution), conducting an investigation and collecting data (Solving the Problem), checking the overall solution and getting feedback (Reviewing the Problem Solution), solving other similar problems in different contexts (Extending the Problem Solution). In implementing these syntaxes, students participate in learning activities ranging from analyzing problems to finding solutions to the problems analyzed. This is in accordance with the opinion of participant Suparlan (2019) who stated that constructivism is a theory that triggers students to advance their way of thinking broadly, applying theories that have been studied to solve a problem. The RICOSRE learning model can hone students' scientific literacy skills because during implementation it involves the reading process as initial knowledge and there is a syntax for building solutions that directs students to collect scientific data to solve existing problems.

The results of descriptive and statistical analysis of the science literacy test indicate that the use of the RICOSRE learning model in the experimental group showed a positive and significant influence on students' science literacy skills. This was proven using the ANCOV (Analysis of Covariance) hypothesis test on the science literacy test data presented in Table 4, showing that the significance value of 0.013 is less than 0.05, indicating that the RICOSRE model contributes to developing science literacy skills. This finding is in accordance with Zahra's (2023) research which stated that the RICOSRE model can improve science literacy skills and students' cognitive learning outcomes. Therefore, RICOSRE is very relevant to be implemented in schools as an alternative in developing students' science literacy skills, because the learning process that involves reading and searching for information to solve problems can effectively train students' science literacy skills.

Based on PISA (2022) data, scientific literacy skills have three indicators: explaining an event using scientific processes, forming, reviewing, and correcting errors in scientific disclosures, and concluding scientific data and evidence. Scientific literacy skills can be optimized using the RICOSRE model. In implementing the RICOSRE model, student-focused activities such as reading, recognizing problems, designing solutions, conducting investigations to solve problems, developing solutions, and applying these solutions in similar situations can help students become more knowledgeable and skilled in science (Mawaddah et al., 2021).

The first indicator is explaining an event using a scientific process. The RICOSRE syntax that aligns with this indicator is the syntax of reading and identifying problems. In the first syntax, namely reading, participants are directed to study several literature sources and then create a summary of the problems related to the material and applicable solutions. This activity serves to hone students in optimizing scientific literacy skills, especially in the aspect of "explaining scientific phenomena scientifically." Reading activities in this learning process also encourage students to develop new and diverse perspectives, in understanding various phenomena, thereby improving critical thinking skills, and being able to analyze and predict situations that may occur in the future (Karadeniz, 2015). In the second syntax, the problem identification stage, this activity can help identify the main issues in a reading. In this process, students are required to recognize problems contained in the information sources obtained during the reading stage. By identifying problems, students are directed to read a scientific event that adheres to meaningful scientific concepts (Rahayu, 2016).

The second indicator of scientific literacy is constructing, reviewing, and correcting scientific errors. In the second indicator of scientific literacy, students are expected to be able to convey scientific exploration methods to a given question (Pisa, 2022). Furthermore, they are also expected to be able to review and correct errors in conducting scientific exploration. Students must also be able to describe, replay, and correct errors related to determining the validity, objectivity of data, and the generality of the explanations provided. The RICOSRE syntax that aligns with the second indicator of scientific literacy is the third syntax of constructing solutions, the fourth syntax of solving problems, and the fifth syntax of reviewing solutions. This syntax guides students to learn and present solutions to obtain the most appropriate and suitable solution (Greenstein, 2012).

The third RICOSRE syntax, "constructing solutions," relates to the indicator of forming, reviewing, and correcting scientific errors. Students attempt to construct solutions to previously identified problems, relying on previously read material. Students construct solutions together with their study groups. This third syntax enhances scientific literacy skills in the indicator of forming, reviewing, and correcting scientific errors. The solution-building process involves cognitive activities that contribute to improving higher-order thinking literacy in students (Mawaddah et al., 2021).

The fourth syntax of the RICOSRE learning model, problem-solving, relates to indicators of forming, reviewing, and correcting scientific errors. This stage is a manifestation of the third syntax, problem-solving. Students are guided to carry out investigations based on a plan designed to solve the identified problem. During the investigation, students will engage with data and information previously sought. This stage supports the development of students' scientific literacy, particularly in the activities of organizing, analyzing, and explaining quantitative data and scientific findings (OECD, 2016). The problem-solving process encourages students to think more critically based on known problems, thereby building new knowledge.

The fifth syntax of the RICOSRE model, reviewing problems (reviewing solutions), relates to indicators of forming, revisiting, and correcting scientific errors. The process of reviewing and expanding solutions in syntax plays a significant role in optimizing students' scientific literacy. The syntax's focus on reviewing solutions allows students to develop new, expanded ideas and connect the problems they face to the broader learning context surrounding them. This activity aims to enable students to be more careful in selecting solutions and thus avoid difficulties when solving problems.

The third indicator of scientific literacy skills includes scientific data and facts. At this stage, students are expected to be able to interpret scientific research results as supporting evidence in discussing conclusions (Rini et al., 2021). The RICOSRE syntax, which aligns with the third indicator of scientific literacy, is the sixth syntax, expanding problem solving (solution expansion). Students expand solutions based on previously discovered data and draw conclusions from the existing data. This activity encourages students to think about solutions to solve a problem, conclude possible appropriate solutions to the problem, and make decisions based on various existing solutions (Mahanal & Zubaidah, 2015). Expanding solutions is done to motivate students to implement new understanding and skills acquired during problem-solving in new, similar situations.

Cognitive Learning Outcomes

RICOSRE is a constructivist model that can optimize students' cognitive learning outcomes because it examines the material taught in greater depth. The immune system is an abstract and in-depth topic, and a constructivist learning model is essential for improving students' abilities. Constructivist learning focuses on emphasizing students' cognitive aspects, which are developed through thinking processes during learning (Muzakki et al., 2021). RICOSRE is problem-based, enabling students to actively participate in problem analysis and scientific problem-solving. The above explanation aligns with Intami's (2023) opinion, which suggests that problem-solving is an appropriate strategy for understanding learning material because the problem-solving process requires higher-order thinking skills, namely critical thinking.

From the results of descriptive and statistical analysis known to cognitive learning outcomes, that the implementation of the RICOSRE model in the experimental class showed a positive influence on students' cognitive learning outcomes. Evidence of this statement is presented in table 5, showing that the average post-test score in the experimental group was superior compared to the control group that applied conventional learning methods. In addition, hypothesis testing using the ANCOV test in table 8 produced a sig value of 0.000, not exceeding 0.05, meaning that H0 was rejected and H1 was accepted. Therefore, it was concluded that the RICOSRE model had a significant influence on students' cognitive learning outcomes on the immune system material at SMA Negeri 3 Temanggung. This is in line with Zahra (2023) who stated that the use of the RICOSRE model can improve students' science skills and cognitive learning outcomes. In line with Sumiati et al. (2018) who stated that the RICOSRE learning model had a significant influence on the biology learning outcomes of grade XI students.

RICOSRE is a combination of Reading, Identifying Problems, Building Solutions, Solving Problems, Reviewing Solutions, and Expanding Solutions, which is a learning stage designed to hone higher-order thinking (Mahal & Zubaidah, 2017). The influence of the RICOSRE model can be seen in the cognitive domains used, which include C1-C6 in the immune system material.

The first stage of syntax is reading. At this stage, students read literature related to the immune system. Reading is one of the stages in building students' initial knowledge and providing the necessary tools for carrying out subsequent syntax. Through this reading activity, students can construct knowledge or information related to the immune system. Reading activities can train students' cognitive abilities, especially in aspects C1 (remembering) and C2 (understanding). Students' reading activities can contribute to improved learning, especially in aspects of remembering and understanding (Yuliskurniawati et al., 2019).

The second syntax is identifying problems (problem identification). In this activity, participants are directed to solve unstructured problems, which not only involve finding a problem but also exploring further the causes of a problem. The syntax of identifying problems can train students' cognitive abilities, especially in the aspect of understanding (C2). Participants are taught to hone their understanding through activities to find existing problems accurately so that they can be formed into a problem formulation. In line with the opinion of Sumiati et al. (2018), who stated that students' activities in identifying problems to solve problems at the beginning of learning will help students to deepen their understanding and thus optimize their cognitive learning outcomes.

The third syntax is building solutions (constructing solutions). In this activity, participants are encouraged to build solutions to previously identified problems. The solution-building stage can hone students' cognitive level in the application aspect (C3). Students can apply their understanding when facing a problem in the process of identifying problems, so they are able to design appropriate solutions based on their existing knowledge. In this activity, students begin to collect as many solutions as possible to determine the best option based on the understanding gained during the reading activity in the first syntax. The activity of identifying problems and building solutions contributes to improved learning, especially in the application aspect (C3) (Yuliskurniawati et al., 2019).

The fourth syntax is problem solving (solving problems). This stage can train students' cognitive abilities in the analytical aspect (C4). The problem-solving stage helps students to be able to solve problems in a structured manner, so that students can explore the root cause of the problem and handle it in an appropriate and thoughtful manner. In line with research by Walker et al. (2015), which states that problem solving allows students to expand their reasoning skills by using known problems as a foundation for creating new knowledge.

The fifth and sixth syntax are reviewing the problem (reviewing the solution) and expanding the problem solving (expanding the solution). At this stage, students' cognitive abilities can be trained in the evaluation (C5) and creation (C6) aspects. In the syntax of reviewing the solution, students will interact with each other to obtain responses or responses and to develop information based on the results of the analysis that has been carried out. Reviewing the solution encourages students to think, find ideas, or a new idea, thereby improving higher-order thinking skills. At the solution expansion stage, the aim is to encourage students to be able to apply new knowledge and skills obtained from the problem-solving process to new similar situations or events. The solution review activity can contribute to improving the evaluation aspect (C5) and problem expansion can improve the creation aspect (C6) (Yuliskurniawati et al., 2019).

Based on the explanation above, the RICOSRE learning model has been proven effective in improving students' cognitive learning outcomes in the immune system material at SMA Negeri 3 Temanggung. This can be seen through the improvement in students' cognitive abilities, which occurs because each syntax in the RICOSRE model is able to train students' thinking skills, so they can solve problems more wisely. These results are relevant to research conducted by Yuliskurniawati et al. (2019) that the RICOSRE model can improve students' cognitive learning outcomes.

CONCLUSION

Based on the results of the research and analysis that have been explained previously, it can be concluded that the RICOSRE model influences students' scientific literacy on the immune system material at SMA Negeri 3 Temanggung with a sig value (2-tailed) of 0.013 <0.05. The RICOSRE model influences students' cognitive learning outcomes on the immune system material at SMA Negeri 3 Temanggung with a sig value (2-tailed) of 0.000 <0.05.

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