

Elevating Motivation and Engagement of Students In Islamic Education: A Meta-Analysis on The Use of Interactive Learning Approaches

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Abstract

Teaching Islamic Education using traditional lecture-based methods is often perceived as monotonous by many students. Consequently, educators are encouraged to adopt innovative instructional strategies, one of which is interactive learning. This study aimed to assess the impact of interactive learning methods on students' motivation and engagement in Islamic Education at the elementary and secondary school levels through a meta-analytical approach. A total of four studies on learning motivation and eight studies on learning activity were compiled into a meta-database. These studies directly compared the effects of the lecturing method with the interactive method in the context of Islamic Education. The odds ratio (OR) was employed as the effect size to synthesize data from various studies. The findings demonstrated that the interactive learning method significantly improved students' motivation compared to the lecturing method (OR 3.67 [2.02-6.68], P<0.001). Additionally, the interactive learning method significantly enhanced students' engagement in learning activities at both elementary and secondary school levels compared to the lecturing method (OR 3.07 [2.01-4.68], P<0.001). In conclusion, the interactive learning method is an effective approach to boost students' motivation and engagement in studying Islamic Education.

Keywords: Activity, Interactive Learning, Motivation

1. Introduction

In Indonesia, Islamic Education (ISE) is a compulsory subject for all Muslim citizens, regardless of their primary field of study, encompassing not only religious studies but also disciplines such as natural sciences, social sciences, engineering, and others. ISE is taught at various educational levels, including elementary school (Sekolah Dasar, SD), secondary school (Sekolah Menengah Pertama, SMP), high school (Sekolah Menengah Atas, SMA), and undergraduate programs at universities. The primary objective of teaching ISE is to prepare students to recognize, understand, appreciate, believe in, and practice Islamic teachings derived from the Qur'an and Hadith. This is achieved through a combination of guidance, instruction, training, and experiential learning. Traditionally, the teaching of ISE across educational institutions has relied heavily on the lecture method (Zaenuri, 2019). In this approach, ISE instructors primarily deliver content orally, with students expected to listen attentively and take notes on key points (Maurin and Muhamadi, 2018). The lecture method offers several advantages, including ease of classroom management, suitability for large groups, straightforward preparation, and effectiveness in conveying complex topics. Consequently, it remains a prevalent teaching strategy in ISE classrooms. However, the lecture method also presents several drawbacks, such as its teacher-centered nature, challenges in assessing students' comprehension, potential for misinterpretation, and a tendency to stifle students' creativity (Tambak, 2014). These limitations highlight the need for enhancements in teaching methods to improve students' understanding. To continuously improve the effectiveness of ISE instruction and achieve educational objectives, it is essential to address the limitations of the conventional lecture method. Innovations in teaching methods are necessary to overcome these challenges. Several alternative instructional strategies could serve as viable replacements for the lecture method, including question-and-answer sessions, discussions, demonstrations, experiments, recitations, group work, role-playing, field trips, drills, discovery learning, team teaching, problemsolving, project-based learning, moral reasoning, mind mapping, and quantum learning methods (Nasih and Kholidah, 2013). This study aimed to assess the impact of interactive learning methods on students' motivation and engagement in ISE by employing a meta-analysis approach.

2. Methodology

This study employed a meta-analysis methodology, which is a quantitative research approach (Cohen et al., 2018; Privitera and Ahlgrim-Delzell, 2019). The research process was structured into the following stages: (1) problem



formulation, (2) literature search and selection, (3) database development, (4) determination and integration of the effect size, and (5) analysis of publication bias. The research problem was formulated using the PICO (Population, Intervention, Comparison, Outcome) framework. The population comprised students in primary and secondary education in Indonesia who were studying Islamic Education (ISE). The intervention under consideration was the interactive learning method, while the comparison was made against the conventional lecturing method. The outcomes evaluated were students' learning motivation and engagement in learning activities. For the literature search, the Google Scholar platform was utilized with keywords such as "learning method," "Islamic education," "learning motivation," and "learning activity." Articles retrieved through this search were then screened based on the following inclusion criteria: (1) the study focused on primary and secondary education students in Indonesia, (2) a direct comparison between the interactive learning method and the conventional lecturing method was made, (3) the dependent variables measured included learning motivation and/or learning activity, and (4) the subject matter was specific to ISE.

The selected studies were compiled into a database, which included the sample sizes and percentage values for both the conventional and interactive learning methods. The response variables examined were learning motivation and learning activity. The effect size, represented by the odds ratio (OR), was used to synthesize data from the various studies (Koricheva et al., 2013). After calculating the OR for each study, the cumulative effect size was determined through an integration process using a fixed-effects model. The synthesized results were visualized through forest plots, as recommended by Gurevitch et al. (2018). To assess publication bias, funnel plots and statistical tests such as Egger's and Begg's tests were employed (Thornton and Lee, 2000; Lin and Chu, 2018). Analyzing publication bias is essential in meta-analytic research as it can influence the validity and generalizability of the study's findings.

3. Results and Discussion

Eight studies explored the impact of interactive learning methods on students' motivation and engagement in studying Islamic Education (Table 1). These studies employed various interactive techniques, including make-a-match, card sort, mind mapping, cooperative script, teams games tournament, learning cell, and questions students have.

Table 1: Literatures used in the meta-database.

| Study | Literature | Interactive Learning | Learning Variable | | |
|-------|---------------------|-------------------------|-------------------|-----------|--|
| No. | | Туре | Motivation | Activity | |
| | | | | | |
| 1 | Dede (2020) | Make a match | _ | $\sqrt{}$ | |
| 2 | Febriany (2019) | Card sort | _ | $\sqrt{}$ | |
| 3 | Khofiyah (2020) | Make a match | | _ | |
| 4 | Mulyani (2020) | Mind mapping | _ | $\sqrt{}$ | |
| 5 | Mustaqhfirin (2021) | Cooperative script | _ | $\sqrt{}$ | |
| 6 | Najamudin (2020) | Teams games tournament | _ | $\sqrt{}$ | |
| 7 | Sentika (2019) | Learning cell | _ | | |
| 8 | Zasti (2016) | Questions students have | V | _ | |

The interactive learning method demonstrated a significant improvement in students' learning motivation compared to the traditional lecturing method (OR 3.67 [2.02-6.68], P<0.001; Figure 1). Additionally, this method markedly enhanced the learning activity of elementary and secondary school students when compared to the lecturing approach (OR 3.07 [2.01-4.68], P<0.001; Figure 2).



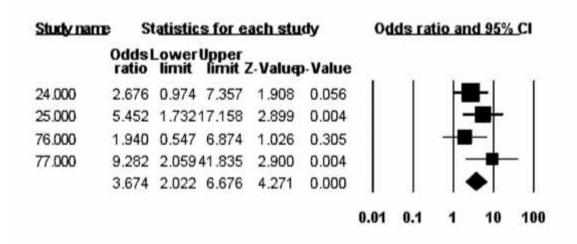


Figure 1: Meta-analysis result regarding the effect of interactive learning method on learning motivation of students to study the Islamic Education subject.

| Study name | Statistics for each study | | | | Q | Odds ratio and 95% Cl | | | CI | |
|------------|---------------------------|----------------|--------|----------|--------|-----------------------|-----|----|----------|-----|
| | Odds ratio | Lower limit | | Z-Valuep | -Value | | | | | |
| 13.000 | 8.094 | 1.868 | 35.071 | 2.795 | 0.005 | - 1 | 1 | 1- | - | - 1 |
| 16.000 | 1.260 | 0.490 | 3.239 | 0.480 | 0.631 | | | # | | |
| 17.000 | 4.542 | 1.413 | 14.595 | 2.541 | 0.011 | | - 1 | - | | - 1 |
| 33.000 | 1.931 | 0.393 | 9.502 | 0.810 | 0.418 | | Ç4 | - | \dashv | - 1 |
| 36.000 | 1.600 | 0.531 | 4.820 | 0.835 | 0.404 | | | - | - | |
| 37.000 | 7.020 | 2.093 | 23.542 | 3.156 | 0.002 | | - 1 | - | • | |
| 11.000 | 6.000 | 1.482 | 24.299 | 2.511 | 0.012 | | - 1 | - | - | |
| 57.000 | 3.318 | 1.134 | 9.707 | 2.189 | 0.029 | | - 1 | - | Н | |
| | 3.068 | 2.010 | 4.681 | 5.198 | 0.000 | | | 4 | • | |

Figure 2: Meta-analysis result regarding the effect of interactive learning method on learning activity of students to study the Islamic Education subject.

Funnel plots for the variables of learning motivation and learning activity are displayed in Figure 3 and Figure 4, respectively. Both plots exhibited symmetry, suggesting that there was no evidence of publication bias for the variables examined. This finding was further corroborated by the results of the Egger and Begg tests, both of which produced P-values greater than 0.05, confirming the absence of publication bias in this study.



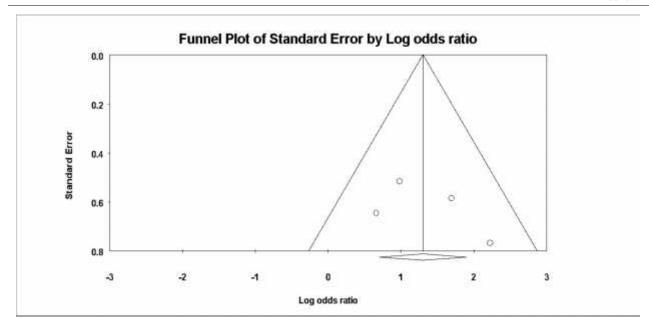


Figure 3: Funnel plot for the learning motivation variable.

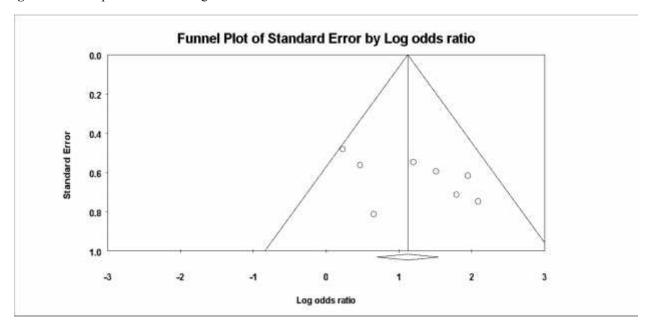


Figure 4: Funnel plot for the learning activity variable.

The interactive learning method is a dynamic and communicative approach where students actively engage in the learning process, reflecting on their knowledge and thought processes (Giorgdze and Dgebuadze, 2017). Unlike conventional or traditional teaching methods, which are typically teacher-centered with students passively receiving information, interactive learning places students at the center of the educational experience. In this model, the teacher's role shifts to that of a facilitator, guiding and assisting students as they navigate the learning process. While there are similarities between active and interactive learning, the key distinction lies in the level of interaction. Active learning emphasizes a closer relationship between students and the teacher, making students more involved in the process. In contrast, interactive learning extends this engagement to include interactions not only between students and the teacher but also among the students themselves. Compared to the conventional lecturing method, the interactive learning method appears to significantly boost students' motivation to engage with Islamic Education (ISE). Motivation, defined as the internal drive that prompts individuals to undertake activities to achieve specific goals (Emda, 2017), is crucial for effective learning outcomes. It plays a vital role in educational activities across all levels, from elementary to higher education, and is closely tied to the goals students aim to achieve. The more ambitious the learning objectives, the stronger the motivation becomes, and in turn, the greater the motivation, the more robust the learning activities (Masni,



2015). Therefore, it is not surprising that the interactive learning method, beyond enhancing students' motivation, also effectively increases their engagement in learning activities related to ISE.

Conclusions

The interactive learning method is a highly effective strategy for enhancing both the motivation and engagement of students in Islamic Education. As such, it is strongly recommended that ISE teachers across all educational levels integrate this approach into their classroom practices. In situations where the conventional lecturing method must be used due to certain constraints, it should ideally be combined with interactive strategies to maximize student engagement and learning outcomes.

References

- Cohen, L., Manion, L., & Morrison, K. (2018). Research Methods in Education. 8th Edition. Routledge, Taylor & Francis Group, New York, USA.
- Dede. (2020). Penerapan metode pembelajaran kooperatif tipe make a match untuk meningkatkan keaktifan dan hasil belajar Pendidikan Agama Islam. Ghaitsa: Islamic Education Journal, 1 (3), 260-270.
- Emda, A. (2017). Kedudukan motivasi belajar siswa dalam pembelajaran. Lantanida Journal, 5 (2), 172-182.
- Febriany, D. (2019). Penerapan metode pembelajaran card sort dalam meningkatkan hasil belajar PAI siswa kelas V di SD Negeri 74 kota Bengkulu. Fakultas Tarbiyah dan Tadris, Institut Agama Islam Negeri Bengkulu.
- Giorgdze, M., & Dgebuadze, M. (2017). Interactive learning methods: Challenges and perspectives. International E-journal of Advances in Education, 3 (9), 544-548.
- Gurevitch, J., Koricheva, J., Nakagawa, S., & Stewart, G. (2018). Meta-analysis and the science of research synthesis. Nature, 555 (7695), 175-182.
- Khofiyah, S. (2020). Peningkatan motivasi belajar PAI melalui model make a match: Studi terhadap siswa SMPN 01 Kesesi, Pekalongan, Jawa Tengah. Jurnal Pendidikan Agama Islam, 17 (1), 81-98.
- Koricheva, J., Gurevitch, J., & Mengersen, K. (2013). Handbook of Meta-analysis in Ecology and Evolution. Princeton University Press, New Jersey, USA.
- Lin, L., & Chu, H. (2018). Quantifying publication bias in meta-analysis. Biometrics, 74 (3), 785-794.
- Masni, H. (2015). Strategi meningkatkan motivasi belajar mahasiswa. Jurnal Ilmiah Dikdaya, 5 (1), 34-45.
- Maurin, H., & Muhamadi, S.I. (2018). Metode ceramah plus diskusi dan tugas untuk meningkatkan aktivitas belajar siswa. Al-Aulad: Journal of Islamic Primary Education, 1 (2), 65-76.
- Mulyani, N. (2020). Meningkatkan aktivitas belajar peserta didik pada mata pelajaran PAI dan Budi Pekerti melalui pembelajaran kooperatif model mind mapping dalam bentuk peta konsep kreatif di SMP Negeri 1 Pemenang. Jurnal Paedagogy: Jurnal Penelitian dan Pengembangan Pendidikan, 7 (3), 244-251.
- Mustaqhfirin. (2021). Strategi peningkatan keaktifan dan hasil belajar PAI siswa kelas VII D SMP Negeri 2 Penawangan melalui model pembelajaran cooperative script. Secondary: Jurnal Inovasi Pendidikan Menengah, 1 (1), 24-37.
- Najamudin. (2020). Meningkatkan aktivitas dan hasil belajar PAI dengan menggunakan metode pembelajaran teams games tournament (TGT) siswa kelas VII A SMP Negeri 1 Woha semester ganjil tahun pelajaran 2018/2019. Jupe: Jurnal Pendidikan Mandala, 5 (6), 110-116.
- Nasih, A.M., & Kholidah, L.N. (2013). Metode dan Teknik Pembelajaran Pendidikan Agama Islam. Cetakan Kedua. Penerbit Refika Aditama, Bandung.
- Privitera, G.J., & Ahlgrim-Delzell, L. (2019). Research Methods for Education. SAGE Publications, Inc., California, USA
- Sentika, E. (2019). Penerapan metode pembelajaran the learning cell dapat meningkatan hasil belajar PAI siswa kelas VIII A di SMPN 14 Seluma. Skripsi. Fakultas Tarbiyah dan Tadris, Institut Agama Islam Negeri Bengkulu.
- Tambak, S. (2014). Metode ceramah: Konsep dan aplikasi dalam pembelajaran Pendidikan Agama Islam. Jurnal Tarbiyah, 21 (2), 375-401.
- Thornton, A., & Lee, P. (2000). Publication bias in meta-analysis: Its causes and consequences. Journal of Clinical Epidemiology, 53, 207-216.
- Zaenuri, A. (2019). Pendidikan dalam Al-Qur'an (konsep metode pendidikan dalam perspektif Al-Qur'an). Al-Ghazali: Jurnal Kajian Pendidikan Islam dan Studi Islam, 2 (2), 19-31.
- Zasti, Y. (2016). Peningkatan motivasi belajar PAI melalui metode pembelajaran questions students have pada peserta didik kelas IV SDN 1 Hajimena kecamatan Natar kabupaten Lampung Selatan tahun pelajaran 2015/2016. Skripsi. Fakultas Tarbiyah dan Keguruan, Institut Agama Islam Negeri Raden Intan Lampung.