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Metacognitive Knowledge and Emotion Regulation of Mathematics Students

Jodeliza A. Pedroso

Katipunan High School, Department of Education, Philippines

Abstract

This research aimed to determine the level of metacognitive knowledge in terms of knowledge of self, knowledge of the task, and knowledge of strategy as well as the level of emotion regulation of mathematics students in terms of content, emotion, and motor. Further, it sought to look into the significant relationship between metacognitive knowledge and emotional regulation of mathematics students, strategies of students in monitoring their performance in mathematics, and the strategies applied by the students to regulate their emotions when facing challenging mathematical problems. Finally, it sought to determine the mathematical activities which can be developed based on the findings of the study. This study employed mixed methods, specifically the sequential explanatory design. Descriptive correlation was first determined followed by the phenomenological approach where an interview guide was used in the gathering of the data. This process involved the gathering of descriptive data as well as testing the correlation among the variables. Findings showed that the level of metacognitive knowledge and emotion regulation of mathematics students is moderately high. Meanwhile, there was a highly significant relationship between mathematics students' metacognitive knowledge and emotion regulation. Specifically, there was a highly significant relationship between knowledge of tasks and cognitive and emotional knowledge of strategies and cognitive, emotional, and motor. The students need to enhance their metacognitive knowledge by employing relevant strategies that will help them become consistent with their performance in mathematics. Additionally, students were encouraged to observe a high level of emotion regulation to understand mathematical concepts. Teachers may apply the suggested mathematical strategies and determine their efficacy in the enhancement of students' metacognition and emotion.

Keywords: metacognitive knowledge, emotion regulation, knowledge of self, knowledge of task, knowledge of strategies, cognitive, emotional, motor

Background of the Study

Learning happens when the purpose of mathematical instruction is to bring the student into applying its concept. Having a sense of understanding is the beginning of knowledge. As they appreciate its value, students can fulfill the tasks endowed upon them without any difficulties. By employing strategies, they bring out the best in them to be ready to respond to their own needs.

Globally, as students strengthen their metacognition in understanding mathematical concepts, this can help teachers provide activities that will enrich participation and better learning experiences (Pun & Gao, 2023). The findings of Petronzi et al. (2023) stated that those high-achieving students employed cognitive information-processing strategies. They recommended the need to make learning mitigated through the affective domain aside from the cognitive, especially to low achieving students (Legrand et al., 2020; Dorji & Subba, 2023).

Metacognitive knowledge of students was found to be the best predictor of their mathematics performance (Gaylo & Dales, 2017; Tan & Limjap, 2018). Emotion regulation which was applied by learners normalized mathematics talk in a non-judgment-based environment which led to more positive views in finding approaches and solutions (Millonado et al, 2021). Indeed, monitoring of the task led to less inaccurate performance when participants showed more positive emotions than negative ones (Manalastas, 2023).

The call to conduct this study is associated with the limitations of the existing pieces of literature about the relationship between metacognitive knowledge and emotion regulation of mathematics students. Each variable was studied separately with varied respondents and approaches (Efklides & Vlachopoulos, 2012; Ajisuksmo & Saputri, 2017; Bakar & Ismail, 2020). Moreover, these did not tackle the situations of the mathematics students in the public schools in the local setting. In this regard, a need to fill the understanding in kinds of literature called for the attention of the researcher.

Understanding how metacognitive knowledge and emotion regulation impact mathematics learning can lead to the development of more effective teaching strategies and interventions. When students are aware of their cognition and emotions, they can have the capacity to regulate them. This potentially leads to improved mathematical skills and academic success.

Statement of the Problem

This research aimed to determine the metacognitive knowledge and emotion regulation of mathematics students. Specifically, this study sought answers to the following research questions:

1. What is the level of metacognitive knowledge of mathematics students in terms of:

1.1 knowledge of self;

1.2 knowledge of tasks; and

1.3 knowledge of strategies?

2. What is the level of emotion regulation of mathematics students in terms of:

2.1 cognitive;

2.2 emotional; and

2.3 motor?

3. Is there a significant relationship between metacognitive knowledge and emotional regulation of mathematics students?
4. How do students monitor their own performance in mathematics?
5. How do students regulate their emotions when facing challenging mathematical problems?
6. What mathematical activities can be developed based on the findings of the study?

Method Used

This study employed mixed methods research, specifically the sequential explanatory design (Almeida, 2018; Thornberg et al., 2022). The descriptive correlation was first determined and followed by the phenomenological approach where the interview guide was used in the gathering of the data. This process involved the gathering of descriptive data as well as testing the correlation among the variables.

To understand this process, quantitative research was formulated first. It is a methodology where the utilization of numerical value plays an important role in the interpretation of the data (Morgan, 2018; Bloomfield & Fisher, 2019). For example, it aimed to collect the data in a larger population to come up with a conclusion. In this regard, researchers utilized different statistical tests depending on the variables and the target respondents.

Qualitative research does not use any numbers in the interpretation of the data. All the data were collected in the form of words which the researcher took from the responses of the participants. Here, an interview was done to extract and understand their experiences. Also, data in the form of pictures as well as observations in the setting can be significant in the study (Roller & Lavrakas, 2018).

To understand the phenomenon, the researcher interviewed mathematics students. This provided data for the qualitative phase of the study. Indeed, this study is sequential explanatory since two methodological approaches were utilized to deepen the understanding of metacognitive knowledge and emotional regulation of mathematics students which makes this paper employ the mixed methods approach.

Sources of Data

This study utilized primary sources of data, specifically quantitative and qualitative data. The quantitative data were derived from the responses provided by the respondents to the questionnaires, while the qualitative data were obtained through interviews conducted with the research respondents.

Data Gathering Instrument

The quantitative data was collected using a structured questionnaire, allowing for numerical analysis and statistical interpretation. The use of questionnaires provides researchers with more information efficiently and systematically, increasing both reliability and findings.

To gather the quantitative data, the questionnaire was taken and modified from the study of Tian et al. (2018) on metacognitive knowledge and by Caballero-Carrasco et al. (2021) on emotion regulation. Each item was modified to meet the needs of the respondents. The Likert scale was used to determine their level of responses as described: 1 - very low, 2 – low, 3 – moderately low, 4 – moderately high, 5 – high, 6 – very high.

Qualitative data were collected through questions referring to interviews. These open-ended questions allowed researchers to delve into participants' experiences, opinions, and perspectives. Through interviews, the researcher gained a broader understanding of the topic, captured rich and nuanced insights that were not easily quantifiable. The qualitative data collected provides valuable context and led to the interpretation of detailed research findings results. To respond to the occurrence of the phenomenon, informants responded to questions by the researcher utilizing the interview guide with the use of a recorder for data gathering.

Population and Sampling Technique

Quantitative

There were a total of seven hundred thirty-five (735) Grade 10 mathematics students in the Municipality of Arakan, of which two hundred fifty eight (258) of them were identified as the respondents in the study. Participation of the respondents in the study was entirely voluntary. The voluntary response sampling was employed through the use of the questionnaire. This procedure carried out simple random sampling. Using Alpha error taken as five percent (5%) in the sample size calculated using Slovin's Formula, thus, sample size was determined at two hundred fifty eight (258).

Qualitative

From the two hundred fifty eight (258) respondents, ten (10) informants were taken to participate in the interview. The informants were personally handpicked by their teachers.

Statistical Treatment

This study used a range of statistical tools to analyze and interpret the data. An important tool is the Weighted Mean, which was used to quantify the responses to the investigated variables. The Weighted Mean can more accurately represent the data by measuring the importance or weight of each response.

Another statistical tool used is the Pearson Product Moment Correlation. This instrument was used to investigate whether there is a significant relationship between metacognitive knowledge and emotional regulation in mathematics students. Pearson product-moment correlation measures the strength and direction of a linear relationship between two variables. Examination of the interaction theory allows us to understand the extent to which there is a relationship between metacognitive knowledge and emotional processing in this study.

These statistical tools provided valuable insights and played an important role in understanding the data collected for this study. By using weighted averages and Pearson product-moment correlations, researchers draw meaningful conclusions and make rational decisions based on the relationships and patterns identified in the data.

Data Analysis

In analyzing the qualitative data, thematic analysis was employed, utilizing Braun and Clarke's (2006) six-phase guide as a comprehensive framework for the analysis process. Initially, the researcher collected data, transcribed and translated, involving the identification of key themes within the informants' statements. Subsequently, the identified themes were reviewed to ensure their coherence within the complete data set, and adjustments were made as necessary. Additionally, global, organizing, and basic themes were determined. Finally, the researcher conducted an analysis of the results and their implications, seeking assistance from a data analyst throughout the process.

Level of Metacognitive Knowledge of Mathematics Students

The first research question determined the level of metacognitive knowledge of mathematics students in terms of knowledge of self, knowledge of task, and knowledge of strategies.

Table 1 presented a comprehensive overview of the metacognitive knowledge levels of mathematics students across various facets, including understanding of self, comprehension of tasks, and familiarity with strategies. The combined mean scores of these elements is reported to be 3.61, indicating a moderately high level of metacognitive proficiency among the students. This finding sheds light on the students' ability to effectively monitor and regulate their cognitive processes in the realm of mathematics.

Table 1

The Level of Metacognitive Knowledge of Mathematics Students

Indicator	Mean	Description
Knowledge of Self	3.70	Moderately High
Knowledge of Task	3.60	Moderately High
Knowledge of Strategies	3.54	Moderately High
Overall Mean	3.61	Moderately High

Legend:

1.00 – 1.82 – Very Low	3.49 – 4.31 – Moderately High
1.83 – 2.65 – Low	4.32 – 5.14 – High

2.66 – 3.48 – Moderately Low 5.15 – 6.00 – Very High

It can be seen from the table that among all the identified indicators, the results showed a moderately high level of metacognitive knowledge among mathematics students in terms of their knowledge of self, knowledge of tasks, and knowledge of strategies. However, among those three indicators knowledge of self showed a higher mean of 3.70.

Moderately high level of metacognitive knowledge of mathematics students implied that students still need further improvement. Although it indicated that it is moderately high, there are still essential strategies that they need to strengthen. This will help them to easily uncover difficult mathematical concepts leading to understanding and widening their horizon. Apart from this, students' knowledge of self indicated that they know their mental capabilities in performing mathematical tasks through varied strategies.

Metacognitive knowledge reveals students' abilities to develop effective learning strategies. Their role is to identify which of the approaches are suitable for their understanding of mathematical concepts which leads them to improved academic performance (AlAli et al., 2023). In addition, Hunaifi and Juandi (2023) stated that metacognition regulates students' own learning as they manage their time, attention, and resources. In the end, they can lead a more focused and organized approach to mathematical tasks (Kurdan & Kaplan, 2023).

Level of Emotion Regulation of Mathematics Students

The second research question uncovered the level of emotion regulation of mathematics students in terms of content, emotion, and motor.

The table 2 showed the level of emotion regulation of mathematics students demonstrated that their cognitive, emotional, and motor skills are all described as moderately high with an overall mean of 3.74.

Table 2

The Level of Emotion Regulation of Mathematics Students

Indicator	Mean	Description
Cognitive	3.60	Moderately High
Emotional	3.73	Moderately High
Motor	3.90	Moderately High
Overall Mean	3.74	Moderately High

Legend:

1.00 – 1.82 – Very Low 3.49 – 4.31 – Moderately High

1.83 – 2.65 – Low 4.32 – 5.14 – High

2.66 – 3.48 – Moderately Low 5.15 – 6.00 – Very High

This concurred that although students observed emotion regulation in their classes to explain and uncover mathematical activities and problems, they still have to work well on them to reach a higher level of emotion regulation. It explains the role of emotional capabilities for them to be ready to make mathematics learning fun. Students have to be emotionally ready so that they could be able to make their learning in mathematics critical for their growth and development.

Emotion regulation plays a crucial role in mitigating math anxiety. Students who can regulate their emotions effectively are less likely to experience overwhelming stress or fear associated with mathematical tasks, leading to a more positive and conducive learning environment (Park et al., 2023). They view challenges as part of the learning process and are less likely to be discouraged by temporary difficulties. In this manner, it promotes long-term persistence and resilience (Gur et al., 2023).

Significant Relationship between Metacognitive Knowledge and Emotional Regulation of Mathematics Students

The third research question determined the significant relationship between metacognitive knowledge and emotion regulation of mathematics students. Table 9 showed that there was a moderate relationship between knowledge of self with cognitive, emotional, and motor.

Table 3 presented whether there was a significant relationship between metacognitive knowledge and emotional regulation of mathematics students. Its r-value of 0.87 was higher than 0.60 which indicated a significant relationship between variables. This led to the non-rejection of the hypothesis.

Table 3

The Significant Relationship between Metacognitive Knowledge and Emotional Regulation of Mathematics Students

Variable	r-value	P-value	Remarks	Interpretations

Level of Metacognitive Knowledge vs Level of Emotional Regulation	0.87	0.000	Significant	High Relationship

Legend:

Below $\pm$ 0.20 – Negligible Relationship

$\pm$ 0.21 – $\pm$ 0.40 – Low Relationship

$\pm$ 0.41 – $\pm$ 0 .70 – Moderate Relationship

$\pm$ 0.71 – $\pm$ 0.90 – High Relationship

$\pm$ 0.91 – $\pm$ 1.0 – Very High Relationship

This mutual movement implied that students use their knowledge and skills in solving mathematical problems. As such, they utilized their emotions to further understand these concepts and arrived at the correct answer.

In response, the adaptability of the students' problem-solving increases their metacognitive knowledge (Merkebu et al., 2023). In the same vein, they become flexible in managing their emotions as a response to different types of mathematical activities. Students reflected on their mental capabilities through their emotional capabilities (Kurdal & Kaplan, 2023).

Strategies of Students in Monitoring their own Performance in Mathematics

The fourth research question determined the strategies of students in monitoring their own performance in mathematics. It can be inferred in Table 4 that students sought additional resources, assessed their level of understanding, and listened to teachers.

Table 4

Strategies of Students in Monitoring their own Performance in Mathematics

Global Theme	**Organizing Themes**	**Basic Themes**
Strategies in Monitoring Performance	Seeking Additional Resources	The students read other references
		The students ask the help of their classmates
	Assessing the Level of Understanding	The students reflect on their own level of understanding of mathematical concepts
	Listening to Teachers	The students pay attention to their teachers

Seeking Additional Resources. When facing difficulties with mathematical problems and activities, one of the strategies that students applied in monitoring their own performance is seeking additional resources aside from monitoring it by their scores or grades. They do not only rely on the book being used in their class, but they also used other resources that could further explain the mathematical concepts. Aside from that, they also sought for help from their classmates especially those who have knowledge of the activities. In this regard, the students were able to widen their perspectives and even understand the lessons better.

During the interview, one of the informants shared that:

"When I encounter a challenging math problem or concept, I assess my level of understanding by attempting to solve the problem, identifying areas of difficulty, seeking additional resources or explanations, reflecting on my approach, and seeking feedback from others if needed". (Informant 1)

Opening a book helped an informant to explore more the topic. As revealed during the interview:

"I would open books further help me understand those math problems and concepts. But in situations where I'm unable to seek knowledge or reminder through books, I would find different alternatives like scanning other questions for ideas, maybe even hints because some questions have answers or clues to other problems. However, if there's none, I would just simply move on to another question that I know I could solve rather than being held back by something that I could possibly waste my time pondering on." (Informant 2)

This indicated that the individual is proactive in seeking further understanding of math problems and concepts by turning to books for help. However, when books were not available, they looked for alternative strategies, such as scanning other questions for ideas and hints. This approach allowed them to avoid being held back by a particular problem. Instead, focused on solving other questions in which they have confidence. They prioritized efficiency and productivity by not wasting time on a challenging problem that may hinder their progress.

Finding resources for learning mathematics is fundamental to students' development. It does not talk only about the availability of books and other materials but it also includes their classmates who can help them explain the difficult bodies of knowledge (Sidik et al., 2023). Students do not only read but they also engage into making socializing with peers who served as their resort in simplifying the problems (Inganah et al., 2023; le Roux et al., 2023).

Assessing the level of understanding. Through self-monitoring, the students assessed their level of understanding. It is a reflection of how far they are towards learning. As such, the students know well that they still need to do more for them to learn more. They do not rely mainly on their peers and

teachers, but they tried to see whether they have come up with the correct answer. This strategy solidified the idea of metacognition among the students since they think first of the mathematical formula.

As during the interview shared:

"When facing challenging math problem, I assess my level on understanding base on the idea that may come up with my mind. If I think I can formulate a good formula, I know that this problem is manageable to solve." (Informant 4)

This statement reflected the use of metacognitive strategies in approaching challenging math problems. The individual assessed their understanding of the problem based on the ideas that come to mind and their confidence in formulating a solution. They relied on their self-assessment of their ability to develop a suitable approach or formula, which influences their perception of the problem's solvability. This demonstrated the integration of metacognitive awareness and self-regulation in problem-solving processes. Students' patience is integral in this manner. They tried to remain calm even in the most challenging mathematical problems.

"When I encounter a challenging math problem or concept in mathematics, I can check my level of understanding by solving problems, extending your patience to solve or understand and being calm." (Informant 5)

This suggested that when faced with a difficult math problem or concept, the individuals relied on problem-solving to gauge their understanding. It emphasized the importance of patience and maintaining a calm demeanor while working through challenging mathematical concepts. This approach highlighted the value of persistence and composure in effectively mastering difficult mathematical material.

Self-assessment among students is a good way where they know well their journey towards learning. In mathematics, students learn more when they recognize their strengths and weaknesses. Therefore, students can adjust well to different teaching strategies as well as activities through their paces of learning (Atkinson, 2023).

Listening to teachers. In the classroom setting, the student's capacity to learn depended on their listening skills. Teachers often explained various concepts in math before allowing students to perform. Through active listening, students can engaged in discussion, asked questions, and eventually contributed to the exploration of mathematical concepts.

"By paying attention to the teacher's talk and showing curiosity when solving math problems, students keep an eye on their own mathematical performance." (Informant 10)

Students exhibited a heightened awareness of their mathematical abilities by actively listening to the teacher's instructions and demonstrating interest and curiosity when solving math problems. The implication is that these behaviors contributed to students' monitoring and evaluation of their own performance in mathematics, potentially leading to improved metacognitive awareness and self-regulation in the subject.

The informant further elaborated her response by stating that:

"If you can easily follow your teacher's explanations, assess mathematical problems, and find solutions to problems in mathematics, you will know that you are doing well in the subject." (Informant 10)

This statement indicated that if a student is able to comprehend their teacher's explanations, effectively assessed mathematical problems, and arrive at solutions, then they can consider themselves to be performing well in the subject of mathematics. It highlighted the importance of understanding the material, being able to apply knowledge to problem solving, and ultimately achieving successful outcomes within the mathematical domain as indicators of proficiency and success in the subject.

Verbal instruction is a fundamental component of teaching mathematics. Listening to explanations, examples, and demonstrations from teachers reinforces learning through auditory channels, complementing other learning modalities. Actively listening to teachers promotes student engagement in the learning process (Atkinson, 2023). Engaged students are more likely to participate in class discussions, ask questions, and collaborate with peers, creating a dynamic and interactive learning environment (Luneta & Legesse, 2023; Zhang et al., 2023).

Strategies of Students in Regulating their Emotions when Facing Difficult Mathematical Problems

Table 5 showed the strategies applied by students in regulating their emotions when facing mathematical problems. They did it by taking a break as well as thinking positively.

Table 5

Strategies of Students in Regulating their Emotions when Facing Difficult Mathematical Problems

Global Theme	Organizing Themes	Basic Themes
	Taking Breaks	The students take a break when facing difficulties in mathematical activities.

Strategies in Regulating Emotions in Mathematics	Thinking Positively	The students are optimistic of their capabilities towards learning mathematical concepts.

Taking Breaks. It cannot be denied that exploring mathematics is daunting. Usually, it is coupled with numerous tasks that students need to perform in a day. Because of its complexities, students may find it difficult to overcome causing them anxiety. To break this barrier in learning, the students preferred to take a break. They know well that mentally and physically, they need some rest when facing mathematical problems. Normally, students take a deep breath by trying to calm down their emotions.

"To calm myself and manage emotional reactions when tackling difficult math problems, I use strategies like deep breathing, positive self-track, breaking down problem, seeking help from others, and taking short breaks." (Informant 1)

When faced with challenging math problems, the individuals employed a variety of strategies to calm themselves and regulate their emotions. These strategies included deep breathing, maintaining a positive inner dialogue, breaking down the problem into smaller parts, seeking assistance from others, and taking short breaks. These techniques were used to manage emotional reactions and maintain a sense of calm and focus when encountering difficult mathematical tasks.

This strategy was applied by Informant 3. She narrated that:

"These strategies I use such as deep breathing, taking short breaks, breaking the problem into smaller parts, seeking help from peers or teachers, and reminding themselves of past successes to boost confidence. These techniques help me to manage emotional reactions and enhance problem-solving capabilities." (Informant 3)

This described the individual's use of specific strategies to regulate their emotions and improve problem-solving abilities. By employing techniques such as deep breathing, taking short breaks, breaking complex problems into smaller, manageable parts, seeking assistance from peers or teachers, and recollecting past successes to bolster confidence, the were able to effectively manage emotional reactions and enhance their capacity for solving problems. These strategies served as practical tools for maintaining emotional equilibrium and fostering a positive mindset, ultimately contributing to improved problem-solving skills. Relaxing their mind enabled them to gain control of their track. Through self-encouragement, the informant reiterated that:

"The strategies or methods that I calm myself down the most I think that I can do it, I relax myself and I don't use negative words, I encourage myself and I manage my emotional reaction when I face difficult things like math problems." (Informant 6)

Students employed strategic strategies to regulate their emotions when facing challenges, particularly in the context of mathematics problems. The strategies mentioned include using positive self-talk (I think I can do it"), relaxation techniques, refraining from using negative language, self-encouragement, and managing emotional reactions when encountering difficult mathematical tasks. These strategies indicated an active effort to maintain a positive and constructive mindset while approaching challenging academic situations, such as math problems.

Research suggests that breaks play a role in memory consolidation (Rojas et al., 2023). Taking breaks between learning sessions allows the brain to process and consolidate newly acquired mathematical information, contributing to better retention and recall. Conversely, physical well-being is closely linked to cognitive functioning, and short breaks that include stretching or light exercises can contribute to overall health and alertness (Meyer, 2023).

Thinking Positively. Students saw the value of optimism in their quest to face difficult mathematical problems. This positive mindset elevated students' level of confidence to face all the aridity that comes along their way. Learning mathematical concepts may cause trouble, but they remained hopeful. At the end of the day, their efforts gained momentum in finding solutions to different mathematical activities.

From the response of Informant 2, it can be inferred that positivism eradicated negativities. She articulated that:

"I usually either doodle or scribble, crack my knuckles, and fiddle on accessories or my pen. I also try to think positively as much as I can because I know that if I get dragged by these emotions, I would have a harder time comprehending the given problems." (Informant 2)

Positive thinking helps students maintain focus and concentration during mathematical tasks. Optimistic learners overcome distractions by negative thoughts and self-doubt. Hence, they could dedicate their cognitive resources to the process of learning (Corno, 2023). Students are capable enough of eradicating negative vibes when they are well-guided by their peers and teachers (Hensley et al., 2022).

Mathematical Activities

The last research question provided different activities that strengthened students' emotion regulation and metacognition in mathematics. The activities were created to target students' areas of weakness, as evidenced by the results of various indicators. The purpose of these activities was to foster and boost students' self-assurance in confronting challenging math tasks, to prepare them emotionally for engaging in mathematical problem-solving activities, and to help them regulate their physical responses during mathematical tasks. Furthermore, the activities aimed to emphasize the significance of students' development in comprehending mathematical concepts, simplifying complex math problems into manageable steps, and gaining knowledge

of effective approaches to various mathematical problems, providing students with firsthand experience of how different strategies can lead to solutions. As revealed in the study of Luneta & Legesse, 2023; Zhang et al., 2023 that students are more likely to participate in class discussions, ask questions, and collaborate with peers, creating a dynamic and interactive learning environment when engaged into mathematical activities.

This strategy provides the students with the glimpse of the real-world setting. In response, the adaptability of the students' problem-solving increases their metacognitive knowledge (Merkebu et al., 2023). They have to put themselves into the shoes of the person being involved in the problem. In this manner, the students would be able to appreciate the context of the lesson and recognize their cognitive strength and weaknesses leading to understanding mathematical activities (Anif et al., 2019). More importantly, mathematical activities empowers them to navigate different mathematical challenges through a reflective approach thereby maximizing their potential for growth and development (Sercenia & Prudente, 2023; Tay et al., 2023).

Conclusions

In light of the foregoing findings, the researcher concludes that students' metacognitive knowledge of the students' needs further improvement. They still need to do more for them to enhance their metacognition in mathematical learning. This is also true with their emotion regulation. Conversely, the highly significant relationship between the variables indicated that when students enhance their metacognitive knowledge, they also improve their manner of regulating their emotions.

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