

STUDENT READINESS IN MATHEMATICS IN THE NEW SCHOOL YEAR 2024-2025

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Abstract:

This research utilizes a qualitative case study approach to investigate student readiness to learn mathematics in the upcoming academic year at MA Husnul Khotimah. Employing purposive sampling techniques, the study intentionally selects participants and locations that align with the research objectives, allowing for an in-depth exploration of key issues. Data collection methods include questionnaires, in-depth interviews, and observations, aimed at capturing qualitative insights into various indicators affecting students' readiness. These indicators encompass self-confidence, motivation, learning facilities, study habits, understanding of the material, academic preparedness, time management, family support, quality of teaching, interactions with teachers, student cooperation, additional activities, anxiety levels, learning strategies, and material relevance. The findings reveal that cooperation among students emerges as a crucial factor, emphasizing the significance of collaborative learning experiences. Additionally, learning facilities, parental support, and positive teacher interactions contribute significantly to student readiness. Conversely, areas such as study habits and engagement in additional activities show potential for improvement. This research highlights the interconnectedness of these factors in shaping a supportive learning environment. By addressing the identified indicators, educators can enhance students' overall readiness for academic challenges. The study underscores the importance of collaboration, adequate resources, and quality teaching in fostering an effective learning atmosphere, paving the way for further research and practical applications in educational contexts. Ultimately, understanding and improving these factors can create a more conducive environment for student learning and success. These insights can inform strategies to better support students in their educational journeys, ultimately contributing to improved academic outcomes and learning stagnation.

Keywords: Readiness, Mathematics, New School Year

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INTRODUCTION

Readiness is a form of a student's willingness to engage in an activity, including physical, mental, and emotional readiness. Specifically, learning readiness refers to a student's preparedness to participate in learning activities at home before the formal learning process in school begins (Novita & Tindangen, 2022). According to this, student learning readiness is crucial in determining the success of the learning process. Students who are ready to learn tend to accept and understand the material being taught more easily. Conversely, students who are not ready to learn often struggle to keep up with lessons, which can negatively impact their academic performance (Siagian et al., 2021)

Recent research shows that various factors influence learning readiness, including family environment, motivation to learn, teacher support, and learning facilities (Andriyani & Suryani, 2017). For example, a study by Anderson and Krathwohl in (Asmah, 2021) found that students who receive strong learning support from their families and have a conducive learning environment at home demonstrate higher levels of learning readiness compared to those who do not receive such support. By understanding the factors that influence students' learning readiness, teachers and educational institutions can take appropriate steps to enhance student readiness. This will positively impact the quality of learning and students' academic performance.

Analyzing students' readiness to learn mathematics aims to understand their preparedness in this subject area. By investigating the factors that influence students' learning readiness, teachers can design

and implement meaningful learning strategies that align with students' modalities, needs, and interests. Learning designed with students' readiness in mind can enhance their engagement and active participation in the learning process, leading to more optimal learning outcomes. For example, interactive and technology-based learning methods can help improve students' learning readiness.

According to a study by Johnson et al. (2019), technology-based learning applications can increase students' motivation and learning readiness by making learning materials more engaging and interactive. By understanding and analyzing the factors that influence students' learning readiness, teachers and educational institutions can take appropriate steps to enhance student readiness. This will positively impact the quality of learning and students' academic performance. This research investigates the factors influencing students' readiness to learn mathematics in the 2024-2025 academic year.

METHODS

This research employs a qualitative approach with a case study model. The case study approach focuses on an in-depth exploration of a "limited system" or a specific case, or several cases, in detail through comprehensive and detailed data collection. Case studies allow researchers to examine a phenomenon within real-life contexts, using various information sources to provide a thorough and in-depth understanding of the research subject (Creswell, 2015).

In this study, the sample was selected using purposive sampling techniques. Purposive sampling allows researchers to intentionally select individuals and locations most suitable and relevant to the research objectives. This selection aims to gain in-depth and specific insights into the main issues being investigated. Participant and location selection was conducted based on predetermined criteria, ensuring that the information obtained significantly contributes to understanding the research problem (Herdiansyah, 2012).

The data collection methods used in this research include questionnaires, in-depth interviews, and observations. The questionnaires are designed to gather qualitative data regarding students' readiness to learn mathematics. In-depth interviews are conducted to obtain more detailed and comprehensive information from participants about their perspectives and experiences related to the research topic. Observations are used to directly observe students' behaviors and interactions in the context of mathematics learning in the classroom. Combining these three data collection methods aims to provide a comprehensive picture of student's readiness to learn mathematics in the new academic year.

RESULT AND DISCUSSION

Learning readiness encompasses self-confidence, learning motivation, learning facilities, study habits, understanding of the material, academic preparedness, time management, family support, quality of teaching, interaction with teachers, student cooperation, additional activities, anxiety level, learning strategies, and material relevance. Based on these indicators, an observation instrument was prepared in print format and distributed to students. Below is a bar chart presenting the percentage of learning readiness:

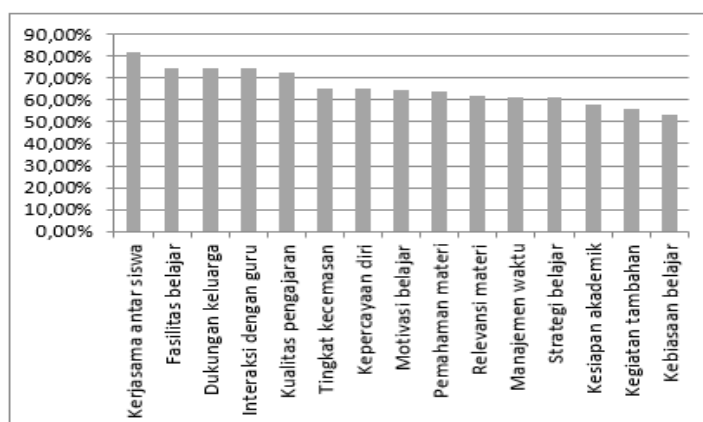


Figure 1. Percentage of Student Readiness

The Figure 1. above shows the percentage of student readiness based on 15 questionnaire statements from 30 students. The highest percentage is held by the indicator of cooperation among students, with a percentage value of 81.80%. Learning facilities, parental support, and interaction with teachers each have a percentage value of 74.50%. The quality of teaching has a percentage value of 72.80%. The anxiety level and self-confidence each have a percentage value of 65.50%. Learning motivation has a percentage value of 64.80%. Understanding of material has a percentage value of 64.20%. Relevance of material has a percentage value of 61.80%. Time management and learning strategies both have a percentage value of 61.20%. Academic preparedness has a percentage value of 58.20%. Additional activities have a percentage value of 55.80%, and study habits have a percentage value of 53.30%.

The highest percentage of cooperation among students is 81.80%, indicating that collaboration is a key factor in learning readiness. This cooperation allows students to help each other, share strategies, and solve problems together. Students involved in group work often gain a better understanding because they can view different perspectives and receive direct feedback from peers. Additionally, a supportive learning environment can reduce anxiety and increase learning motivation, all contributing to improved learning readiness (Sinaga, 2024).

Learning facilities, parental support, and interaction with teachers each have a percentage of 74.50%. This means that adequate learning facilities, such as books, technology, comfortable study spaces, active parental support, and positive interaction with teachers form a strong foundation for learning readiness (Siahaan & Meilani, 2019). Good learning facilities ease access to necessary materials and tools, while support from parents and teachers provides additional motivation and guidance. Positive interaction with teachers offers direct help and constructive feedback, reducing barriers in the learning process and enhancing students' readiness to face academic challenges (Sobandi, Yuniarsih, Rasto, 2020,)

The quality of teaching has a percentage of 72.80%. Teaching quality significantly impacts learning readiness because effective teaching ensures that students understand concepts correctly and acquire the necessary skills. Competent teachers use appropriate methods, provide clear explanations, and tailor teaching to students' needs. This enhances students' understanding and builds a solid foundation for further learning, making students feel more prepared to tackle more complex curricula.

The level of anxiety and self-confidence is 65.50%. Low anxiety and high self-confidence are crucial for learning readiness as they affect students' attitudes towards academic tasks (Lee & Kim, 2022). High anxiety can disrupt concentration and learning processes, while high self-confidence increases students' readiness to face challenges. Students who feel confident and not pressured are likelier to actively engage in learning and approach problems positively. Learning motivation is 64.80%. This indicates that learning motivation is crucial for students to engage and commit to learning. Intrinsic

motivation, such as interest in the material or personal goals, encourages students to put in more effort and persist through difficulties. Students with high motivation are more willing to invest time and effort in learning, directly enhancing their readiness to absorb and apply the material. Understanding of material has a percentage of 64.20%. A good grasp of the material is essential for advancing to more complex learning. Students who understand basic concepts well are more prepared to tackle advanced topics and solve more complicated problems. A deep understanding of the material provides the confidence and skills needed for independent learning.

The relevance of material has a percentage of 61.80%. It means that material relevant to students' lives or future goals makes learning more meaningful and engaging. When students feel that their learning has practical applications or relates to their interests, they are more motivated to learn and feel more prepared to handle the material. Relevance enhances student engagement and motivation, supporting their readiness to learn. Time management and learning strategies each have a percentage of 61.20%. This indicates that managing time effectively and using efficient learning strategies impacts how students prepare for learning (Rahmatullah & Sutama, 2021). Good time management allows students to complete tasks on time and avoid procrastination, while effective learning strategies help them study and remember information better. These skills contribute to learning readiness by ensuring students have a structured and efficient approach to handling their academic workload. Academic preparedness has a percentage of 58.20%. Academic preparedness includes the fundamental skills and knowledge to follow a higher curriculum. Lower academic preparedness indicates gaps in primary education that may need to be addressed. Improving academic preparedness involves strengthening foundational skills and knowledge needed to study more advanced material, helping students feel more ready and confident to face academic challenges.

Additional activities have a 55.80% percentage. Additional activities can provide valuable experiences and skills beyond the academic curriculum. Although their impact on learning readiness may not be as significant as other factors, additional activities such as sports or clubs can develop social skills, leadership, and time management, all of which support students' readiness in the learning process. Study habits have a percentage of 53.30%. This indicates that study habits include students' routines and practices in their learning process. Good study habits help students stay organized and focused, but the lower percentage suggests that there may be areas needing improvement in the consistency and effectiveness of their study habits. Developing solid study habits can enhance students' efficiency and learning outcomes (Dewi et al., 2018). Despite having a lower percentage, regular study habits help students manage their workload and remain focused on academic goals.

Each indicator plays a different role in shaping students' learning readiness, and all these factors are interrelated. Understanding and improving these factors can help create a more supportive and effective learning environment.

CONCLUSION

Indicators with the highest values highlight factors that profoundly and directly influence students' learning readiness. Factors such as student cooperation, learning facilities, parental support, and teaching quality significantly create a supportive and effective learning environment. While factors with lower percentage values, such as study habits and additional activities, are also important, they may require further attention to enhance overall learning readiness. Understanding and improving all these factors can help create a better learning environment and prepare students to face academic

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