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# Theology Students' Perceptions of The Impact of Metacognitive Strategy Teaching Materials on Their Critical Thinking Skills

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Abstract. Metacognitive strategies have been widely recognized to enhance active and reflective learning for students. However, there are still issues of debate regarding the practicality and effectiveness of these strategies across different disciplines. Some argue that these strategies may not be universally applicable, especially in the field of theology, where interpretive thinking dominates over structured problem solving. This study aims to determine theology students' perceptions of teaching materials for English Theology courses that integrate metacognitive strategies and explore their impact on the critical thinking skills of seminary theology students. Metacognitive strategies, which involve planning to self-evaluation in the learning process, are thought to improve students' critical thinking skills by helping them to be more aware and in control of their learning process. This study used mixed methods, which integrates qualitative and quantitative research approaches to collect data. The quantitative approach was conducted by distributing questionnaires to thirty-six students to find out their perceptions regarding the impact of metacognitive strategy teaching materials on critical thinking skills in the learning process. Then, a qualitative approach in the form of in-depth interviews was conducted with six representative students to find out their learning experiences and perceptions after being exposed to metacognitive strategies. With teaching materials that implement metacognitive strategies, teachers can improve students' critical thinking skills, prepare them to engage more deeply with current theological issues, and improve their overall academic and ministry.

**Keyword:** Theology Students'; Metacognitive Strategy; Teaching Materials; Critical Thinking Skills; Teaching Strategies

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# INTRODUCTION

In this modern era, which is full of information and rapid change, critical thinking has become one of the most important skills for students, including theology students (Paul & Elder, 2019). Critical thinking allows one to evaluate arguments, analyze in-depth information, and make informed decisions based on a mature under-standing. Critical thinking is widely acknowledged as an essential skill for students, particularly in disciplines such as theology that demand analytical reasoning, evaluation of complex arguments, and deeper engagement with abstract concepts. However, traditional educational approaches in theological studies often emphasize rote memorization of concepts and theories rather than fostering analytical and reflective thinking skills (Baker, 2020). This has raised concerns regarding the adequacy of such methods in preparing students for the intellectual demands of their field. In the EFL classroom, developing critical thinking skills is an additional outcome of the learning process and an important goal that needs to be strategically planned. This can be achieved by applying effective teaching models, such as inquiry-based teaching methods, using relevant strategies and helping students (Novianti & Tersta, 2024).

For theology students, critical thinking skills are important to understand and interpret religious texts and face the challenges of thinking in a complex and multicultural world (Helmirita et al., 2023). However, it cannot be denied that many students still have difficulty developing these skills optimally due to limitations in the learning process that only focus on memorizing material, not on developing analytical and reflective abilities. There is growing interest in integrating metacognitive strategies into teaching materials to address this gap and enhance critical thinking. Metacognitive strategies encompassing self-regulation, planning, and evaluating one's thought processes have encouraged students to actively engage with their learning and develop independence in problem-solving (Pereles et al., 2024).

Metacognitive strategies play an important role. Metacognitive strategies help students become more aware and actively involved in their own thinking processes. With this strategy, students are invited to think about how they think, understand the steps they take in solving a problem, and evaluate the effectiveness of their way of thinking. According to Flavell (1979), metacognition includes a person's awareness of their thinking process, which includes three stages: planning, monitoring, and self-evaluation. When theology students are equipped with teaching materials using metacognitive strategies, they receive information passively. They are invited to reflect on and criticise the material's content, thus developing more profound critical thinking skills. Previous research shows that metacognitive strategies can improve critical thinking skills in various fields of study (Damayanti et al., 2019), but they are still limited to theology. In the field of theology, the need for critical thinking is crucial, especially in understanding, interpreting, and even applying religious teachings in work, ministry, and daily life. For example, a student would need more than just basic cognitive skills to understand the meaning of a text in the Bible or texts created by famous figures with multiple interpretations. More than that, they need the ability to evaluate arguments and consider historical and social contexts (Rivas et al., 2022). Therefore, applying metacognitive strategies in theology teaching materials is expected to help students become more independent, active, critical, and reflective learners.

This study focuses on the perceptions of theology students regarding the impact of using teaching materials with metacognitive strategies on their critical thinking skills. In this study, the teaching materials studied were in the English Theology course, one of the compulsory courses for theology study program students (Kelly, 2004). Students' perceptions are important to investigate because how they perceive the effectiveness of

this method can affect their motivation and engagement in the learning process. The application of metacognitive strategies in the context of theological education, particularly in English courses, is still relatively rarely explored. It is rare to find writings that discuss English theology. Most research on metacognitive strategies tends to focus on science or general education. At the same time, the uniquely challenging field of theological studies is often overlooked (Lin & Chan, 2022) due to the lack of English lecturers who focus on research in the field of theology.

Meanwhile, so many seminary schools need new things to support the learning process. Despite the need for critical thinking, not all students possess this ability naturally (Niemi & Isopahkala-Bouret, 2021). Gender also does not significantly influence a student's critical thinking (Forsia et al., 2024). Some students may be more likely to receive information without questioning or pondering its deeper meaning passively. They tend to receive information without critically processing it. This passive approach can hinder students' understanding of theological issues in learning theology. Therefore, there is a need for pedagogical interventions that can encourage students to become active and critical learners in all situations. One approach that can encourage critical thinking is metacognitive strategies (Guamanga et al., 2024).

Several previous studies are similar. Such as research conducted by Damayanti and friends, providing results that metacognitive-based teaching materials to improve mathematical critical thinking skills, which begins with a preliminary study that shows the need for the development of teaching materials based on metacognitive strategies. Mathematical critical thinking skills with learning using teaching materials based on metacognitive strategies are more effective than mathematical critical thinking skills that do not use teaching materials (Damayanti et al., 2019). In another research, Pelenkahu and friends concluded that metacognition and critical thinking significantly improved students' persuasive argument writing skills, with progress observed across cycles, which included problem under-standing, monitoring, resolution, evaluation, and conclusion formulation. This intervention helps students anticipate outcomes through effective time management, highlighting our commitment to monitoring and providing constructive feedback for continuous improvement (Pelenkahu & Muhammad, 2024).

From several of the previous studies, it is known that there is a limitation that no research has specifically examined seminary theology students, especially the relationship between English theology courses and the use of metacognitive strategies and critical thinking. This paves the way for understanding how critical thinking skills develop in theological studies with unique characteristics, such as the interpretation of religious texts and philosophical reflection. There is still a lack of studies that explore student perceptions, especially in terms of seeing the impact of these strategies on the formation of more holistic and contextual critical thinking skills in the field of theology.

Thus, the research question to be answered in this study is: How do theology students perceive the impact of metacognitive strategy teaching materials on their critical thinking skills? Overall, this research aims to make a meaningful contribution to the development of teaching methods, especially in the field of theology, with the hope that theology students can become more critical and reflective learners. By understanding their perceptions, it is hoped that we know that metacognitive strategies can be applied more effectively and tailored to the specific needs of theological seminary schools. The findings of this study are also expected to be the basis for curriculum development that is more supportive of learning that not only focuses on mastery of material but also on the development of critical thinking skills that are very important for students and graduates who are ready to face challenges in the world of work and ministry.

#### Metacognitive Strategies in ELT

Metacognitive strategies involve various processes, namely planning, monitoring, and up to the process or stage of evaluating learning and have been proven effective in

improving critical thinking skills (Flavell, 1979). By applying this metacognitive strategy, students are expected to be more aware and also understand their thinking process when studying English theology materials so that students can quickly improve their ability to analyze and reflect on information appropriately and critically. Metacognition is a person's full awareness and control of their thinking and learning processes (Flavell, 1979). In an educational context, planning, monitoring and evaluating their understanding during the learning process is a student's metacognition process.

Students who can apply metacognitive strategies in their learning contexts tend to be more successful because they focus on what they learn, how they learn, as well as how they can achieve their goals. Metacognitive strategies in English Language Teaching (ELT) have received increasing attention to help students become more effective, autonomous, independent and reflective (Zepeda et al., 2020). This strategy involves a learner's awareness of their thinking process and applying specific techniques to regulate their cognitive activity during the learning process. A study revealed that developing metacognitive awareness, such as being aware of one's learning methods, can significantly improve student learning outcomes (Aldosari et al., 2023). This is particularly important in learning English as a foreign language as it allows learners to adjust their strategies to maximize comprehension and retention. For example, learners can reflect on which vocabulary learning techniques work best for them or how they can improve their reading comprehension through specific planning and monitoring activities (British Council, 2021).

Teaching materials that use metacognitive strategies can include activities that encourage students to actively understand, master and evaluate their understanding (Zohar & Barzilai, 2013). Teaching materials that integrate metacognitive strategies can significantly help students become more independent in their learning process. When encouraged to think about their learning process, students will face academic challenges, but this will help them become more active and responsible learners (Zepeda et al., 2020). Previous research shows that this strategy helps students understand the material better and more precisely and improves their ability to think critically, as they are invited to actively reflect on (evaluate) their own thinking process (Lyons & Thayer, 2021).

In fact, these strategies affect language learners' writing skills as some previous studies have shown. Metacognitive experiences, such as students' awareness of their strategies when writing in a foreign language, have been associated with better performance in writing tasks. For example, research has shown that students who use metacognitive strategies such as planning, monitoring, and evaluating their writing will be more likely to produce higher quality written texts in a second language context (Sun et al., 2021). By incorporating metacognitive strategies into their learning routines, language learners can more effectively manage thinking and challenges such as complex grammatical structures or unfamiliar vocabulary. Through self-reflection and strategy evaluation, they can continue to improve their language skills day by day (Aldosari et al., 2023).

# **Critical Thinking**

Critical thinking has long been considered an essential skill in education, certainly in theology (Graham, 2009). This skill is vital for theology students, especially when preparing to be directly involved in ministry or future academic careers requiring reflective and analytical thinking. According to Paul and Elder (2019), critical thinking includes skepticism towards claims or assumptions and the ability to make decisions based on deep understanding. This involves analyzing arguments, evaluating evidence, and drawing logical and appropriate conclusions. Critical thinking skills are becoming increasingly important in the era of digital information that has been very loaded with fake news and hoaxes. Ennis (2020) states that critical thinking is an important skill in

distinguishing valid and invalid information in everyday life through any media and under any conditions. This is very relevant in higher education, where students are expected to memories and understand information, think independently and make objective judgments. In theological education, critical thinking skills can help students understand and interpret religious texts more deeply and reflectively.

Recent research notes that critical thinking consists of several important components, namely, one's ability to analyze, evaluate, and make inferences (Halpern & Butler, 2020). Analysis involves a person's ability to understand and divide information into small parts to be easily understood and passed on to the next stage. Many strategies can be used in education to improve students' critical thinking skills, and one of the popular ones is the application of metacognitive strategies (Schraw & Dennison, 2021). This strategy helps students encourage and develop awareness of their thinking and learning (Pintrich, 2022). This strategy has been proven effective in improving students' ability to think critically, as it directly encourages students to actively control and reflect on their thinking processes. Metacognition, or awareness of one's thought processes, is also important in critical thinking (Schraw & Dennison, 2021). Metacognition allows individuals to reflect on and evaluate their thinking to make the necessary adjustments to improve their critical thinking skills.

#### **METHOD**

This research used a mixed methods approach combining quantitative and qualitative data in one study. This approach is used to gain a more complex and comprehensive understanding of the phenomenon, focusing on collecting and analyzing numerical data to answer research questions. This research aims to test hypotheses, find relationships between variables, or measure phenomena objectively using statistical tools (Creswell, 2014). The qualitative approach allows for a deeper understanding of the subject's perceptions or views, experiences, and motivations, thus providing a more comprehensive picture of the problem and answers that are being researched (Ramedlon et al., 2023). Therefore, the researchers used theology students as research subjects in this study.

Theology students specifically study religion and its practices in an academic setting. Theology students explore various religious disciplines, such as philosophy, history of religion, sacred texts, and the socio-cultural context of the religion they study. According to Johnstone (2023), theology students are important in proclaiming interfaith dialogue and developing a deep understanding of religious beliefs and practices in a multicultural society. They learn about religion from a scholarly perspective and apply that knowledge in their communities, including religious service, teaching, and mentoring. In this study, researchers focus on Christian theology students. This is suggested by Smith (2022), who emphasizes that studying theology requires a balance between spiritual appreciation and a critical approach. Theological students are expected to develop a critical and reflective understanding of the religious doctrines they have heard and learned, especially in dealing with complex contemporary issues. According to previous research, critical thinking allows theology students to analyze and evaluate various theological perspectives and build more logical and reasoned arguments to ultimately be accepted by the wider community (Brookfield, 2012).

The quantitative approach measures theology students' perceptions of the impact of metacognitive strategy teaching materials on critical thinking skills in the learning process of English theology courses. English Theology courses teach students to explore complex theological texts in a foreign language, which requires critical thinking and strong linguistic skills. The English Theology, sometimes called TE course, is designed to meet the specific needs of theology students who require English language skills in academic and professional contexts. Therefore, this TE course is included in the

English for Specific Purposes (ESP) section (Pierson et al., 2010). Teachers and administrators often express various views and concerns when discussing the need for Theological English (TE) instruction (Kelly, 2004). TE teaching aims to bridge the gap between what students have learned in the English for General Academic Purposes (EGAP) course and what they will encounter in the academic context of theology. In particular, TE courses are designed to accomplish two main things (Kelly, 2004): first, to connect the general material taught in EGAP, which usually covers topics relevant to all students, with more specific material related to the study of theology; second, to strengthen students' study skills, such as critical reading and the development of theological vocabulary, which are crucial for their academic success.

Meanwhile, the qualitative approach explores their views and experiences more deeply after being exposed to learning with teaching materials using metacognitive strategies. Researchers used an in-depth interview approach and questionnaires as quantitative research instruments. For the quantitative approach, researchers will distribute questionnaires. The questionnaire created is closed in which respondents can only answer the questions given with the answer options determined by the questionnaire maker. In this study, researchers used a Likert scale, namely 1 (Disagree), 2 (Neutral), and 3 (Agree). In this study, the researchers distributed questionnaires to a total of 36 samples who were students of theology study program by using purposive sampling. Purposive sampling is a sampling technique carried out with certain considerations, where the researcher selects members of the population based on specific characteristics relevant to the research objectives (Campbell et al., 2020). The researchers selected this sample by referring to individuals who had taken the English Theology course by integrating metacognitive strategies in the teaching materials.

This questionnaire is divided into three main points, so the number of questions is 10. This questionnaire was adopted by Fionce (2015), who, in her research, said that critical thinking involves the ability to analyze and evaluate information in depth, so it is important to measure students' perceptions of this ability. Furthermore, the ability to be able to assess the validity and reliability of information is one of the key skills in critical thinking. The results of that study are in line with this research. Therefore, the researchers adopted the questionnaire questions that had been designed. The questions are described in the table:

Table 1 Questionnaire Questions

Table I Questionnaire Questions	
Construct	Question
Information Analysis and Evaluation	I feel more able to analyze the subject matter in depth.
	I can evaluate the strengths and weaknesses of the
	arguments presented in the English theology material.
Ability to question information and make decisions while drawing conclusions.	I feel more confident in making decisions based on the
	information I learn
	I can draw logical conclusions from various sources of
	information in English theological studies
	I feel more confident to question or challenge the
	information I receive.
	I tend to criticize views or arguments before accepting them.
Ability to evaluate the credibility of information while maintaining metacognitive awareness	I am more aware of my thought processes when completing
	English theology assignments.
	I often consider the best way to understand the material
	before I start studying
	I can judge whether the information I obtain is reliable or not
	I feel more critical in evaluating the accuracy and source of
	information

The questions in the first construct align with *Bloom's Taxonomy of Cognitive Domains* at the analysis and evaluation levels (Bloom, 1956). Analyzing involves breaking down information into its components and understanding relationships, while evaluating requires assessing arguments or evidence for validity and reliability. The second construct is grounded in decision theory and critical thinking models, such as Paul and Elder's framework, which emphasizes the ability to synthesize information and make reasoned judgments (Paul & Elder, 2019). The third construct reflects *Socratic Questioning* and theories of *Argumentation* in critical thinking, focusing on challenging assumptions, exploring alternatives, and interrogating evidence (Ennis, 1985). The fourth construct is rooted in Flavell's Metacognition Theory, which defines metacognition as the awareness and regulation of one's thought processes (Flavell, 1979). Last, the fifth construct corresponds to *Information Literacy* frameworks and *Epistemological Theories* in critical thinking that emphasize the importance of evaluating the credibility of sources, the accuracy of data, and the soundness of arguments to discern truth from misinformation (Bruce, 1997).

The researchers also conducted in-depth interviews as a qualitative research instrument. This interview will be conducted with 6 outstanding students who are representatives. The selection of representative subjects was based on the criteria from the quantitative test results based on a Linkert Scale where two people were appointed per scale. There are 6 questions for this in-depth interview: (1) Can you explain your understanding of metacognitive strategies in your learning? (2). How do you think using metacognitive strategy materials has affected your approach to learning theology? (3). Have you noticed any changes in your critical thinking skills since you started using these materials? If so, what are some examples? (4). What challenges have you faced when using metacognitive strategies in your learning? (5). In what ways do you feel more aware of your own thought processes when studying theology? and (6). Do you think these materials encouraged you to reflect deeply on theological concepts? Give the reason!

The interview questions were adopted from Brookfield (2012), as they explore how students understand the concept of metacognitive strategies, which is an important foundation or basis for understanding their impact on one's critical thinking ability. Brookfield emphasizes the importance of metacognition as a tool that helps students become more aware of their own thinking. According to Brookfield, the ability to understand and control our own thought processes, especially in the context of critical thinking is metacognition (Brookfield, 2012). He also added that critical thinking does not only stop when one understands information but also one's ability to question, evaluate, and make decisions based on that understanding. This is also supported by Halpern and Butler (2020) research which shows that metacognition can improve critical thinking skills in various contexts and issues.

To analyze the quantitative data obtained, researchers will examine using descriptive statistics to see the distribution of perceptions from all students. The qualitative data collected will be analyzed using thematic analysis to identify the main themes that often emerge from the qualitative data relating to perceptions and the impact of teaching materials on students' critical thinking skills. Then, after all the data are analyzed separately, the researchers will compare the results to get a comprehensive picture of students' perceptions and the impact of teaching materials on their critical thinking skills. Triangulation will also be conducted in this study to increase the validity and reliability of the data (Carter et al., 2014).

Primary ethics and trustworthiness are important components to consider in ensuring the quality and integrity of research. The researchers have ensured that this study also upholds ethical standards, such as informed consent and honesty in data representation (Aguilar-Solano, 2020). The ethical component refers to the importance of following ethical guidelines throughout the research process, ensuring that the rights,

dignity, and confidentiality of participants are respected. The researchers have first asked permission from the informant and promised that the confidentiality of the data obtained will not be disseminated and harm the informant (Stahl & King, 2020).

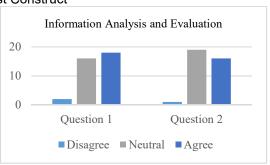
# RESULTS AND DISCUSSION

The following discussion attempts to answer this research problem. All of the following key findings are summarized from the quantitative and qualitative data obtained by the researchers. Further research results, along with in-depth explanations, can be seen as follows:

# Deep Understanding in the Context

The data that has been collected concludes the first point, which is an in-depth understanding of the context. From the first question of the questionnaire, most of the respondents agreed that they felt more able to analyze after attending the program or learning. Only a few respondents disagreed with the statement. There were also relatively few neutral respondents. Then from the second question, most respondents agreed that they could evaluate the strengths and weaknesses of the arguments presented in the English theology materials. Only a few respondents (1 person) disagreed with the statement. Overall, the graph shows that respondents felt more able to analyze the subject matter in depth and evaluate the arguments in the English theology materials after attending the program or learning, with 94.4% of participants agreeing to both statements related to information analysis and evaluation. These results indicate that the program effectively improved participants' analysis and evaluation skills.





This aligns with interview question one: "Can you explain your understanding of metacognitive strategies in your learning?". This talks about active engagement in the learning process. A student with the initials AH stated in the interview: "In the past, I just read without knowing what was important. Now I know how to highlight the main concepts and connect them to the big themes". They find this strategy helps them and contributes because they already have a good foundation of understanding. In addition, this strategy creates a good atmosphere that helps students to increase interaction between students and lecturers or between students and peers. Another student with the initials IJ said: "In the beginning, I thought that metacognitive is a strategy that only focused on how students can understand and evaluate their learning process, but more than that, through this strategy, the student who has an introvert side in their life that emphasize to have a better understanding about the material and also can create a better confidence to express their feeling or their thought". Many students mentioned that using the metacognitive strategy helped them identify key concepts in each material and more than that; this strategy helped them move out of their position. This skill makes students more proactive in class discussions.

On the other hand, students also deeply understand the context of "English Theology". This is in line with interview question number six. Students explored the historical, social and theological context of the material studied. They also demonstrated the ability to integrate the various sources they found, both classical and contemporary texts. One participant said: "When I learn about a doctrine, I find that I am able to not only focus on the text itself but also look at the historical context and how that view has developed until today". This answer can conclude that deep understanding allows them to think holistically and build more comprehensive arguments. Other responses from the student with initial FA said, "...Well, I am really proud of myself, miss. Last meeting, with confidently I express my opinion regarding other people's opinions that I think is not correct. The point is, I have a huge confidence to express what I thought in front of the class". From that, it concludes that many students have a deep understanding of the material, but the plus point that they got is that they can confidently share their opinions in class. This strategy helped them to not only understand the content of the material but also to be able to apply it in various contexts, including in their daily lives and ministries.

# Self-Understanding and Improvement Process

Based on the graphs presented, here are the conclusions for the two questions related to the ability to make decisions and draw conclusions in theological studies and also the ability to question information. Respondents who agreed with this statement had a significant number, equivalent to respondents who answered neutral. The number of Neutral responses was also high, indicating that many respondents were still in the evaluation stage before being fully confident in their decision-making abilities. Then, agree responses for the fourth question were also high, almost equal to the number of respondents in the neutral category. Respondents with neutral answers remained significant, which suggests that some of them may need more time or support to feel confident in their ability to draw logical conclusions.

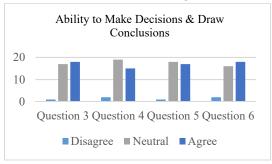


Chart 2 Answer result for the Second Construct

This graph shows that most respondents feel confident in making decisions and drawing logical conclusions from various sources of information, with a percentage of 91.6% answering in the affirmative. However, several respondents gave neutral responses, which could indicate a need to improve their understanding and skills in this area further. Students emphasized the importance of reflection on their learning process. In this context, self-evaluation becomes the main tool to identify strengths and weaknesses in understanding theological concepts. Some students explained that they realized their mindset when facing theological texts or discussions. When the researchers conducted an in-depth interview, one student with initial OZ revealed: "When I read a text, I start asking myself, do I really understand this concept? Is there a bias in the way I process this information?". Through this reflection, students can improve their learning methods by adjusting their learning strategies or seeking additional resources. This process also helps them be more confident in class discussions and exams.

The results of the fifth questionnaire question showed that most participants agreed that they could question information. This indicates that most participants are confident enough to ask questions. However, there were also some participants who were neutral towards this statement, which could indicate that they were still unsure or needed more practice to improve their ability to question information. Then, on question six, the survey results on this question were similar to the previous question. Most participants agreed that they were able to question information. This reinforces the finding in the previous question that participants generally have a fairly good ability to question information. Based on the survey results above, it can be concluded that most participants have a fairly good ability to question information, with a percentage of 97.2% who answered in the affirmative. This indicates that the program or training participants have attended is quite effective in improving their ability to analyze information and ask relevant questions critically. However, it should be noted that there are still several participants who feel neutral or unsure about their ability to question information. This suggests that there is still room for improvement in participant ability.

One of the most significant impacts of implementing metacognitive strategies is the ability to think critically. Students not only passively receive information, but also question its validity and relevance. The questions asked are often fundamental and challenge assumptions. One example of a student with an initial AH statement: "I often ask myself, is this interpretation correct? Is there another view that is more relevant in today's context?". This ability to ask critical questions has unknowingly helped them to build more solid arguments in essays and presentations. Some students felt that this strategy changed how they viewed theology as a dynamic discipline open to various interpretations.

# Metacognitive Awareness and Evaluating Information

Respondents showed a high metacognitive awareness of their thought processes, particularly in the context of English theology assignments. They tend to think about the best way to understand the material before starting the study, which indicates careful planning and preparation. This is shown in the chart below:

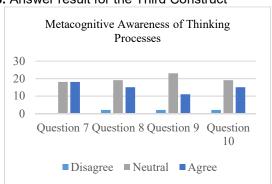


Chart 3. Answer result for the Third Construct

The results for the seventh question showed that most participants agreed that they were aware of their thought processes after being exposed to metacognition strategies. This indicates that most participants were able to reflect on and understand their thoughts when working on tasks or solving problems. The same number also indicated that some participants still had to develop their metacognitive awareness further. Then, question eight showed a slightly different pattern. Most participants agreed that they had a good awareness of their thought processes, but there were also participants who were neutral. This indicates that participants tended to be more confident with their metacognitive awareness in this question compared to the previous

questions. Thus, based on the survey results above, it can be concluded that 91.6% of participants had fairly good metacognitive awareness after exposure. They were able to reflect and understand how they think and how they can improve their thinking process. This is a positive indication, as metacognitive awareness is one of the important factors in effective learning.

It aligns with the results of the interviews conducted in this study. A major challenge often experienced by students is consistency in the application of metacognitive strategies. Although they have realized the benefits, some students find it difficult to remain consistent, especially when the task load increases, or some conditions are beyond their expectations. One student with initial SA in the interview revealed: "Sometimes I feel too busy to do deep reflection, even though I know it is very important". In addition, students also find it difficult to measure how effective this strategy is on their learning outcomes. Usually, they will only rely on feedback from lecturers or exam results as indicators of success. However, there is a consensus that this strategy has a positive impact, although it is difficult to measure directly.

The results in question nine showed that most participants agreed with statements related to validity and reliability. This indicates that most participants believe this study's instruments or methods are valid and reliable. A relatively larger number of participants were neutral, indicating a high confidence level in validity and reliability. Then, question ten was similar to the previous question. Most participants agreed with the statements related to validity and reliability. Based on the survey results above, it can be concluded that most participants have fairly high confidence in the validity and reliability of the instruments or methods used in this study, with a percentage of 72.2%. This indicates that the instruments or methods have been well designed and implemented so that the data obtained are reliable and can be used to draw valid conclusions.

The students realized that metacognitive strategies helped them to monitor and evaluate their learning outcomes. One student with initial HK explained how, after being exposed to these strategies, it was very useful for him to be able to assess whether he had achieved certain learning objectives: "After I finish studying a topic, I try to assess whether I really understand it. If I am still confused, I know that I need to do some repetition or look for additional resources". This approach gives students a greater sense of responsibility for their learning. Students feel more involved in the learning process and can better identify areas for improvement, which will certainly positively impact their academic performance.

These analyses show that metacognitive strategies significantly improve the critical thinking skills of theology students, especially in the "English Theology" course that has implemented these strategies. Students feel more engaged, reflective, and in control of their learning process. However, consistency in implementation and measuring effectiveness remains a challenge that needs to be overcome. More systematic guidance and support from lecturers is needed to ensure that this strategy can be implemented optimally (Dewi, 2021). Thus, integrating metacognitive strategies in the theology curriculum can be a strategic step to produce graduates with in-depth theological knowledge and strong critical thinking skills. Effective learning in theological education involves a deep understanding of the context of the material being taught, followed by a high degree of self-awareness in the process of self-evaluation and improvement. Metacognition plays an important role in helping students to not only understand information deeply but also to evaluate and improve the way they think. By increasing metacognitive awareness, students can critically assess the information received, which supports the development of critical and reflective thinking skills in the context of theological education.

The findings of this study also highlight the transformative potential of metacognitive strategies in developing critical thinking skills among theology students.

Through self-evaluation, active engagement, and reflective questioning, students gain greater control over their learning process and achieve a deeper understanding, particularly in English Theology courses that require them to navigate the various English languages used in theological discourse (Paul & Elder, 2019). These strategies empower students to critically analyze the content and approach to learning, which is vital for mastering complex theological concepts. However, challenges in consistently applying these strategies and measuring their long-term effectiveness underscore the need for ongoing support, adaptation, and refinement of teaching methods. These findings are consistent with existing metacognition and critical thinking theories, emphasizing the importance of developing self-regulated learning. As Zimmerman (2002) described, selfregulation is reflected in students' ability to plan, monitor, and evaluate their learning processes. Moreover, the emphasis on reflective questioning aligns with the Socratic method, which prioritizes inquiry and dialogue as essential pathways to critical thinking (Dewi, 2021). This approach supports intellectual growth and fosters a learning environment where students become more independent and reflective thinkers, ready to engage with theological challenges critically and thoughtfully.

Educators in higher education should note and consider the importance of integrating metacognitive strategies into the curriculum in a structured and student-appropriate way. Providing clear guidance to students on implementing these strategies and offering regular feedback can help overcome the challenges of consistency and effectiveness (Lianto, 2019). In addition, incorporating alternative assessment methods, such as reflective journals or portfolio assessment (evaluation), can also provide a more thorough and complex evaluation of students' cognitive growth. Theology students found that metacognitive strategies were very useful in improving their critical thinking skills in the context of the English Theology course. These strategies foster self-awareness, active engagement, and reflective and logical questioning, all essential for navigating the complexities of theological studies. Despite some challenges, the overall impact on students' learning outcomes and academic performance can be very positive, underscoring the value of metacognition as a pedagogical tool in higher education.

#### CONCLUSION

As the researchers stated earlier, this study aimed to explore the perceptions of theological students regarding the impact of the application of metacognitive strategies in English Theology courses on their critical thinking skills. Through quantitative and qualitative data analysis, the study revealed significant findings regarding the effectiveness of metacognitive strategies in theological education. The data collected shows that teaching materials incorporating metacognitive strategies have been effective in fostering a deeper understanding of the content and a critical approach to analyzing and questioning the arguments presented. In other words, students were able to engage in more critical thinking after being exposed to these strategies, which highlights the potential of metacognitive strategies in enhancing critical thinking skills in the context of theological education. Therefore, the debate of some who think that these strategies cannot be used universally for all disciplines, especially theology, has been refuted.

Overall, this study shows that teaching materials that use metacognitive strategies have a significant positive impact on the critical thinking skills of theology students. They can analyze, evaluate information, and make logical and wise decisions by asking critical questions and increasing awareness of their thought processes. By designing teaching materials that incorporate metacognitive strategies, teachers can enhance students' critical thinking skills, prepare them to engage more deeply with theological issues and improve their overall academic and ministry performance. Nevertheless, further improvements and research are still needed for all students to optimally utilize these teaching materials. Thus, metacognitive strategies can continue

to be developed as an effective learning approach in theological education. Future research needs to explore the application of metacognitive strategies across different theological disciplines to understand how to adapt these strategies in a broader context. In addition, it is important to explore the interaction between students' cultural and religious beliefs and their use of metacognitive strategies, as this may provide new insights into the influence of personal factors in the learning process. This research could be a useful direction to take in the future.

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