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The Effectiveness of Self-Assessment to Improve Metacognitive Ability in Islamic Religious Education

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Abstract: The weakening of the metacognitive ability of adolescent students, especially at the junior high school level is very important to note. Because metacognition ability has implications for students' ability to solve problems in the end on their learning outcomes. Improved metacognition skills can be done through models, learning strategies, and assessments of learning PAI subjects. Increasing students' metacognitive abilities can be done through a complete self-assessment so that they can assess all aspects of competence to improve students' metacognitive abilities. This study aims to elaborate on how the effectiveness of the self-assessment model in PAI learning in junior high schools can improve students' cognitive abilities. This research was conducted at SMP Negeri 2 Ponorogo using a qualitative approach. Data collection through interviews and documentation. Data analysis was carried out interactively and continuously until it was completed using the Miles & Huberman model, including condensation data, data display, and conclusion drawing. This study revealed that the students of SMPN 2 Ponorogo who conducted an effective self-assessment showed an increase in their metacognitive ability. They succeeded in increasing their metacognition ability by conducting self-regulation through reflection during the self-assessment. In addition, students can understand the PAI material in-depth, marked by a critical attitude to ask questions, provide feedback to the teacher, and solve problems so that PAI learning leads to student-centeredness.

Abstrak: *Melemahnya kemampuan metakognitif siswa remaja khususnya pada jenjang sekolah menengah pertama sangat penting untuk diperhatikan. Karena kemampuan metakognisi berimplikasi pada kemampuan siswa dalam memecahkan masalah pada akhirnya terhadap hasil belajarnya. Peningkatan keterampilan metakognisi dapat dilakukan melalui model, strategi pembelajaran, dan penilaian pembelajaran mata pelajaran PAI. Peningkatan kemampuan metakognitif siswa dapat dilakukan melalui asesmen diri secara lengkap sehingga dapat menilai seluruh aspek kompetensi untuk meningkatkan kemampuan metakognitif siswa. Penelitian ini bertujuan untuk mengelaborasi bagaimana keefektifan model self assessment dalam pembelajaran PAI di SMP dapat meningkatkan kemampuan kognitif siswa. Penelitian ini dilakukan di SMP Negeri 2 Ponorogo dengan menggunakan pendekatan kualitatif. Pengumpulan data melalui wawancara dan dokumentasi. Analisis data dilakukan secara interaktif dan berkesinambungan*

hingga selesai dengan menggunakan model Miles & Huberman, meliputi pemadatan data, display data, dan penarikan kesimpulan. Penelitian ini mengungkapkan bahwa siswa SMPN 2 Ponorogo yang melakukan penilaian diri yang efektif menunjukkan peningkatan kemampuan metakognitif mereka. Mereka berhasil meningkatkan kemampuan metakognisinya dengan melakukan self-regulation melalui refleksi pada saat self-assessment. Selain itu, siswa dapat memahami materi PAI secara mendalam yang ditandai dengan sikap kritis untuk bertanya, memberikan masukan kepada guru, dan memecahkan masalah sehingga pembelajaran PAI mengarah pada berpusat pada siswa.

Keywords: Self-assessment, metacognitive, PAI.

INTRODUCTION

Students' poor problem-solving ability is a problem in learning where students do not understand their strengths and weaknesses. Students lack the understanding necessary to apply their knowledge to solve problems nor understand the motivation behind utilizing certain strategies in problem-solving (Alfiyah & Siswono, 2014). 21st-century learning requires students to be able to solve problems well (Lufri et al., 2021). According to this line of reasoning, students are not very aware of how to absorb, process, and analyze the challenges they encounter. Students lose confidence in their ability to think critically, are ignorant of their mistakes, and do not attempt to correct them. This is in line with Dewika's research (2021) where adolescent students develop their metacognitive skills, which, if not cultivated, tend to deteriorate by the moment they reach junior high school, coupled with Larasati's research (2021) which suggests that teachers must assist their students in problem-solving skills due to the poor metacognitive abilities of the students in distance learning for the students to properly use their metacognitive strategies (Sudia et al., 2014) in every subject, including PAI and Budi Pekerti. Student-student and student-teacher interactions can improve students' metacognitive skills in a variety of ways, which also improves student learning outcomes (Nurwati, 2009). Utilizing the necessary models, techniques, and media will enable the interaction to be established (Indriati et al., 2018). Problem-solving-based learning methods, question-and-answer delivery strategies that require students to provide appropriate feedback, and evaluation in the form of questions or statements, can enhance metacognitive capability.

The implementation of assessments in Islamic education has an urgency that cannot be forgotten (Shoit & Masrukan, 2021) even though assessments can hone students' metacognitive abilities and are often only carried out as a formality. The teacher only conducts an assessment at the end of the semester (summative assessment) (González De Sande & Godino Llorente, 2014). Analyzing student achievement in-depth and tracking its progress is still being disregarded. Assessing students as they are studying is essential. Non-cognitive testing must be performed to determine students' actual abilities, therefore that they can be utilized to make further advancements. (Sahidu et al., 2020). For this reason, assessment in a learning process must be carried out comprehensively or thoroughly (Maimori, 2017). Teachers can use self-assessment models to assess their students. It features an in-class assessment that encourages students to acknowledge their independence, as well as analyzes students' metacognitive skills, which are essential for learning (Pantiwati, 2016). The PAI and Budi Pekerti curricula emphasize the development of faithful, religious, and helpful individuals. Carrying out PAI and Budi Pekerti assessments in their entirety to observe students change in a better direction and apply them in everyday life is crucial.

Students are expected to solve various life problems with their metacognitive abilities. (Mindani, 2016) relevant to Islamic Education and good manners, such as the law of worship and Muamalat (Islamic rulings governing commercial transactions) to Fiqh and Qur'anic Hadith, able to learn from Islamic history, and able to identify the proper solution for the Akidah Akhlaq (Islamic morality and character) issues in their everyday lives.

At SMPN 2 Ponorogo, Islamic education teachers who previously only used formal cognitive assessments are now paying more attention to all assessments, particularly self-assessment in the PAI subject. This began when distance learning was still being used, so there was very little interaction between teachers and students, despite the teachers must assess and guide students in their cognitive processes in addition to cognitive assessment. A teacher of PAI and Budi Pekerti subject further explained that since the presentation of ready-made knowledge predominates PAI and Budi Pekerti learning, students frequently end up merely as the objects of knowledge. Teachers must effectively manage the class. Teachers' choice of learning strategies can increase the learning benefits for their students and enhance their metacognitive skills in critical thinking, particularly through self-assessment (Junaedi et al., 2022). (Ibabe & Jauregizar, 2010). The teacher can evaluate students' abilities to measure their mastery of knowledge through self-assessment. How students evaluate their learning implementation. The teacher's ability to gauge the students' proficiency with their skills is crucial (Yenti et al., 2016).

Therefore, this study departs from the phenomena previously described, making it crucial to do further research to clarify how the self-assessment model used by PAI teachers at SMPN 2 Ponorogo can effectively enhance students' metacognitive abilities.

METHODS

This study employs a qualitative technique, one of its distinguishing features being that the researcher serves as the primary instrument in the process of data collection and interpretation (Hardani, et al, 2020). This research uses a descriptive methodology to explain actual events to build a detailed vision of the population (Khilmiyah, 2016) and determine if the self-assessment model is effective at enhancing students' metacognitive skills.

Researchers from SMPN 2 Ponorogo picked the research location. The participants of this study were five seventh-grade students who were selected using a purposive sampling methodology in which the sample was chosen based on the researcher's consideration to optimize data gathering. Researchers engaged in interviews, documentation, and observation to collect the data. PAI teachers performed in-depth interviews with selected students with the purpose to enable researchers to be able to describe, analyze, and correlate between the tests that have been given and the scores given by the teacher.

Documentation is a tool to add data to this research so that teacher documents are obtained in the form of self-assessment instruments, books, articles, or others that support and are relevant to the research theme, while observation is used as a comparison technique between interview answers and the reality that occurs (Sugiono, 2017).

Researchers conducted data analysis after the data collection was deemed sufficient. The researchers decided to analyze the data in three stages: condensing the data, presenting the data, and finally interpreting or drawing a conclusion. (Miles & Huberman, 1987).

RESULTS AND DISCUSSION

Results

Self-Assessment

Evaluating teachers' learning is important to facilitate learning and becomes more effective in improving student learning

outcomes. Teachers use self-evaluation as a formative assessment instrument in addition to summative assessments. Based on interviews with teachers, the present evaluation procedure cannot only be carried out as a formality because the teacher can learn from the assessment what limitations the students have when studying PAI.

> "Now, self-assessment should not be underestimated because through this assessment the teacher can find out the limitations experienced by students. Which students do not understand, which students are less proficient because PAI mostly requires practice" (TeacherP1)

PAI teacher carried out the self-assessment after completing one chapter of the lesson. There are 4 steps of self-assessment carried out by the teacher.

> "This self-assessment questionnaire must be designed by the teacher, including the indicators that will be assessed. It may be a burden that takes a long time to use this assessment model, and in this PAI lesson I also urge my fellow PAI teachers to add questions or statements directly related to problems in everyday life." (TeacherP1)

First, the teacher prepares components that will be assessed through self-assessment by taking into account competency standards, fundamental competencies, and achievement indicators. In practice, teachers frequently use self-assessment questionnaires that are already in the textbook and add complementary questions or statements that the teacher believes should be given to their students. Second, the teacher determines when the self-assessment questionnaire will be distributed. Based on the interview, the self-assessment was performed during the scheduled PAI class in the morning before the test assessment meeting. The teacher realizes that a comfortable atmosphere in the morning can help students to be more truthful and conducive to filling out self-assessment questionnaires. Students can evaluate themselves and use the results to improve their further learning. The teacher provided instructions for filling out a questionnaire before distributing it to the students; however, based on observations, some students did not comprehend and were marked by engaging in a question-and-answer session with their peers to fill out the assessment questionnaire. Third, the teacher follows up and assesses the outcomes of the self-assessment that the students have completed. Following observations, the teacher looked at some of the students' work, immediately provided feedback to the said students, and then continued to explain the subject the students had trouble understanding. Students began to ask questions when they became aware of their limitations in understanding the sub-chapter of the material they had received the class atmosphere grew more vibrant. The teacher scores the students' self-assessment to support other assessments. Fourth, the teacher replicates or repeats the questionnaire if it is deemed to be adequate for measuring students' competence and improves the questionnaire so that students' cognitive capacities can further develop.

The teacher stated during an interview that he occasionally performed self-assessment before beginning a new chapter to diagnose students' previous knowledge and experiences as additional information for the teacher. If most of the students understand the material, it would be beneficial for the teacher to instruct the material and further deepen it. The teacher acknowledges the use of self-assessment questionnaires to date, however, only for the results and not for the actual scoring stage. Four out of five interviewed students said they were pleased to be given a self-assessment questionnaire because students were free to fill it out according to the student's actual condition, while one student said it was more difficult to fill out a self-assessment questionnaire because they had to think deeply and evaluate themselves, for indeed this is the purpose of self-assessment.

"Indeed, indirectly we (students) have to be honest, answer whatever it is, but sometimes we also answer all the same or choose the best one if indeed we have ambitious values." (Student4)

Other students said that they had difficulty filling in because they did not understand the directions from their teacher so sometimes, they filled out questionnaires that did not reflect their original state and presented themselves better. Interviewed students revealed they read carefully and understand each question item or statement given, then they look at themselves to whether it is the same or different from the item. In the process of self-observation, students admit that they always consider how to answer it on the encouragement of honesty or the urge to lie. Students further admit that they consistently recall the same statements or questions from questionnaires they have done before. If there are similarities, students can answer with ease, but if there are differences, students need to reconsider their response strategy (solving problems). A student said that he was motivated internally by reflecting on a self-assessment questionnaire. Teacher feedback further motivates students to study harder in the future. The teacher's observations and responses reveal that once the students completed a self-evaluation and received feedback, the classroom environment became dynamic. The teacher believes that PAI learning should continue to condition student action and disrupt the traditional PAI learning environment by shifting it from being teacher-centered to being student-centered.

The Effectiveness of Self-assessment in Improving Students' Metacognitive Ability

Students' metacognitive abilities need to be honed in every classroom learning. Students experience the development of their cognitive domain after the evaluation of learning in terms of student activities in table 1.

Table 1. The results of interviews and student observations related to metacognitive abilities.

No	Student Activities	S1	S2	S3	S4	S5
1	Be aware of cognitive processes (receiving, processing, and analyzing) through a given questionnaire.	√	√	√	√	√
2	Give a response to the teacher's explanation after giving the questionnaire.		√		√	√
3	Asking questions to the teacher after giving the questionnaire.		√		√	
4	Evaluate the lessons that have been passed so far.	√	√	√	√	√
5	Evaluate the lessons that have been passed so far.	√	√	√	√	√

The interviews revealed that as many as five students acknowledged that their cognitive regulation comprises the process of receiving, processing, and assessing the questions and statements in the self-assessment questionnaire. This is supported by the absence of points on the questionnaire that were not completed by students. Students can resolve the issues that appear on the self-assessment questionnaire points. The teacher will then provide feedback on the student's work in the form of clarification of answers, questions, and student appreciation. Three students responded to the teacher's feedback. Two students who did not respond described the possible outcome of the lack of proper teacher feedback for the students. Observation revealed that two out of five students asked the teacher questions about subjects they did not fully understand. Five students admitted that they realized how effective their learning was. It was discovered that by using a self-assessment questionnaire, students were able to assess

their behavior, select the best strategy for determining the next step, and defend the correct answer. Therefore, the acknowledgment of five students through interviews that they are motivated to improve their learning after being provided a self-assessment is deemed to be significant. PAI teachers' selection of self-assessment questionnaires is considered necessary because it can enhance students' cognitive abilities so that students can think more critically and solve daily life problems, especially those related to PAI and Budi Pekerti subjects.

> "Not only giving written or oral tests to evaluate students, but giving self-assessment questionnaires has been effective to train students to be more critical and active." (Teacher P1)

Teachers admit that it helps them analyze their students through self-assessment. Students' increased motivation to learn has a positive impact on their learning outcomes. Additionally, the reciprocal communication between teachers and students enables active and conducive PAI learning.

Discussion

Self-Assessment

The findings reflect that teachers have used assessment as an assessment for learning and not only as an assessment of learning as the actual assessment function is as expressed by (Sudiyanto et al., 2015). This self-assessment model is directly related to students and serves to provide information for diagnostic purposes on students' abilities, besides that students can use it to evaluate and improve their competencies before being assessed by the teacher. Students are encouraged to reflect on what they have done and what they have produced with these efforts (Hayati, 2015).

PAI teachers conducted evaluations that met the self-assessment requirements, demonstrating the extent to which the learning objectives, which are stated explicitly or by the criteria, are met, and identifying students' strengths and weaknesses in their efforts as stated (Thoha & Jannah, 2018). Other findings of the shortcomings of self-evaluation assessment include students' lack of honesty as a result of being highly subjective, students' tendency to present themselves better than they are, students' inadequate experience in doing a questionnaire, and insufficient information from the teacher. In line with the description in Putri et al's research, it is possible that students still have difficulties in assessing themselves and filling it out without understanding what they mean first (Putri & Febliza, 2022).

The Effectiveness of Self-assessment in Improving Students' Metacognitive Ability

PAI teachers at SMPN 2 Ponorogo are challenged to help pupils strengthen their metacognitive abilities.

PAI teachers understand that simply asking questions or utilizing lecture approaches is insufficient for supporting students in developing and directing their metacognitive abilities. Teachers can encourage the development of students' metacognitive techniques—a process of self-regulation—by helping them build self-assessment strategies. The students' metacognitive strategies consist of planning, monitoring, evaluation or concentration, goal setting, self-testing selecting main ideas, and anxiety management (Clipa et al., 2011). It indicates that there is a direct connection between students' metacognitive processes and self-assessment, both of which call for students to reflect deeply on themselves. Some students initially misunderstood the purpose of self-assessment and underestimated the written test assessment. Therefore, the PAI and Budi Pekerti teachers must provide a better understanding and

communication before the assessment is implemented. From this communication, the teacher should receive student acknowledgment for the answers given and provide appropriate feedback (Colthart et al., 2008) on the student's circumstances so that student learning performance increases. Self-assessment is said to be effective when it can increase student motivation according to McMillan and Hearn quoted by Siegesmund (Siegesmund, 2017) because when students do self-assessments with honesty and full responsibility, a desire arises from within to make improvements in a positive direction.

The implementation of self-assessment is considered to be able to help improve students' metacognitive abilities because in answering the questionnaire they carry out cognitive processes under the direction of the teacher although they are still carried out by each student. There are three sets of metacognitive questions in students, namely comprehension questions, strategic questions, and connection questions (Larasati et al., 2021). Comprehension questions occur when students receive a self-assessment questionnaire then students reflect by reading the statement or question given, explaining and independently understanding the meaning in it. Second, strategic questions occur when students are compelled to consider which way or strategy is appropriate in solving a problem or an urge to be honest and responsible for answering the self-assessment questionnaire or be lying. This process certainly encourages students to think based on certain reasons. The next is connection questions where students focus on the similarities and differences between the experience of the problem they are currently facing and the experience of the problem that they have successfully solved before. When students work on the assessment instrument given by the teacher, students experience a deep thinking process about themselves. A good instrument is seen from the length of time the test takes (As et al., 2021). Self-testing of students' metacognition abilities shows students evaluating the performance that they have been doing before moving on to self-regulate their thought processes. This is very influential on the next student's progress.

PAI and Budi Pekerti learning utilizes self-assessment, which is a learning method that always conditions students' activity so that students no longer passively only receive knowledge from the teacher as a phenomenon that still occurs regularly, and learning places more focus on student-centeredness. PAI and Budi Pekerti learning of course requires teacher-centeredness to explain normative knowledge, but with self-assessment, students become active learners in recognizing their knowledge, realizing weaknesses and shortcomings to stimulate student learning motivation (Clipa et al., 2011), and actively improve their learning by preparing themselves before the learning process started. This results in students' capability to understand the concept of PAI and Budi Pekerti material deeper and are more embedded in their minds. Students can answer problems in a systematic and precise manner given by the teacher thanks to students' critical attitude in asking questions, providing feedback, and solving problems. Students are better prepared to deal with issues related to Islam in their daily lives as a result of the positive implication in addition to improving learning outcomes, according to research conducted by Basnet (2011).

CONCLUSION

Self-assessment is an assessment model that directly involves students and teachers, which in addition to aims to evaluate students' PAI learning activities, it can also improve students' metacognitive abilities. Students perform metacognitive self-regulation strategies for self-regulation through reflection during the self-assessment. Students' learning motivation can increase through self-evaluation to the point that it affects the development of their academic performance.

The limitations of this paper are due to the limited loci and research subjects, this

suggests that a broader and more in-depth study is required. The issue of self-assessment and its relationship to students' metacognitive abilities is very important to study since it helps in the development of meaningful learning both theoretically and empirically.

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