

## The Contribution of Discipline and Learning Motivation to the Academic Achievement of Grade XII UG D Students at Al Azhar Flagship High School Medan

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### ABSTRACT

Penelitian ini dilaksanakan untuk menganalisis keterkaitan antara disiplin belajar dan motivasi belajar dengan prestasi akademik siswa kelas XII UG D di SMA Unggulan Al Azhar Medan. Penelitian ini berangkat dari permasalahan bahwa perbedaan tingkat kedisiplinan dan dorongan belajar siswa sering kali berdampak pada pencapaian hasil belajar di sekolah. Pendekatan yang digunakan dalam penelitian ini adalah pendekatan kuantitatif dengan melibatkan 20 siswa sebagai subjek penelitian. Data dikumpulkan melalui angket untuk mengukur tingkat disiplin dan motivasi belajar siswa, serta data nilai akademik sebagai indikator prestasi akademik. Data yang diperoleh selanjutnya dianalisis menggunakan teknik analisis statistik deskriptif. Hasil penelitian menunjukkan bahwa disiplin belajar dan motivasi belajar memiliki kontribusi dalam mendukung prestasi akademik siswa. Dengan demikian, peningkatan disiplin dan motivasi belajar perlu mendapat perhatian dalam upaya meningkatkan kualitas hasil belajar siswa di sekolah.

*The study aims to empirically examine the effect of discipline and learning motivation on the academic achievement of 12th-grade UG D students at SMA UNGGULAN AL-AZHAR. The subjects of the study were 20 12th-grade UG D students. The data was collected using a quantitative method with a survey approach. The results of this study are expected to make a positive contribution to the school in improving the quality of learning, as well as being useful for teachers in designing effective strategies for delivering material. It is also hoped that this study will increase awareness among students of the importance of discipline and motivation.*



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### INTRODUCTION

Academic achievement is one of the indicators of the success of the learning process at school. The high and low academic achievement of students is not only influenced by intellectual ability, but also by the attitudes and learning behaviors shown during the learning process (Salmina et al., 2018). Learning discipline and learning motivation are two important factors that play a role in shaping students' learning habits so that they have an impact on the learning outcomes achieved (Sibuea et al., 2023).

Learning discipline is reflected in students' adherence to learning rules, such as punctuality in participating in learning activities, seriousness in doing assignments, and consistency in utilizing learning time (Musfah & Mulia, 2020). Students who have good learning discipline tend to be able to manage their learning activities regularly so that the learning process can run more effectively (Ananda, 2023). On the other hand, low learning discipline often causes students to be less focused and less optimal in achieving academic achievement (Silaban & Romiaty, 2023).

In addition to learning discipline, learning motivation also has an equally important role (Rahayu et al., 2021). Learning motivation is an internal drive that encourages students to learn, try to understand

the material, and achieve the expected learning outcomes (Rohaendi & Laelasari, 2020). High motivation can foster a spirit of learning, a sense of responsibility, and perseverance in facing learning difficulties. However, if students' motivation to learn is low, then the learning process tends to run without a clear goal and has an impact on low academic achievement.

Based on initial observations in grade XII UG D Al Azhar Medan Superior High School, there are still differences in the level of discipline and learning motivation between students. This condition is suspected to affect the variety of academic achievements achieved by students. Therefore, a more in-depth study is needed to find out how the contribution of learning discipline and learning motivation to students' academic achievement.

This study aims to analyze the contribution of learning discipline and learning motivation to the academic achievement of grade XII UG D students at Al Azhar Superior High School Medan. The results of this study are expected to provide an overview of the importance of improving discipline and learning motivation as an effort to support the achievement of students' academic achievement optimally.

### METHOD

This study uses a quantitative approach with a type of correlational descriptive research. This approach is used to determine the contribution of learning discipline and learning motivation to students' academic achievement objectively through numerical data.

The subjects of the study were all students of grade XII UG D at Al Azhar Superior High School Medan which amounted to 20 people. The subject taking technique used is the saturated sample technique, where all members of the population are used as research subjects because the number is relatively small.

The data collection technique is carried out through the distribution of questionnaires and documentation. The questionnaire was used to obtain data on students' learning discipline and learning motivation, while documentation was used to obtain data on students' academic achievement taken from the average score of report cards from semester I to semester V.

The data that has been collected is then analyzed using descriptive statistical analysis techniques to provide an overview of learning discipline, learning motivation, and academic achievement of grade XII UG D Al Azhar Superior High School Medan.

### RESULTS AND DISCUSSION

#### Learning Discipline (X1)

Based on the results of the data processing of the Learning Discipline questionnaire filled out by 20 students of grade XII UG D Al Azhar Superior High School Medan, the average value of the learning discipline variable was obtained of 4.1. This score shows that the level of student learning discipline is in the good category. This shows that students in general have regular learning habits, such as obeying study rules, doing assignments on time, and participating in learning activities consistently.

Table 1. Student Questionnaire Results

Responden	X1.1	X1.2	X1.3	X1.4	X1.5	X1.6	X1.7	X1.8	X1.9	X1.10
1	5	5	5	5	5	5	5	5	5	5
2	5	5	5	4	4	4	4	4	4	4
3	4	3	3	3	4	3	4	3	4	3
4	4	3	3	3	4	3	4	3	4	3
5	4	4	4	3	4	4	4	3	4	3
6	3	4	5	5	3	3	3	4	5	3
7	3	4	4	4	3	3	4	3	5	4
8	4	4	4	5	5	3	4	5	4	3
9	5	5	5	5	5	4	5	5	5	5
10	3	3	4	4	3	4	4	4	4	5
11	5	5	5	5	5	5	5	5	5	4
12	5	4	4	4	4	4	4	4	4	4
13	3	4	5	3	5	5	4	4	4	4
14	5	5	4	3	4	3	4	3	3	4
15	5	5	5	5	4	4	5	4	4	3
16	5	5	4	5	5	5	5	5	5	5
17	3	4	3	3	3	4	4	3	5	3
18	4	4	4	4	3	4	3	5	3	3
19	5	5	4	5	5	3	3	4	4	3
20	4	3	4	4	4	4	3	3	3	3
Total Rata-rata	4,2	4,2	4,2	4,1	4,1	3,85	4,05	3,95	4,2	3,7

**Learning Motivation (X<sub>2</sub>)**

Based on the results of the data processing of the Learning Motivation questionnaire filled out by 20 students of grade XII UG D Al Azhar Superior High School Medan, the average value of the learning motivation variable was obtained of 4.1. This score shows that the level of student learning motivation is in the good category. This illustrates that students have a fairly high learning drive, such as the desire to excel, perseverance in participating in learning, and seriousness in completing academic tasks

Table 2. Learning Motivation Questionnaire

RESPONDEN	X2.1	X2.2	X2.3	X2.4	X2.5	X2.6	X2.7	X2.8	X2.9	X2.10
1	5	5	4	4	3	3	4	4	5	4
2	5	4	5	5	4	4	4	4	5	5
3	5	4	4	5	4	3	4	4	4	4
4	4	4	3	4	4	4	4	3	3	4
5	4	4	3	4	4	4	4	3	3	4
6	5	5	5	5	5	4	5	5	5	5
7	5	5	5	5	5	5	5	5	5	5
8	4	5	5	5	4	3	3	4	4	3
9	5	5	3	5	5	3	3	5	4	3
10	5	5	5	5	3	3	3	5	5	5
11	4	3	2	5	4	3	3	4	3	2
12	5	5	5	5	5	4	4	4	4	4
13	5	4	3	5	4	4	4	5	5	5
14	5	5	3	5	5	4	3	3	5	5
15	3	4	5	5	5	4	5	5	4	5
16	3	4	4	5	4	3	4	3	5	4
17	5	5	5	5	5	5	5	5	5	5
18	4	4	4	4	3	4	4	4	4	4
19	5	5	5	5	5	5	5	5	5	5
20	5	5	5	5	4	4	3	4	5	4
Total Rata Rata	4,55	4,5	4,15	4,8	4,25	3,8	3,95	4,2	4,4	4,25

**Academic Achievement**

Students' academic achievement was obtained from the average score of the report card from semester I to semester V. Based on this data, the average score of student academic achievement was **93.32**. This score shows that the academic performance of grade XII UG D students of Al Azhar Medan Superior High School is in the very **good category**.

Overall, the combined average of the variables of learning discipline (X<sub>1</sub>) and learning motivation (X<sub>2</sub>) was **4.17**, which was included in the **good** category. This shows that the free variable conditions in this study are at a positive level and support the achievement of students' academic achievements.

The results of the study showed that the level of learning discipline of students in grade XII UG D Al Azhar Medan Superior High School was in the good category with an average score of 4.1. These findings show that students have had fairly regular learning habits, such as obeying study rules, doing assignments on time, and participating in learning activities consistently. Good learning discipline plays an important role in helping students manage their academic time and responsibilities so that the learning process can run effectively.

Student learning motivation is also in the good category with an average score of 4.1. This shows that students have a strong enough internal drive to learn and achieve optimal academic achievement. Good learning motivation is reflected in the enthusiasm for participating in learning, perseverance in doing assignments, and the desire to obtain maximum learning results. This condition is an important supporting factor in the success of students in the academic field.

Student academic achievement measured through the average score of report cards from semester I to semester V showed excellent results with an average score of 93.32. The high academic achievement is in line with the condition of learning discipline and student learning motivation which is in the good category. This shows that learning discipline and learning motivation have a role that supports each other in achieving students' academic achievements.

Overall, the results of this study show that learning discipline and learning motivation are important factors in supporting students' academic achievement. Students who have good learning discipline and high learning motivation tend to be able to achieve optimal learning outcomes. Therefore, efforts to improve discipline and learning motivation need to continue to be considered in the learning process to maintain and improve students' academic achievement.

The results of the study showed that the learning discipline of grade XII UG D students of Al-Azhar Medan Superior High School was in the good category with an average score of 4.1, which indicates that students have regular and responsible learning habits in following the learning process

(Tambunan, 2020). Learning discipline is reflected in students' adherence to learning rules, punctuality in doing assignments, and consistency in participating in learning activities, which play an important role in creating an effective learning process (Dwi Bekti et al., 2018).

Learning discipline is reflected in students' adherence to learning rules, punctuality in doing assignments, and consistency in participating in learning activities, which play an important role in creating an effective learning process (Safna & Wulandari, 2022). Thus, learning discipline is one of the main supporting factors in students' academic success.

In addition to learning discipline, students' motivation to learn is also in the good category with an average score of 4.1, which shows that there is a strong internal drive in students to learn and achieve optimal results (Ratana & Kaluge, 2023). Learning motivation serves as a driver that encourages students to participate actively, diligently, and not easily give up in the face of learning difficulties (Lumbantoruan et al., 2021).

Good learning motivation also contributes to increasing the quality of student involvement in the learning process, both in understanding the material and in completing academic tasks (Sibuea et al., 2023). Students who are highly motivated tend to show a positive attitude towards learning and have a clear orientation towards achieving academic achievement.

The academic achievements of students obtained from the average report card scores from semester I to semester V showed excellent results with an average score of 93.32. The high academic achievement is in line with the condition of discipline and learning motivation of students who are in the good category (Suparsawan, 2021). Academic achievement is not only determined by cognitive ability, but also influenced by the attitudes, habits, and learning behaviors that students show during the learning process (Nurlita et al., 2022).

Overall, the results of this study show that learning discipline and learning motivation have complementary contributions in supporting students' academic achievement. Discipline helps students regulate and control learning behavior, while motivation encourages students to keep striving to achieve optimal learning outcomes (Musfah & Mulia, 2020; Rahayu et al., 2021). Therefore, efforts to improve and maintain discipline and learning motivation need to continue to be carried out as an important strategy in improving the quality of learning and academic achievement of students.

## **CONCLUSION**

Based on the results of research that has been conducted on students in grade XII UG D Al Azhar Superior High School Medan, it can be concluded that the level of student learning discipline is in the good category with an average score of 4.1. This shows that students have fairly regular and responsible learning habits in following the learning process. Student learning motivation is also in the good category with an average score of 4.1. This condition reflects a high enough learning drive in students to achieve optimal learning outcomes. Good learning motivation is an important supporting factor in students' academic success. Student academic achievement measured through the average score of report cards from semester I to semester V showed excellent results with an average score of 93.32. The high academic achievement is in line with the condition of learning discipline and student learning motivation which is in the good category. Overall, learning discipline and learning motivation are important factors that support the achievement of students' academic achievements. Therefore, efforts to maintain and improve students' discipline and learning motivation need to be continued so that academic achievement can be maintained and improved..

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## REFERENCES

- Ananda, N. P. (2023). Edutech: Jurnal Teknologi Pendidikan PENGGUNAAN MODEL PEMBELAJARAN FLIPPEND CLASSROOM DI INDONESIA DAN CINA. *Edutech: Jurnal Teknologi Pendidikan*, 22(1), 2023. <https://doi.org/10.17509/e.v22i1.52834>
- Dwi Bakti, R., Titah Jatipaningrum, M., & Suryowati, K. (2018). Peningkatan Potensi Siswa Melalui Pelatihan Test Potensi Akademik (TPA). In *Jurnal Abdimas PHB* (Vol. 1, Issue 2).
- Lumbantoruan, L., Widiastuti, W., & Tangkin, W. P. (2021). Penerapan Rules and Procedures Untuk Meningkatkan Kedisiplinan Siswa. *Jurnal Educatio FKIP UNMA*, 7(2), 546–553. <https://doi.org/10.31949/educatio.v7i2.1084>
- Musfah, J., & Mulia, B. (2020). Analisis Standar Nasional Pendidikan Tinggi: Studi Kasus di UIN ANTASARI Banjarmasin. *AL-Tanzim: Jurnal Manajemen Pendidikan Islam*, 04(02), 224–235. <https://doi.org/10.33650/al-tanzim.v4i2>
- Nurlita, R., Utami, W. B., & Suwandono, S. (2022). Pendidikan Karakter dalam Proses Pembelajaran Matematika di Masa Pandemi COVID-19. *Jurnal PEKA (Pendidikan Matematika)*, 5(2), 53–60. <https://doi.org/10.37150/jp.v5i2.1278>
- Rahayu, I. F., Aini, I. N., Karawang, U. S., Ronggo Waluyo, J. H., Timur, T., Karawang, K., & Barat, J. (2021). Analisis Kemandirian Belajar dalam Pembelajaran Matematika Pada Siswa SMP. *Jurnal Pembelajaran Matematika Inovatif*, 4(4). <https://doi.org/10.22460/jpmi.v4i4.789-798>
- Ratana, M., & Kaluge, L. (2023). Dampak Kedisiplinan Belajar dan Peran Guru terhadap Prestasi Belajar Matematika Siswa SMP. *Jurnal Ilmiah Pendidikan Profesi Guru*, 5(3), 587–599. <https://doi.org/10.23887/jippg.v5i3.51738>
- Rohaendi, S., & Laelasari, N. I. (2020). Penerapan Teori Piaget dan Vygotsky Ruang Lingkup Bilangan dan Aljabar pada Siswa MTs Plus Karangwangi Karangwangi. *PRISMA*, 9(1), 65–76. <https://jurnal.unsur.ac.id/prisma>
- Safna, O. P., & Wulandari, S. S. (2022). Pengaruh Motivasi, Disiplin Belajar, Dan Kemampuan Berpikir Kritis terhadap Hasil Belajar Siswa. *Scaffolding: Jurnal Pendidikan Islam Dan Multikulturalisme*, 4(2), 140–154.
- Salmina, M., Syarifah, D., Nisa, K., Bina, S., & Getsempena, B. (2018). Kemampuan Penalaran Matematis Siswa berdasarkan Gender pada Materi Geometri. *Jurnal Numeracy*, 5(1), 41–48.
- Sibuea, B., Suriyadi, S., Azmi, F., & Daulay, N. K. (2023). Penilaian Diri dan Penilaian Reflektif. *Jurnal Ilmiah Universitas Batanghari Jambi*, 23(2), 1376. <https://doi.org/10.33087/jiubj.v23i2.3440>
- Silaban, F., & Romiaty, R. (2023). Pengaruh Intensitas Penggunaan Game Online Terhadap Disiplin Belajar Siswa SMA Negeri 2 Palangka Raya. *Jurnal Ilmiah Kanderang Tingang*, 14(1), 133–139. <https://doi.org/10.37304/jikt.v14i1.190>
- Suparsawan, I. K. (2021). Implementasi Pendekatan Saintifik pada Model Pembelajaran Kooperatif Tipe STAD untuk Meningkatkan Keaktifan dan Hasil Belajar Matematika. *Indonesian Journal of Educational Development*, 1(4), 607–620.
- Tambunan, H. (2020). Kinerja guru matematika SMP dalam membangun minat dan motivasi belajar siswa. *Jurnal Riset Pendidikan Matematika*, 7(1), 108–117. <https://doi.org/10.21831/jrpm.v7i1.19384>