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The Influence of The Guided Inquiry Learning Model Integrated with Islamic Values on Learning Motivation and Physics Learning Outcomes in Islamic Boarding Schools

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ABSTRACT

This study aims to determine whether or not there is a significant effect of using the guided inquiry learning model integrated with Islamic values on learning motivation and student physics learning outcomes in Islamic boarding schools. This research is a quantitative research with Quasi Experimental Design research design with Nonequivalent Control Group Design. Population In this study, all students of class X were taken, and two classes as samples, namely the experimental class and control class, and the selection of this sample was carried out by purposive sampling. Data collection techniques in the form of multiple choices test to measure student learning outcomes and learning motivation questionnaires to determine student learning motivation. Data analysis was performed with the help of SPSS *V.25* with normality test, homogeneity test, and hypothesis testing using MANOVA test. The results of the hypothesis test of student learning motivation are known to have a significance value of 0.001 and student learning outcomes are known to have a significance value of 0.004. The results of the study revealed that there was a significant influence on the guided inquiry learning model integrated with Islamic values on students' physics learning motivation and there was a significant influence on the integrated guided inquiry learning model Islamic values on students' physics learning outcomes.

Keywords: guided inquiry, integration of Islamic values, learning motivation and learning outcomes.

INTRODUCTION

Law Number 20 of 2003 concerning the National Education System explains that education is a conscious and structured effort to create a learning atmosphere and teaching and learning process that makes students actively develop their potential so that they have intelligence, spiritual strength, and other skills that are needed by themselves. as well as other people, and all of them are interconnected in an integrated manner to achieve the goals of National education. One of the main goals of education emphasizes a balance between scientific and religious knowledge.

In the National Curriculum applying the 2013 Curriculum concerning the relationship between science and religion which is manifested in the first Core Competence, Core Competencies (KI) are designed in four interrelated groups including religious attitudes, social attitudes, science, and the application of knowledge. The four groups are used as a reference for Basic Competencies (KD) that must be developed in every activity of the integrated learning process. Competencies related to religious and social attitudes are developed indirectly when students learn knowledge and apply knowledge. It is the content of the scope contained in the 2013 research and development agency guidelines [1]. According to [2], one way that can shape students to become individuals in accordance with religious norms, nation and society who are not only capable in theoretical aspects, but also has positive skills and characters, is one of them through the integration of Islamic values.

The integration between science and religion can be applied in various schools formally, so that students can get both knowledge perfectly and in balance [3]. In line with this opinion, [4] revealed that teaching and learning activities that integrate Islamic values with science can create a complete understanding by students in learning a lesson, both in terms of Islamic religious scholarship (Al-Qur'an) and also in terms of science. science to form an Ulul Albab generation. [5] suggests that the desired integration of learning is to instill, link learning in physics with verses of the Qur'an when teaching and learning activities occur.

Based on the results of observations made by researchers in some schools based on Islamic boarding schools in Pamekasan, it was found that the learning

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model applied in schools still did not integrate Islamic values. This causes students to be less motivated to learn one of the subjects of physics, because the delivery of physics material has not integrated physics with the quotations of the contents of the verses of the Qur'an, the general delivery of which is the concept of physical laws, memorizing formulas. and questions that must be handwritten by the students themselves without being given printed questions. As a result, students perceive that physics is a boring and difficult subject to understand, so that it can affect student learning outcomes. Supposedly as a boarding school-based school that has a vision and mission to form smart, skilled and faithful physics students and fear Allah SWT, it should link the verses of the Qur'an with physics material so that there is no separation between religious knowledge and religious knowledge. science (physics) known as the dichotomy of science. As states [6] that regarding the learning process, some schools based on Islamic boarding schools are deemed very necessary to connect daily lessons with religious lessons. This aims to motivate students to be more interested in physics subjects, especially students who are used to getting religious subjects in their daily lives, so that it will certainly affect the way students think in receiving learning materials.

The learning that has taken place so far has separated science from religion, so that there is a dichotomy of science in students' understanding. The dichotomy in the teaching-learning process can lead to failure in obtaining a balanced individual, the concept of integration must be carried out [7]. In the learning process, many teachers have not tried to integrate physics material with the Qur'an. Learning that integrates with science can be applied in physics learning, but the concept of integrating the values of the Qur'an in physics learning has not been fully implemented in the learning process at school [8]. The current reality in the teaching-learning process by instilling religious values that can link science and religion is difficult to find [9]. Often in the learning process takes place independently there is no link with religion. So it is necessary to integrate Islamic values in the learning process.

To solve these problems, learning can be done by integrating Islamic values. Previous research revealed that the integration of Islamic values in education as an aid to students to realize and experience the values and place them integrally in their whole life [10]. Understanding the integration of Islamic values in science learning (science) is implied in the Qur'an. So that the Qur'an does not contradict science and religion. In fact, in many of His verses it is emphasized that humans always think about events in nature to strengthen their religious beliefs (Q.S. al-Anbiyaa, [21]:30) [11]. Based on the author's analysis, the integration of Islamic values has been widely studied in Indonesia. [12] reported that science learning that integrates the Qur'an and Islamic values can successfully eliminate the separation between general science and religious knowledge. Research conducted by [11] reported that in integrating Islamic values in science learning in schools succeeded in forming students who have faith and piety. Thus, creating students who are spiritually, cognitively and socially capable. Learning that is integrated with Islamic values, students will be given the cultivation of values about divinity in accordance with the concept of science [13]. The hope is that students have a strong faith, because the science concepts they learn are scientifically proven and implied in the religious teachings they believe in. This will make students motivated in learning physics. One of the appropriate learning models for the teaching-learning process to be effective is the guided inquiry learning model

The guided inquiry learning model is a student-centered learning model by finding and investigating their own findings with confidence, while the teacher only acts as a facilitator and guide for students to learn. This is in accordance with the statement [14] that the inquiry learning process is guided, students are involved mentally and physically in order to solve the problems given by the teacher. Guided inquiry learning model where the teacher is only a facilitator in guiding students to carry out learning activities by giving initial questions and leading to a deliberation or discussion [15]. The general purpose of the guided inquiry learning model is to help students develop intellectual and other skills, such as finding answers and asking questions that stem from their curiosity [16]. The guided inquiry learning model can be chosen as an alternative because the steps of the guided inquiry learning model are in accordance with the scientific approach and strongly support the achievement of learning indicators. By using the guided inquiry learning model in the learning process students learn actively because they use critical thinking skills when they discuss or deliberation, analyze evidence, evaluate ideas, and make conclusions [17].

This study integrates Islamic values, where this study will discuss the significance of the guided inquiry learning model integrated with Islamic values on learning motivation and learning outcomes of physics in Islamic boarding schools. The author hopes that the research results can be a reference for other researchers regarding the integration of Islamic values in a wider scope.

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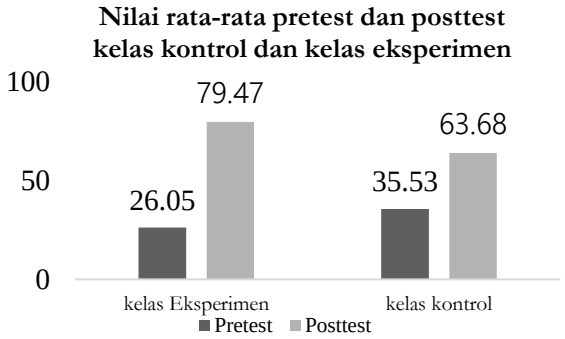
METHODOLOGY

This research is a quantitative study with a quasi-experimental research design with a Nonequivalent Control Group Design [18]. The population of this study were all students of class X Ma Sumber Bungor Pakong Pamekasan. The samples in this study were Class X MIPA^{4} as the experimental class and X MIPA^{B} as the control class. The sample selection in this study was carried out by purposive sampling. The difference in treatment between the two classes lies in the use of the learning model, namely the guided inquiry learning model integrated with Islamic values which is applied to the experimental class while the control class is applied to the discovery learning model.

The data collected in this study is data on learning motivation and learning outcomes of physics with data collection techniques used are questionnaires and tests, test techniques in the form of pretest-posttest and observations on the implementation of learning. Pretest was conducted to measure the students' initial ability before being given treatment. After that, a final test was conducted in the form of a posttest to find out how big the changes experienced by students in improving physics learning outcomes after being given treatment. The observation method is a way of collecting data by making observations which include the implementation of the Learning Implementation Plan (RPP) by observers. Data analysis was carried out with the help of the SPSS version 25 program. Before testing the research hypothesis, first a normality test and a data homogeneity test will be carried out. The proposed hypothesis will be tested using the MANOVA test with a significance level of 0.05 ($P < 0.05$) using data on learning motivation and student learning outcomes.

RESULT AND DISCUSSION

Based on the results of data analysis in the form of normality test, and data homogeneity test, it can be explained that the pretest and posttest scores of student learning outcomes in the experimental class and control class are normally distributed and homogeneous. The results of the pretest and posttest assessment data can be seen in Figure 1.



Gambar 1. Graph of the average results of *pretest* and *posttest*

In Figure 1 it can be seen clearly that the difference in the test results of the experimental class students' mean pretest = 26.05 and posttest = 79.47, and in the control class the average value of pretest = 35.53 and posttest = 63.68. This means that the test results of students in the experimental class are higher while the learning outcomes of students in the control class are lower. This is because the learning process on aspects of core activities from observations made by researchers regarding the implementation of learning during learning has a very good category with a percentage of the experimental class which is 92.25% while the control class is 87.5%.

This means that during the learning process in the experimental class students who are used to it before learning begins are accustomed to living and contemplating everything that Allah SWT has created. In addition, students are also given the understanding that studying science (physics) also gains worship as well as studying religious sciences. When conducting experiments, students were more enthusiastic and enthusiastic when the teacher guided students by giving verses about Newton's First Law listed in QS. Yassin verses 38 and 40 in the word of Allah which means "and the sun goes where it goes, that is the decree of the All-Mighty, All-Knowing". In that verse, an object that is at rest or in a state of walking but with a fixed position, speed and time, the object will maintain its position as long as there is no external force that influences it to change its state. So that students look more interested, namely because when the teacher gave verses of the Qur'an to the experimental class there were 3 students who gave a response compared to the control class which was only given treatment without integrating Islamic values, only 1 student gave a response. This is because the teacher only gives examples of Newton's First Law without integrating Islamic values, so students feel bored and bored in the learning process.

After the normality and homogeneity tests have been carried out, it is known that the data are normally distributed and homogeneous. Furthermore, the MANOVA test was conducted to determine whether the research hypothesis was accepted or not. The results of the MANOVA test can be seen in table 1 below.

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Table 1. The output results of SPSS *V.25* MANOVA test the value of learning outcomes and learning motivation.

Tests of Between-Subjects Effects						
no	***Dependent Variable***	***Type III Sum of Squares***	***Df***	***Mean Square***	***F***	***Sig.***
1	Learning Outcome	716,447	1	716,447	9,525	0,004
2	Learning Motivation Value	2368,421	1	2368,421	13,853	0,001

Based on table 1, namely Tests of Between-Subjects Effects, the value of sig. learning motivation is 0.001, because the value of sig. smaller than the significance level of = 0.05, then a common thread is drawn that the application of the guided inquiry learning model integrated Islamic values in Islamic boarding schools-based schools has an effect on students' learning motivation. This is evidenced by the presence of filling out questionnaires conducted by students, after being analyzed it turns out that students are very motivated and eager to learn, do assignments, and always answer questions asked by the teacher, and so on. So that the average student has a high motivation to learn. In line with the results of research that has been done (Halimah, 2015) states that using a guided inquiry model can increase student learning motivation. This is because the physics learning process with the guided inquiry learning model integrated Islamic values carried out by the researchers in this study involved students actively in carrying out practical activities, so that students gained mastery of physics concepts by linking them to the verses of the Qur'an that comprehensive in the form of facts and concepts about the material being studied. This proves that with practicum activities students can conduct observations, ask questions about material they do not understand, make hypotheses according to their own prejudices, analyze data and make conclusions about material related to the verses of the Qur'an studied through practical activities directly so that the material they get becomes long in memory and meaningful with knowledge, both previously studied and those that will be studied later.

The guided inquiry learning model integrated with Islamic values gives better results than the discovery learning model. The integration of Islamic values in this research is not only carried out at the beginning of the sub-material, but also in the middle and at the end of the material in the closing activity. In the learning process that applies the integration of science and religion, it can increase students' attention because in the learning process the teacher relates the material to the verses of the Qur'an related to physics material so that students are motivated to understand and carry out the stages of learning properly and correctly. According to [19] students' curiosity can be stimulated through new elements, strange things, different from existing ones, contradictory or complex. So that the existence of Islamic values in the material can foster students' gratitude for the greatness of Allah SWT, and can increase student learning motivation. Previous research revealed that the presence of verses of the Qur'an in the material can increase students' gratitude for the greatness of God the creator of the heavens and the earth, so that they can participate in increasing learning motivation and achieving physics learning goals [20]. At the same time, by including verses of the Qur'an related to physics material that can make students aware of the truth of the Qur'an which is the guideline for their lives as people who are Muslim.

Increased learning motivation results in increased learning outcomes as well, learning motivation is very influential on the achievement of learning outcomes. In table 1 above, the value of sig. learning outcomes is 0.004, because the value of sig. smaller than the significance level of α = 0.05, then a common thread is drawn that the application of the integrated guided inquiry learning model of Islamic values has an influence on student learning outcomes. This shows that there is an increase in students' knowledge and understanding after using the guided inquiry learning model integrated with Islamic values. Improving student learning outcomes is the effect of using a guided inquiry learning model integrated with Islamic values, during the learning process the teacher gives examples of questions in each sub-chapter and relates them to verses from the Qur'an, thus helping students in completing other practice questions, and the ability of students to complete students to increase. This study is in line with research [21], which states that the results of research conducted using the guided inquiry learning model have an influence on learning outcomes. This proves that the guided inquiry learning model integrated with Islamic values can improve student learning outcomes because the learning carried out in the learning process in the core activities of students is given worksheets and guided to carry out experimental activities. Students will gain direct experience when conducting experiments, so students will more easily understand the material being studied. In the student worksheet (LKS) there is also material accompanied by pictures when conducting experiments as an attraction and support for the material. This study is in line with the statement [22]

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that pictures are able to provide motivation to students in the learning process. In addition to student worksheets, students are also given problems that must be solved so as to encourage students to think critically in solving these problems. According to [23]–[26] also revealed that learning by using the integration of Islamic and scientific values can improve student learning outcomes, student creativity along with increasing student character.

SUMMARY

Based on the research that has been done, it can be concluded that the guided inquiry learning model integrated Islamic values affect the motivation to learn and student learning outcomes in the learning process. This is obtained based on the results of the questionnaire analysis of learning motivation and increasing multiple choice test answers.

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