Enhancement of Students’ Learning Motivation and Activity to Study Islamic Education Subject through Interactive Learning Method: A Meta-analysis

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Abstract
Teaching the subject of Islamic Education by using the lecturing method is generally considered to be tiresome by most students. Teachers are therefore requested to apply an innovative learning method and one of them is the interactive learning. This study aimed to evaluate the effects of interactive learning method on learning motivation and learning activity of students at elementary and secondary schools by using a meta-analysis approach. A total of four and eight studies for the variables of learning motivation and learning activity, respectively, were integrated into a meta-database. These studies directly compared between the lecturing method and the interactive method for the Islamic Education subject. Odds ratio (OR) was employed as the effect size for integrating data from different studies. Results revealed that the interactive learning method significantly enhanced students’ learning motivation than that of the lecturing method (OR 3.67 [2.02–6.68], P ≤ 0.001). Furthermore, the interactive learning method significantly elevated the learning activity of elementary and secondary school students in comparison to the lecturing method (OR 3.07 [2.01–4.68], P ≤ 0.001). In conclusion, interactive learning method is an effective strategy to enhance learning motivation and learning activity of students to study the Islamic Education subject.

Key words: activity, interactive learning, motivation, research synthesis

Introduction
In Indonesia, Islamic Education (ISE) is a subject that must be taught to all citizens who are Muslim, not only for those who specifically study religion-related disciplines, but also for those who study other disciplines such as natural sciences, social sciences, engineering, etc. This is applied to students from various levels, i.e., elementary school (Sekolah Dasar, SD), secondary school (Sekolah Menengah Pertama, SMP), high school (Sekolah Menengah Atas, SMA), and undergraduate students in the university. Teaching of ISE is aimed at preparing students to recognize, understand, appreciate, believe, have noble characters, practice Islamic teachings from the sources of the Qur’an and Hadith, through guidance, teaching, training, and experience.

The learning method of ISE at various educational institutions generally employs the lecturing method (Zaenuri, 2019). In the lecturing method, ISE teachers deliver and explain learning materials orally to students in the classroom.
The main activity of students in this method is listening to the learning material delivered by the teachers carefully and taking notes on the important points of the material (Maurin and Muhamadi, 2018). The lecturing method has a number of advantages, i.e., easier to organize classes, suitable for a large number of students, relatively easy to prepare teaching and learning activities, and suitable to deliver a difficult topic. Due to these reasons, it is not surprising that the lecturing method is typically used by the ISE teachers in the classroom. However, this method also has a number of disadvantages, i.e., teacher-centered learning, not easy to assess the extent to which students understand the lecture, possibility of misinterpretation by students, and tends to make students less creative (Tambak, 2014). Such weaknesses of the conventional learning method, i.e., the lecturing method need to be overcome or at least reduced in order to enhance students’ understanding.

The effectiveness of ISE learning has to be continuously improved in order to achieve learning objectives, and this depends on, among others, the learning method. Since the conventional (lecturing) method has a number of limitations as described above, innovation of ISE learning methods is therefore required. A number of innovative learning methods that may serve as alternatives to the lecturing method include question and answer methods, discussions, demonstrations, experiments, recitations, group work, role playing, field trips, drills, discovery, team teaching systems, problem solving, projects, moral reasoning, mind maps, and quantum methods (Nasih and Kholidah, 2013). This study aimed to evaluate the effects of interactive learning method on learning motivation and learning activity of students in the ISE subject by employing the meta-analysis approach.

Method

This study used the meta-analysis method which is one of the research methods with a quantitative approach (Cohen et al., 2018; Privitera and Ahlgrim-Delzell, 2019). Stages of the study consisted of: (1) problem formulation, (2) literature search and selection, (3) database development, (4) determination of effect size method and its integration, and (5) publication bias analysis.

Formulation of the research problem was carried out using the PICO (Population, Intervention, Comparison, Outcome) model. Population was students in primary and secondary education in Indonesia who obtain ISE subject. Intervention was the interactive learning method. Comparison was the conventional learning method (the lecturing method). Outcome was learning motivation and learning activity.

Literature search was carried out by using the Google Scholar platform using the keywords “learning method”, “Islamic education”, “learning motivation” and/or “learning activity”. Articles obtained through the search process were then selected based on the following inclusion criteria: (1) the research was conducted on students at primary and secondary education levels in Indonesia, (2) the article directly compared between the interactive learning method and the conventional learning method, (3) the article reported dependent variables in the form of learning motivation and/or learning activity, and (4) the subject was specific on ISE.

The selected articles were subsequently integrated into a database. The data were the number of samples or respondents from each study and the percentage values, both from the conventional/lecturing method and the interactive learning method in pairs. The response variables were the learning motivation and the learning activity.

Odds ratio (OR) was employed as the effect size for integrating data from different studies (Koricheva et al., 2013). After each study had calculated the effect size in the form of OR, then the cumulative effect size was calculated through the integration process. The integration of the effect size was carried out using a fixed effects model. The results of the synthesis were displayed in the form of forest plots as recommended by Gurevitch et al. (2018). Publication bias was assessed by using the funnel plot, Egger and Begg tests (Thornton and Lee, 2000; Lin and Chu, 2018). An analysis of publication bias is required when conducting a meta-analysis study since its presence may affect the validity and generalization of the results obtained.

Results & Discussion

Result

There were eight literatures that investigated the effects of interactive learning method on learning motivation and learning activity of students to study the Islamic Education subject (Table 1). Within the interactive learning method, there were some different types, i.e., make a match, card sort, mind mapping, cooperative script, teams games tournament, learning cell, and questions students have.

The interactive learning method significantly enhanced students’ learning motivation than that of the lecturing method (OR 3.67 [2.02-6.68], P ≤ 0.001; Figure 1). Furthermore, the interactive learning method significantly elevated the learning activity of elementary and secondary school students in comparison to the lecturing method (OR 3.07 [2.01-4.68], P ≤ 0.001; Figure 2).

Funnel plots for the learning motivation and learning activity variables are presented in Figure 3 and Figure 4, respectively. Both plots showed symmetry, indicating that publication bias did not exist for the variables investigated.
Table 1. Questionnaire Results

<table>
<thead>
<tr>
<th>Study Code</th>
<th>Literature</th>
<th>Interactive Learning Type</th>
<th>Motivation</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Dede (2020)</td>
<td>Make a match</td>
<td>–</td>
<td>√</td>
</tr>
<tr>
<td>15</td>
<td>Khofiyah (2020)</td>
<td>Make a match</td>
<td>√</td>
<td>–</td>
</tr>
<tr>
<td>20</td>
<td>Mulyani (2020)</td>
<td>Mind mapping</td>
<td>–</td>
<td>√</td>
</tr>
<tr>
<td>22</td>
<td>Mustaqhfirin (2021)</td>
<td>Cooperative script</td>
<td>–</td>
<td>√</td>
</tr>
<tr>
<td>25</td>
<td>Najamudin (2020)</td>
<td>Teams games tournament</td>
<td>–</td>
<td>√</td>
</tr>
<tr>
<td>35</td>
<td>Sentika (2019)</td>
<td>Learning cell</td>
<td>–</td>
<td>√</td>
</tr>
<tr>
<td>46</td>
<td>Zasti (2016)</td>
<td>Questions students have</td>
<td>√</td>
<td>–</td>
</tr>
</tbody>
</table>

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

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

The absence of publication bias in the present study was confirmed by the results of the Egger and Begg tests, in which both tests resulted in the P-values above 0.05.

Figure 3. Funnel plot for the learning motivation variable.
Discussion

Interactive learning method is a form of learning and communicative activity in which students are involved in the learning process and reflect on what they know and what they are thinking (Giorgdze and Dgebuadze, 2017). It is different with a conventional or traditional learning method that typically teacher center and students are passive and receive information only, the interactive learning method focuses on the students as the centers; the function of the teacher is to facilitate and assist the students during the learning process. There is a certain degree of similarity between active learning and interactive learning. Active learning focuses on a closer relationship between students and a teacher, and students are more active in the learning process. The main difference between active and interactive learning methods is that, in contrast to active approach, interactive learning involves the interaction of students not only with the teacher but also with each other.

In comparison to the conventional lecturing method, the interactive learning method apparently triggers students to have a higher learning motivation to study the ISE subject. Motivation is defined as an impulse that can make someone perform certain activities to achieve goals (Emda, 2017). In the context of learning, motivation is an important aspect in order to achieve a more effective learning outcome. Motivation plays an important role in learning activities at various levels of education (i.e., elementary, secondary and higher education), and motivation is influenced by the goals to be achieved by learning. The higher the learning objectives, the greater the motivation, and the greater the learning motivation, the stronger the learning activities (Masni, 2015). It is therefore unsurprising that the interactive learning method, apart from increasing students’ learning motivation, is also able to enhance learning activity of students to study the ISE subject.

Conclusion

Interactive learning method is an effective strategy to enhance learning motivation and learning activity of students to study the Islamic Education subject. Therefore ISE teachers at various levels of education are highly recommended to apply the interactive learning method during the classroom meeting. In the case that the use of conventional or lecturing method is unavoidable due to some reasons, it can be combined with the interactive approach.

References


