

Increased of Spiritual Attitudes and Social Attitudes Through the Integration Model of Science and Islam at the Madrasah Aliyah level

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Abstract The purpose of this study is to identify the integration model of science and Islam in improving spiritual attitudes and social attitudes in MA al-Islam Jamsaren Surakarta. This study uses *a mix method* with a type of field *research*. The object of the chosen research is MA Al-Islam Jamsaren Surakarta. The design of the *mix method* used is *sequential exploratory*. The techniques used in data collection consist of observations, interviews and, documentation for qualitative and questionnaires for quantitative data. In selecting samples, the researcher used *the purposive sampling* technique on the qualitative method and *random sampling* on the quantitative data using the Slovin formula. In data analysis, the stages of data reduction were used on qualitative data and percentage analysis was used to determine the impact of integration on the improvement of spiritual-social attitudes. The results of this study show that the model of integration of science and Islam is based on several philosophical and historical reasons, namely how the position of the Quran and Hadith as a source of knowledge then emits various branches of other disciplines as a form of scientific interpretation. The integration of science and Islam in this madrasah has a good enough impact on improving students' spiritual attitudes and social attitudes. This is shown in the results of the answers of 100 students the improvement of spiritual attitudes and social attitudes is very good with the figures for the spiritual indicators of agreeing and strongly agreeing 85.3%, while social attitudes are 81.2%.

Keywords : Integration of Science and Islam, Spiritual Attitudes, Social Attitudes

A. INTRODUCTION

Religious education is an important domain in the life of a Muslim for survival both vertically to Allah SWT and horizontally to fellow humans and nature. This is because religious education provides an understanding of religious and social values to students (Muslih et al., 2021, p. 27). In addition, producing a generation that is moral, independent, nationalistic, and insightful is one of the goals of education, both nationally and specifically in Islamic education (Depdikbud, 2003). However, religious education in formal schools in Indonesia, is considered by many to have failed in achieving its goals (Muhaimin, 2005, p. 17-27).

We can see that many of our students have fallen into the negative western liberal culture and immoral cases. For example, in the context of *bullying*, Alifia and Rizky in their news wrote that UNICEF in 2020 released that 41% of students in Indonesia had experienced bullying at the age of 15

(Yudanti & Nauvalif, 2023). The bullying is carried out by their peers either in the form of ridicule, physical contact, or forcibly destroying goods even to the point of ending someone's life.

KPAI in its report also stated that as of September 2023, there were 563 cases of Special Child Protection (PKA) cases, be it acts of violence, bullying, pornography, and so on. The National Narcotics Agency (BNN) also conveyed data based on research from the Ministry of Communication and Information in 2021 that 82.4% of adolescents in Indonesia with the age range of 15-35 years have been exposed to drugs as users, 31.4% as couriers, and 47.1% as dealers (BNN, 2022). Furthermore, in the news published by *hidayatullah.com* released from data taken from CNN Indonesia that the current teenagers who get married early because they are pregnant out of wedlock have touched 50 thousand. This data increased 7 times compared to 2016 (Ahmad, 2023). Furthermore, recently there have been rampant suicide cases among students, students and junior high school students in the Sumedang area (Huda, 2023). The next case was related to violence against residents involving 15 teenagers and students in Banjarmasin under the pretext of wanting to show their existence (Admin, 2023). Finally, the case of raising the LGBT flag at the Jakarta National Monument at *the women's merch* action in which in the group of demonstrators there were many Muslim teenagers who also supported LGBT (Nelfira, 2023).

From the cases that the researcher explained above, this problem should be attention to the world of education, especially Islamic education. In addition, the phenomenon of the above problems reflects the low spiritual attitude and social attitude among students. The causes of the various cases above are very varied if we look at various sources such as associations, parenting styles, gadgets, etc (Tajuddin & Hj Rofie, 2014, p. 8). In addition, one of the causes that is quite visible today is that religious education today has experienced dualism or secularization, namely separating religion and science (Al-Attas, 1981). The dichotomy discourse between science and Islam has been discussed again since the development of Western secularism (Isgandi, 2021, p. 7). This western secular view does not depart from what knowledge is revealed and religion, but from cultural traditions that are strengthened by philosophical opinions and human reflections on the life of the world centered on humans as physical and rational beings consisting of physical and spiritual aspects (Al-Attas, 1984). They consider that the phenomena that occur in this world have nothing to do with nomena or things that smell of metaphysics. In fact, in the Islamic view, nomena and phenomena are related.

Actually, spiritual attitudes and social attitudes cannot grow and develop naturally but through several stimulating factors, one of which is through the learning process through certain fields, namely the combination of religion and science. In other words, integrated education can have an impact on improving students' spiritual and social attitudes (Zurqoni, 2019, p. 11). This is also reinforced by Hadi and Imron in their book who said that Islam interprets the unity of knowledge means that there is no concept of corruption between disciplines because everything boils down to the concept of monotheism (Masruri & Rossidy, 2007, 23).

We cannot deny that currently religion and science play an important role in the human life order Both must go hand in hand to achieve the essence of a complete human being. Islam itself also views that the source of knowledge is Allah Himself so that when knowing all the sources of all knowledge are from one thing, why there is polarization and dichotomy that leads to a dead end in finding the true meaning (Kartanegara, 2005, p. 47). If we correlate this problem with the existence of the world of Islamic education today, then we find the meeting of these two aspects in learning with an integration model, one of the examples that we can meet is in the field of chemistry or physics where the phenomenon that is fatwached by science has been discussed in the Qur'an, such as the meeting of two streams of water that cannot merge because of the difference in water pH and surface tension.

This study on the integration of science and Islam has been widely carried out and initiated by observers of contemporary Islamic education such as (Khoeriyah, 2019) who studied the integration of science and Islam. Dharmawan who examines the relationship between integration and spiritual attitudes (Dharmawan et al., 2023). Rossidy who examines the concept of integration in secondary education institutions (Rossidy et al., 2023). Mufid who studies the integration of Islam and Science (Mufid, 2014). However, from previous studies, Researchers want to study has specifically studied the model of the integration of science in Islam at the practical level which is associated with the improvement of spiritual and social attitudes.

The reason why the researcher in this article chose a school with a classification in high school is because the latest data in 2024 states that at the SMA/MA/SMK level it is the highest in the discovery of cases of violence. This is based on data from the Ministry of Women's Empowerment and Child Protection (Ministry of Women's Empowerment and Child Protection) showing 342 victims, followed by junior high school 299 victims and elementary school 235 victims (Aisyah, 2024). From this data, researchers feel that the upper middle level is important in cultivating spirituality and social attitudes through one of its agendas, namely the integration of Science and Islam.

MA Al-Islam Jamsaren Surakarta started from a Madrasah which combines a religious curriculum based on the Quran and Hadith as well as a general curriculum from the Ministry of National Education. Despite the status of a high school with Islamic characteristics at that time, this Al-Islam graduate was intelligent in academics and al-Quran Hadith (Syafii, Interview, 2024). So that in 1967 it was stateized as MAAIN (Madrasah Aliyah Agama Islam Negeri) which is now MAN. Then from the Al-Islam foundation, it had the initiative to develop into Al-Islam High School which became one on Jl. Honggowongso until 1989 (Syafii, Interview, 2024). The curriculum in this madrasah combines four curricula, namely the independent curriculum, the ministry of religion curriculum, the tahfidz curriculum, and local content. The local content used in this madrasah consists of three subjects, namely and 'Ulumul Hadith, Qiroatul Kutub, Javanese Language,. The book referred to in *the study of 'Ulumul Hadith* itself is an essay by one of the great Kiai who was a student at Pondok Jamsaren Surakarta.

The flagship programs at MA Al-Islam Jamsaren Surakarta include al-Quran *Follow The Line* (FTL) which is a requirement for class promotion and graduation every year 10 juz. In addition, in this span of 5 years, the madrasah has collaborated with the al-Quran *al-qosimi memorization method* institution and targets its students to memorize 1 juz per semester. In addition, there are also scholarship programs, be it achievement scholarships, foster child scholarships, or tahfidz scholarships. Then there are also programs that have become a habit in this madrasah such as the recitation of *asma'ul husna* every morning before starting learning, dhuha prayers, *greeting* mornings, recitation of *riyadush shalihin* every time after the zuhur prayer, *Quran camping*, social service, and so on.

B. METHOD

In this study, the researcher wants to use a combination approach or *mix method* that wants to obtain comprehensive data both descriptively and numerically. This is in line with Cresswell in Sugiyono who emphasized that the combination method is a research approach that combines qualitative and quantitative approaches (Sugiyono, 2020, p. 27). In the combination method, there are two models, namely sequential and mixed models, while in mixed models, they are further divided into three, namely convergence, *sequential explanatory* and *sequential exploratory* (Cresswell, 2020, p. 34). In this study, the model used is a *sequential exploratory* model where a combination research model that combines qualitative and quantitative research in sequence with

the aim of qualitative data being able to *capture* the meaning of a number obtained by the researcher (Cresswell, 2020, p. 7). The object of the chosen research is MA Al-Islam Jamsaren Surakarta. The design of the *mix method* used is *sequential exploratory*. The techniques used in data collection consist of observations, interviews and, documentation for qualitative and questionnaires for quantitative data. The research subjects selected in the collection of qualitative methods consisted of the head of the madrasah, the Deputy Head of Curriculum, and the Deputy Head of Student Affairs. Meanwhile, the sample in the collection of quantitative data was 100 respondents from a total of 261 students. In selecting samples, researchers used *purposive sampling* techniques on qualitative methods and *random sampling* on quantitative data using the Slovin formula (Arikunto, 2010). The data analysis technique used goes through four stages, namely data collection, data reduction, data analysis, and drawing conclusions and percentage analysis.

C. RESULTS AND DISCUSSION

MA Al-Islam Jamsaren Surakarta in viewing the integration of Science and Islam is more about efforts to compromise scientific materials with the postulates of naqli as a form of interpretation of a source of knowledge. The integration of science and Islam in the learning and education process is very important for this madrasah because of several philosophical and historical reasons. From the various concepts, foundations and urgency of the integration of science and Islam put forward by the three speakers above, the madrasah concretely translates the integration model in the learning process, namely by connecting each discipline with the postulates of naqli. Furthermore, initiating the tahfidz program which is included in the lesson hours, a combination of various curricula, as well as other supporting programs and habits

The above is also a valid researcher through documentation carried out in the administration of the madrasah curriculum (Madrasah Operational Curriculum) where there are three integrated curricula and programs run in the madrasah (Documentation, 2024). Meanwhile, in the realm of students, the integration model is translated more on habituation and programs. MA Al-Islam Jamsaren Surakarta in viewing the integration of Science and Islam is more about efforts to compromise scientific materials with the postulates of naqli as a form of interpretation of a source of knowledge :

"From my personal point of view, integration is actually enshrined in the Qur'an how the earth was created, science but still in general. Now from the general nature it needs to be interpreted specifically through each discipline so that from this it can be interpreted that the integration understood in this madrasah is the Qur'an and hadith as a source of knowledge, while this discipline is to detail what is still lacking concrete or abstract so that we increasingly know the absolute truth so that spirituality and social relations with humans become stronger" (Interview, 2024).

The integration of science and Islam in the learning and education process is very important for this madrasah because there are several philosophical and historical reasons, the founder of this foundation always advises not to separate religious knowledge and general science because in all sources of knowledge will certainly come out more concrete sciences :

"Because the first one is an Islamic-based school so we do not know the dichotomy of knowledge. Second, the founder of this foundation always advises not to separate religious science and general science because in all sources of knowledge, of course, more concrete sciences will come out. Third, because coincidentally, this integration is also the grand design of the Ministry of Religion, so that we can combine all fields of knowledge to produce people who are called ulul albab.(Interview, 2024).

From the various concepts, foundations and urgency of the integration of science and Islam put forward by the three speakers above, the madrasah concretely translates the integration model in the learning process, namely by connecting each discipline with the postulates of naqli. Furthermore, initiating the tahfidz program which is included in the lesson hours, a combination of various curricula, as well as other supporting programs and habits. If we analyze the various forms of integration of science and religion carried out by teachers, then the integration approach applied in this madrasah can be categorized as a combination of several approaches.

This approach combines Islamic science, the Islamization of science, and the cultivation of revelation-based scientific findings. This approach is in line with the opinion expressed by Isgandi. In its implementation, the approach to the integration of Islam and science is categorized into four approaches based on past experiences carried out by Muslim scholars. classification of these approaches is the scientificization of Islam, the Islamization of science, the cultivation of revelation-based Islamic science findings, and the merger between integration models (Isgandi, 2021). These four approaches broadly focus on finding scientific value in every Islamic teaching, both in the Qur'an and Hadith, as well as observing, analyzing, inferring, and finding a new science based on revelation for the benefit of the people. This is designed to provide an alternative in the world of education and science globally from the secular paradigm that tends to be destructive, damaging the environment, and lacking in divine and human values (Zein, 2014).

In addition, the approach to the integration of Science and Islam implemented in this madrasah is divided into two approaches, namely the integration approach in the context of bayani and burhani. Integration in the context of bayani, according to Suyudi, aims to clarify, reveal, and express the intention of the conversation based on words. With its main feature, namely using text as a reference for the main source, namely the Qur'an (Wijaya et al., 2020, p.97). Meanwhile, in the context of burhani, it departs from reason and the reason begins from a rational abstraction process so that it gives rise to the meaning and meaning of the truth. Integration in the context of burhani is also carried out by connecting social, natural and cultural realities (Adawiyah, 2021).

What is interesting here, the researcher tries to compare the integration model or concept in MA Al-Islam Jamsaren Surakarta with the spider web integration concept which is known to come from the philosophy of scientific interconnection of UIN Sunan Kalijaga Yogyakarta. Why is that, because the views of the two institutions on the meaning of integration boil down to the values of the Quran and hadith as a source of knowledge (Hilmy, 2016), which later each emerging discipline will detail things that are still global and focus more on epistemological aspects.

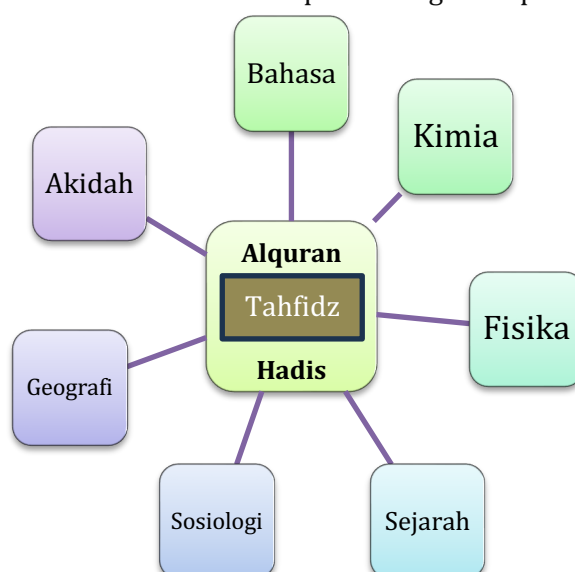


Figure 1 Jamsaren Integration Model

Based on the data that the researcher has obtained through the questionnaire, it can be concluded that the impact or consequences of the integration of science and Islam at MA Al-Islam Jamsaren Surakarta on the improvement of spiritual attitudes and social attitudes have a fairly high percentage. The impact of the integration of science and Islam on the improvement of spiritual attitudes and social attitudes was very good with figures for spiritual indicators agreeing and strongly agreeing 85.3%, while social attitudes were 81.2%. In addition, the total number of the impact of these two attitudes according to Arikunto's attitude hierarchy is said to be a good attitude or the highest level because it is in the range of 76-100% (Kuesioner, 2024).

It can be interpreted explicitly that indeed the phenomenon of moral degradation, negative behavior, thirst for spiritual values, and anti-social among students can only be solved by the integration of science and Islam (Hashim & Abdallah, 2013). Because the integration of science and Islam seeks to provide understanding as well as holistic embodiment to individuals so that students are able to understand a material well and at the same time be able to apply it in their daily lives (Rossidy et al., 2023).

This is a concrete answer to the implementation of religious education which currently gives more emphasis to the cognitive and psychomotor realms and tends to ignore the affective realm in the form of spiritual and moral attitudes which are actually the most essential part of religious education (Abdallah, 2015). On that basis, to overcome these problems, contemporary Islamic religious education experts offer the concept of integration of Islam and science as an alternative solution to improve their abilities, intellectual, physical and spiritual integrally

D. CONCLUSION

The model of integration of science and Islam is based on several philosophical and historical reasons, namely how the position of the Quran and Hadith as a source of knowledge which then emits various branches of other disciplines as a form of scientific interpretation. At first glance, this is similar to the integration model initiated by UIN Sunan Kalijaga Yogyakarta, but what is the distinction from the model in this madrasah is that to further explore the source of knowledge, a strong memorization and interpretation of the holy book is needed.

This research certainly contributes to educational institutions in the context of Madrasah to become a reference or reference related to the integration model of science and Islam at a practical level. On the other hand, this study also has shortcomings in the richness of qualitative analysis, so it is hoped that future researchers can more comprehensively examine similar themes, one of which is by making a comparison.

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