

Character Education as Brain Education: Spiritual Neuroscience Studies in Islamic Education

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ABSTRACT

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Islamic education has been dogmatic because it emphasizes a behavioral approach, where the environment shapes the students' character. This contradicts neuroscience, where students have the potential to change their environment. Therefore, this literature study aimed to analyze character education as brain education from a neuroscience perspective using a qualitative approach. Data were then obtained manually and digitally from books and journals on neuroscience and Islamic education on the Sinta database and analyzed using content analysis. The results showed that character education using a behavioral approach does not produce students with good habits in the community. In contrast, the neuroscience approach allows them to develop a permanent good character identity with a transformative impact on the environment. These findings challenge a new direction of studies on Islamic education using a neuroscience approach with implications for shifting learning theory and practice.

Keywords: *Islamic Education; Character; Neuroscience; Behavioral*

ABSTRAK

Selama ini, pendidikan Islam cenderung dogmatis karena terlalu mengedepankan pendekatan behavioristik. Karakter peserta didik tergantung pada lingkungan. Jika lingkungan baik anak mejadi baik demikian pula sebaliknya. Padahal, dalam neurosains anak memiliki potensi untuk mengubah lingkungannya. Penelitian ini bertujuan untuk menganalisis pendidikan karakter sebagai pendidikan otak dalam perspektif neurosains. Penelitian ini merupakan studi kepustakaan dengan pendekatan kualitatif. Sumber data dalam penelitian ini merupakan konsep-konsep pokok dalam neurosains dan pendidikan Islam yang bersumber dari buku maupun jurnal terkait. Teknik pengumpulan data dilakukan baik secara manual maupun digital pada database Sinta. Teknik analisis data menggunakan *content analysis* (analisis isi). Hasil penelitian menunjukkan pendidikan karakter yang menggunakan pendekatan behavioristik tidak memberikan jaminan peserta didik mampu mempertahankan kebiasaan baiknya di lingkungan masyarakat. sebaliknya, pendekatan neurosains membuka kemungkinan peserta didik membantuk jati diri karakter baiknya secara permanen. Lebih dari itu, pendekatan neurosains memiliki potensi dampak transformatif di lingkungan secara luas. Temuan dalam penelitian ini menantang arah baru riset di bidang pendidikan Islam dengan pendekatan neurosains yang berimplikasi pada pergeseran teori dan praktik pembelajaran.

Kata-kata Kunci: Pendidikan Islam, karakter, neurosains, behavioristik.

INTRODUCTION

Islamic education without neuroscience is similar to education without brains (Suyadi, 2020). It only provides teaching and transfers knowledge without incorporating brains. This is shown by the ineffectiveness of character education for students today (Wijaya, 2018). Therefore, the knowledge gained is not useful to students because education should shape character and behavior to educate the nation's life (Omeri, 2015). The education aspect being discussed by experts is the students' character. In this case, the character is a person's mentality with implications for actions formed from social values (Rizal, 2020); (Wahab, Khairiansyah, & Misridah, 2020).

There is an inseparable relationship between the human brain and everyday behavior (Muhimmah & Suyadi, 2020; Suyadi, 2016). Therefore, this study aimed to analyze how the behavioral method could be replaced by an educational, scientific approach based on neuroscience (Awhinarto & Suyadi, 2020). Islamic character education uses a dogmatic behavioral approach that cannot last long because it is based on social, behavioral development. Therefore, there needs to be another approach because there are many unanswered questions. This is because Islamic character education does not use the brain and scientific approach as the main basis.

Brain or neuroscience is important in education (Hanafi, 2016) because character education in Islamic boarding schools is normative and behavioral. As a result, the behavior of alumni no longer reflects their life in Islamic boarding schools. In line with this, religious education focuses on cognitive development rather than religious awareness (Suliswiyadi, 2020). For instance, the boarding school students wake up on time and pray in the congregation at the mosque. After leaving the boarding school, they pray irregularly and out of the congregation and even wake up late. This shows that years of behavioral, educational approach in Islamic boarding school have no implications for a permanent character.

This study aimed to clarify the misunderstanding of the interpretation and use of normative and dogmatic behavioral methods. It showed the good, bad, or acceptance by analyzing how the scientific approach answers the challenges of today's character education problems. The system in the educational environment prohibits the use of brains and thoughts. Instead, students must only know and maintain nobility of heart and character while neglecting the mind, soul, and body. In this case, education is considered successful when one part has been mastered. Many students achieve high performance by appearing smart and capable before teachers and parents. However, their behavior does not reflect the outcome of the learning process. According to Taufik Pasiak, education must have traces in neuroscience to optimize the brain in educating students (Jailani et al. 1, 2021; Muhimmah & Suyadi, 2020).

Previous studies attempted to map this brain problem. In Neuroscience Education and Its Implications in Today's Education, Wijaya concluded that humans had not

optimized their brains in solving problems, creativity, or innovation (Hengki, 2018). Awhinarto and Suyadi examined the Character Brain in Islamic Education: Critical Analysis of Neuroscience-Based Islamic Character Education. The study found that human activities and behavior are influenced and controlled by the brain's nerves (Awhinarto & Suyadi, 2020). Furthermore, Harahap and Suyadi mapped this problem in the Development of Character Education Through a Neuroscience-Based Behavioral Approach at SD Muhammadiyah Purbayan. The results showed that the learning process conducted with stimulus and guidance using behaviorism should incorporate neuroscience-based education to eliminate the bias in brain development (Harahap & Suyadir, 2020). The three previous studies explained the importance of brain education. However, they did not examine the neuroscience-based approach included in dogmatic Islamic education. Therefore, this study aimed to fill the void by analyzing brain education in Islamic character education. This is because education only focuses on filling the mind without discussing neuroscience as a study that uses scientific methods in the educational process.

METHOD

This study aimed to analyze character brain education using library research with a qualitative approach based on references from books, scientific journals, and articles (Sugiyono, 2011). The references were selected critically by focusing on the theme that met the criteria (Suyadi, 2019a) concerning the dogmatic character education using a behavioral approach. These constraints include the inability of students with no character to survive in the environment outside school.

Data were collected using documentation from primary and secondary sources. Primary data were obtained from scientific journals and books on neuroscience, while secondary data were sourced from scientific articles, books, journals, and magazines related to this study. The data were then analyzed using content analysis to answer the problem formulation.

RESULTS AND DISCUSSION

Character education refers to a person's actions and behavior. The accumulation of human behavior becomes a permanent character (Suyadi, 2018b). At the beginning of its emergence, character education received criticism. For instance, an expert called John Sewey stated that education was necessary (Suyadi, 2013) because character formation is the goal of teaching at school (Omeri, 2015). However, educators must use normative science to create a good character for students (Suyadi, 2019b) because Islamic character education is still dogmatic.

Islamic character education using a neuroscience approach would no longer be dogmatic and behavioral in its implementation. However, a new approach must create

permanent behavioral change resulting in good Islamic characters (Suyadi, 2018a). Islamic character education prioritizes the ritual aspect and only compares to the spiritual aspect as its basis. This is also related to the human character of certain repetitive behaviors (Awhinarto & Suyadi, 2020).

1. Comparison of Behavioral and Scientific Approaches

Educational theory with a behavioral approach is inseparable from education. According to behavioral theory, changes in behavior are observed directly through responses and stimuli in the learning process (Rufaedah, 2017). In this case, student activities are exercises to stimulate something that becomes a habit in the educational process. This interaction between stimulus and response enables students to master what is being taught (Pratama, 2019). It indicates that applying this theory creates a permanent character through a behavioral approach or habituation in students' actions.

Based on the behavioral theory, Islamic education is only relevant to Islam. Pratama in Rusuli (2013) stated that the behavioral theory emphasizes the change or formation of behavior (Pratama, 2019), justifying the example in the Al-Quran Surah Al-Hujurat verse 11:

“O you who have believed, let not a people ridicule [another] people; perhaps they may be better than them, nor let women ridicule [other] women; perhaps they may be better than them. And do not insult one another and do not call each other by [offensive] nicknames. Wretched is the name [i.e., mention] of disobedience after [one's] faith. And whoever does not repent - then it is those who are the wrongdoers” (Ministry of Religion of the Republic of Indonesia, 2014: 516).

The verse explains the need for a person's behavior to change for the better. However, it returns to the given stimulus and depends on how students respond to and apply in everyday life (Sukmayadi, 2020). In comparison, the scientific approach is widely believed to be a new direction of attitude development (Budiyanto et al. 1., 2016). According to Agus, the results of scientific-based learning are more effective than the traditional methods often used by educators. The method was introduced in America in the 19th century as one of the approaches to solving problems to produce scientific, educational facts (Setiawan, 2017). Therefore, it is to help students conduct activities that enable them to recognize and understand scientific knowledge. The comparison is presented in Table I.

Table 1. Behavioristic and Scientific Comparison

No	Scientific approach	Behavioristic Approach
1	Through observing, asking, gathering information, associating, and communicating.	Through response and stimulus
2	Behavior is formed according to environmental conditions	behavior is formed through experience and maintenance
3	Actively interact to build students' thinking	Seeing the stimulus to determine the responses and reactions in the surrounding environment.

Table 1 shows that the scientific approach allows students to change more than the dogmatic behavioral approach. Observing, asking, collecting information, associating, and communicating (Setiawan, 2017) are the most important aspects of the scientific method. Therefore, there is a need to change the approach from dogmatic to scientific for better student behavior output.

The behavioral approach only waits for a stimulus from the environment or educators. However, the character education that uses this dogmatic method is ineffective because it relies on students' responses. The character built is only based on students' experience without helping them gain knowledge from the unscientific approach. This shows that behavioral theory is an experimental method that uses stimulus and response as a study basis (Harahap & Suyadi, 2020). Conversely, students must understand what the educator conveys in the education process to develop their thinking capacity.

The behavioral approach cannot answer the problem of Islamic education that emphasizes good student morals and grades. Based on Table 1, when a behaviorist waits for a stimulus from the environment, educators, and students, the response may be positive or negative. Therefore, the behavioral theory only emphasizes the response aspect of students. However, education must produce educated scholars using appropriate methods.

2. Character Education Based on Scientific Approach

Etymologically, scientific means science whose proof method is based on empirical data (Harahap & Suyadi, 2020). This method is based on scientific activities, where the knowledge is structured systematically and objectively, and the truth is open to investigation. Subsequently, education with unsatisfactory results is almost failing (Raharjo, 2015) because character education is inseparable from the role of its components. Therefore, Islamic education should not be dogma in its implementation but have implications for students in a new environment. Furthermore, character education does not always have good morals, meaning that the scientific approach is

a new challenge for all education components (Nulfita, 2014). The scientific approach enables students to condition, change, and adapt to a new environment. This is because the scientific approach does not view the final result as important in student development. In line with this, Muhammad Abduh mentioned several characteristics of the scientific approach, including students as learning centers, building knowledge concepts, scientific stages as the basis of knowledge, and involving social activities (Abduh, 2014).

Instilling character values must have its strategy (Perdana, 2018), though the approaches and methods used are irrelevant to the current state of students. Serious cases and moral issues occur to students because behavioral approaches and methods have been used as references. These methods have no implications for students in that environment. Therefore, the government initiated the scientific approach through the 2013 curriculum (K13) (Abduh, 2014) to enable students to observe questions and create concepts in the educational process. Scientific students have brain capabilities useful in processing their potential to gain double knowledge (Muhimmah & Suyadi, 2020). Furthermore, the current educational problems could be solved using the scientific method.

Character education launched by the government with a scientific approach is the main foundation for improving the quality of education (Hakim & Rahayu, 2019). This is because education must create moral human beings with a strong Islamic basis (S. Suyadi, 2019). Therefore, the scientific method is needed to improve Indonesian education. Moreover, families, schools, and communities are important components in creating quality Islamic education (Harahap & Suyadi, 2020).

3. Neuroscience-Based Character Education

Neuroscience studies the science of the nervous system (S. Suyadi, 2018) or the brain, the main subject in education and a tool for human thinking. In this case, neuroscience connects the brain and cognitive, producing positive results (Hengki, 2018). Meanwhile, education directs students to good behavior and character acceptable in the environment and the community. Character education conducted in the educational process subsequently should have environmental, social, and real implications. This signifies that it has a higher meaning than moral education because it speaks right and wrong and instills habits about good things, increasing the students' awareness (Hengki, 2018). Therefore, a neuroscience approach changes the dogmatic Islamic character education to become a personality inseparable from the students.

Islamic character education cannot change students' behavior, meaning that a behavioral approach is insignificant in society. For instance, children in boarding school always obey the rules and activities in the school environment. However, their activities obligations are inconsistently implemented upon leaving school. Therefore, neuroscience-based character education changes this situation using a scientific

approach, starting from students' awareness to change. This makes the character of Islamic education always be attached to students in any environment.

Criticism of Islamic character education in the boarding school environment is a big problem in Islamic education. This is because it is expected to provide character education with good implications for the community due to its uniqueness compared to other educational areas (Zuhriy, 2011). The dogmatic tendency of character education shows problems in its implementation. This indicates that the behavioral approach used in the Islamic boarding school environment is not patent to students' character to survive outside the school environment. Therefore, character education is similar to developing brain potential through neuroscience (S. Suyadi, 2018). In this case, all brain systems work in unison to build attitudes and behavior. Therefore, character education in Islamic boarding schools is only dogmatic because it does not use brain education or neuroscience.

Using a behavioral approach or habituation in Islamic boarding schools, madrasas, and universities, is biased. The main problem is how students maintain their behavioral character formed in the educational process in an environment where the habituation model is compulsory. In this case, they cannot maintain their behavior outside the educational environment. Therefore, the paradigm formation by educational institutions must realize that education is not concerned with psychology but must cultivate the students thinking capabilities (Nursa & Suyadi, 2020).

Islamic education is the main hope of Muslims in forming character and morals, though it still uses many conventional methods. Consequently, students cannot become a benchmark capable of changing themselves and their surroundings upon leaving school. The methods used in Islamic education make the students unable to maintain good character. The output and reality are not in line with the desired expectations, since behavioral method is teacher-centered and only results-oriented (Asfar et al., 2019). Therefore, it is necessary to use neuroscience-based Islamic education (Saifurrahman & Suyadi, 2019).

There are potential problems in character education courses not using a neuroscience-based approach. Therefore, there is a need for a neuroscience approach to producing unique students. This would allow all activities be stored in brain memory and produce students whose personalities are not easily eroded by the environment or people surrounding.

CONCLUSION

The behavioral method cannot solve the problem of Islamic character education because it only relies on stimulus and response from students, indicating that its application is too dogmatic. The method cannot help character education students adapt to new circumstances outside the school environment, which is effective. In contrast, a

neuroscience approach or brain education effectively assesses character education implementation. Therefore, a comprehensive study should be conducted to compare more than one method of character education approach that allows new policy implementation.

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