Qalamuna - Jurnal Pendidikan, Sosial, dan Agama | Vol. 14 No. 1 (2022)
471-482

ANALYSIS OF CRITICAL THINKING ABILITY, MOTIVATION AND ACHIEVEMENT OF STUDENTS IN THE DEPARTMENT OF ISLAMIC RELIGIOUS EDUCATION

Muhammad Fahrurrozi [1], Nurul Yakin [1]
[1] Universitas Islam Negeri Mataram, Indonesia
**Corresponding Address*: *fahrurrozi.ntb@gmail.com*

Received: 30 March 2022 | Approved: 19 May 2022 | Published: 29 June 2022

Abstract: The quality of education in Indonesia still needs improvement, especially for educators to improve critical thinking skills and problem solving. The role of education is synonymous with the quality of human resources (HR) in society. To form human resources that have good quality, Indonesia needs to improve the concept of education because good education will also form good human resources. This study aims to determine (1) critical thinking skills, (2) learning motivation, and (3) student learning outcomes majoring in Islamic Religious Education at the State Islamic University of Mataram. This research is a type of quantitative research. Sampling was conducted on 40 students, consisting of 20 male and 20 female students in Islamic religious education courses. Research data collection techniques are divided into two types: data in the form of critical thinking skills and learning outcomes are obtained using test question instruments. In contrast, research data on learning motivation is obtained using non-test instruments in the form of questionnaires. All the data obtained in the research was then analyzed descriptively, and a comprehensive description of the data obtained in the research was provided. The results of the study show that (1) the critical thinking skills of students in Islamic religious education courses are in the moderately critical category but have different averages between male and female students; (2) the learning motivation of students in Islamic religious education courses is equally in the high category but has different averages between male and female students; and (3) the learning outcomes of Islamic religious education students are in the very good category for college students and good for female students.

Keywords: Critical thinking, Learning Motivation, Learning Outcomes

INTRODUCTION

Higher education is one of the important pillars in the development of a nation that is capable of becoming a moral force in the formation of character and human resources that are responsive to the needs of society. Education in Indonesia is generally more focused on mechanical learning, such as the ability to repeat and store information provided in books than on deep thinking skills, which are rarely provided. Educators are encouraged to provide 21st century learning, including educating students to become critical thinkers and problem solvers as well as creative, innovative, communicative, and collaborative (Rizaldi et al., 2020; ŽivkoviĿ, 2016).

Critical thinking is an ability that students must possess to face the challenges of the 21st century (Vieira & Tenreiro-Vieira, 2016). Students who have critical thinking skills will be more effective in solving problems (Saputra et al., 2019). According to the data obtained, Indonesia has students with very low critical thinking skills (Saputri et al., 2018). Students' critical thinking was still low, as seen from the symptoms of problems that dominated the results of observations during the learning process in class (Saputra et al., 2019). The symptoms of the problem in question include: (1) it is difficult to answer high-level questions (C4-C6); (2) many of them have difficulty connecting concepts and problems; and (3) some of them have difficulty expressing their opinions during the discussion. In addition, some students were passive when working on group assignments, students were not proactive in raising problems in learning, and only a few students were involved in answering the problems raised (Basri et al., 2019). As a result, students have not been able to provide solutions to the problems found. Critical thinking needs to be one of the important studies in learning developed by the demands of the 21st century, along with three other indicators: creative thinking, communicating, and working together. Therefore, a lot of research makes critical thinking a research variable that is observed and applied using various learning models adapted to the characteristics of the material being taught.

One of the parameters used to measure the level of educational success is student achievement (Goddard et al., 2015). Communities, students, and teachers, in particular, desire high levels of learning achievement (Rubie-Davies et al., 2010; Yustiqvar et al., 2019). Good learning achievement must be accompanied by good-quality education to form good human resources (Sudarsana, 2015). When students achieve well, an education is said to be of high quality. However, based on the data, Indonesian students do not have good learning achievements in practice. This is because the learning process does not lead to critical thinking skills, so many students experience difficulties in participating in learning, which ultimately has an impact on the low learning achievement achieved. To measure the achievement of students' critical thinking skills, researchers can ultimately refer to

students' achievements in terms of the learning outcomes obtained. However, sometimes the learning outcomes produced by students can be influenced by the student's motivation, so apart from paying attention to students' thinking abilities, educators also need to pay attention to students' level of motivation to participate in learning.

Learning motivation can affect the learning achievement achieved by students. In line with Zheng's statement, which states that motivation is a factor that influences learning achievement, students will be more enthusiastic, hardworking, and diligent in their learning as a result of their own motivation (Zheng et al., 2020). Motivation is a driving force or enthusiasm for learning that can move students to be enthusiastic about learning. Students' motivation to learn needs to be encouraged so that they can generate enthusiasm for learning. Several opinions explain that optimal learning motivation will increase learning achievement. Many previous researchers have described how important motivation is in forming students' abilities or skills so that they impact learning outcomes. Based on the problem described above, this research aims to describe the relationship between critical thinking skills, motivation, and learning outcomes for students in the Department of Islamic Religious Education at Mataram State Islamic University.

METHODS

The type of research used is quantitative descriptive research. Descriptive research describes the characteristics of the population or phenomenon being studied (Siyoto & Sodik, 2015). This research was carried out in January 2022 at Mataram State Islamic University, specifically the Islamic Religious Education study program. The samples taken in this study were 40 students (20 male students and 20 female students) from the Islamic Religious Education Study Program semester 3. The variables in this study include critical thinking skills, learning motivation, and student learning outcomes of the Islamic Religious Education Study Program at Mataram State Islamic University.

Research data collection techniques are divided into two types: data in the form of critical thinking skills and learning outcomes is obtained using test question instruments, while research data in the form of learning motivation is obtained using non-test instruments in the form of questionnaires. Of course, the instruments developed are based on each indicator of the research variables used: critical thinking skills, learning motivation, and student learning outcomes. All the data obtained in the research was then analyzed descriptively, and a comprehensive description of the data obtained in the research was provided. The data described is in the form of average values and percentage results using the following equation:

1. Calculating Average

$$\bar{x} = \frac{\text{JN}}{\text{BN}}$$

2. Value Percentage

$$\% = \frac{\text{JS}}{\text{BS}}\ x\ 100\%$$

Information:

$\bar{x}$ = Average Value

JN = Number of Value

BN = Lots of Value

JS = Number of samples according to category

BS = Total sample size in the study

RESULTS AND DISCUSSIONS

Result

The research results are the percentages of critical thinking skills, learning motivation, and student learning outcomes. The percentage of critical thinking skills of 40 students (20 male students and 20 female students) in the Islamic Religious Education Study Program at Mataram State Islamic University can be seen in Table 1.

Table 1. Percentage of Students' Critical Thinking Ability

No.	Category	Male Student		Female Student	
		Amount	%	Amount	%
1	Very Uncritical	3	15	1	5
2	Less Critical	4	20	8	40
3	Pretty Critical	6	30	7	35
4	Critical	5	25	4	20
5	Very Critical	2	10	0	0

Table 2. Average Critical Thinking Results in Islamic Religious Education Courses

	Average	Category
Male Student	67.10	Pretty Critical
Female Student	64.70	Pretty Critical

Based on the data obtained, it is known that as many as 2 people are included in the very critical category, 5 people are included in the critical category, 6 people are pretty critical, 4 people are included in the less critical category, and 3 other people are in the very uncritical category for male students data. For student data, 4 people are in the critical category, seven are critical, eight are less critical, and one is uncritical for female students. They obtained average results of learning motivation for students of 67.1% for males and 64.7% for females.

The percentage of learning motivation of 40 students (20 male students and 20 female students) in the Islamic Religious Education Study Program at Mataram State Islamic University can be seen in Table 3.

Table 3. Shows The Percentage of Students Who Are Motivated to Learn

No.	Category	Male Student		Female Student	
		Amount	%	Amount	%
1	Very high	8	40	6	30
2	High	6	30	9	45
3	Currently	6	30	5	25
4	Low	0	0	0	0
5	Very low	0	0	0	0

Table 4. Shows The Average Results of Learning Motivation for Islamic Religious Education Subjects

	Average	Category
Male Student	77.75	High
Female Student	79.20	High

Based on the data obtained from Table 3, 8 people were included in the category of having very high learning motivation, six were in the low category, and 6 were included in the medium category for students. Not much different from female students, 6 people are in the very high category, 9 people are in the high category, and 5 others are in the medium category. They obtained an average percentage of learning motivation for students as high as 77.75% for male students and 79.20% for female students.

The percentage of learning outcomes for 40 students (20 male students and 20 female students) in the Islamic Religious Education Study Program course can be seen in Table 5.

Table 5. Percentage of Student Learning Outcomes

No.	Category	Male Student		Female Student	
		Amount	%	Amount	%
1	Very less	0	0	0	0
2	Not enough	0	0	0	0
3	Enough	0	0	4	20
4	Well	8	40	8	40
5	Very good	12	60	8	40

Table 6. Average Student Learning Outcomes in Islamic Religious Education Courses

	Average (%)	Category
Male Student	90.55	Very good
Female Student	86.50	Well

Based on the data obtained, it is known that there were 20 students and 20 female students; it can be seen that as many as 12 people were included in the very good category, and eight others were included in the good category for male students. Whereas for female students, eight were in the very good category, eight were in the well category, and five others were in the enough category. The average percentage of learning outcomes for PAI courses is 90.55% for male students in the very good category and 86.50% for female students in the good category.

Discussion

Critical Thinking Ability

In this study, the ability to think critically can be identified based on the critical thinking category. At the same time, the average critical thinking ability of students can be seen in Table 2. It is known that the average results of critical thinking among male and female students are included in the moderately critical category, namely 67.1% for male students and 64.7% for female students in Religious Education Courses on Islam. This means that male critical thinking skills are higher than female students. Critical thinking skills can influence students' approaches to solving problems. Female students are less able to solve problems that require an explanation of concepts and analysis (Ramdani et al., 2021). Students must have this critical thinking ability, which can be used as an important capital in learning something, especially complicated material that requires time in the problem solving process (Rizaldi et al., 2019). The data shows that the number of students who think critically and students who are less critical or very uncritically have the same average number. Continuous training is needed to optimize students' mental abilities such as critical thinking, solving problems, making decisions, and conducting scientific research (Sanderayanti, 2015). Given that

students' critical thinking skills greatly affect their ability to analyze, compare, conclude, and evaluate various problems.

Efforts that can be made to improve student's critical thinking skills include applying problem-based learning methods with the aim that concepts in the form of memorization can be easily understood, developed, and compared by observing a phenomenon that occurs. This method allows students to study problems systematically, design organized thinking concepts, and conclude appropriate actions or solutions. Mairisiska also explained that critical thinking skills help students understand concepts, apply concepts, and be more sensitive to problems (Mairisiska et al., 2014). According to Fakhriyah, by applying the problem-based learning model, students' critical thinking skills can develop because critical thinking skills it is observed that students can identify, analyze, solve problems, think logically, make correct decisions, and draw conclusions (Fakhriyah, 2014). According to Youllanda et al., in their research, a positive relationship was obtained between critical thinking skills and student learning outcomes using the high-category inquiry learning model (Youllanda et al., 2020). Several previous research results certainly illustrate a positive influence on students' critical thinking abilities in participating in the teaching and learning process, which is not only limited to the tertiary level but also at the primary and secondary school levels. However, in research, there is an interesting thing where male students have average grades compared to female students. This rarely happens in a learning process. This condition certainly gives us an illustration that critical thinking skills are not only inherent and possessed by female students but also by male students. This condition is supported because men tend to think more deeply and critically when examining a problem they are experiencing.

Learning Motivation

The results from Table 4 show that students' curiosity is very high, considering the importance of growing motivation to learn for students, which will be a factor in causing the desire to learn and in obtaining good learning outcomes. High learning motivation will directly influence learning awareness, learning processes, and final results. Awareness of the importance of learning can encourage student progress in absorbing the knowledge and information provided, building a healthy learning system, and improving the quality of students both actively, creatively, effectively, and innovatively (Uno, 2007). Motivation can be the initial capital that determines success in the learning process. High motivation certainly makes students more interested and enthusiastic in receiving, responding to, and solving various problems being faced.

Strategies are needed in systems, concepts, and learning methods to increase students' learning motivation (Rizaldi & Fatimah, 2020). In addition to appropriate learning methods, media can

increase student enthusiasm (Ramdani et al., 2021). Given that Islamic religious education is not only theory but also the practice of the material studied in everyday life. The role of the teacher is also very important in motivating students to be more active, creative, and critical. Considering that motivation is a psychological condition, the mental urge to move and create an active learning atmosphere is necessary so that students are driven independently, through learning activities, to understand science and practice it in everyday life.

According to the theory of educational psychology, several factors affect students learning motivation, one of which is the existence of a stimulus. Stimulation is a change in perception or experience with the environment that makes a person active (Rifa'i, 2017). Stimulation directly helps meet the needs of students. If students do not pay attention to the learning process, there will be very little learning among students. In addition, learning that was not interesting resulted in students who were initially eager to learn becoming bored with being involved in learning. According to Hidayatullah, based on his research, there is a positive correlation between motivation and learning outcomes. The higher the students' motivation, the better the learning outcomes (Hidayatullah, 2021). Meanwhile, Sopiyani & Wirdati, in their research, found that there was a significant influence between learning motivation and the learning outcomes of students' religious education (Sopiani & Wirdati, 2021). Thus, it is hoped that teachers will always try to increase student learning motivation. Teachers can help students by increasing motivation to improve so that students have high learning motivation and achievement in learning outcomes becomes optimal.

Learning Outcomes

Learning outcomes are the final results obtained after completing the learning process. They are the reference for the student to determine whether he has succeeded in understanding the material that has been delivered or not (Fimansyah, 2015). In addition, learning motivation also influences student learning outcomes; this is McClelland's opinion in Sanderayanti that motivation has an important role in achieving high achievement, struggling to achieve orientation, and good learning outcomes (Sanderayanti, 2015). The other factors that can affect learning outcomes are internal and external. Internal factors include physical, psychological, and fatigue (Izza et al., 2022). At the same time, external factors include environmental factors, family, school, teaching methods, facilities, and infrastructure (Slameto, 2010).

Based on Table 6, it is known that there are differences in categories between male and female student learning outcomes. This can happen because the level of understanding of each individual is different. In addition, students with good metacognitive skills will perform better than students with low metacognitive skills. Differences in characteristics between male and female students, such as

men's attitudes being more logically aggressive and superior, while women's attitudes being more emotionally obedient and superior in verbal abilities, may influence their mindset, resulting in differences in metacognitive skills and learning outcomes, given the form of the test, which was given in the form of a written test. The results also show that factors such as gender influence the improvement rate of male and female students learning outcomes (Brooks et al., 2014). The learning outcomes of male students are higher than those of female students, in line with the critical thinking skills in the previous explanation, where there is a positive relationship between critical thinking skills and student learning outcomes. This is different from the perspective of learning motivation, where female students with higher motivation should have higher learning outcomes. This difference is certainly explained by the fact that critical thinking skills tend to be used to process things that are academic or related to the material being studied while learning motivation tends to play a role in a person's level of liking but does not necessarily influence a person's way of thinking in a higher direction or critical.

CONCLUSION

From the analysis of the existing data, it can be concluded that the learning motivation and outcomes of Islamic education students are good, which is a sign that the Islamic education teaching and learning process is good. However, the data on students' critical thinking skills is still standard, so lecturers must create a teaching and learning process to stimulate students' critical thinking skills. The achievement of good learning outcomes is highly correlated with students' motivation and critical thinking skills, so to achieve these conditions, it is necessary to create learning conditions for Islamic religious education that are by the demands of meaningful learning. The results of this research can certainly be a reference, especially for teachers or educators, in maximizing various factors that can influence the quality of learning: critical thinking skills and learning motivation. These two factors are global requirements in efforts to produce competent human resources who can compete widely nationally and internationally.

REFERENCES

Basri, H., Purwanto, P., As'ari, A. R., & Sisworo, S. (2019). Investigating Critical Thinking Skill of Junior High School in Solving Mathematical Problems. *International Journal of Instruction, 12*(3), 745–758.

Brooks, S., Dobbins, K., Scott, J. J. A., Rawlinson, M., & Norman, R. I. (2014). Learning about learning outcomes: The student perspective. *Teaching in Higher Education*, *19*(6), 721–733.

https://doi.org/10.1080/13562517.2014.901964

Fakhriyah, F. (2014). Penerapan Problem Based Learning Dalam Upaya Mengembangkan Kemampuan Berpikir Kritis Mahasiswa. *Jurnal Pendidikan IPA Indonesia*, *3*(1), 95–101. https://doi.org/10.15294/jpii.v3i1.2906

Fimansyah, D. (2015). Pengaruh Strategi Pembelajaran dan Minat Belajar terhadap Hasil Belajar Matematika. *Jurnal Pendidikan UNSIKA*, *3*(1), 32–44. https://doi.org/10.35706/judika.v3i1.199

Goddard, Y., Goddard, R., & Kim, M. (2015). School Instructional Climate and Student Achievement: An Examination of Group Norms for Differentiated Instruction. *American Journal of Education*, *122*(1), 111–131. https://doi.org/10.1086/683293

Hidayatullah, A. (2021). Pengaruh Motivasi Belajar Dan Manajemen Kelas terhadap Hasil Belajar Siswa. *EDUKATIF : JURNAL ILMU PENDIDIKAN*, *3*(4), 1451–1459. https://doi.org/10.31004/edukatif.v3i4.620

Izza, F. N., Rizaldi, D. R., Fahrurrozi, M., Nilwan, N., & Zaini, M. (2022). Students' Discipline Behavior from The Ethics of Learning in The Class. *Journal of Psychological Perspective*, *4*(2), 59–64. https://doi.org/10.47679/jopp.424052022

Mairisiska, T., Sutrisno, S., & Asrial, A. (2014). Pengembangan Perangkat Pembelajaran Berbasis TPACK pada Materi Sifat Koligatif Larutan untuk Meningkatkan Keterampilan Berpikir Kritis Siswa. *Edu-Sains: Jurnal Pendidikan Matematika Dan Ilmu Pengetahuan Alam*, *3*(1). https://doi.org/10.22437/jmpmipa.v3i1.1764

Ramdani, A., Jufri, A. W., Gunawan, G., Fahrurrozi, M., & Yustiqvar, M. (2021). Analysis of Students' Critical Thinking Skills in terms of Gender Using Science Teaching Materials Based on The 5E Learning Cycle Integrated with Local Wisdom. *Jurnal Pendidikan IPA Indonesia*, *10*(2), 187–199. https://doi.org/10.15294/jpii.v10i2.29956

Rifa'i, A. (2017). *Psikologi Pendidikan*. Unnes Press.

Rizaldi, D. R., & Fatimah, Z. (2020). How the Distance Learning can be a Solution during the Covid-19 Pandemic. *International Journal of Asian Education*, *1*(3), 117–124. https://doi.org/10.46966/ijae.v1i3.42

Rizaldi, D. R., Makhrus, Muh., & Doyan, A. (2019). Analisis Tingkat Kemampuan Berpikir Kritis Dengan Model Perubahan Konseptual Ditinjau Dari Gaya Belajar Siswa. *Jurnal Pendidikan Fisika dan Teknologi*, *5*(1), 74–81. https://doi.org/10.29303/jpft.v5i1.794

Rizaldi, D. R., Nurhayati, E., & Fatimah, Z. (2020). The Correlation of Digital Literation and STEM Integration to Improve Indonesian Students' Skills in 21st Century. *International Journal of Asian Education, 1*(2), 73–80. https://doi.org/10.46966/ijae.v1i2.36

Rubie-Davies, C. M., Peterson, E., Irving, E., Widdowson, D., & Dixon, R. (2010). Expectations of Achievement: Student Teacher and Parent Perceptions. *Research in Education*, *83*(1), 36–53. https://doi.org/10.7227/RIE.83.4

Sanderayanti, D. (2015). PENGARUH MOTIVASI BERPRESTASI DAN KEMAMPUAN BERPIKIR KRITIS TERHADAP HASIL BELAJAR MATEMATIKA SISWA DI SDN KOTA DEPOK. *Jurnal Pendidikan Dasar*, *6*(2), 222–231.

Saputra, M. D., Joyoatmojo, S., Wardani, D. K., & Sangka, K. B. (2019). Developing Critical-Thinking Skills through the Collaboration of Jigsaw Model with Problem-Based Learning Model. *International Journal of Instruction*, *12*(1), 1070–1094.

Saputri, A. C., Sajidan, & Rinanto, Y. (2018). Critical thinking skills profile of senior high school students in Biology learning. *Journal of Physics: Conference Series*, *1006*, 012002. https://doi.org/10.1088/1742-6596/1006/1/012002

Siyoto, S., & Sodik, M. A. (2015). *Dasar Metodologi Penelitian*. Literasi Media Publishing.

Slameto, S. (2010). *Belajar dan Faktor-Faktor yang Mempengaruhi*. Rineka Cipta.

Sopiani, M., & Wirdati, W. (2021). Pengaruh Motivasi terhadap Hasil Belajar Pendidikan Agama Islam Siswa di Sekolah Menengah Atas. *An-Nuha*, *1*(4), 598–608. https://doi.org/10.24036/annuha.v1i4.115

Sudarsana, I. K. (2015). PENINGKATAN MUTU PENDIDIKAN LUAR SEKOLAH DALAM UPAYA PEMBANGUNAN SUMBER DAYA MANUSIA. *Jurnal Penjaminan Mutu*, *1*(1), 1–18.

Uno, H. B. (2007). *Teori motivasi & pengukurannya*. Bumi Aksara. http://139.0.27.91/detail?id=28288&lokasi=lokal

Vieira, R. M., & Tenreiro-Vieira, C. (2016). Fostering Scientific Literacy and Critical Thinking in Elementary Science Education. *International Journal of Science and Mathematics Education*, *14*(4), 659–680. https://doi.org/10.1007/s10763-014-9605-2

Youllanda, W., Medriati, R., & Swistoro, E. (2020). HUBUNGAN ANTARA KEMAMPUAN BERPIKIR KRITIS DENGAN HASIL BELAJAR MELALUI MODEL INKUIRI TERBIMBING. *Jurnal Kumparan Fisika*, *3*(3), 191–198. https://doi.org/10.33369/jkf.3.3.191-198

Yustiqvar, M., Hadisaputra, S., & Gunawan. (2019). ANALISIS PENGUASAAN KONSEP SISWA YANG BELAJAR KIMIA MENGGUNAKAN MULTIMEDIA INTERAKTIF BERBASIS GREEN CHEMISTR. *Jurnal PIJAR MIPA*, *14*(3), 135–140. https://doi.org/DOI: 10.29303/jpm.v14i3.1299

Zheng, L., Bhagat, K. K., Zhen, Y., & Zhang, X. (2020). *The Effectiveness of the Flipped Classroom*

on Students' Learning Achievement and Learning Motivation. *23*(1), 1–15.

ŽivkoviĿ, S. (2016). A Model of Critical Thinking as an Important Attribute for Success in the 21st Century. *Procedia - Social and Behavioral Sciences*, *232*, 102–108. https://doi.org/10.1016/j.sbspro.2016.10.034