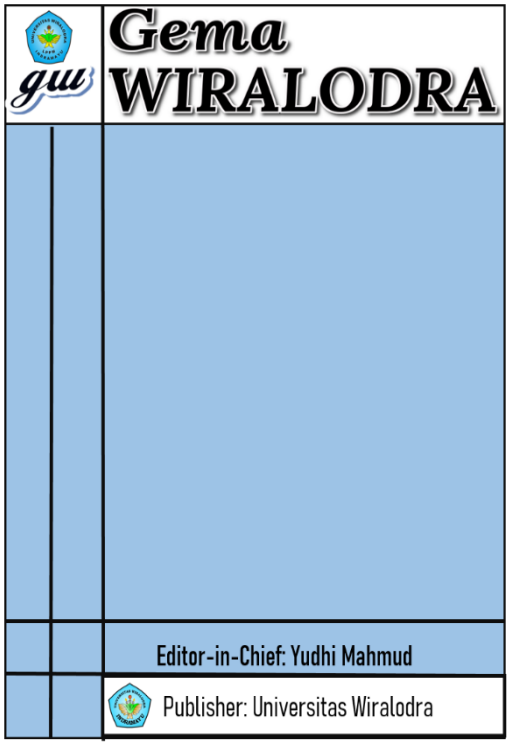
Gema Wiralodra

Publication details, including instructions for authors and subscription information:
https://gemawiralodra.unwir.ac.id



Analysis of Factors Inhibiting Students' Problem-Solving Ability on Sequences and Series at SMA Negeri 2 Indramayu

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To cite this article:
Ihwan, D. F., & Ismunandar, D. (2025). Analysis of Factors Inhibiting Students' Problem-Solving Ability on Sequences and Series at SMA Negeri 2 Indramayu, *Gema Wiralodra*, 16(2), 326 – 338.
To link to this article:
https://gemawiralodra.unwir.ac.id/index.php/gemawiralodra/issue/view/57
Published by:
Universitas Wiralodra
Jln. Ir. H. Juanda Km 3 Indramayu, West Java, Indonesia

Gema Wiralodra, 16(2), 326 – 338
https://gemawiralodra.unwir.ac.id/index.php/gemawiralodra
p – ISSN: **1693 – 7945**
e – ISSN: **2622 – 1969**

Orginal Article

Analysis of Factors Inhibiting Students' Problem-Solving Ability on Sequences and Series at SMA Negeri 2 Indramayu

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Abstract
This study is motivated by the persistently low level of students' mathematical problem-solving ability in the topic of sequences and series, despite its importance in the senior high school mathematics curriculum. The purpose of this study is to identify and describe factors that inhibit students' problem-solving ability in sequences and series at SMA Negeri 2 Indramayu from the perspectives of mathematics teachers. This research employed a descriptive qualitative approach involving several mathematics teachers at SMA Negeri 2 Indramayu. Data were collected through semi-structured interviews focusing on instructional methods, internal and external inhibiting factors, strategies implemented by teachers, and an overview of students' problem-solving abilities. The findings indicate that teachers use a variety of instructional methods, including direct instruction, deep learning approaches, STAD-type cooperative learning, visual approaches, and GeoGebra; however, their implementation is constrained by time limitations and classroom conditions. Internal inhibiting factors include low learning motivation, students' reluctance to engage, weak mastery of basic concepts, and difficulties in understanding word problems. External factors include limited learning facilities, less conducive classroom environments, and restricted instructional time. Teachers attempt to overcome these obstacles through interactive media, e-modules, educational games, personal approaches, scaffolding, and visualization, although these strategies have not yet been implemented optimally. These findings emphasize the need for more systematic, problem-solving-oriented lesson planning in teaching sequences and series.
Keywords: inhibiting factors, learning motivation, problem-solving ability, sequences and series, teachers' perspectives.

1. Introduction

Mathematical problem-solving ability is one of the primary objectives of mathematics instruction at the senior high school level, as through problem-solving activities students are trained to think critically, logically, creatively, and systematically when facing various situations. According to Amalina (2023), in educational contexts, problem solving is not merely understood as the ability to obtain correct answers, but also as a means of developing deeper conceptual understanding and connecting diverse mathematical ideas. The senior high school mathematics curriculum therefore positions problem solving as a core competency that should be embedded in all topics, including those related to patterns, algebra, and applications.

Among these topics, sequences and series occupy a crucial position because they are not only related to numerical patterns but are also strongly connected to the concepts of functions, limits, and applications in finance, science, and technology. Amalina (2023) emphasizes that through sequences and series, students are expected to recognize patterns, construct generalizations, and model real-world situations into analyzable mathematical forms. This topic also requires the integrated use of verbal, numerical, and symbolic representations, making it highly relevant as a medium for developing mathematical problem-solving ability. Therefore, mastery of sequences and series is not only important for achieving curriculum competencies,

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but also strategic in equipping students with higher-order thinking skills needed for further education and real-life contexts.

However, in classroom practice, many students still experience difficulties when dealing with sequences and series, particularly when solving word problems that require more than simple formula substitution. Students often make errors in identifying the type of sequence or series, determining the first term, common difference, or ratio, and selecting appropriate formulas for the nth term or the sum of the first n terms. These errors indicate that students' conceptual understanding of sequences and series has not been firmly established and remains dominated by procedural memorization. Difficulties become more evident in word problems, where students are required to translate textual information into mathematical models. Many students fail to clearly identify what is given and what is being asked, resulting in unfocused and ineffective solution strategies. As noted by Saifurrisal (2022), students also tend to rarely review their solutions, either in terms of computational accuracy or consistency with the problem context. This condition suggests that obstacles in problem solving related to sequences and series are multilayered, encompassing conceptual understanding, modeling skills, and reflective habits during and after the problem-solving process.

These difficulties cannot be separated from the influence of both internal and external factors that affect students' learning processes. From an internal perspective, problem-solving ability is closely related to learning motivation, interest in mathematics, attitudes toward challenging problems, and students' learning habits (Izzah et al., 2022). Low motivation and passive learning attitudes often lead students to avoid active engagement in problem-solving activities and rely solely on examples provided by the teacher. In addition, weak mastery of basic concepts and prerequisite knowledge—such as algebraic operations and pattern recognition—makes it difficult for students to connect problem information with relevant sequence and series concepts. From an external perspective, limited learning facilities, less conducive classroom environments, restricted instructional time, and learning resources that emphasize procedural practice further limit students' opportunities to engage in meaningful problem-solving activities. A comprehensive understanding of the interaction between these internal and external factors is therefore essential as a foundation for more effective instructional planning.

Preliminary findings from interviews with mathematics teachers at SMA Negeri 2 Indramayu reinforce this perspective. Teachers reported that students' problem-solving ability in sequences and series tends to be low, especially when dealing with word problems and non-routine tasks. Teachers observed that students often memorize formulas without understanding the underlying concepts, read problems carelessly, and are reluctant to attempt alternative strategies when encountering difficulties. Teachers also highlighted inhibiting factors such as low learning motivation, passive attitudes, weak mastery of basic sequence and series concepts, limited supporting facilities, occasionally unconducive classroom conditions, and insufficient time to implement problem-based learning approaches. Teachers' direct experiences in classroom instruction provide strong indications that obstacles to problem solving in sequences and series constitute a real and significant issue that requires systematic investigation.

Based on these considerations, this study focuses on analyzing the factors that inhibit students' problem-solving ability in sequences and series at SMA Negeri 2 Indramayu from the perspectives of mathematics teachers. The objectives of this study are to identify and describe internal inhibiting factors—such as motivation, attitudes, and mastery of basic concepts—as well as external factors related to facilities, classroom conditions, instructional time, and teaching practices. In addition, this study seeks to describe how teachers interpret and explain these obstacles within the context of daily classroom instruction. The findings are expected to

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serve as a reference for teachers, schools, and other stakeholders in designing more systematic and problem-solving-oriented instructional strategies for teaching sequences and series.

2. Method

2.1 Research Design

This study employed a qualitative approach with a descriptive research design. This approach was chosen because the focus of the study was on gaining an in-depth understanding of mathematics teachers' perspectives regarding the factors that inhibit students' problem-solving ability in the topic of sequences and series, rather than on measuring numerical variables or testing hypotheses. According to Winata, Widiyasari, and Amami (2025), descriptive qualitative research allows phenomena to be described in a detailed and contextual manner, enabling a more comprehensive portrayal of teachers' experiences and interpretations of students' learning difficulties and classroom conditions.

2.2 Research Participants

The participants of this study were mathematics teachers teaching at SMA Negeri 2 Indramayu. The number of teachers involved was determined based on availability and the representativeness of teaching experience, for example, three teachers who taught classes covering the topic of sequences and series. The general criteria for participants included having experience teaching mathematics at the senior high school level in recent years, having taught or currently teaching sequences and series, and being willing to provide open and detailed information related to instructional practices and students' learning difficulties. Participants were selected purposively to ensure that the data obtained were relevant to the focus of the study.

The research was conducted at SMA Negeri 2 Indramayu as the empirical context of the study. This school is a secondary education institution whose curriculum includes sequences and series at the appropriate grade level (e.g., Grade XI), making it a suitable setting for examining obstacles to students' problem-solving ability in this topic. The instructional context considered in this study included classroom learning processes, teachers' instructional practices in teaching sequences and series, and general characteristics of students' responses to problem-solving tasks.

2.3 Data Collection Techniques

The primary data collection technique in this study was semi-structured interviews with mathematics teachers. The interviews were conducted using an interview guideline developed in the form of an interview matrix covering several aspects: (1) instructional methods and approaches used by teachers in teaching sequences and series (e.g., lecturing, deep learning approaches, STAD-type cooperative learning, visual approaches, and the use of GeoGebra); (2) internal student factors that, according to teachers, inhibit problem-solving ability, such as motivation, passive attitudes, weak mastery of basic concepts, and difficulties in understanding word problems; (3) external factors, including learning facilities, classroom conditions, and time constraints; (4) strategies implemented by teachers to address these obstacles, such as the use of interactive media, e-modules, educational games, personal approaches, scaffolding, and

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visualization; and (5) teachers' overall perceptions of students' problem-solving ability in sequences and series. Semi-structured interviews were chosen to provide a clear framework of questions while allowing teachers the flexibility to elaborate on their experiences and perspectives.

Data analysis followed the general stages of qualitative data analysis, namely data reduction, data display, and conclusion drawing. According to Putri et al. (2025), during the data reduction stage, interview results were transcribed and read repeatedly to identify information relevant to the research focus. The data were then coded and grouped into thematic categories, such as "instructional methods," "internal factors," "external factors," "teacher strategies," and "students' problem-solving ability." In the data display stage, these categories were organized into narrative descriptions and, where necessary, concise matrices to facilitate the identification of patterns and comparisons among teachers. Conclusions were drawn gradually by interpreting relationships among categories, identifying consistent patterns in teachers' perspectives, and formulating findings that addressed the research objectives.

Data trustworthiness was ensured through source triangulation. According to Nurtamam and Jannah (2025), triangulation was conducted by comparing and contrasting information obtained from multiple mathematics teacher participants, ensuring that the findings were not based on a single informant's perspective. In addition, consistency within and across interview responses was examined to minimize overly subjective conclusions (Ediyanto et al., 2025). Where necessary, follow-up clarification was conducted with participants to ensure that interpretations aligned with their intended meanings and experiences. Through these procedures, the findings were expected to achieve an adequate level of credibility and dependability.

2.4 Instrument

Teacher Interview

Tabel 1.

Teacher Interview Guide Indicators

No	Dimensions	Question Indicator	Interview Questions
1	Teaching Approaches and Methods	Explain the method of teaching rows and sequences and why	As long as you teach row and series material in PPL activities, what approach or method do you use most often? And what is your reason for choosing the method?
2	Conceptual Difficulties by Students	Identify the parts of the material that students find most difficult to understand	According to your experience during PPL, which parts of the line and series material are the most difficult for students to understand? Why do you think that part is an obstacle for them?
3	Guidance in Problem Solving	Explain how to guide students in choosing a problem-solving strategy	How do you guide students when they have difficulty choosing strategies in solving row and sequence problem-solving, especially non-routine problems or story problems?

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No	Dimensions	Question Indicator	Interview Questions
4	Obstacles in Learning	Identify obstacles when teaching rows and rows in the classroom	What are some of the obstacles you encounter in class when teaching rows and rows? Do these obstacles come from student readiness, classroom conditions, learning media, or other factors?
5	Low Problem-Solving Factor	Explain the main factors of students' low problem-solving skills	In your opinion, what factors have the most influence on students' low problem-solving skills in row and series material? Please explain the reason.
6	Understanding the Story	Explain students' ability to understand and model story problems	How do you see students' ability to understand story problems related to rows and sequences? Are they able to identify important information and translate it into mathematical models?
7	Strategies for Overcoming Learning Barriers	Explain strategies to help students overcome conceptual and procedural barriers	During PPL, what strategies do you use to help students overcome barriers in understanding concepts and procedural steps in line and sequence materials? Is the strategy effective?
8	Support for Improved Troubleshooting	Support for Improved Troubleshooting	In your experience, what kind of support do students need to improve their problem-solving skills on row and series material?

2.5 Data Analysis

Data analysis in this descriptive qualitative study was conducted through several stages, namely data collection, data reduction, data display, analysis, description of findings, and conclusion drawing, with a focus on identifying factors that inhibit students' problem-solving ability in the topic of sequences and series at SMA Negeri 2 Indramayu. Data were primarily collected through semi-structured interviews with mathematics teachers and were supplemented by relevant documentation related to instructional practices and the assessment of students' problem-solving ability.

After data collection, data reduction was carried out by transcribing the interview recordings, reading the transcripts repeatedly, and selecting information that was relevant to the research focus, such as instructional methods, internal and external inhibiting factors, teacher strategies, and descriptions of students' problem-solving ability. The reduced data were then presented in the form of thematic narratives and, where necessary, concise tables or matrices to facilitate the identification of patterns and key categories related to factors inhibiting problem-solving ability.

The analysis process was conducted in depth to examine how motivation, learning attitudes, mastery of basic concepts, learning facilities, classroom conditions, instructional time, and teaching practices contributed to the emergence of obstacles at each stage of problem solving in sequences and series. The findings were then described in detail to portray the actual conditions experienced by both students and teachers at SMA Negeri 2 Indramayu. Conclusions were drawn based on a holistic interpretation of the data by linking the analytical results to theoretical perspectives on mathematical problem-solving ability and the factors influencing it, thereby producing a comprehensive understanding of the factors that inhibit students' problem-solving ability in the topic of sequences and series.

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3. Result and Discussion

A. RESULTS

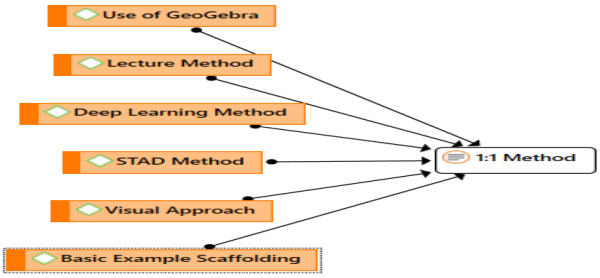
Teacher interviews

The interview was held on November 17, 2025 at SMAN 2 Indramayu with the subject of PPL students mathematics because the material of rows and arithmetic series has been taught to students

The results of the interview:

Figure 1

Interview Method

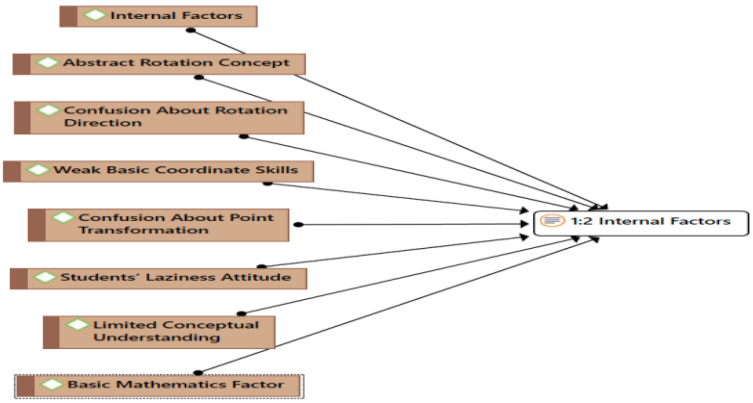


Based on Figure 1, the results of the teacher's interviews, the learning methods in the row and series materials are quite diverse, including lecture methods, DEEP LEARNING approaches, STAD-type cooperative methods, visual approaches, scaffolding through basic examples, and the use of Geogebra software as a supporting medium. This variety of methods shows that teachers seek to tailor learning to the characteristics and needs of students, from direct explanations to active involvement of students in group discussions and visual exploration, so that the concepts of rows and sequences are understood not only procedurally, but also conceptually.

Meaningfully, the combination of these various methods illustrates the importance of the flexibility of teaching strategies to support the development of students' problem-solving skills in row and series materials. The visual approach and use of Geogebra help students build a mental picture of patterns and relationships between tribes, scaffolding with basic examples provides a gradual structure of thinking, while the STAD and DEEP LEARNING methods encourage interaction and deepening of understanding through cooperation and discussion. This effort is expected to reduce students' dependence on mere memorization of formulas and lead them to a more meaningful understanding of the problem situation at hand

Figure 2

Internal Factors Interview



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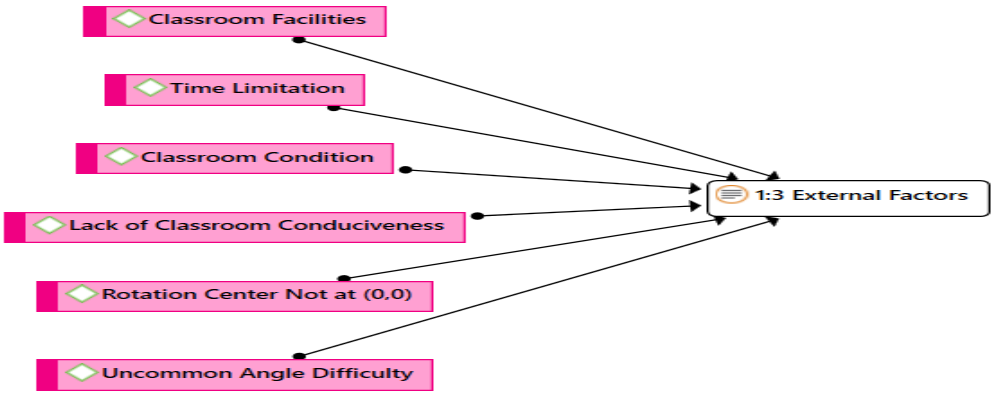
In Figure 2, internal factors from the results of teacher interviews contain several aspects of weaknesses in students that hinder problem-solving skills. The teacher highlighted that basic mathematical factors and limited understanding of concepts make it difficult for students to connect the information of the problem with the concept of the right rows and sequences. In addition, students' laziness weakens the willingness to read the questions carefully and try different strategies when experiencing difficulties.

The teacher also explained that weak basic coordinates, confusion about point changes, direction of rotation, and concepts of rotation that are considered abstract indicate that some students have difficulty understanding spatial representations and transformations, which has an impact on their ability when questions of rows and series are associated with a coordinate or visual context. Overall, these internal factors suggest that problem-solving barriers are not only related to the memorization of formulas, but also concern attitudes, mastery of prerequisites, and the ability to interpret object changes in a mathematical context.

Figure 3

External Factors Interview



Based on Figure 3, the category of external factors in the interview results showed that the mathematics teacher identified a number of conditions outside the students that also hindered the problem-solving ability in row and series material. Limited classroom facilities are considered to reduce the opportunity to use varied media and learning resources, making the concept of rows and rows difficult to concretize through visual or interactive aids. The limited learning time is also an obstacle, because teachers are more directed to complete material and provide routine exercises, so that the space for deepening concepts and practicing non-routine problem-solving problems is relatively narrow.

In addition, less conducive classroom conditions are described as significant factors, such as a noisy atmosphere, student attention that is quickly distracted, and challenging classroom management when the material demands high concentration. In these situations, students have difficulty maintaining focus when dealing with complex row and series problems, including when the questions involve unusual angles or reference points that require more careful reasoning. This combination of facilities, time, and classroom conditioning ultimately reinforces the internal barriers students already have and reduces the quality of their experience in practicing in-depth problem-solving.

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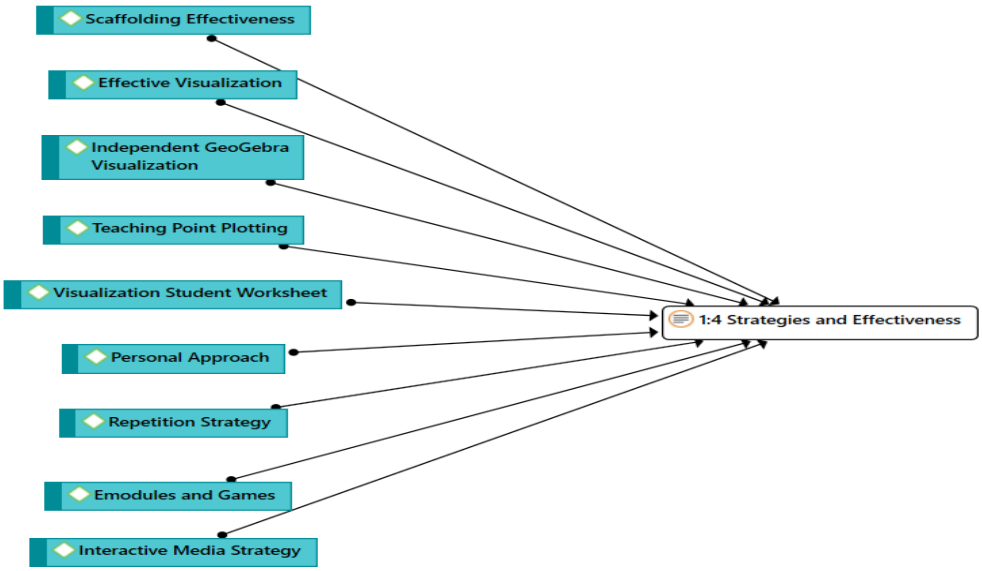
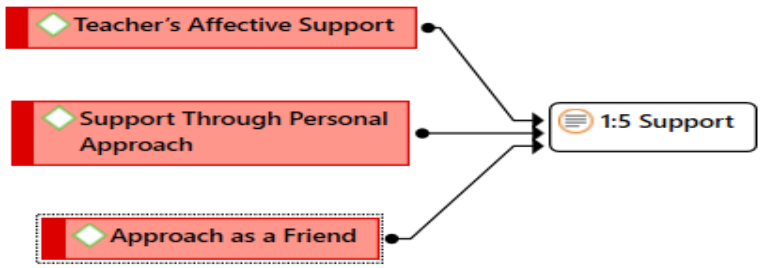
Figure 4
Strategy and Effectiveness Interviews



As shown in Figure 4, the strategy and effectiveness categories show that teachers apply a variety of efforts to help students overcome barriers in understanding and problem-solving to row and sequence material. The prominent strategies are the use of visualization through visualization worksheets, teaching point drawing, and the use of GeoGebra for independent visualization, which aims to build a concrete and intuitive representation of patterns and changes in point positions. Teachers also apply scaffolding by providing step-by-step help, ranging from simple examples to more complex problems, and assess that this strategy is effective in guiding students to understand problem-solving steps in a more structured way.

In addition to this cognitive approach, teachers rely on affective strategies and learning reinforcement such as a personal approach, a strategy to repeat material that has not been mastered, and the use of e-modules and games as part of an interactive media strategy. A personalized approach allows teachers to build closeness with students so that they are more courageous to ask questions and express difficulties, while repetition of the material helps to close the gaps of basic concepts that are still weak. The use of e-modules, games, and interactive media is considered to be able to increase student involvement and motivation, so that the learning atmosphere becomes more interesting and supports the gradual improvement of problem-solving skills.

Figure 5
Support Interviews



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In Figure 5, it can be seen that, the support category describes the important role of teachers in providing affective assistance and a personal approach to students who have difficulty solving problems with row and row material. The teacher explained that the approach as a friend and support through a personal approach is carried out so that students feel more comfortable asking questions, telling about their difficulties, and dare to try problem-solving strategies without fear of being blamed.

This form of affective support includes providing encouragement, positive reinforcement, and the teacher's willingness to accompany students more intensively when they face challenging problems. Through these efforts, teachers hope to increase student motivation, confidence, and involvement in the learning process, so that internal obstacles such as fear, anxiety, and laziness can be reduced and students' problem-solving skills in row and series materials can develop more optimally.

Figure 6
Problem-Solving Skills Interview

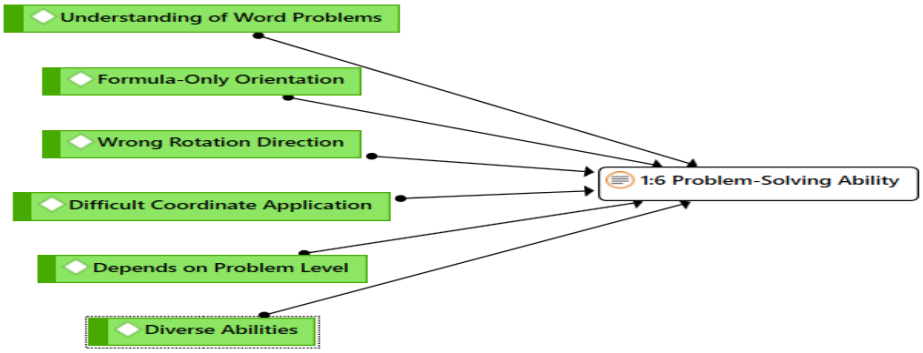

Figure 6 describe the category of problem-solving ability shows that teachers view students' abilities in row and series material very diverse and highly dependent on the level of difficulty of the questions given. Students are generally still able to solve routine problems that directly use formulas, but begin to experience difficulties when the questions require deeper understanding, such as the application of coordinates or more abstract contexts. The teacher revealed that some students still make mistakes in applying coordinates, make rotation direction errors, and have difficulty interpreting changes in point positions, so the mathematical modeling needed to solve the problem is inappropriate.

In addition, the learning orientation of many students is still centered on memorizing formulas, not on understanding meaning and problem-solving steps. Students often only look for formulas that are considered appropriate without understanding the relationship between quantities in the problem, especially in the question of row and series stories. The teacher considers that the understanding of the story is still low; Students are less able to identify known and questioned information, so the chosen solution strategy is not directed and the answers generated are often out of context. This condition shows that students' problem-solving skills have not developed optimally, both in terms of understanding concepts, procedural skills, and the ability to interpret problem situations.

B. DISCUSSION

The internal and external factors identified in the interview can be understood as inhibitors at every stage of the row- and series problem-solving process, from understanding the problem to re-examining the solution. Students' low motivation and lack of engagement in mathematics are often associated with poorer problem-solving outcomes and reduced

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persistence when tasks become difficult (Schukajlow et al., 2021; Middleton et al., 2022). Research shows that students' motivation plays a mediating role in how they approach word problems and persist in solving them, thereby influencing their ability to interpret problem situations and engage meaningfully with solution strategies (Strohmaier et al., 2020).

Weak mastery of basic mathematical concepts and prior knowledge has been consistently linked to difficulties in solving complex problems, as students struggle to recognize key features of problems, identify relationships, and connect procedures to underlying meaning (Verschaffel et al., 2020). This finding aligns with research highlighting that cognitive readiness and conceptual understanding are critical prerequisites for successful mathematical problem solving (Capone et al., 2021). External conditions, such as classroom environment, limited instructional time, and lack of rich representations, further compound these challenges by restricting the range of learning experiences and instructional approaches available to students (Weigand et al., 2022).

In these contexts, teaching strategies that support understanding and engagement—such as visualization, scaffolding, instructional supports, and interactive learning tasks—can help reduce students' cognitive and affective load during problem solving (Middleton et al., 2022). Empirical evidence suggests that inquiry-based and learner-centered instructional approaches enhance problem-solving skill development by promoting deeper conceptual connections, strategic thinking, and student agency in mathematics learning (Schukajlow et al., 2021).

For example, visualization through concrete models, diagrams, or digital tools supports the construction of mental representations that help students interpret patterns and relationships without over-reliance on rote formula application (Verschaffel et al., 2020). Similarly, scaffolding that progresses from simple examples to more complex tasks provides structure to students' thinking processes and supports systematic development of solution strategies (Middleton et al., 2022).

Personalized support, teacher–student interaction, and the use of interactive media have also been associated with increased engagement and confidence, as students receive tailored feedback and opportunities to explore alternative strategies in a supportive learning environment (Weigand et al., 2022).

The interview findings further emphasize the importance of mathematical literacy, including reading comprehension and conceptual reasoning, as central components of effective problem solving. Many students experience difficulties in interpreting mathematical texts, identifying known and unknown information, and connecting this information to relevant concepts, which reflects broader findings that instructional approaches emphasizing procedures over meaning weaken students' problem-solving performance (Capone et al., 2021; Strohmaier et al., 2020).

Within this framework, improving problem-solving ability in sequences and series requires simultaneous attention to both internal and external inhibiting factors, as well as a sustained commitment to student-oriented instructional design. Motivation, conceptual readiness, classroom conditions, and instructional time interact to shape students' engagement with word problems and influence their overall achievement. Therefore, strategies that systematically integrate supportive pedagogies into instructional planning are essential for fostering sustainable improvements in students' mathematical problem-solving capacity (Schukajlow et al., 2021; Weigand et al., 2022).

The findings of this study indicate that low motivation and weak self-regulation constitute major inhibiting factors affecting students' engagement at every stage of the mathematical problem-solving process, particularly in sequence and series topics. This result is consistent with the study by Rittle-Johnson et al. (2021), which emphasized that motivation and self-regulation play crucial roles in helping students monitor their problem-solving progress and

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evaluate the strategies they employ. However, the present study extends these findings by demonstrating that low motivation not only reduces students' persistence but also leads to reluctance in reading, understanding, and interpreting problems thoroughly from the initial stage of problem solving.

Such motivational limitations have direct implications for students' use of prerequisite knowledge, which was also identified in this study as a significant barrier. This finding aligns with the work of Cai et al. (2020), who reported that students' failure to connect prior knowledge with new contexts encourages the mechanical application of procedures without conceptual understanding. Unlike Cai et al. (2020), which emphasized knowledge transfer, this study highlights that weak mastery of fundamental concepts further hinders students' ability to recognize patterns, relationships between terms, and the underlying structure of sequences and series in a meaningful way.

The interaction between low motivation and limited prerequisite knowledge becomes increasingly complex when associated with low mathematical literacy, particularly in understanding word problems. The findings of this study reinforce the OECD (2021) report, which noted that limited mathematical literacy constrains students' ability to interpret contextual situations and connect them to appropriate mathematical representations. This study complements that report by showing that literacy difficulties are exacerbated when instruction is overly oriented toward formula memorization, resulting in students being unaccustomed to systematically identifying given information and what is being asked.

In addressing these challenges, this study underscores the importance of visualization and the use of representations in mathematics instruction. This finding is consistent with Hwang et al. (2021), who stated that visual representations help students organize information and reduce cognitive load during mathematical problem solving. However, the present study extends this perspective by demonstrating that visualization does not automatically enhance students' understanding unless it is accompanied by explicit conceptual guidance and systematic teacher scaffolding, particularly in topics that require pattern modeling such as sequences and series.

Beyond internal factors and instructional strategies, this study also highlights the role of the learning environment and instructional design as external factors influencing problem solving. This finding is consistent with Holzberger et al. (2020), who showed that learning environment quality, time constraints, and instructional support affect the depth of students' cognitive engagement. This study further adds that, within the context of sequences and series, limitations in classroom conditions and learning facilities directly restrict students' opportunities to explore non-routine problems, causing the problem-solving process to remain largely at a procedural level.

4. Conclusion

This study concludes that students' problem-solving ability in the topic of sequences and series at SMA Negeri 2 Indramayu is hindered by an interrelated combination of internal and external factors. Internally, the main obstacles include low learning motivation, passive or reluctant attitudes when facing problems perceived as difficult, weak mastery of basic mathematical skills, and limited conceptual understanding of sequences and series.

Students tend to rely on memorizing formulas without comprehending the underlying meanings and relationships among quantities, which leads to difficulties in solving word problems and transforming verbal information into mathematical models. As a result, many students struggle at the initial stages of problem solving, are unable to plan solution strategies systematically, and rarely engage in reviewing or verifying their answers.

From an external perspective, the major inhibiting factors identified include limited learning facilities, less conducive classroom environments, and insufficient instructional time

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to develop problem-solving-oriented learning. Suboptimal facilities and learning resources restrict the variety of media and activities that can be used to concretize concepts of sequences and series or to present non-routine problems in engaging ways. Noisy classroom conditions and heterogeneous student abilities further disrupt students' focus when addressing word problems that require high levels of concentration. At the same time, pressure to complete the syllabus encourages teachers to prioritize routine exercises over conceptual deepening and contextual problem-solving activities. Under these conditions, students' problem-solving ability becomes highly dependent on the level of task difficulty—relatively adequate for routine problems but weak for non-routine tasks.

Another important conclusion is that teachers have implemented various strategies to mitigate these obstacles, including visualization, scaffolding, personal approaches, affective support, and the use of interactive media, e-modules, and educational games. These strategies have been shown to assist some students in developing more concrete conceptual understanding, increasing their willingness to ask questions, and fostering greater interest in mathematics learning. However, their implementation has not yet been fully systematic or well integrated into long-term instructional planning. Thus, the objectives of this study—to identify and describe factors inhibiting students' problem-solving ability in sequences and series at SMA Negeri 2 Indramayu—have been achieved, while also highlighting the need to strengthen instructional strategies that emphasize conceptual understanding and word-problem comprehension to support more optimal development of students' problem-solving ability.

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