
Meta-Analysis Study: Correlation Study of the Influence of Motivation on Student Learning Outcomes

Zulyusri¹, Ida Elfira², Violita³, Tomi Apra Santosa⁴

¹Dosen Pascasarjana, FMIPA, Padang State University

²Biology Education Masters, FMIPA, Padang State University

^{3,4}Padang State University

Email: zulyusri0808@gmail.com

ARTICLEINFO

Article history:

Received 20 September 2022

Received in revised form 30 October 2022

Accepted 19 November 2022

Available online 27 Desember 2022

Keywords:

Motivation, Student Learning Outcomes, Influence.

ABSTRACT

This study intends to investigate the relationship between motivation and student learning outcomes. Impact measures in several studies that examined the relationship between the influence of motivation on student learning outcomes were analyzed using a meta-analysis procedure. Empirical data were collected using electronic search engines such as Google Scholar, Garuda Portal, and national journal URLs. The effect size is used as a starting point for data analysis. A systematic review of research findings in Indonesia's national e-journal was used, with 18 articles selected as a sample that met the criteria. The results of calculating the combined effect size obtained a p-value of less than 0.001 and an estimated value of 0.825. A meta-analysis study found that motivation and learning outcomes had a significant relationship, with the strength of the relationship in the high category. The variance of the studies analyzed is also very high, with I2 test results far exceeding 50%, implying that this study is heterogeneous, with a significant estimate value in the SMK subgroup category (estimated value 1,031) with a p-value of 0.001 and the SMP subgroup (estimated value 1.186) with a p-value of 0.005.

Correspondent authors: Zulyusri

Padang State University

E-Mail: zulyusri0808@gmail.com

INTRODUCTION

Human life cannot exist without education. The most important factor in the growth and development of a nation is the improvement of education (Razak et al., 2021). Because the phenomenon of education in Indonesia is still in its infancy, for Indonesians to succeed in a more competitive market, education standards are required to improve (Santosa, Razak, et al., 2021). Efforts to improve the quality of learning at certain levels of education are called improving the quality of education. Education is also expected to be able to give birth to the next generation who have a mixed spirit between intellectual, religious, social, ethical and national personality values (Lomu & Widodo, 2018). Through education which is a deliberate and planned effort to create a learning environment and learning process, students actively develop their potential to have religious spiritual strength, self-control, intelligence, personality, noble character, and the skills needed by themselves, society and the country (Lou et al., 2017). Education plays an important role in improving the quality of human resources in an effort to realize the ideals of the Indonesian people in the field of public welfare and education (Santosa, Razak, et al., 2021). Various supporting factors play an important role in determining whether or not educational goals are achieved (Amalda & Prasajo, 2018).

Learning outcomes that show how well students, teachers, learning processes, and educational institutions have succeeded in achieving predetermined educational goals, become a benchmark for measuring the success of the learning process (Andriani & Rasto, 2019). The success of learning in the classroom is greatly influenced by the teacher. If every

student understands what the teacher teaches, the teacher has succeeded in teaching in the classroom (Cheng et al., 2018). This is clearly inseparable thanks to the teacher's knowledge of how to apply teaching strategies, methods, models, and techniques. Learning outcomes for students who meet or exceed the KKM score (minimum completeness requirements) can indicate the success or failure of the teacher in teaching (Putri Ningrat et al., 2018). The skills that students acquire as a result of their learning experience are called learning outcomes. Learning experiences in schools can be separated into three categories: psychomotor, affective, and cognitive (Santosa et al., 2021). The psychomotor domain is about skills, the affective domain is about attitudes, and the cognitive domain is about intellectual abilities. Tests or nontes can be used to assess learning outcomes (Romadhoni et al., 2019).

Deep Sardiman Budiariawan (2019) states that one of the factors that helps students get the most out of their education is their learning motivation. Students who are very eager to learn will be more open to instruction and have a more optimistic outlook on learning (Oktarina et al., 2021). Khasanah and Kusmanto (2016) in (Marzuqoh et al., 2020) defines motivation as "a conscious urge to influence one's behavior so that one is compelled to act in order to achieve certain results or goals". Students who have high motivation to learn are willing to take their participation in educational activities seriously and appropriately. On the other hand, students who lack learning motivation do not participate properly and seriously in learning activities. According to Dimiyati, (2005:85) in (Meyanti et al., 2021), Both students and teachers need to be motivated to learn. Here are some examples of how important learning motivation is for students: 1). Raise awareness of the initial position of learning, process and final results; 2). Inform students about the importance of learning efforts compared to peers; 3). Direct activities for; 4). Increased interest in learning; and 5). Raise awareness of a journey followed by continuous work.

Penelitian sebelumnya menunjukkan hubungan positif dan signifikan antara hasil belajar siswa dengan motivasi (Budiariawan, 2019 p. 105; Putri Ningrat et al., 2018 p. 263; Surya & Husna, 2018 p. 74; Saputra et al., 2018 ; Rizqi & Sumantri, 2019 ;; Prananda & Hadiyanto, 2019 ; Asnaldi et al., 2018 ; Hadjarati & Haryanto, 2020 ;; Romadhoni et al., 233; Wiyono, 2018 ; Wijayanti & Widodo, 2021 ; Arif, 2018). The results of other studies also report that there is a very close relationship between motivation and learning outcomes (Kinasih & Mariana, 2021). But there is also research that shows a low relationship between motivation and learning outcomes (Palittin, Ivyentine Datu, Wihelms Wolo, 2019 p. 107). Other research shows that teacher motivation has an important effect on student learning outcomes, this conveys the more teacher motivation the better student learning outcomes; Conversely, the worse the student learning outcomes, the lower the teacher's motivation. (Rina et al., 2019), This is in line with opinion Awe (Awe & Benge, 2017) who suggested that teachers and schools increase motivation for students in the learning process on an ongoing basis, accompanied by guidance and coaching because giving motivation is considered important and without motivation from teachers and schools, students' interest in learning will not be optimal so that it affects learning outcomes. In the process of teaching and learning in schools, student motivation and learning outcomes are very closely related (Santosa & Yulianti, 2020).

Meta analysis is research that uses research that has been done by other researchers (Ichsan et al., 2022). To arrive at the right conclusion, this is done quantitatively and methodically. Thus, meta-examination is a quantitative exploratory technique in which quantitative information from the consequences of past investigations is dissected to admit or disprove speculation. (Retnawati et al., 2018). According to Schmidt & Hunter (2015); Juandi and Tamur, (2020) in Paloloang et al., (2020 p. 853), meta-analytic reviews need for the purpose of combining and interpreting

findings to arrive at comprehensive and convincing conclusions, as well as increasing the likelihood that the same conclusions will be reached by multiple readers by calculating and combining effect sizes in an objective formula. When compared to single primary studies or nonquantitative narrative reviews, meta-analyses allow researchers to draw more accurate and more credible conclusions (Rosenthal & DiMatteo, 2001). Based on this, this study aims to expand and complement previous studies that focused on the correlation between motivation and student achievement.

RESEARCH METHOD

This research is a meta-analytic study that was carried out by summarizing, reviewing, and evaluating the results of previous research (Santosa et al., 2021). The research sample consisted of articles published in national journals and met the following requirements: 1). Articles regarding the correlation of motivation for student learning outcomes, 2). The research was conducted from 2018 to 2022, 3). Analysis conducted in Indonesia, 4). Types of correlational research and 5). The data in the study include the value of the correlation coefficient and the number of samples. Correlation will be transformed using Fisher's *z* and will be analyzed using this index (Retnawati et al., 2018 p. 29). There were 18 articles meta-analyzed in this study according to the criteria.

The three main activities carried out in this study were forming meta-analytic research questions, collecting studies or research results as material for meta-analysis, calculating effect sizes, and writing analysis findings reports. (Retnawati et al., 2018 p. 9). The effect size calculation is carried out with the help of the OpenMEE application with reference to the effect size calculation formula in Table 1.

No	Step	Formula
1	Correlation (r) is transformed to Fisher's z	$z = 0,5 \times \ln \left(\frac{1+r}{1-r} \right)$
2	Varians	$Vz = \frac{1}{n-3}$
3	Standar error	$SEz = \frac{1}{\sqrt{n-3}}$

Table 1 Calculation of the effect size.
(source : Retnawati et al., 2018 p. 29)

After obtaining the impact size values, the results are described into classifications according to Table 2.

Effect size	Kategory
0 ES 0,2	Low
0,2 ES 0,8	Medium
ES 0,8	Hight

Tabel 2. Klasifikasi Effect size
(Source: Cohen, 1997 dalam Retnawati et al., 2018 p. 143)

RESULT AND DISCUSSION

In this study, there were 18 articles that would be subject to meta-analysis regarding the correlation between motivation and student learning outcomes. Articles come from accredited journals. The following is complete data from the article in question, which is listed in Table 3.

No	Author	Article Title	Publication Type	Year	Participant
1	Surya, E., & Husna, A.	Hubungan sense of humor, kecerdasan emosional dan motivasi berprestasi terhadap hasil belajar matematika siswa kelas x SMK Teladan Kota Batam.	Journal	2018	SMK
2	Palittin, Ivylentine Datu, Wilhelmus Wolo, R. P.	Hubungan Motivasi Belajar dengan Hasil Belajar Siswa.	Journal	2019	SD
3	Budiariawan, I. P.	Hubungan Motivasi Belajar Dengan Hasil Belajar Pada Mata Pelajaran Kimia.	Journal	2019	SMA
4	Putri Ningrat, S., Tegeh, I. M., & Sumantri, M.	Kontribusi Gaya Belajar Dan Motivasi Belajar Terhadap Hasil Belajar Bahasa Indonesia.	Journal	2018	SD
5	Saputra, H. D., Ismet, F., & Andrizal, A.	Pengaruh Motivasi Terhadap Hasil Belajar Siswa SMK.	Jurnal	2018	SMK
6	Rizqi, A. T., & Sumantri, M.	Hubungan Antara Motivasi Belajar dan Pola Asuh Orang Tua terhadap Hasil Belajar IPA.	Journal	2019	SD
7	Meyanti, Admadja, & Pageh.	Kontribusi motivasi belajar, disiplin belajar, dan sikap sosial terhadap hasil belajar ips.	Journal	2021	SMP
8	Rina, H., E., M., & Anung, A. H.	Hubungan Motivasi Dan Kreativitas Guru Dalam Mengajar Dengan Hasil Belajar Mata Pelajaran Pai Di Madrasah Aliyah Negeri 4 Bogor.	Journa	2019	MAN
9	Prananda, G., & Hadiyanto.	Korelasi Antara Motivasi Belajar dengan Hasil Belajar Siswa dalam Pembelajaran IPA di Sekolah Dasar.	Journal	2019	SD
10	Yuliany, N. (2018).	Hubungan Antara Motivasi Belajar Dan Hasil Belajar Siswa Sdn Emmy Saelan Makassar.	Journal	2018	SD
11	Asnaldi, A., FIK-UNP, Z., & M, M.	Hubungan Motivasi Olahraga Dan Kemampuan Motorik Dengan Hasil Belajar Pendidikan Jasmani Olahraga Dan Kesehatan Siswa Sekolah Dasar Negeri 16 Sintoga Kecamatan Sintuk Toboh Gadang Kabupaten Padang Pariaman.	Jurnal	2018	SD

12	Hadjarati, H., & Haryanto, A. I.	Motivasi Untuk Hasil Pembelajaran Senam Lantai.	Journal	2020	SMP
13	Sulfemi, W. B.	Hubungan Motivasi Belajar Dengan Hasil Belajar IPS Di SMP Kabupaten Bogor.	Journal	2018	SMP
14	Romadhoni, E., Wiharna, O., & Mubarak, I.	Pengaruh Motivasi Belajar Terhadap Hasil Belajar Peserta Didik Pada Mata Pelajaran Gambar Teknik.	Journal	2019	SMK
15	Wiyono, T.	Pengaruh Motivasi Siswa Dan Kreativitas Belajar Terhadap Hasil Belajar Pkn Siswa.	Journal	2018	SMK
16	Wijayanti, N., & Widodo, S. A.	Studi Korelasi Motivasi Belajar terhadap Hasil Belajar Matematika Selama Daring.	Journal	2021	SMP
17	Kinasih, A., & Mariana, E.	Hubungan Antara Motivasi Belajar Dan Minat Baca Siswa Dengan Hasil Belajar Fisika Siswa Kelas Viii Smp Pgr 2 Sekampung.	Journal	2021	SMP
18	Arif, L. S.	Relationship Between Learning Attitude and Vocational Learning Motivation With Learning.	Journal	2018	SMK

Table 3. Article data that will be meta-analyzed

Furthermore, the researchers calculated the effect size in each study with the help of the OpenMee application. In meta-analyses, quantitative indices called effect sizes are used to summarize research results. That is, the effect size in each study represents the magnitude of the relationship between variables (Retnawati et al., 2018), The impact size normalizes the findings of various checks which can be seen directly (Retnawati et al., 2018). The impact size normalizes the findings of various checks which can be seen directly.

Study ID	Author	Participant	Publication type	N	r	zr	Var(Zr)
Study 1	Surya, E., & Husna, A. (2018).	SMK	Journal	106	0.909	1.522	0.010
Study 2	Palittin, Ivyentine Datu, Wihelmus Wolo, R. P. (2019).	SD	Journal	32	0.080	0.080	0.034
Study 3	Budiariawan, I. P. (2019).	SMA	Journal	72	0.391	0.413	0.014
Study 4	Putri Ningrat, S., Tegeh, I. M., & Sumantri, M. (2018).	SD	Journal	37	0.673	0.816	0.029
Study 5	Saputra, H. D., Ismet, F., & Andrizal, A. (2018).	SMK	Journal	33	0.860	1.293	0.033
Study 6	Rizqi, A. T., & Sumantri, M. (2019).	SD	Journal	52	0.463	0.501	0.020
Study 7	Meyanti, Admadja, & Pageh. (2021).	SMP	Journal	56	0.791	1.074	0.019
Study 8	Rina, H., E., M., & Anung, A. H. (2019)	MAN	Journal	20	0.693	0.854	0.059
Study 9	Prananda, G., & Hadiyanto. (2019).	SD	Journal	49	0.323	0.335	0.022
Study 10	Yuliany, N. (2018).	SD	Journal	80	0.522	0.579	0.013
Study 11	Asnaldi, A., FIK-UNP, Z., & M, M. (2018).	SD	Journal	36	0.341	0.355	0.030
Study 12	Hadjarati, H., & Haryanto, A. I. (2020).	SMP	Journal	25	0.930	1.658	0.045
Study 13	Sulfemi, W. B. (2018).	SMP	Journal	120	0.981	2.323	0.009
Study 14	Romadhoni, E., Wiharna, O., & Mubarak, I. (2019).	SMK	Journal	67	0.780	1.045	0.016
Study 15	Wiyono, T. (2018).	SMK	Journal	30	0.723	0.914	0.037
Study 16	Wijayanti, N., & Widodo, S. A. (2021).	SMP	Journal	30	0.386	0.407	0.037
Study 17	Kinasih, A., & Mariana, E. (2021).	SMP	Jurnal	36	0.417	0.444	0.030
Study 18	Arif, L. S. (2018).	SMK	Jurnal	42	0.334	0.347	0.026

Table 4. Category size of the effect of motivation on student learning outcomes.

Description : N : Number of research samples
R : Correlation coefficient
zr : Effect size of each study
Var (Zr) : The variance of each effect size

Furthermore, data analysis was carried out to calculate the combined effect size of the 18 studies above, the results of the calculation results were obtained as shown in Table 5

Estimate	Lower bound	Upper bound	Std. error	p-Value
0.825	0.497	1.153	0.167	< 0.001

Tabel 5. Model Results

The p-value was obtained <0.001 , because the p-value was less than 0.05, it was determined that there was a significant relationship between learning motivation and learning outcomes. The Estimate value (combined Siza Effect) is obtained at 0.825, based on the Cohen category, this value includes the high category (Retnawati et al., 2018), so that we can conclude that there is a significant relationship between motivation and learning outcomes with the strength of the relationship being in the high category based on data processing from 18 selected studies. The overall driving force within students that creates, guarantees the continuity of learning activities, and provides direction for learning activities in order to achieve the desired goals is called learning motivation. Learning motivation has a significant influence on student learning activities. Learning outcomes will be the results obtained and claimed by individuals after effectively playing a role in critical thinking, both physically and intellectually (Yuliany, 2018).

Then for the Q statistics, to see the heterogeneity of the variants of the 18 studies analyzed, the data obtained is as shown in Table 6.

τ^2	Q(df=17)	Het. p-Value	I^2
0.477	400.861	< 0.001	95.759

Tabel 6. Heterogeneity

The heterogeneity search results can also be seen from the forest plots as shown in Figure 1. Forest plots were created during the meta-analysis to understand the effect size, also known as the aggregation effect size. Each bar in this plot represents the confidence interval for each study point estimation result. Researchers use a certain level of significance to determine this confidence interval. The confidence interval presented is 95% if the significance level is set to 5%. The resulting aggregation effect sizes are also shown in this forest plot. Confidence intervals and effect sizes for each study are shown next to a bar in the plot. The significance of each stem in the forest plot is different. The lower limit is on the far left, while the upper limit is on the right. The areas of the various boxes in the center represent the sum of the weights, and their position indicates the location of each study's effect size. The magnitude aggregation effect sizes are represented by the square at the bottom, whose area is equal to the sum of the areas of the total weight of each study(Retnawati et al., 2018 p. 40). The following is Figure 1 to illustrate the heterogeneity of forest plots.

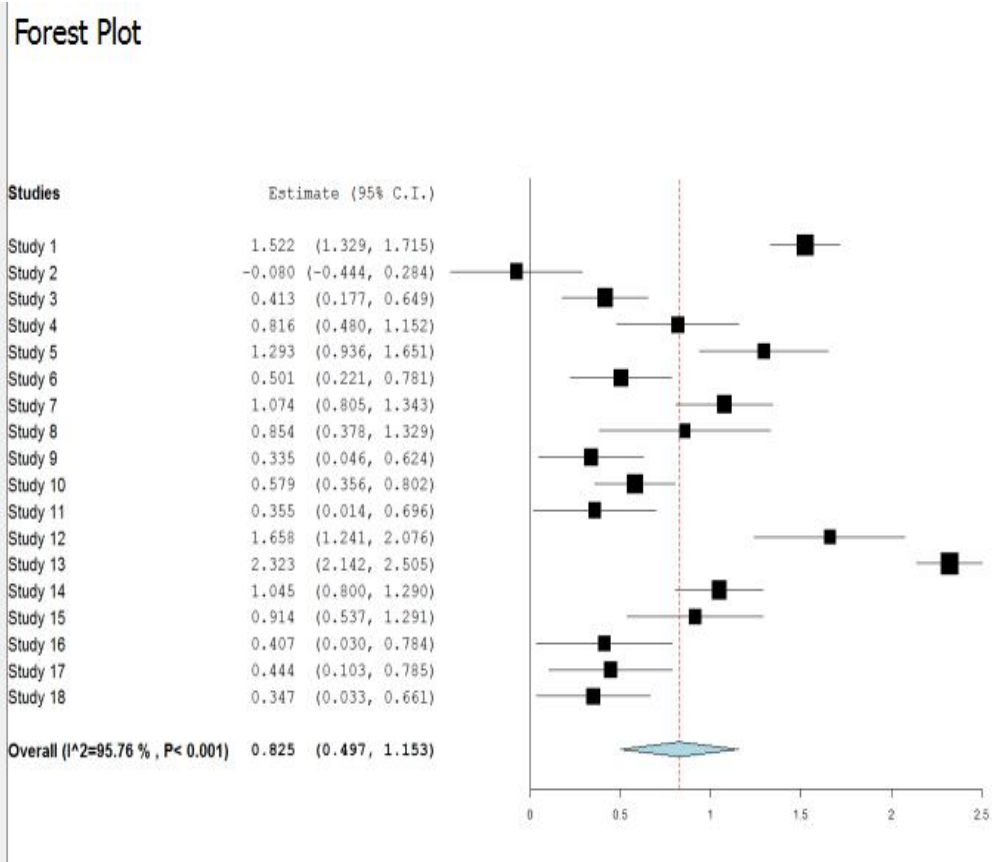


Figure 1. Forest plot uji heterogenitas

From the results of the Q statistics, it was found that the variance of the 18 analyzed studies proved to be very diverse, this can be seen from the I² value of 95,759%, far exceeding 50%, from these results it can be concluded that the variance of the 18 studies that we analyzed very high, so that this study can be assumed to be heterogeneous, because this study is very heterogeneous, it is possible to carry out a moderator/sub-analysis analysis. The statistical summary of each sub-group that the researcher did in the participant category is shown in Table 7

Studies	Estimate	Lower bound	Upper bound	Std. error	p-Val
Subgroup SMK	1.031	0.621	1.442	0.209	< 0.001
Subgroup SD	0.430	0.218	0.642	0.108	< 0.001
Subgroup SMA	0.413	0.177	0.649	0.120	NA
Subgroup SMP	1.186	0.357	2.016	0.423	0.005
Subgroup MAN	0.854	0.378	1.329	0.243	NA
Overall	0.825	0.497	1.153	0.167	< 0.001

Table 7. Model Results

The average combined effect size value is listed in the estimate column, where you can see the estimated value in the SMK sub-group with a value of 1,031 (high category), SD with a value of 0,430 (medium category), SMA with a value of 0,413 (medium category), SMP with a value of 1,186 (high category) and MAN with a value of 0.854 (moderate category). From the 5 sub-group categories above, the most significant average effect size is in the SMK sub-group and SMP sub-group, it can be seen that the estimate value that is quite significant is in the SMK sub-group category (estimation value 1.031) with a p-Val < 0.001 and the SMP sub-group (estimated value 1.186) with a p-Val

value of 0.005, to see the differences in the study subgroups of the 5 categories we can see from the forest plot in Figure 2.

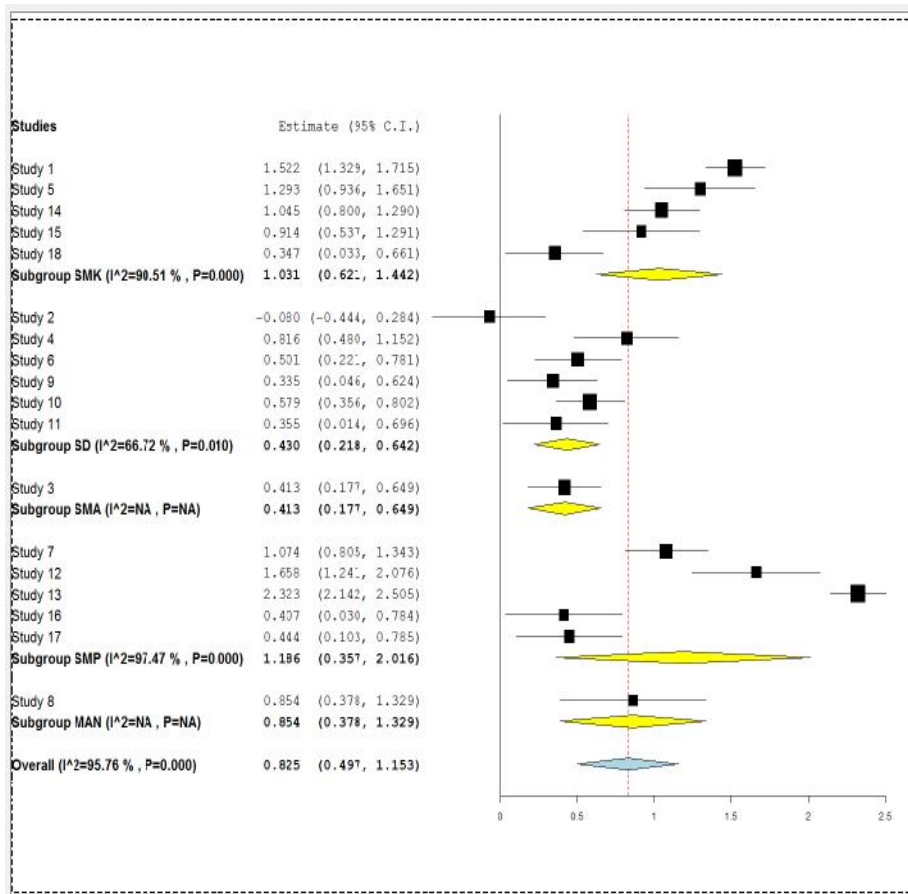


Figure 2. Forest plot of study subgroups

In Figure 2. The yellow mark shows the average effect size for each category. The red lines in the SMK, SMP and MAN subgroups still overlap, which indicates that the average effect size is not significantly different, but the position of the SMK and SMP subgroups shows a more significant position than the MAN subgroup which is in the red midline position. This shows that the effect size of the SMK and SMP sub-groups is very significant, so it can be concluded that the level of participants involved in the study influences the average effect size of the combined meta-analytic studies conducted. This confirms that the strongest correlation between motivation and learning achievement occurs at the SMK and SMP levels compared to SD, SMA and MAN.

CONCLUSION

Based on the research above, it is concluded that motivation and learning outcomes have a significant relationship with the strength of the relationship in the high category. The variance of the studies analyzed is also very high with the I² test results of 95,759%, far exceeding 50%, so this study is assumed to be heterogeneous with a significant estimate value in the SMK subgroup category (estimation value 1,031) with a p-value Val < 0.001 and the SMP subgroup (estimated value 1.186) with a p-Val value of 0.005.

REFERENCE

- Amalda, N., & Prasojo, L. D. (2018). Pengaruh motivasi kerja guru, disiplin kerja guru, dan kedisiplinan siswa terhadap prestasi belajar siswa. *Jurnal Akuntabilitas Manajemen Pendidikan*, 6(1), 11. <https://doi.org/10.21831/amp.v6i1.7515>
- Andriani, R., & Rasto, R. (2019). Motivasi belajar sebagai determinan hasil belajar siswa. *Jurnal Pendidikan Manajemen Perkantoran*, 4(1), 80. <https://doi.org/10.17509/jpm.v4i1.14958>
- Apra, T., I., S., Razak, A., Arsih, F., Sepriyani, E. M., & Hernaya, N. (2021). Meta-Analysis: Science Learning Based on Local Wisdom Against Preserving School Environments During the Covid-19 Pandemic. *Journal of Biology Education*, 10(2), 244–251. <http://journal.unnes.ac.id/sju/index.php/ujbe>
- Arif, L. S. (2018). Relationship Between Learning Attitude and Vocational Learning Motivation With Learning. *Jurnal Taman Vokasi Volume 6, Nomor 1, Juni 2018 Hal. 92 - 97*, 6, 92–97.
- Asnaldi, A., FIK-UNP, Z., & M, M. (2018). Hubungan Motivasi Olahraga Dan Kemampuan Motorik Dengan Hasil Belajar Pendidikan Jasmani Olahraga Dan Kesehatan Siswa Sekolah Dasar Negeri 16 Sintoga Kecamatan Sintuk Toboh Gadang Kabupaten Padang Pariaman. *Jurnal MensSana*, 3(2), 16. <https://doi.org/10.24036/jm.v3i2.75>
- Awe, E. Y., & Benghe, K. (2017). Hubungan Antara Minat Dan Motivasi Belajar Dengan Hasil Belajar Ipa Pada Siswa Sd. *Journal of Education Technology*, 1(4), 231. <https://doi.org/10.23887/jet.v1i4.12859>
- Budiariawan, I. P. (2019). Hubungan Motivasi Belajar Dengan Hasil Belajar Pada Mata Pelajaran Kimia. *Jurnal Pendidikan Kimia Indonesia*, 3(2), 103. <https://doi.org/10.23887/jpk.v3i2.21242>
- Cheng, S. C., She, H. C., & Huang, L. Y. (2018). The impact of problem-solving instruction on middle school students' physical science learning: Interplays of knowledge, reasoning, and problem solving. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(3), 731–743. <https://doi.org/10.12973/ejmste/80902>
- Hadjarati, H., & Haryanto, A. I. (2020). Motivasi Untuk Hasil Pembelajaran Senam Lantai. *Multilateral Jurnal Pendidikan Jasmani Dan Olahraga*, 19(2), 137. <https://doi.org/10.20527/multilateral.v19i2.8646>
- Ichsan, Suhaimi, Amalia, K. N., Santosa, T. A., & Yulianti, S. (2022). Pengaruh Model Pembelajaran Problem Based Learning Berbasis TPACK Terhadap Keterampilan Literasi Sains Dalam Pembelajaran IPA Siswa Tingkat SD Sampai SMA: Sebuah Meta-Analisis. *Jurnal Pendidikan Dan Konseling*, 4(5), 2173–2181.
- Kinasih, A., & Mariana, E. (2021). Hubungan Antara Motivasi Belajar Dan Minat Baca Siswa Dengan Hasil Belajar Fisika Siswa Kelas Viii Smp Pgr 2 Sekampung. *Jurnal Pendidikan Fisika Undiksha*, 11(1), 39. <https://doi.org/10.23887/jjpf.v11i1.32396>
- Lomu, L., & Widodo, S. A. (2018). Pengaruh Motivasi Belajar dan Disiplin Belajar terhadap Prestasi Belajar Matematika Siswa. *Prosiding Seminar Nasional Pendidikan Matematika Etnomatnesia*, 0(0), 745–751.
- Lou, S. J., Chou, Y. C., Shih, R. C., & Chung, C. C. (2017). A study of creativity in CaC 2 steamship-derived STEM project-based learning. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(6), 2387–2404. <https://doi.org/10.12973/EURASIA.2017.01231A>
- Marzuqoh, F. A., Sujadi, A. A., & Arigiyati, T. A. (2020). Hubungan Antara Motivasi, Keaktifan, Gaya Belajar dengan Prestasi Belajar Matematika Siswa SMA Se-Kecamatan Banguntapan. *UNION: Jurnal Ilmiah Pendidikan Matematika*, 8(1), 53–61. <https://doi.org/10.30738/union.v8i1.5022>
- Meyanti, Admadja, & Pageh. (2021). Kontribusi motivasi belajar, disiplin belajar, dan sikap sosial terhadap hasil belajar ips. *Jurnal Pendidikan IPS Indonesia*, 5(2), 107–116. <https://doi.org/10.23887/pips.v5i2.422>
- Oktarina, K., Suhaimi, S., Santosa, T. A., & ... (2021). Meta-Analysis: The Effectiveness of Using Blended Learning on Multiple Intelligences and Student Character Education During the Covid-19 Period. ... *Journal of Education* ..., 4(3), 184–192. <http://journal.ummat.ac.id/index.php/IJECA/article/view/5505><https://journal.ummat.ac.id/index.php/IJECA/article/download/5505/pdf>
- Palittin, Ivylentine Datu, Wihelmus Wolo, R. P. (2019). Hubungan Motivasi Belajar dengan Hasil Belajar Siswa. *Jurnal Keguruan Dan Ilmu Pendidikan*, 6, 101–109.
- Paloloang, M. F. B., Juandi, D., Tamur, M., Paloloang, B., & Adem, A. M. G. (2020). Meta Analisis: Pengaruh Problem-Based Learning Terhadap Kemampuan Literasi Matematis Siswa Di Indonesia Tujuh Tahun Terakhir Universitas

Pendidikan Indonesia , Bandung , Indonesia Universitas Katolik Indonesia Santu Paulus Ruteng , Indonesia Universitas. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 9(4), 851–864.

- Prananda, G., & Hadiyanto. (2019). Korelasi Antara Motivasi Belajar dengan Hasil Belajar Siswa dalam Pembelajaran IPA di Sekolah Dasar. *Jurnal Basicedu*, 3(3), 909–915.
- Putri Ningrat, S., Tegeh, I. M., & Sumantri, M. (2018). Kontribusi Gaya Belajar Dan Motivasi Belajar Terhadap Hasil Belajar Bahasa Indonesia. *Jurnal Ilmiah Sekolah Dasar*, 2(3), 257. <https://doi.org/10.23887/jisd.v2i3.16140>
- Razak, A., Santosa, T. A., Lufri, & Zulyusri. (2021). Meta-Analisis: Pengaruh HOTS (Higher Order Thinking Skill) terhadap Kemampuan Literasi Sains dan Lesson Study Siswa pada Materi Ekologi dan Lingkungan pada Masa Pandemi Covid-19. *Bioedusiana: Jurnal Pendidikan Biologi*, 6(1), 79–87.
- Retnawati, H., Apino, E., Kartianom, Djidu, H., & Anazifa, R. D. (2018). *Pengantar Analisis Meta (Edisi 1)* (Issue July).
- Rina, H., E., M., & Anung, A. H. (2019). Hubungan Motivasi Dan Kreativitas Guru Dalam Mengajar Dengan Hasil Belajar Mata Pelajaran Pai Di Madrasah Aliyah Negeri 4 Bogor. *Jurnal Teknologi Pendidikan*, 8(2), 235–246.
- Rizqi, A. T., & Sumantri, M. (2019). Hubungan Antara Motivasi Belajar dan Pola Asuh Orang Tua terhadap Hasil Belajar IPA. *Jurnal Imiah Pendidikan Dan Pembelajaran*, 3(2), 145–154.
- Romadhoni, E., Wiharna, O., & Mubarak, I. (2019). Pengaruh Motivasi Belajar Terhadap Hasil Belajar Peserta Didik Pada Mata Pelajaran Gambar Teknik. *Journal of Mechanical Engineering Education*, 6(2), 228–234.
- Rosenthal, R., & DiMatteo, M. R. (2001). Meta-analysis: Recent developments in quantitative methods for literature reviews. *Annual Review of Psychology*, 52, 59–82. <https://doi.org/10.1146/annurev.psych.52.1.59>
- Santosa, T. A., Razak, A., Lufri, L., Zulyusri, Z., Fradila, E., & Arsih, F. (2021). Meta-Analisis: Pengaruh Bahan Ajar Berbasis Pendekatan STEM Pada Pembelajaran Ekologi. *Journal of Digital Learning and Education*, 1(01), 1–9. <https://doi.org/10.52562/jdle.v1i01.24>
- Santosa, T. A., Sepriyani, E. M., Lufri, L., Razak, A., Chatri, M., & Violita, V. (2021). Analisis E-Learning Dalam Pembelajaran Evolusi Mahasiswa Pendidikan Biologi Selama Pandemi Covid-19. *Edumaspul: Jurnal Pendidikan*, 5(1), 66–70. <https://doi.org/10.33487/edumaspul.v5i1.1027>
- SANTOSA, T. A., & YULIANTI, S. (2020). Pengaruh Pemberian Kuis Terhadap Peningkatan Motivasi Belajar Biologi Siswa Di Sma Negeri 7 Kerinci. *Edusaintek: Jurnal Pendidikan, Sains Dan Teknologi*, 7(2), 1–18. <https://doi.org/10.47668/edusaintek.v7i2.58>
- Saputra, H. D., Ismet, F., & Andrizal, A. (2018). Pengaruh Motivasi Terhadap Hasil Belajar Siswa SMK. *INVOTEK: Jurnal Inovasi Vokasional Dan Teknologi*, 18(1), 25–30. <https://doi.org/10.24036/invotek.v18i1.168>
- Surya, E., & Husna, A. (2018). Hubungan sense of humor, kecerdasan emosional dan motivasi berprestasi terhadap hasil belajar matematika siswa kelas x SMK Teladan Kota Batam. *Pythagoras*, 7(1), 68–77. <https://doi.org/10.33373/PYTHAGORAS.V7I1.1190>
- Wijayanti, N., & Widodo, S. A. (2021). Studi Korelasi Motivasi Belajar terhadap Hasil Belajar Matematika Selama Daring. *Journal of Instructional Mathematics*, 2(1), 1–9. <https://doi.org/10.37640/jim.v2i1.849>
- Wiyono, T. (2018). Pengaruh Motivasi Siswa Dan Kreativitas Belajar Terhadap Hasil Belajar Pkn Siswa. *Citizenship Jurnal Pancasila Dan Kewarganegaraan*, 6(2), 90. <https://doi.org/10.25273/citizenship.v6i2.3115>
- Aryanto, Ihsan. “Pelaksanaan Bimbingan Perawatan Rohani Islam (Warois) Untuk Memenuhi Kebutuhan Spiritual Pasien.” *Irsyad: Jurnal Bimbingan, Penyuluhan, Konseling, Dan Psikoterapi Islam* 5, no. 3 (2017): 241–60. <http://jurnal.fdk.uinsgd.ac.id/index.php/irsyad/article/view/890>.
- Cooke, David J. 2008. *Menyikap Dunia Gelap Penjara*. Jakarta: Gramedia Pustaka Utama.
- Daud Ali. 1998. *Pendidikan Agama Islam*. Jakarta: RajaGrafindoPerasada, 1998.
- Fadli. “Pembimbing Rohani Islam,” 2021.
- Hidayati, Nurul. “Metode Bimbingan Rohani Islam Di Rumah Sakit.” *Jurnal Bimbingan Konseling Islam* 5, no. 2 (2014): 207–22.
- Jalaludin. 2004. “Psikologi Agama.” Jakarta: RajaGrafindoPerasada.

Mansur. "Pembimbing Rohani Islam, Lembaga Pemasarakatan," 2021.

Mercellina, Feni, and Muhammad Adil. "Muraja ' Ah Learning Method On Muraja ' Ah Learning Method On Home Tahfizh Quran An-Nuur" *Edukasi Islami: Jurnal Pendidikan Islam* 09, no. 02 (2020): 63–74.

Nata, Abuddin. 2014. *Metodologi Studi Islam*. Jakarta: RajaGrafindoPerasada.

Ni Luh Deliyani, Marlina S. Mahajudin, Sri Adiningsih. "Pengaruh Bimbingan Metode Diskusi Terhadap Perubahan Harga Diri Narapidana Di Lapas Kelas II B Kota Mojokerto." *Jurnal Penelitian* 7, no. 2 (2015): 1–11.

Nur Ikromah, Jihadiah, Nurfika Asmaningrum, and Lantin Sulistiyorini. "Perbedaan Metode Buzz Group Discussion Dengan Ceramah Audiovisual Terhadap Tingkat Pendidikan Warga Binaan Tentang HIV / AIDS Di Lembaga Pemasarakatan Kelas IIA Kabupaten Jember." *E-Journal Pustaka Kesehatan* 3, no. 1 (2015): 82–88.

Yusrin. "Pembimbing Rohani Islam Lembaga Permasarakatan," Wawancara, pada tanggal 5 September 2021 .

Zaidan, Ali. 2016. *Kebijakan Kriminal*. Jakarta: Sinar Grafika,