

Implementation of Neuropedagogy in Strengthening the Panca Jiwa in Pesantren

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Abstract

This paper explores the implementation of neuropedagogy in strengthening the Panca Jiwa values at pesantren (Islamic boarding schools). The background of the study emphasizes the importance of character education in pesantren, which is traditionally rooted in religious values that shape the personality of santri (students). The purpose of this study is to analyze how neuropedagogical strategies can enhance the internalization of the Panca Jiwa values, which include sincerity, simplicity, independence, Islamic brotherhood (ukhuwah Islamiyah), and freedom. The study utilizes a library research method, gathering data from scientific sources, journals, and books related to neuropedagogy, character education, and pesantren culture. The results show that integrating neuropedagogy with pesantren's traditional values can foster a more profound understanding and emotional connection to these values. This approach not only addresses cognitive learning but also supports emotional and social development, aligning with the educational goals of pesantren. The conclusion highlights the potential of neuropedagogy as an innovative strategy to improve the character education of santri, making it more personal, emotional, and impactful in shaping their moral and intellectual development. The study suggests further exploration of this approach for optimal adaptation to contemporary educational needs.

Keywords: *Character, Five Souls, Neuropedagogy, Pesantren.*

INTRODUCTION

Pesantren, as a non-formal educational institution, has unique and potential characteristics in shaping character. With its comprehensive and integrated educational system, pesantren is effective in fostering the character and personality of its students¹. The pesantren culture is considered capable of shaping the character of santri, as it gives rise to various activities related to religious, social, and personal development². In pesantren, religious knowledge that is nurtured in classrooms and places of worship will not make society religious if it only fills the cognitive space without internalizing the values into the heart, actions, and thoughts of its followers. The learning culture in pesantren, created as an effort to form character, occurs because pesantren culture has been internalized in the lives of santri³. Such cultures include the presence of the pesantren, classical Islamic texts, as well as the roles of kyai (Islamic scholars) and santri. Ultimately, these elements become part of the system in the educational process within pesantren⁴.

The concept of Panca Jiwa (Five Souls) was introduced by K.H. Imam Zarkasyi as a fundamental principle inherent in pesantren life. Panca Jiwa represents values used to develop and nurture the ability of santri to build soft skills in order to shape individuals who are both faithful and virtuous. The educational process aims to develop the potential and personality of students, which is essential for realizing the educational objectives within pesantren⁵. The Panca Jiwa of the pesantren forms the worldview and the foundation of actions for santri, shaping their way of thinking, mental attitude, and behavior. These values should have become an integral part of the lives of santri, influencing the decisions and actions they take, guided by the values that serve as their role models within the pesantren⁶. Previous research on the application of Panca Jiwa in pesantren has been conducted using the Targhib wa Tarhib method, which has proven significant in nurturing the character of Panca Jiwa at Pesantren Daarul Ukhuwah As'adiyah⁷.

The methods used to form the character of Panca Jiwa at Pesantren Daarul Ukhuwah include three main approaches: advice, role modeling, and habituation. The

¹ Yudi Latif, *Negara Paripurna: Historis, Rasionalis Dan Aktualitas Pancasila* (Jakarta: Gramedia Pustaka Utama, 2020).

² Yuyun Yunita and Abdul Mujib, "Pendidikan Karakter Dari Perspektif Islam," *Jurnal Taujih Jurnal Pendidikan Islam* 14 No.01, no. Pendidikan karakter dalam perspektif Islam (2021): 78–90.

³ Mohamad Mustari, *Nilai Karakter Refleksi Untuk Pendidikan* (Jakarta: Raja Grafindo Persada, 2014).

⁴ Maryono Maryono, "Budaya Pesantren Dalam Pembentukan Karakter Pada Santri Sekolah Menengah Pertama Berbasis Pesantren," *DWIJA CENDEKIA: Jurnal Riset Pedagogik* 6, no. 2 (2022): 296, <https://doi.org/10.20961/jdc.v6i2.63441>.

⁵ Irwan Masduqi, "Deradikalisme Pendidikan Islam Berbasis Khasanah Pesantren," *Jurnal Pendidikan Islam* 1, no. 2 (2012): 3–4.

⁶ Andy Dermawan, "Internalisasi Core Values Di Pesantren Sebagai Budaya Organisasi," *Jurnal Manajemen Dakwah* 02, no. 02 (2016): 240, <https://ejournal.uin-suka.ac.id/dakwah/JMD/article/view/1086>.

⁷ Hamsir Hamsir, Khojir Khojir, and Shafa Shafa, "Pertumbuhan Karakter Panca Jiwa Santri Melalui Metode Targhib Wa Tarhib Di Pondok Pesantren Daarul Ukhuwah As'Adiyah Kabupaten Kutai Kartanegara," *Inspiratif Pendidikan* 12, no. 2 (2023): 307–35, <https://doi.org/10.24252/ip.v12i2.41437>.

role of kyai and asatidz (teachers) as role models is critical to the success of character education, as santri need real figures to emulate in their daily lives⁸. The implementation of Panca Jiwa in Pesantren Putri Al-Mawaddah involves the habituation of the Panca Jiwa values, the enforcement of regulations or discipline, and learning processes⁹.

The application of Panca Jiwa in practice is not always smooth. One of the main challenges is the decline in the sincerity of motivation among santri, especially when learning is more driven by parental expectations or worldly ambitions, rather than the heartfelt desire to seek knowledge. The phenomenon of the commercialization of pesantren education, such as high tuition fees and luxurious facilities, tends to shift the spirit of simplicity that should characterize pesantren life. On the other hand, the independence of pesantren remains a challenge, with many institutions still dependent on external assistance and lacking adequate life skills training systems for santri. In terms of ukhuwah Islamiyah (Islamic brotherhood), differences in the backgrounds of santri and the lack of space for dialogue often lead to internal conflicts or exclusive behavior among groups. Additionally, some pesantren still emphasize absolute obedience to authority, without allowing santri to think critically or engage in open discussions, which could hinder intellectual development and academic freedom. These various challenges demonstrate that although Panca Jiwa serves as the philosophical foundation of pesantren, its implementation requires a contextual and adaptive approach to the evolving times.

The urgency of possessing the Panca Jiwa character as the spirit (soul) of progress towards national advancement is clear. The hope is that the implementation of Panca Jiwa can shape the character of santri within pesantren amidst the rapid development of technology¹⁰. Some practices of using neuro-pedagogy in Hungary's kindergarten education show that teachers there have become aware of the importance of implementing teaching approaches that consider brain and emotional development to maximize children's growth. They build experiences through activities supported by an environment full of love, attention, emotional support, and empathy throughout the neuro-pedagogical learning process¹¹. The use of neuro-pedagogy and psychology to enhance creative skills in art classes has been shown to improve personality development in preschool children in Ukraine. A teacher's competence in neuro-

⁸ Romadhon and Ali Rohman, "Implementasi Pendidikan Karakter Panca Jiwa Di Pesantren Daarul Ukhuwwah Kecamatan Pakis Kabupaten Malang," *Prosiding Seminar Nasional Pendidikan Dan Pembelajaran Bagi Guru Dan Dosen* 3 (2019): 734–38.

⁹ T A Lestari, "Implementasi Panca Jiwa Pondok Dalam Menumbuhkan Karakter Disiplin Santriwati Kelas 6 Pesantren Putri Al-Mawaddah Ponorogo," 2021, <http://etheses.iainponorogo.ac.id/16701/>.

¹⁰ Lisda Nurul Romdoni and Elly Malihah, "Membangun Pendidikan Karakter Santri Melalui Panca Jiwa Pondok Pesantren," *Jurnal Pendidikan Agama Islam Al-Thariqah* 5, no. 2 (2020): 13–22, [https://doi.org/10.25299/al-thariqah.2020.vol5\(2\).4808](https://doi.org/10.25299/al-thariqah.2020.vol5(2).4808).

¹¹ Tünde Szécsi, László Varga, and Veronika Mák, "Current Trends, Dilemmas and Future Directions in Neuropedagogy in the Field of Early Childhood," *Képzés És Gyakorlat* 16, no. 3 (2018): 51–58, <https://doi.org/10.17165/tp.2018.3.6>.

pedagogy correlates creative cognitive abilities by adjusting tasks according to the age, ability, and psychological condition of students, with positive emotional states achieved by stimulating the child's emotions¹².

The application of neuro-pedagogy in strengthening Panca Jiwa in pesantren has the potential to become a new proposition, as this approach internalizes values not only cognitively but also through affective and social experiences. The aim of this article is to analyze the potential of implementing the neuro-pedagogy approach to strengthen Panca Jiwa in pesantren.

METHOD

This research employs a library research approach, exploring various relevant scientific sources. The process of searching is carried out using keywords such as "neuropedagogy", "Panca Jiwa (Five Souls)", and "pesantren" in national and international journal databases, as well as references from credible academic books. The data collection technique is conducted through documentation methods, which involve gathering, recording, and reviewing written documents such as journal articles, books, and previous research findings that are relevant to the research topic.

Subsequently, the collected data is analyzed using critical analysis techniques, aimed at deeply examining the relevance, accuracy, and contribution of each source to the development of the central idea in the research. This analysis allows the researcher to build a strong theoretical synthesis and generate profound conceptual findings regarding the integration of the neuropedagogical approach in internalizing the values of Panca Jiwa within the pesantren environment.

RESULT AND DISCUSSION

Neuropedagogical Approach

Neuropedagogy considers brain activity, so both formal and non-formal learning activities must stimulate cognitive activity. Brain stimulation should be aligned with the learning process. When the brain needs to solve problems, neuropedagogy designs educational tasks that address these challenges. One important principle in neuropedagogy for educational activities is the production of dopamine. Dopamine is a substance in the brain that induces feelings of satisfaction with human activity. This approach combines emotional satisfaction with intellectual problem-solving¹³.

The meaning of neuropedagogy, according to research findings, is as follows: First, Jiménez (2010) states that neuropedagogy's object of study is human life, particularly the brain, which is understood not as a computer, but as a social organ

¹² Liudmyla Shulha et al., "Developing Creative Abilities in Preschoolers in Painting Classes via the Principles of Neuropedagogy and Psychology of Creativity in Ukraine," *Revista Romaneasca Pentru Educatie Multidimensionala* 13, no. 4 (2021): 614–32, <https://doi.org/10.18662/rrem/13.4/501>.

¹³ Vasily Kaplinsky et al., "Educational Needs of Society: Neuropedagogy as One of the Main Aspects of Motivation in Learning within Formal and Non-Formal Education," *BRAIN. Broad Research in Artificial Intelligence and Neuroscience* 13, no. 3 (2022): 225–35, <https://doi.org/10.18662/brain/13.3/364>.

that requires affection, recreation, and play for its development. Second, Castillo (2015) describes neuropedagogy as arising from the integration of pedagogy, psychology, and neuroscience, aiming to study the brain and its functions, approaching humans integrally from a social dimension, recognizing their needs and characteristics to empower them and develop various aspects, including learning. Neuropedagogy refers to how the brain works and how understanding the brain can explain why some learning practices are more appealing than others.

Finally, Torres Ríos, Alvarado Zermeño, and Bernal Trigueros (2018) argue that neuropedagogy enables teachers to improve their students' learning. In this context, teachers need to possess knowledge in this field to design didactic strategies that allow students to develop competencies included in their curriculum¹⁴. This study aligns with the findings of Etika (2025), who stated that teachers not only teach but also serve as role models for students in managing emotions, coping with stress, and providing motivation. The goal is for students to maximize their abilities and intelligence, which originate from the brain system (neuroscience), adapt optimally to various social conditions, and develop into individuals with mature Islamic thinking.¹⁵

Neuropedagogy aims to improve learning by encouraging educators to use discoveries related to learning, memory, language, and other areas of students' cognitive structures so that educators can create the best strategies for teaching and learning. The tasks of neuropedagogy include: gathering information about the neurobiological realities of education; analyzing the realities, relationships, and dependencies within them; and disseminating the knowledge acquired to transform such realities¹⁶. The neuropedagogical approach helps modernize education systems to improve teaching and learning processes and address school failures¹⁷. According to standards and research findings on the brain, learning needs to consider brain-based strategies to optimize learning for all children.

1. Safe Environment

Safety and well-being are priorities in brain-based learning. Children will struggle to learn if they experience fear, restrictions, hunger, or aggressive behavior from peers. Therefore, teachers must ensure the classroom is free from fearful elements, begin activities with safety rituals, and reassure children that they are safe with their teacher and classmates. Considering the learning environment, Farmer-Dougan and Alferink's

¹⁴ A H Fernández, "Neuropedagogy and Neuroimaging," *Texto Livre* 15 (2022), <https://doi.org/10.35699/1983-3652.2022.40453>.

¹⁵ Etika Pujianti, "Integrating Neuroscience Perspectives in Islamic Religious Education: Strategies for Developing Islamic Character in Students," *At-Ta'dib*. Vol. 19. No. 2 (2024), <http://dx.doi.org/10.21111/attadib.v19i2.12666>.

¹⁶ Michael S.C. Thomas et al., "Neuropedagogy as a Scientific Discipline: Interdisciplinary Description of the Theoretical Basis for the Development of a Research Field," *World Academy of Science, Engineering and Technology International Journal of Educational and Pedagogical Sciences* 12, no. 4 (2019): 1–8, <https://doi.org/10.5281/zenodo.1474341>.

¹⁷ Oksana Piddubna et al., "Implementing Neuropedagogical Innovation in Schools: From Theory to Practice," *BRAIN. Broad Research in Artificial Intelligence and Neuroscience* 14, no. 2 (2023): 37–58, <https://doi.org/10.18662/brain/14.2/443>.

research suggests that the quality of caregiving impacts brain structure and neural networks development. Therefore, it is crucial to create an environment that supports children's development during their first eight years. If the environment is limited, the activities and experiences derived from it will be limited, which can hinder neural networks from exploring and learning¹⁸.

2. Emotions

Emotions are effective tools for influencing memory and brain functions. When someone feels satisfied, the brain releases endorphins that can enhance memory skills¹⁹. Therefore, it is essential to start the class with, firstly, humorous and funny stories, as laughter helps children feel safe and satisfied. Secondly, singing songs together, movement and songs, or even drawing freely while listening to enjoyable music. Thirdly, paying attention to the sequence and pace of daily activities. Children will feel overwhelmed if they are presented with too much new information, so teachers should encourage children to reflect on what they have learned. Fourthly, helping children control what they are learning. Researchers agree that short, topic-specific lessons align better with the brain's processing capacity. Fifth, teachers should be proactive and use logical strategies to address classroom situations since threats and punishments can trigger negative emotions that hinder learning. Sixth, maintaining social and emotional intelligence. Children must learn to follow the teacher's instructions, cooperate, complete tasks, take initiative to master new information, control verbal impulses, behaviors, solve problems, and take responsibility for their actions. This is the right time to create a cooperative, collaborative, and team-oriented learning environment.

3. Multisensory Practices

The more senses involved in learning, the more information the brain receives. Using multiple senses in learning helps children more easily connect new information with their existing knowledge. Activities that can be done include: First, using real materials, which means using familiar and tangible objects to demonstrate concepts that can make ideas concrete. Second, using songs or rhymes, as rhythm patterns are catchy for children. Third, making everything fun. Singing, dancing, playing games, and laughing are activities that engage multiple senses and simultaneously improve memory. Fourth, providing a natural environment. Bringing children's activities into real-world environments.

4. Supporting Learning Practices Based on Differences

Teachers facilitate the differences present among children in the classroom because each child develops according to their own timeline and varies in many ways. These differences make children unique, stemming from culture, family, temperament,

¹⁸ Valeri Farmer-Dougan & Larry A. Alferink, *Brain Development, Early Childhood, and Brain-Based Education: A Critical Analysis* (New York: Springer, 2013), https://link.springer.com/chapter/10.1007/978-94-007-6671-6_5.

¹⁹ Eric Jensen, *Brain Based Learning, Pembelajaran Berbasis Kemampuan Otak, Cara Baru Dalam Pengajaran Dan Pelatihan*, Terj. Narulita Yusron (Yogyakarta: Pustaka Pelajar, 2008).

multiple intelligences, personality styles, special needs, or developmental delays. Teachers can do the following: First, focus attention on the child, for instance, by starting with music, photos, or games. Second, divide learning into small, manageable parts. Children can focus better when receiving less information at a time. Third, engage in hands-on practice. According to Sousa, hands-on manipulation can enhance 75% of new information. Direct investigations increase sensory input, helping students focus. This allows for experimentation, letting children experience trial and error, which increases the likelihood that they will understand and build relevance with what they are learning²⁰. Fourth, use an integrated approach.

5. Inclusive/Supportive Classrooms

Children with special needs (such as visual or hearing impairments, cognitive delays, motor delays, speech/language issues, or emotional challenges) learn in the same environment as their peers. This can be a positive experience for all children. First, present simple concepts. Second, modify tools and materials according to the needs of the child. Third, recognize signs of developmental delays. Identify delayed development and provide additional opportunities to practice using new information while offering several methods to introduce learning concepts. Fourth, set goals according to the child's age and developmental stage.

6. Meaningful Learning

Feelings and meaning are essential for the brain to process new information in a logical and meaningful way²¹. First, leverage prior knowledge by connecting existing knowledge with what will be taught. Second, use organization to help children see connections between various pieces of information using images, maps, etc. Third, practice directly through hands-on activities. Fourth, reflect by encouraging children to reflect on what they have learned by asking them questions.

Panca Jiwa (Five Souls) in Pesantren

The essence of pesantren lies in its content and soul (ruh), not its outward form, because the soul that governs the atmosphere of life in pesantren is what the santri carry as the primary foundation for their lives in society. This soul of the pesantren must always be kept alive, nurtured, and developed as best as possible²². In addition to the santri, the commitment of pesantren teachers is also shaped by the cultural values contained in Panca Jiwa, particularly the values of sincerity and loyalty.²³

Panca Jiwa consists of five values that must be instilled and internalized by santri to build character, values that are practiced in daily life. The atmosphere in pesantren

²⁰ David A Sousa, *Bagaimana Otak Yang Berbakat Belajar* (Jakarta: Indeks, 2012).

²¹ Sousa.

²² Ahmad Suradi, "Analisis Dampak Transformasi Pendidikan Pesantren Terhadap Penanaman Jiwa Keikhlasan Santri Di Pondok Pesantren," *Ta'allum: Jurnal Pendidikan Islam* 6, no. 1 (2018), <https://doi.org/10.21274/taalum.2018.6.1.197-218>.

²³ Rasyidin, Muhammad Anggung Manumanoso Prasetyo, Ayesha Fakhra Naeem, Abdullah Sani Ritonga, "The Role of Pesantren Cultural Values in Enhancing Teacher Professional Identity and Commitment," *At-Ta'dib*. Vol. 20. No. 1, (2025), <https://doi.org/10.21111/attadib.v20i1.13927>.

is closely aligned with values that build the character of santri to possess a spirit of sincerity, simplicity, independence, brotherhood, and freedom, in preparation for becoming individuals of noble character, virtuous morals, and meaningful lives for a better future. The Panca Jiwa of the pesantren is not just a slogan, but these five souls represent a character education that must be shaped for the santri. In building the character of santri, educators or caretakers must pay attention to the processes and activities that are frequently carried out²⁴. The soul of pesantren consists of five principles, known as "Panca Jiwa Pesantren"²⁵:

1. Spirit of Sincerity: Free from selfish motives (not driven by specific desires). It is purely for the sake of worship. This includes the entire atmosphere of life in the pesantren. The Kyai teaches sincerely, the santri learn sincerely, and the head of the pesantren assists sincerely. Every action in the pesantren runs in an atmosphere of deep sincerity. This creates a harmonious atmosphere between the respected Kyai and obedient santri, filled with love and respect. A santri's sincere attitude provides awareness that whatever is given or ordered by the pesantren is for the greater good, and this is seen by the santri as a form of worship.
2. Spirit of Simplicity: Life in the pesantren is surrounded by simplicity, yet it is noble. Simplicity does not mean passivity or living in poverty. It carries elements of strength and resilience in facing difficulties. Behind this simplicity, a great soul shines through, willing to keep moving forward in life's struggles and never giving up in any circumstance.
3. Spirit of Independence: This education instills a strong weapon. Independence is not just about santri learning and practicing to manage their own interests, but the pesantren itself as an educational institution never relies on the charity or assistance of others.
4. Spirit of Ukhuwah Islamiyah (Islamic Brotherhood): Life in the pesantren includes an atmosphere of close brotherhood, unity, and mutual cooperation. All joys are shared, creating a bond of religious feelings and ukhuwah (brotherhood), not only within the pesantren but also carried beyond it, even influencing the unity of the community in society.
5. Spirit of Freedom: Freedom in thinking and acting, the freedom to determine their future and choose their path in society; with a noble spirit and optimism in facing life.

From these five Panca Jiwa, the philosophy and life orientation emerge from the soul of the pesantren. This life philosophy is instilled by the Kyai in the santri through daily life in the pesantren. The Kyai offers guidance related to the traditions of life.

²⁴ Abd Mukti, Syamsu Nahar, and Muhammad Baihaqi, "Model Penanaman Akhlak Santri Melalui Panca Jiwa Di Pondok Pesantren Modern Sumatera Utara," *Edukasi Islami: Jurnal Pendidikan Islam* XI, no. 1 (2022): 1183–1202, <https://doi.org/10.30868/ei.v11i01.2980>.

²⁵ Zarkasyi and Abdullah Syukri, *Pondok Pesantren Sebagai Alternatif Kelembagaan Untuk Program Pengembangan Studi Islam Di Asia Tenggara* (Surakarta: UMS, 1999).

The Implementation of Neuropedagogy in Strengthening Panca Jiwa in Pesantren

Strategies for applying neuropedagogy to strengthen Panca Jiwa in pesantren must consider creating a safe environment, prioritizing emotions, implementing multisensory practices, supporting differentiated learning, accommodating children with special needs, and ensuring meaningful learning.

1. Safe Environment

Creating a safe environment in pesantren is crucial for supporting the optimal growth and development of santri, physically, mentally, and spiritually. A safe environment is not only free from physical violence but also from psychological pressure, bullying, and other discomforts. Several studies have highlighted the importance of close supervision from caretakers and pesantren management to ensure the safety and well-being of the santri. Proper supervision can prevent violence or bullying within the pesantren²⁶.

In addition to supervision, implementing a structured system of safety and comfort is also necessary. This includes educating dormitory residents about the importance of safety and comfort, as well as improving the physical dormitory environment to create a conducive setting. Programs such as educational workshops and surveys to assess needs can help identify and address issues within the pesantren environment²⁷.

The concept of a child-friendly pesantren also becomes a strategic step in creating a safe environment. This concept focuses on protecting children's rights within the pesantren, creating an atmosphere that is safe, comfortable, and supportive of the physical, mental, and social development of santri. The implementation of this policy requires support from all parties, including the government, caretakers, and the surrounding community²⁸. A safe and conducive environment can enhance the formation of character in students. A supportive environment enables students to learn and practice positive values in their daily lives. Conversely, an unsafe environment can lead to stress and anxiety, hindering character development.

Studies have shown that teachers in primary schools in the Czech Republic create a safe learning environment. The primary strategies used by teachers to foster a safe environment include creating an inclusive and supportive classroom atmosphere,

²⁶ M Arfah and Wantini Wantini, "Perundungan Di Pesantren: Fenomena Sosial Pada Pendidikan Islam," *Urwatul Wutsqo: Jurnal Studi Kependidikan Dan Keislaman* 12, no. 2 (2023): 234–52, <https://doi.org/10.54437/urwatulwutsqo.v12i2.1061>.

²⁷ Annisa Qudrunnada et al., "Edukasi Dan Implementasi Sistem Keamanan Dan Kenyamanan Di Asrama Pesantren Babul Maghfirah Aceh Besar," *Jurnal Pengabdian Masyarakat (INOTEC)*, 6, no. 2 (2024): 32–35.

²⁸ Moh Mahmudi, Putra Fernanda Setya Abdullah, and Hayat, "Implementasi Kebijakan Pondok Pesantren Ramah Anak : Tantangan Dan Peluang Di Era Modern Implementation of the Child Friendly Islamic Boarding School Policy : Challenges and Opportunities in the Modern Era," *JAP: Jejaring Administrasi Publik* 16, no. c (2024): 131–43, <https://doi.org/10.20473/jap.v16i2.65651>.

applying teaching approaches that focus on character values²⁹. Setting participatory rules, promoting student performance without violence, and using individual approaches to teaching³⁰. These actions can contribute to the creation of a safe environment while also supporting personality development³¹.

The implication of a safe environment in strengthening Panca Jiwa in the process of character building in pesantren can be achieved through the creation of a safe environment. Indicators include a clean and comfortable physical environment, and a psychologically safe environment free from bullying, physical, psychological, or sexual violence. The learning space should create a democratic atmosphere, valuing every child, being inclusive (open), and using an individual approach in learning.

2. Prioritizing Emotions

Character education that prioritizes emotions is an educational approach that considers emotional aspects as an integral part of the character-building process. This approach is known as Social and Emotional Learning (SEL), which is the process by which individuals develop self-awareness, emotional management, social skills, empathy, and responsible decision-making. In this context, emotions are not seen as disruptions to learning but as a source of strength in shaping good character.³²

The strategy of emotion-based character education involves several key aspects, including: (1) recognizing and understanding one's own emotions and those of others (emotional awareness), (2) managing emotions in a healthy way, (3) showing empathy, (4) building and maintaining positive relationships, and (5) making ethical and responsible decisions. Teachers play a crucial role as facilitators who help students integrate cognitive learning with emotional experiences through discussions, reflections, role-playing, and collaborative activities.

One concrete approach to emotion-based character education is integrating emotional reflection activities into daily lessons. For example, before starting a lesson, students are invited to check their mood, express their feelings, and given space to calm down if necessary. In this activity, children learn to understand that emotions are a legitimate part of life and need to be recognized and managed appropriately.

Research findings suggest that learning with an emphasis on emotions helps students develop self-awareness, empathy, and social skills, which are fundamental in

²⁹ Vera Monteiro, Carolina Carvalho, and Natalie Nóbrega Santos, "Creating a Supportive Classroom Environment Through Effective Feedback: Effects on Students' School Identification and Behavioral Engagement," *Frontiers in Education* 6, no. June (2021): 1–14, <https://doi.org/10.3389/feduc.2021.661736>.

³⁰ Veronika Bačová, "Developing a Safe Learning Environment in Primary-Level Innovative Schools in the Czech Republic," *International Journal of Primary, Elementary and Early Years Education* 3, no. 13 (2024): 1–11, <https://doi.org/10.1080/03004279.2024.2410482>.

³¹ Rindiyan Puteri Pertiwi, Amir Pada, and Widya Karmila Sari Achmad, "Hubungan Lingkungan Sekolah Dengan Pembentukan Karakter Siswa Sekolah Dasar Di Makassar," *INNOVATIVE: Journal Of Social Science Research* 4, no. 3 (2024): 186–95.

³² Christina F. Mondì, Alison Giovannelli, and Arthur J. Reynolds, "Fostering Socio-Emotional Learning through Early Childhood Intervention," *International Journal of Child Care and Education Policy* 15, no. 1 (2021), <https://doi.org/10.1186/s40723-021-00084-8>.

character development³³. Strengthening Panca Jiwa can be achieved by prioritizing emotions, so that each santri builds awareness of the importance of embodying the Panca Jiwa values in themselves.

3. Multisensory Practices

Multisensory practices that can be applied in instilling character values in the educational environment include:

Interactive storytelling, where students are involved in stories read aloud with voice intonations, visual aids, and body movements. Stories that contain moral values such as honesty, courage, or empathy are easier to understand and internalize when presented multisensorily³⁴. Through activities such as drawing, painting, making collages, or crafts with themes related to character values (e.g., creating posters about cooperation or tolerance), students learn through touch, vision, and deep motor coordination³⁵.

Role-playing allows children not only to understand character from a cognitive perspective but also to emotionally and physically experience how to apply values like responsibility or courage³⁶. Using songs, dances, or clapping that convey moral messages such as respecting parents or preserving the environment. This activity simultaneously activates auditory, kinesthetic, and affective channels³⁷. Students are asked to observe pictures, listen to audio recordings or short videos depicting ethical situations, and then invited to discuss the attitudes or decisions of the characters in them³⁸.

Strengthening Panca Jiwa can be packaged through multisensory practices, such as stories about pesantren figures, involving santri in creating posters containing the Panca Jiwa values, making videos or songs created by santri about Panca Jiwa, and consistently engaging in social analysis in the community.

4. Supporting Learning Based on Differences

This approach allows teachers to adjust teaching strategies based on the unique needs of each student, supporting more effective and meaningful learning³⁹. Differentiated learning contributes significantly to shaping students' character through

³³ Joseph A. Durlak et al., "The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions," *Child Development* 82, no. 1 (2011): 405–32, <https://doi.org/10.1111/j.1467-8624.2010.01564.x>.

³⁴ Mustafa Gazioğlu and Neslihan Karakuş, "The Impact of Multisensory Learning Model-Based Tale-Telling on Listening Skills and Student Opinions about It," *Frontiers in Education* 8, no. September (2023): 1–9, <https://doi.org/10.3389/feduc.2023.1137042>.

³⁵ Amanda Romaine, "Student Development The Role of Multi-Sensory Learning in Elementary Classrooms on Student Development" 17 (2023): 59–72.

³⁶ Siti Hajar Diaudin et al., "The Effectiveness of Using Multisensory Learning Style toward the Improvement of Preschool Student 's Fine Motor Skills," 2024, 418–29, <https://doi.org/10.4236/jss.2024.1211030>.

³⁷ Romaine, "Student Development The Role of Multi-Sensory Learning in Elementary Classrooms on Student Development."

³⁸ Gazioğlu and Karakuş, "The Impact of Multisensory Learning Model-Based Tale-Telling on Listening Skills and Student Opinions about It."

³⁹ H Pitaloka and M Arsanti, "Pembelajaran Diferensiasi Dalam Kurikulum Merdeka," *Seminar Nasional Pendidikan Sultan ...*, no. November (2022): 2020–23, <http://jurnal.unissula.ac.id/index.php/sendiksa/article/view/27283>.

approaches that adjust learning strategies based on individual needs, readiness, and interests. In this context, character traits such as empathy, responsibility, and self-confidence can be developed through relevant and meaningful learning experiences.

The practice of differentiated learning by teachers significantly contributes to students' emotional well-being, social inclusion, and academic self-concept. Students who feel valued and supported in the learning process tend to develop a positive attitude toward themselves and others⁴⁰. Differentiated learning allows students to work in diverse groups and face challenges appropriate to their readiness level. This encourages the development of social skills such as cooperation, communication, and empathy, which are essential in character formation.

Each santri has different learning needs. Therefore, teachers need to understand the differences in each child as unique in internalizing the Panca Jiwa character. By adjusting learning differences, the formation of the Panca Jiwa character will be easier. Differences that need to be considered in strengthening Panca Jiwa include variations in parental upbringing backgrounds and children's learning styles. Every difference in children requires different treatment. As teachers, it is essential to identify the needs of each child before providing reinforcement.

5. Accommodating Special Needs Children

In neuropedagogy, accommodating children with special needs refers to inclusive learning. In practice, very few pesantren accommodate children with special needs; however, inclusive strategies can be applied to strengthen Panca Jiwa in pesantren. Inclusive education is presented simply. Simplicity means providing knowledge and experiences that are close to the santri's environment. Recognizing the development of each santri helps set learning objectives according to the development stage of the santri.

Relevant research suggests that moral reinforcement is achieved through approaches that facilitate positive social interactions, value reflection, and appropriate role modeling and guidance according to children's cognitive and emotional abilities⁴¹. Support from teachers and peers ensures that children feel valued, safe, and able to build healthy social relationships, which are essential in moral character development.

6. Meaningful Learning

Meaningful learning for strengthening Panca Jiwa can be achieved by linking knowledge and experiences for santri. Santri are provided with insights into the values of Panca Jiwa, followed by a learning process that results in experiences related to the ownership of these values. Through meaningful learning approaches that do not solely rely on memorization and the transfer of knowledge, but build awareness of meaning and deep spiritual and social experiences. In this context, meaningful learning becomes

⁴⁰ Marcela Pozas et al., "DI (Differentiated Instruction) Does Matter! The Effects of DI on Secondary School Students' Well-Being, Social Inclusion and Academic Self-Concept," *Frontiers in Education* 6, no. December (2021): 1–11, <https://doi.org/10.3389/educ.2021.729027>.

⁴¹ Lani Florian and Kristine Black-Hawkins, "Exploring Inclusive Pedagogy," *British Educational Research Journal* 37, no. 5 (2011): 813–28, <https://doi.org/10.1080/01411926.2010.501096>.

a transformative tool that makes santri not only intellectually smart but also morally and emotionally mature.

The concept of meaningful learning in pesantren also leads to holistic character building through an approach that touches on cognitive, affective, and psychomotor dimensions. Learning in pesantren is dynamic and contextual, not confined to the classroom, and highly relevant for character education in the modern era⁴². Applying the Panca Jiwa values through the neuropedagogical approach is a strategic effort to strengthen the formation of santri's character by utilizing an understanding of how the brain learns optimally.

Neuropedagogy integrates principles from neuroscience, cognitive psychology, and pedagogy to create learning environments that consider how the brain works, including aspects of affection and motivation. When the Panca Jiwa values sincerity, simplicity, independence, ukhuwah Islamiyah, and freedom are internalized through this approach, these values are not only received cognitively but are also processed emotionally and sensorimotorically, making them deeper and more meaningful for santri. Implementing Panca Jiwa through the neuropedagogical framework makes the educational process in pesantren more personal, directed at emotional processing, and supports long-term behavioral change. This approach ensures that santri not only memorize and know the values but truly experience and practice them in real life.

The implementation of neuropedagogy in internalizing the Panca Jiwa values in pesantren is essential for several reasons, including: Neuropedagogy facilitates meaningful learning: Panca Jiwa, which consists of sincerity, simplicity, independence, ukhuwah Islamiyah, and freedom, is not merely knowledge that can be transferred verbally, but values that must be experienced and internalized through meaningful experiences⁴³.

Brain-based learning reinforces internal processes: Neuropedagogy emphasizes holistic brain stimulation through sensorimotor, emotional, cognitive, and social activities. Each value in Panca Jiwa can be realized through learning strategies involving direct experiences, deep reflection, and constructive social interactions.

Accommodating diverse learning styles: Each santri has different learning styles and intelligences. Neuropedagogy respects these differences and encourages adaptive, multimodal learning approaches. This aligns with the spirit of Panca Jiwa, particularly the value of freedom, which includes freedom of thought and responsibility. Integrating this approach makes pesantren an inclusive space that supports the optimal growth of every santri's character.

⁴² Rofik and Rosyid Pratidinal Jadid, "Religious Moderation in Walisongo Material in History Textbook of Islamic Culture Class VI Madrasah Ibtidaiyah Ministry of Religion 2016," *Jurnal Pendidikan Agama Islam* 18, no. 1 (2021): 55–88, <https://doi.org/10.14421/jpai.2021.181-04>.

⁴³ Mary Helen Immordino-Yang and Antonio Damasio, "We Feel, Therefore We Learn: The Relevance of Affective and Social Neuroscience to Education," *LEARNing Landscapes* 5, no. 1 (2011): 115–31, <https://doi.org/10.36510/learnland.v5i1.535>.

Promoting emotional safety and attachment: Neuropedagogy emphasizes the importance of emotional and social safety in the learning process. When santri feel accepted and valued, their brain is in an optimal state for learning, including learning values. This is closely related to the value of ukhuwah Islamiyah, which promotes togetherness and solidarity.

Increasing retention and transfer of values: Neuropedagogy makes the values taught easier to remember and apply in real-life situations. When learning is designed with consideration for how long-term memory works, the synaptic connections formed are stronger. This is crucial in character education because shaping attitudes and behaviors requires ongoing and consistent internalization. Learning becomes more lasting when it occurs in relevant, emotional, and social contexts.

CONCLUSION

The implementation of the Panca Jiwa values in pesantren through a neuropedagogical approach has the potential to become an innovative strategy in strengthening the character education of santri comprehensively. By integrating principles from neuroscience, psychology, and pedagogy, this approach enables a learning process that not only emphasizes the cognitive aspect but also activates the emotional and sensorimotor aspects of the santri, allowing values such as sincerity, simplicity, independence, ukhuwah Islamiyah, and freedom to be more deeply internalized. This approach makes the educational process more personal, emotionally engaging, and supportive of long-term behavioral change. Neuropedagogy strengthens meaningful learning by encouraging reflection, direct experiences, and deep emotional connections, which in turn activate brain areas involved in moral decision-making.

Furthermore, this approach accommodates the diversity of santri's learning styles, promotes inclusivity, and values individuality, while also fostering emotional security in the learning environment. A safe and supportive environment maximizes the learning potential of santri and strengthens their attachment to the noble values of pesantren. Neuropedagogy also supports the formation of strong retention and transfer of values in long-term memory. This is crucial in the process of character internalization, as the values taught become easier to access and apply in real life.

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