

## The Effect of Group Guidance Services with Problem Solving Techniques to Improve Self-Regulation in Students

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### ABSTRACT

Self-regulation is one very important aspect for students. From the results of the analysis shows that self-regulation in students is still lacking. This study aims to determine the effect of group guidance services with problem solving techniques to improve self-regulation in students represented by SMP NEGERI 5 Jepara class IX students. The method used in this research is quantitative research with the type of true experimental with the pretestposttest control group design model, using a questionnaire with a Likert scale . The initial condition regarding self-regulation is known as 10% in the very low category, 80% of students in the low category, and 10% in the high category for the experimental group. The control group got a low category with a presentation of 90% and a high category with a percentage of 10%. After being given group guidance services with problem solving techniques . Student self-regulation increased to 20% very high category and high category with a percentage of 80%. Meanwhile, the control class got a low category with a presentation of 90% and a high category with a percentage of 10%. The results showed that group guidance services with problem solving techniques can influence and improve student self-regulation. It can be concluded that there is a significant influence on the self-regulation of students of SMP Negeri 5 Jepara class IX before and after group guidance services with problem solving techniques .

## INTRODUCTION

Education is a fundamental need that affects the quality of a nation, where the quality of education is one indicator of the success of a country's development (Putrie, 2021). As a developing country, Indonesia faces great challenges in improving the quality of human resources. To achieve this goal, educators have a strategic role in shaping a generation that is able to compete and advance the nation. In this context, student self-regulation is one important aspect that needs to be considered, because this ability allows students to manage the learning process independently, effectively, and responsibly. (Nugraha & Rositawati, 2019).

However, data and research findings show that many students in Indonesia have low levels of self-regulation. This phenomenon is reflected in various behaviors such as lack of good study habits, dependence on others to complete tasks, and minimal utilization of learning support facilities such as libraries (Pratiwi & Laksmiwati, 2016). This situation is a big challenge in efforts to improve the quality of education, especially in the face of increasingly high educational standards. The decline in students' self-regulation not only impacts on their academic performance, but also on their future psychological and social development



Self-regulation in learning involves the ability to regulate, control, and monitor behavior to achieve certain goals. Internal factors, such as motivation and self-evaluation, as well as external factors, such as the learning environment and social support, influence students' level of self-regulation (Nugraha & Rositawati, 2019). In this context, group guidance services with problem solving techniques offer an effective approach to help students improve their self-regulation. This technique provides students with space to think critically and creatively in overcoming problems, as well as developing social skills through group dynamics (Juliawati, 2014; Tohirin, 2011).

The main problem that is the focus of this research is students' low self-regulation in learning, which can be seen from the lack of planning, learning strategies, and student motivation. This phenomenon not only impacts on academic achievement, but also on students' ability to face challenges outside the school environment. A common solution that has been widely used is to provide guidance services that focus on developing students' learning skills, but this approach is often individualized and lacks group dynamics.

The specific solution offered in this research is the application of group guidance services with problem solving techniques to improve student self-regulation (Suryani et al., 2024). According to Prayitno, this technique integrates a group-based approach with systematic problem solving, which not only helps students solve problems, but also trains them to manage emotions, behavior, and attention in the learning process (Khairani, 2020).

Previous research shows the effectiveness of group guidance services in improving students' problem-solving and self-regulation skills. For example, research by Nuraini et al. (Nuraini et al., 2017) found that students with low levels of self-regulation tend to have low learning motivation and are less able to manage time. This study reinforces the relevance of the group guidance approach as an intervention to address students' self-regulation issues. In addition, McFadzean and Nelson (1998) highlighted the importance of the facilitator's role in maintaining focus and group dynamics during the problem-solving process.

In other literature, problem solving techniques have also been shown to be effective in developing students' critical thinking skills. Anwar and Jalil (2018) showed that this approach can improve students' ability to manage their own thinking process, which is an important component of self-regulation. Yuliana et al. (2021) also found that the application of problem solving techniques in group guidance significantly improved students' learning achievement while supporting the development of their self-regulation.

The literature review shows that although various studies have uncovered the benefits of group guidance and problem solving techniques separately, there have not been many studies that specifically integrate these two approaches to improve students' self-regulation. This gap provides the basis for this study to explore the effectiveness of group guidance services with problem solving techniques as a solution to the self-regulation problems of students in class IX of SMP Negeri 5 Jepara.

This study aims to examine the effect of group guidance services with problem solving techniques in improving students' self-regulation. This study makes a new contribution to the literature by systematically integrating group guidance approaches and problem solving techniques. In addition, this study also aims to provide practical solutions for educators and counselors in addressing students' self-regulation challenges, focusing on the effectiveness, efficiency, and sustainability of the interventions provided.

This research also draws on previous findings that show that problem-solving-based strategies can produce significant results in a variety of educational contexts. For example, research by Thomas et al. (2016) highlighted that the use of this strategy was able to improve students' cognitive and metacognitive functions. This technique provides students with the ability to better understand their own learning needs through approaches such as concept maps and learning goal setting. In addition, empowerment programs such as the Self-Regulation Empowerment Program (SREP) also support the importance of strengthening the self-directed learning cycle through goal setting, strategy monitoring, and adjusting learning approaches (Cleary & Zimmerman, 2004).

In this context, problem solving techniques are not only beneficial in developing students' self-regulation but also have a positive impact on their collaboration and decision-making abilities (Broome & Chen, 1992; McFadzean & Nelson, 1998). Thus, this study provides a strong theoretical and empirical foundation to support the implementation of group guidance services with problem solving techniques as a solution to improve students' self-regulation.

## RESEARCH METHODS

The design used in the research is a quantitative approach with the *Pre Experimental Design* method with the *One Group Pre-test - Post-Test* research design. The experimental design in this study uses *One Group Pre-Test*, which is a design in which observations are made twice, namely before the experiment is called *Pre Test*, and observation after the experiment is called *Post Test*. Thus, the results of the *treatment* can be known more accurately because it can compare the situation before and after treatment.

This research was conducted at SMP Negeri 5 Jepara with a total population consisting of 8 classes, namely 251 people. This research was carried out by providing group guidance services with problem solving techniques for five treatments in the experimental group. To obtain research data, it begins with a try out that is tested in class IX D which totals 32 students, then proceeds with a pre-test. The pre-test was given by distributing a self-regulation scale to determine the equality between the control group and the experimental group, determining the sample in this study by cluster random sampling. The class used is class IX B which has been selected randomly (random), where 10 students are used as the control group and 10 students are used as the experimental group.

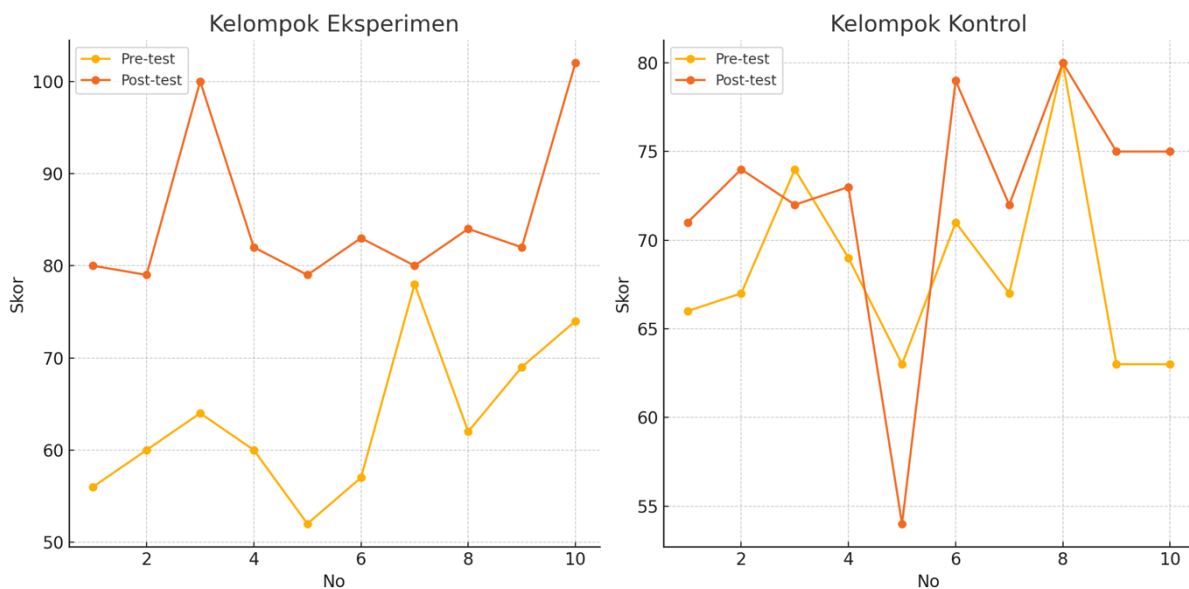
After the sample is determined, followed by giving treatment to the experimental group through group guidance services with problem solving techniques to improve self-regulation in students for five meetings. After being given treatment, a post-test is then conducted to measure the final condition of student self-regulation.

In this study, the tool used to collect data is to use a psychological scale with the Likert method which has four alternative answers, namely: very appropriate, appropriate, inappropriate, very inappropriate. The measurement scale used in this study has four answer options. There are indicators on the Self-Regulation Variable measured through this scale, namely the ability to regulate behavior in various situations, the necessary support or motivation, awareness in thinking what is known and unknown, being a person who can regulate or control himself, and various things that can influence. The instruments used have gone through validity and reliability tests and are declared valid and reliable. Furthermore, to analyze the data in this

study using normality test, homogeneity test as a prerequisite test of analysis, and T test as a hypothesis test.

## RESEARCH RESULTS

This study examines the effect of group guidance services with *problem solving* techniques on self-regulation of ninth grade students at SMP Negeri 5 Jepara. Based on data analysis that has been carried out by researchers, it is obtained if group guidance services with *problem solving* techniques can improve self-regulation of ninth grade students of SMP Negeri 5 Jepara. The results of data analysis from 10 students who were given group guidance services using problem solving techniques to ninth grade students of SMP Negeri 5 Jepara by distributing AKPD, *Pre Test*, *Treatment*, and *Post test* that has been carried out by researchers. The purpose of this study was to determine the effect of group guidance services with *problem solving* techniques on self-regulation of ninth grade students at SMP Negeri 5 Jepara. Group *guidance/treatment* activities carried out on the experimental group were carried out 5 times.



**Figure 1. Graph of Pre-Test and Posttest Data of Experimental Group and Control Group**

Based on the results of the Pre-test for the experimental group, the average score was 63.2 with the majority category being at the “Low” level. The highest score achieved in this group was 78, while the lowest score was 52. On the other hand, the control group showed an average Pre-test score of 69.1 with the highest score of 80 and the lowest score of 63. Although the average score of the control group was slightly higher than the experimental group, both groups showed relatively similar results in the level of self-regulation category at the initial stage of the study.

In the post-test, the experimental group showed a significant increase with an average score of 85.1. The highest score in the experimental group increased to 102, while the lowest score was 79, all in the “High” to “Very High” category. In contrast, the control group only experienced a small increase with an average score of 71.5. The highest score in the control group remained at 79, and the lowest score was 54, with the majority of participants still in the “Low” to “High” category.

Furthermore, based on the results of the hypothesis test, the significance result (2-tailed) is  $0.001 < 0.05$ . So, there is a significant difference between the initial variable (pre test) and the final variable (post test). In other words,  $H_0$  is rejected and  $H_a$  is accepted. Based on these calculations,

the alternative hypothesis ( $H_a$ ) which reads “there is an effect of group guidance services with problem solving techniques on self-regulation of class IX students at SMP Negeri 5 Jepara” is accepted at the 5% significance level.

These results indicate that group guidance services with problem solving techniques applied to the experimental group have a significant impact on improving student self-regulation. The greater improvement in the experimental group compared to the control group indicates the effectiveness of the intervention, while the control group, although showing improvement, did not have a noticeable difference in the average score compared to the pre-test stage. This underscores the importance of a structured approach such as group guidance services with problem solving techniques in improving students' self-regulation skills. It can thus be concluded that group guidance services with *problem solving* techniques can have an effect on improving the self-regulation of ninth grade students of SMA Negeri 5 Jepara.

## DISCUSSION

Based on the results of the study, group guidance services with problem solving techniques showed a significant effect on improving self-regulation of class IX students at SMP Negeri 5 Jepara. The Pre-test data of the experimental group showed an average score of 63.2 which was in the “Low” category, while the Post-test average increased significantly to 85.1 in the “High” to “Very High” category. In contrast, the control group showed a smaller increase from the Pre-test average score of 69.1 to 71.5 in the Post-test. This difference shows the effectiveness of group guidance services with problem solving techniques in improving student self-regulation.

The results of hypothesis testing also support these findings, where the significance value (2-tailed) of  $0.001 < 0.05$  indicates a significant difference between the initial variable and the final variable in the experimental group. The experimental group's highest score increased from 78 to 102, while the control group's highest score remained in the same range of 79. This finding underscores the importance of structured approaches such as group guidance services with problem solving techniques in helping students develop optimal self-regulation.

The results of this study are in line with previous studies that highlighted the benefits of group guidance services in improving problem-solving skills and self-regulation. Research by Whiston et al. (2011) states that group interventions are more effective than individual interventions in dealing with students' emotional and personal problems. This finding is also supported by Yuliana et al. (2021) which shows that problem solving techniques in group guidance improve students' learning achievement and self-regulation.

In addition, Anwar and Jalil's (2018) research confirms that problem solving strategies are able to develop students' critical thinking skills, which is an important component of self-regulation. This is consistent with Rahman's (2022), research, which showed that modeling techniques in group guidance significantly improved students' self-regulation. Thus, the results of this study strengthen empirical evidence of the effectiveness of group guidance with problem solving techniques in overcoming various student learning problems.

Problem solving techniques have also proven effective in various other educational contexts. For example, research by Shah et al. (2021) shows that the use of visualization techniques such as Bar Model helps students understand and solve problems better. In this study, students trained

using a problem solving-based approach showed significant improvements in self-regulation skills and learning strategies.

The results of this study also support the theory of self-regulation proposed by Nugraha et al. (2019), which states that self-regulation involves the ability to control, regulate, and monitor behavior in achieving certain goals. In the context of group guidance services, problem solving techniques provide students with the opportunity to practice this ability practically and systematically. Group dynamics are also an important element in supporting students' learning process.

In addition, this study emphasizes the importance of the facilitator's role in guiding the group guidance process. McFadzean and Nelson's (1998) study showed that effective facilitators can help groups achieve optimal results through managing group dynamics and encouraging problem solving. In this study, facilitators provided structured guidance during the five treatment sessions, which had a positive impact on students' self-regulation.

This finding has important implications in the educational context. The application of group guidance services with problem solving techniques can be used as an effective strategy to improve students' self-regulation at school. This approach not only improves students' learning outcomes, but also helps them develop relevant skills to face academic and daily life challenges.

However, this study has some limitations that need to be considered. First, the sample size of only 10 students in the experimental and control groups limits the generalizability of the findings. Secondly, the relatively short treatment duration may not fully reflect the long-term impact of the intervention. Therefore, further research with a larger sample and longer duration is needed to corroborate the results.

Overall, the results of this study indicate that group guidance services with problem solving techniques are an effective approach to improve students' self-regulation. This intervention can be a relevant solution for schools in addressing students' learning problems and supporting their overall development.

## CONCLUSIONS

This study shows that group guidance services with problem solving techniques significantly improve the self-regulation of students in class IX SMP Negeri 5 Jepara. The experimental group recorded an increase in mean score from 63.2 in the Pre-test to 85.1 in the Post-test, with the results of statistical analysis showing a significant difference between the Pre-test and Post-test ( $p < 0.05$ ). In contrast, the control group only experienced a small increase with no notable significant difference. This finding confirms that the problem solving approach in group guidance services is an effective method for developing students' self-regulation.

The significance of this finding extends to a broader context in educational research, where self-regulation is an important component in students' learning success. Problem solving techniques, which involve critical thinking, self-reflection and collaboration, provide a more in-depth learning experience than traditional approaches. In the context of problem-based learning theory, the findings support that group-based interventions are not only effective for cognitive development, but also assist students in building their self-regulation skills, which are essential for long-term academic success. Practically, the results of this study contribute to knowledge in the field of guidance and counseling, by offering empirical evidence on the effectiveness of group

guidance services with problem solving techniques. The theoretical implications of this study corroborate the theory of self-regulation as a skill that can be developed through group-based intervention approaches. However, this study has limitations, including a small sample size and limited duration of the intervention, which might affect the generalizability of the results. Therefore, further research is needed to explore the long-term impact by involving a larger sample and more diverse conditions.

In closing, the findings of this study confirm the importance of integrating problem solving techniques in school guidance and counseling programs as an innovative approach to improving students' self-regulation. By understanding the potential impact of this intervention, this study makes an important contribution to the development of educational strategies that are more effective and responsive to students' needs in the modern era.

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