

The Impact of Outdoor Learning Strategies Based on Islamic Religious Education Values on the Spiritual Intelligence of Early Childhood

Nurrohman^{1*}, Farida², Muhamad Sukri Situmeang³, Mahamadaree Waeno⁴, Mohd Ziaolhaq Qazi Zada⁵

¹Universitas Serang Raya, Indonesia

²Sekolah Tinggi Ilmu Tarbiyah INSIDA Jakarta, Indonesia

³Universitas Islam Negeri Syarif Hidayatullah Jakarta, Indonesia

⁴Fatoni University, Thailand

⁵University of Wollongong, Australia

¹nrohman148@gmail.com, ²farida@stit-insida.ac.id, ³msukri.situmeang@uinjkt.ac.id,

⁴m.waeno@ftu.ac.th, ⁵zia.qazizada@uow.edu.au

*Corresponding Author

Submission May 21, 2025

Revised June 5, 2025

Accepted October 12, 2025

Publish November 17, 2025

ABSTRACT

The spiritual intelligence of early childhood remains relatively low; thus, innovative, contextual, and experiential-based Islamic education strategies are required to support the spiritual, social, emotional, and physical development of children. This study aims to enhance children's spiritual abilities through interactive, contextually relevant outdoor Islamic Religious Education activities. The research employed an experimental design with observational data from 15 students. Data analysis was conducted using validity testing and t-tests in SPSS. The study's pretest results indicated low to moderate spiritual abilities in early childhood (average score 1.33–1.67), particularly in identifying religion, mimicking worship movements, reciting prayers, and distinguishing between good and bad behaviour. Observation of Outdoor Islamic Religious Education activities revealed improvement, with children displaying increased enthusiasm, greater orderliness in the mosque/musholla, greater independence during ablution, greater mimicry of prayer movements, and greater diligence in reading the Qur'an (average score 2–3, categorized as Moderate–Good). The posttest showed a significant improvement (average score 2.33–2.67), reflecting a better understanding of religious teachings, improved worship skills, and positive behaviour. Pearson validity test ($r=0.977$, $p=0.000$) and the t-test ($p=0.000$) confirmed that the data were valid and showed a significant increase in spiritual intelligence. In conclusion, outdoor Islamic Religious Education activities enhance religious understanding, worship skills, positive behaviour, and motor, coordination, and social skills, with statistically significant results.

Keywords: Learning, Outdoor Learning, Islamic Religious Education, Spiritual Intelligence, Early Childhood.

Copyright © 2025 by Authors, Published by STAI Publisistik Thawalib Jakarta

A. INTRODUCTION

Spiritual intelligence (SI) in early childhood refers to the ability to act wisely and compassionately while understanding existential values and higher principles of life. It

encompasses dimensions such as critical existential thinking, personal meaning-seeking, transcendental awareness, and the expansion of consciousness (Dacka & Rydz, 2023; Abdolrezapour & Alipour, 2021). The Heart Intelligence model, which integrates spiritual, emotional, and social intelligence, has been shown to positively impact educators and their interactions with students (Abdulghani et al., 2018). SI contributes to the holistic development of children, including social and emotional skills, while fostering empathy, compassion, and resilience traits that are essential for emotional intelligence and overall well-being (Amram, 2022; Pinto et al., 2024; Ghonchehpour et al., 2025). The implementation of SI in early childhood education can create an environment that supports both spiritual and emotional growth, aligning with the goals of early education to build a foundation for lifelong learning (Chongcharoen et al., 2024). However, SI remains under-researched, particularly in early childhood, necessitating further studies to understand integration methods and their long-term impacts, including consideration of cultural and contextual factors (Kilcup, 2016; Nguyen, 2023).

The development of spiritual intelligence in early childhood is a crucial aspect of holistic education, focusing on character formation and emotional competencies. Spiritual intelligence can be measured through five components: the creation and awareness of personal meaning; self-understanding; mastery of self-control; awareness of authenticity and individual uniqueness; and social skill, with initial validation showing good psychometric properties (Grasmane et al., 2022). Research indicates that spiritual intelligence helps children develop a positive mindset, understand personal commitments, accept individual differences, and enhance interpersonal relationships and leadership abilities (Ahluwalia, 2019). Furthermore, emotional intelligence also plays a vital role, with programs like the WeFEEL Approach improving children's emotional knowledge and empathy skills both in the classroom and at home (Foerch & Adelman, 2024). Despite these challenges, implementing spiritual pedagogy requires educators to engage in personal reflection and epistemological understanding to integrate spirituality into their pedagogical practices (Rouse, 2024). Discrepancies between national and regional curricula may also affect the recognition and implementation of spirituality in early childhood education (Grajczonek, 2022).

Islamic Religious Education (PAUD) strategies involve structured and contextual approaches. Schools use assignments and direct instruction to guide children in understanding and practising Islamic teachings. At the same time, habituation through daily routines, such as prayers and ethical behaviours, reinforces the internalisation of these values (Cinantya et al., 2019). The role of role models, such as teachers and parents, is crucial in helping children imitate Islamic behaviours. Stories are used as a medium to deliver moral and religious lessons engagingly, allowing children to understand complex concepts in a fun manner (Chofifah et al., 2025). The integration of local cultural values, such as the *Gurindam 12* by Raja Ali Haji, helps children learn Islamic values within a familiar and meaningful context (Fauziddin et al., 2023; Subandi et al., 2025). The use of traditional games and interactive media, such as *kaulinan barudak Sunda*, makes learning more engaging and effective (Agustin et al., 2020). The involvement of parents as informal educators at home also strengthens children's religious education, though challenges such as limited parental participation persist (Pratiwi et al., 2025).

Observations before the intervention revealed that children's abilities to identify religion, imitate worship movements, recite prayers, distinguish between good and bad behaviour, and be

friendly and greeting others were still low to moderate, indicating a gap in the development of spiritual intelligence in early childhood. To address this, an innovative approach in the form of Outdoor Islamic Religious Education activities was introduced, including mosque visits, introductions to mosques, and practice of ablution, prayer, and Qur'anic recitation. The purpose of this research is to enhance children's spiritual abilities through direct learning experiences in real-life environments. The posttest results indicated significant improvement in the ability to identify religion, imitate worship movements, recite prayers, and exhibit friendly and polite behaviour. Pearson correlation analysis and t-tests confirm that these improvements were a direct effect of outdoor Islamic Religious Education activities. In addition to supporting spiritual development, these activities also improved children's gross motor skills, coordination, balance, mental health, and social skills. These findings emphasize that integrating outdoor learning has a comprehensive positive impact on child development.

B. RESEARCH METHOD

This study uses an experimental method with a one-group pretest-posttest design ($O_1 \times O_2$) conducted at the Qu Elmahira Kindergarten. The objective is to determine the impact of intervention on the development of spirituality and worship skills in children. A total of 15 students were selected as research subjects using purposive sampling, ensuring the participants represented the characteristics required for the study. Data collection was conducted through observation, assessing various aspects, including the ability to name their religion, understand basic teachings, imitate worship movements, recite prayers, differentiate between good and bad behaviour, and exhibit polite and friendly behaviour. The data collected was then validated to ensure accuracy and consistency in the assessment. Subsequently, the data were analyzed using a t-test to examine significant differences between the pretest results before the intervention and the posttest results after the intervention. Analysis was performed using SPSS version 26, which facilitated the calculation of mean and total scores and the assessment of significance.

Table 1. Observation of Spiritual Intelligence in Early Childhood
(Permendikbud No. 137 of 2014)

Indicator	Notes / Score
The child can name the religion they follow and understand its central teachings in simple terms.	
The child can imitate worship movements in the correct sequence.	
The child can correctly recite prayers before or after daily activities.	
The child can differentiate between good/polite and bad/impolite behavior.	
The child consistently demonstrates good, friendly, and polite behavior.	
The child can greet others correctly and respond to greetings.	

Score: 1 = Poor, 2 = Adequate, 3 = Good

Table 2. Observation Sheet for Outdoor PAI Activities

Activity	Focus of Observation	Notes / Score
Introduction to the Mosque	The child's reaction when seeing the mosque Attitude of respect inside the mosque	
Introduction to the Prayer Room	How the child enters the prayer room Ability to maintain cleanliness	
Wudu Practice at the Mosque	Maintaining cleanliness during wudu Independence in washing hands/face/feet Reciting intention or prayer before wudu	
Prayer Practice at the Mosque	Imitating prayer movements	



Qur'an Recitation Practice at the Prayer Room	Orderliness during congregational prayer
	Attitude toward friends during prayer
	Imitating Arabic letters (hijaiyah)
	Diligence in repeating recitations
	Consistency in reading and praying after recitation

Score: 1 = Needs Guidance, 2 = Adequate, 3 = Good

C. RESULTS AND DISCUSSION

1. Pretest

Table 3. Results of Spirituality Observation in Early Childhood Before Intervention (Pretest)

No	Child's Name	Can Name Religion & Understand Basic Teachings	Can Imitate Worship Movements in Correct Sequence	Can Recite Prayers Accurately	Can Differentiate Between Good & Bad Behavior	Demonstrates Good, Friendly, Polite Behavior	Can Greet & Respond to Greetings	Total	Average
1	ZYQ	1	2	1	2	1	2	9	1,50
2	KLM	2	1	2	1	2	1	9	1,50
3	RPT	1	1	2	2	1	2	9	1,50
4	AQX	2	2	1	1	2	1	9	1,50
5	BDN	1	2	2	1	2	1	9	1,50
6	VME	2	1	1	2	1	2	9	1,50
7	LTR	1	1	2	1	2	1	8	1,33
8	PJS	2	2	1	2	1	2	10	1,67
9	QWF	1	2	2	1	2	1	9	1,50
10	MKN	2	1	1	2	1	2	9	1,50
11	YTR	1	2	2	1	2	1	9	1,50
12	XCV	2	1	1	2	1	2	9	1,50
13	JPL	1	2	2	1	2	1	9	1,50
14	FGH	2	1	1	2	1	2	9	1,50
15	WNB	1	2	2	1	2	1	9	1,50

The pretest results in Table 3 indicate that most children demonstrate basic skills in recognising their religion and prayers, imitating worship movements, and distinguishing between good and bad behaviours, although scores vary. The average score for each child ranged between 1.33 and 1.67, suggesting that their spiritual development is still at a low to moderate level. The children consistently performed well in greeting others and responding to greetings, and they exhibited polite behaviour. The most common total score was 9, with the lowest being 8. Overall, these data suggest a clear need for intervention to improve understanding of religious teachings, worship skills, and the consistent application of positive behaviours.

2. Observation of Islamic Religious Education Activities

Table 4. Results of the Outdoor Islamic Religious Education Activity Observation

Activity	Focus of Observation	Results	Total Score	Average Score
Introduction to the Mosque	The child's reaction when seeing the mosque	Of the 15 children, some showed curiosity and enthusiasm, but others still needed guidance to recognize parts of the mosque. (Score: 2 – Adequate)	32	2.46 (Good)
	Attitude of respect inside the mosque	Most children maintained respectful behavior, such as strolling, not shouting, and refraining from running. (Score: 3 – Good)		
Introduction to the Prayer Room	How the child enters the prayer room	Many children entered the prayer room in an orderly manner, but some needed reminders to step in with their right foot first. (Score: 2 – Adequate)		
	Ability to maintain cleanliness	Nearly all children arranged their sandals properly and refrained from littering. (Score: 3 – Good)		
Wudu Practice	Maintaining cleanliness during wudu	Some children were observed playing with water, but overall, they maintained cleanliness during wudu. (Score: 2 – Adequate)		
	Independence in washing hands/face/feet	Most children followed the wudu steps independently, with minimal assistance. (Score: 3 – Good)		

Prayer Practice	Reciting intention or prayer before wudu	Many children attempted to recite the prayer, although some were hesitant and not yet fluent. (Score: 2 – Adequate)
	Imitating prayer movements	Children were able to imitate the prayer movements fairly well, although some movements like bowing (ruku') and prostration (sujud) still required guidance. (Score: 2 – Adequate)
	Orderliness during congregational prayer	Almost all children demonstrated orderliness, followed the imam, and stayed in their designated spots. (Score: 3 – Good)
	Behavior toward friends during prayer	Children were able to maintain proper behavior and did not disturb their friends during prayer. (Score: 3 – Good)
Qur'an Recitation Practice	Imitating Arabic letters (hijaiyah)	Many children were able to imitate the Arabic letters, though some still needed repetition. (Score: 2 – Adequate)
	Diligence repeating recitations in	Children followed the teacher's guidance diligently and were not easily distracted. (Score: 3 – Good)
	Consistency in reading and praying after recitation	Some children were fairly consistent, but others needed reminders to recite the closing prayer. (Score: 2 – Adequate)

The Outdoor Islamic Religious Education Activity Observation of the 15 children demonstrated positive spiritual development. In the introduction to the mosque and prayer room, the children were generally enthusiastic, maintained respectful behaviour, and kept the area clean, although some still required guidance. During wudu practice, most children were independent and attempted to recite the prayer, though a few were observed playing with water. In prayer practice, the children were able to imitate the prayer movements fairly well, remained orderly, and maintained good behaviour toward their friends. In Qur'an recitation practice, the ability to imitate Arabic letters (hijaiyah) and the children's diligence were evident, though their consistency in reading the closing prayer needs improvement. The average score for the activities ranged from 2 to 3, classifying the children's performance as Adequate to Good. This reflects noticeable progress, though areas like consistency in prayers and wudu still require further attention.

3. Post Test

Table 5. Results of the observation of the spirituality of children before the intervention (posttest)

No	Child's Name	A child can name the religion & understand the basic teachings	Child mimics worship movements in order	Child recites prayers correctly	A child distinguishes between good & bad behavior	The child performs good, polite, and friendly behavior	Child greets and responds to greetings	Total	Average
1	ZYQ	2	2	2	3	3	2	14	2,33
2	KLM	3	2	2	2	3	2	14	2,33
3	RPT	3	3	2	3	2	3	16	2,67
4	AQX	3	2	3	3	2	3	16	2,67
5	BDN	2	3	3	3	2	3	16	2,67
6	VME	3	3	2	3	2	3	16	2,67
7	LTR	2	3	3	3	2	3	16	2,67
8	PJS	2	3	2	3	3	2	15	2,50
9	QWF	3	2	3	2	3	2	15	2,50
10	MKN	3	3	3	2	2	3	16	2,67
11	YTR	3	2	3	3	2	3	16	2,67
12	XCV	2	2	2	3	2	3	14	2,33
13	JPL	2	3	2	2	2	3	14	2,33
14	FGH	2	2	3	2	3	2	14	2,33
15	WNB	3	3	2	2	3	2	15	2,50

The posttest results indicate an improvement in the children's spiritual abilities compared to the pretest. The average score for each child increased to between 2.33 and

2.67, marking progress from a low-medium level to a medium-good level. The children became more capable of naming their religion, understanding its fundamental teachings, mimicking worship movements, reciting prayers correctly, distinguishing between good and bad behaviour, and demonstrating polite and friendly behaviour. Their ability to greet and respond to greetings also improved. This improvement reflects the intervention's effectiveness in enhancing religious understanding, worship skills, and positive behaviour, demonstrating consistent and significant spiritual development in the children.

4. Data Validity

Table 6. Results of Data Validity

		Pretest	Posttest
Pretest	Pearson Correlation	1	.977**
	Sig. (2-tailed)		.000
	N	30	30
Posttest	Pearson Correlation	.977**	1
	Sig. (2-tailed)	.000	
	N	30	30

** . Correlation is significant at the 0.01 level (2-tailed).

A validity test using Pearson's Correlation was conducted to examine the relationship between pretest and posttest scores and determine the correlation between the variables. The decision criterion is based on a significance value ≤ 0.05 and a correlation coefficient in the strong category. The analysis results show a correlation coefficient of 0.977, which is very strong, and a significance value of 0.000, indicating that the relationship is statistically significant. With a sample size of 30, this analysis is considered sufficient, and the pretest and posttest data show a strong, significant relationship, indicating validity.

5. T-Test

Table 7. Results of the T-Test

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Pretest	Equal variances assumed	26.242	.000	-23.984	28	.000	-6.133	.256	-6.657	-5.609
	Equal variances not assumed			-23.984	18.638	.000	-6.133	.256	-6.669	-5.597

The significance value (Sig. 2-tailed) of 0.000, which is smaller than 0.05, indicates a significant difference between the pretest and posttest scores of early childhood spiritual intelligence after the intervention, which involved Outdoor Islamic Religious Education activities. This means that the improvement in scores was not due to chance but was a genuine result of the outdoor learning activities provided. Therefore, Outdoor Islamic Religious Education activities have been shown to impact children's spiritual intelligence positively, and the changes observed before and after the intervention are statistically significant.

The development of early childhood gross motor skills through educational learning indicates that structured physical activities play a key role in improving coordination, balance, and physical strength in children within a holistic learning environment (Adilah et al., 2024). In this context, outdoor learning provides significant additional support. Outdoor learning has been shown to enhance children's social and psychosocial well-being

(Ne'matullah et al., 2024) and to contribute to personal development and mental, physical, and social health (Jucker & von Au, 2022). Outdoor activities also help alleviate symptoms of ADHD, improve breathing, memory, and other skills (Chrysomalidou et al., 2024). Furthermore, outdoor learning can complement indoor learning by clarifying abstract concepts, expanding knowledge, and improving test outcomes (Nikbay Arslantaş & Bavlı, 2024). Nature-based learning fosters environmentally friendly behaviours, ecological knowledge, and positive attitudes in students (Cheng & Lee, 2015). and enhances engagement, ownership of the learning process, and academic achievement (Mann et al., 2022).

Outdoor learning offers a cost-effective, non-invasive solution to various public health challenges, particularly those related to mental health, physical literacy, and increased physical activity (Mann et al., 2021). However, significant barriers include a lack of knowledge, confidence, and expertise among teachers in delivering outdoor education (Neville et al., 2023). Initial Teacher Education (ITE) programs play an essential role in preparing teachers for outdoor classroom teaching through mastery and vicarious experiences (Barrable et al., 2022). Teachers often face difficulties in implementing outdoor education due to the lack of specialized training and perceptions of the challenges involved in this type of activity (Rojo-Ramos et al., 2021). Systemic support, including backing from school principals, school policies, funding, and resource availability, is crucial for the integration of outdoor learning (Oberle et al., 2021). Environmental factors such as weather, natural hazards, and man-made conditions also pose challenges. Outdoor education is typically applied to subjects such as geography, geology, and biology, allowing students to engage meaningfully with both the physical and social environment (Sebastián-López & González, 2020).

Efforts to shape students' Islamic character through both curricular and extracurricular activities aim to instil religious values, discipline, responsibility, and the habituation of positive behaviours in Islamic school environments (Baidowi, 2023). Teachers and the learning environment instil religious and moral values in young children through habituation, role modelling, and religious activities. Research assesses the success of these strategies in developing children's spiritual intelligence and religious character (Oktari et al., 2025). The method of teaching the Islamic religion to young children includes memorising short Surahs and practising obligatory prayers. Research emphasizes effective guidance strategies to nurture spiritual intelligence, discipline, and understanding of religious practices from an early age (Mutinah et al., 2024). A life-skills-based curriculum grounded in Islamic values has the potential to foster spiritual intelligence (Suyono et al., 2025). The role of Islamic Religious Education teachers in motivating student learning, including values and spirituality, is significant (Jalaluddin et al., 2025). Guidance and rules grounded in Islamic values shape the academic climate, which in turn influences the development of character and spirituality in students (Jannah et al., 2025).

D. CONCLUSION

The pre-intervention observations indicated that the children's abilities in naming their religion, mimicking worship movements, reciting prayers, distinguishing between good and bad behaviour, being friendly, and greeting others remained low to moderate, highlighting the need



for further guidance in developing spiritual intelligence. As a follow-up, outdoor Islamic Religious Education activities were implemented through mosque and prayer room introductions, wudu (ablution) practice, prayer (shalat), and Quran recitation. The children showed enthusiasm, curiosity, and politeness, and began to show independence in some worship practices, although some still needed guidance. The posttest results showed a significant improvement in children's spiritual abilities, including naming their religion, mimicking worship movements, reciting prayers, and exhibiting friendly, polite behaviour. Pearson's correlation analysis revealed a powerful and significant relationship between pretest and posttest scores. At the same time, the t-test confirmed that this improvement was not coincidental but a genuine effect of the outdoor Islamic Religious Education activities. Outdoor learning also supported the development of gross motor skills, coordination, balance, physical strength, mental health, and social skills. Despite challenges such as teachers' limited knowledge and experience, systemic support, training, and a readiness in the learning environment were critical factors for effective outdoor learning. The integration of outdoor learning had a significant positive impact on children's overall spiritual, social, emotional, and physical development.

ACKNOWLEDGMENT

Praise and gratitude are addressed to Allah SWT for His abundant blessings and grace, enabling the completion of this research. The author expresses sincere thanks to the school, teachers, parents, and children who participated in the outdoor Islamic Religious Education activities. This research aimed to enhance early childhood spiritual intelligence through outdoor learning methods, and the results showed significant improvements in spiritual, social, emotional, and motor skills. Special thanks are also given to the research supervisors and colleagues who provided guidance and valuable feedback. May this research contribute to the development of early childhood education and the application of innovative learning methods.

AUTHOR CONTRIBUTIONS

- Author 1 : Formulated the research objectives, developed the conceptual framework and systematic design, and provided methodological guidance to ensure effective outdoor learning for Islamic Religious Education
- Author 2 : Conducted pretest and posttest observations, supervised outdoor learning activities, and meticulously recorded children's behavioural data.
- Author 3 : Analyzed the observation and posttest data, provided statistical interpretations, and prepared visualizations of the research findings to support educational recommendations.
- Author 4 : Identified the impact of outdoor learning on children's development, provided recommendations for teachers, and developed an implementation guide for effective learning practices.
- Author 5 : Compiled the systematic research manuscript, wrote the conclusions and recommendations, and disseminated the research findings for the advancement of early childhood education.

LITERATURE

- Abdolrezapour, P., & Alipour, J. (2021). Fostering spiritual intelligence and a concomitant development of WTC in EFL learners. *Teaching Theology and Religion*, 24(3), 136–151. <https://doi.org/10.1111/teth.12592>
- Abdulghani, A., Hashim, H., Abd Rani, A., Mohd Radzuan, N. R., Ali, F., Fauzi, W. J., Zainal Abidin, N. A., Ngah, E., & Haron, S. F. (2018). Inculcating heart intelligence in English communication workshop for day-care educators. *Proceedings of the 32nd International Business Information Management Association Conference, IBIMA 2018 - Vision 2020: Sustainable Economic Development and Application of Innovation Management from Regional Expansion to Global Growth* (pp. 4669–4678). International Business Information Management Association. ISBN 978-099985511-9
- Adilah, N., Situmorang, M. N., Ay, E. L. ., & Situmorang, P. L. N. (2024). Analysis of Gross Motor Skills in Early Childhood Through Educational Learning. *Al Tahdzib: Jurnal Pendidikan Islam Anak Usia Dini*, 3(2), 59–72. <https://doi.org/10.54150/altahdzib.v3i2.614>
- Agustin, M., Mamat, N. B., & Syaodih, E. (2020). Exploring “Kaulinan Barudak” to develop children’s character values in Islamic early childhood education. *Jurnal Pendidikan Islam*, 6(1), 13–26. <https://doi.org/10.15575/jpi.v6i1.8226>
- Ahluwalia, G. (2019). Spiritual intelligence in relation to expansion and extension of potentials in ageing. *International Journal of Scientific and Technology Research*, 8(12), 2785–2788.
- Amram, Y. J. (2022). The intelligence of spiritual intelligence: Making the case. *Religions*, 13(12), 1140. <https://doi.org/10.3390/rel13121140>
- Barrable, A., Touloumakos, A., & Lapere, L. (2022). Exploring student teachers’ motivations and sources of confidence: The case of outdoor learning. *European Journal of Teacher Education*, 45(3), 356–372. <https://doi.org/10.1080/02619768.2020.1827386>
- Cheng, I. N.-Y., & Lee, J. C.-K. (2015). Environmental and outdoor learning in Hong Kong. In *Experiencing the outdoors - Enhancing strategies for wellbeing* (pp. 135–146). Sense Publishers. https://doi.org/10.1007/978-94-6209-944-9_12
- Chofifah, N. N., Lubis, M. A., Anami, A. M., Hazar, I., Amirullah, et al. (2025). Parental strategies in instilling Islamic values in children: A case study. *Research Journal in Advanced Humanities*, 6(2). <https://doi.org/10.58256/xrmwwp32>
- Chongcharoen, D., Waiyaroop, S., Phangsanga, D., & Khan, M. S. (2024). Promoting the emotional and social intelligence of early childhood by improving pre-service teacher performance through collaborative learning process. *Revista de Gestão Social e Ambiental*, 18(3), e06771. <https://doi.org/10.24857/rgsa.v18n3-145>
- Chrysomalidou, A., Takos, I., Spiliotis, I., & Xofis, P. (2024). The participation of teachers in Greece in outdoor education activities and the schools’ perceptions of the benefits to students. *Education Sciences*, 14(8), 804. <https://doi.org/10.3390/educsci14080804>
- Cinantya, C., Suriansyah, A., Asniwati, & Aslamiah. (2019). The strategy of religious-based character education in early childhood education. *International Journal of Innovation, Creativity and*

Change, 5(5), 174–189.

- Dacka, M., & Rydz, E. (2023). Personality traits and the spiritual and moral intelligence of early adulthood in Poland: Research reports. *Religions*, 14(1), 78. <https://doi.org/10.3390/rel14010078>
- Fauziddin, M., Lestari, G. D., Mariana, N., Hendratno, & Sukartiningsih, W. (2023). Analysis on value of 12 verses Gurindam by Raja Ali Haji in the context of learning Islam in early childhood (PAUD). *International Journal of Membrane Science and Technology*, 10(2), 600–607. <https://doi.org/10.15379/ijmst.v10i2.1268>
- Foerch, D. F., & Adelman, A. (2024). The WeFEEL approach: Examining an emotional intelligence curriculum's impact on young children's development and social interactions with their families. *Journal of Research in Childhood Education*. <https://doi.org/10.1080/02568543.2024.2427728>
- Ghonchehpour, A., Parandeh Afshar, P., Targari, B., Maazallahi, M., & Azizzadeh Forouzi, M. (2025). Spiritual sensitivity in nursing and midwifery students and its relationship with spiritual intelligence and spiritual growth. *BMC Medical Education*, 25(1), 1442. <https://doi.org/10.1186/s12909-025-08041-6>
- Grajczonek, J. (2022). Ambiguity, silence and misalignment: The place of religion in Australia's early childhood education curriculum documents. In *The Routledge international handbook of the place of religion in early childhood education and care* (pp. 353–363). Taylor and Francis. <https://doi.org/10.4324/9781003017783-27>
- Grasmane, I., Raševskis, V., & Pipere, A. (2022). Primary validation of children spiritual intelligence scale in a sample of Latvian elementary school pupils. *International Journal of Children's Spirituality*, 27(2), 97–112. <https://doi.org/10.1080/1364436X.2022.2043833>
- Jucker, R., & von Au, J. (2022). Outdoor learning—Why it should be high up on the agenda of every educator. In *High-quality outdoor learning: Evidence-based education outside the classroom for children, teachers and society* (pp. 1–26). Springer International Publishing. https://doi.org/10.1007/978-3031041082_1
- Kilcup, C. (2016). Secret wisdom: Spiritual intelligence in adolescents. *Gifted Education International*, 32(3), 242–257. <https://doi.org/10.1177/0261429415602587>
- Mann, J., Gray, T., Truong, S., Brymer, E., Passy, R., Ho, S., Sahlberg, P., Ward, K., Bentsen, P., Curry, C., & Cowper, R. (2022). Getting out of the classroom and into nature: A systematic review of nature-specific outdoor learning on school children's learning and development. *Frontiers in Public Health*, 10, 877058. <https://doi.org/10.3389/fpubh.2022.877058>
- Mann, J., Gray, T., Truong, S., Sahlberg, P., Bentsen, P., Passy, R., Ho, S., Ward, K., & Cowper, R. (2021). A systematic review protocol to identify the key benefits and efficacy of nature-based learning in outdoor educational settings. *International Journal of Environmental Research and Public Health*, 18(3), 1199. <https://doi.org/10.3390/ijerph18031199>
- Ne'matullah, K. F., Mee, R. W. M., Talib, N. A., Pek, L. S., Amiruddin, S., & Ismail, M. R. (2024). Early childhood education pre-service teachers' perception of outdoor learning. *International*

- Neville, I. A., Petrass, L. A., & Ben, F. (2023). Cross disciplinary teaching: A pedagogical model to support teachers in the development and implementation of outdoor learning opportunities. *Journal of Outdoor and Environmental Education*, 26(1), 1–21. <https://doi.org/10.1007/s42322-022-00109-x>
- Nguyen, T. A. H. (2023). Spiritual intelligence: A vision for formation in religious education. *Religious Education*, 118(4), 343–355. <https://doi.org/10.1080/00344087.2023.2264554>
- Nikbay Arslantaş, Ç., & Bavlı, B. (2024). School-based outdoor education: A neglected practice at secondary level. *Journal of Adventure Education and Outdoor Learning*, 24(2), 270–286. <https://doi.org/10.1080/14729679.2022.2143385>
- Oberle, E., Zeni, M., Munday, F., & Brussoni, M. (2021). Support factors and barriers for outdoor learning in elementary schools: A systemic perspective. *American Journal of Health Education*, 52(5), 251–265. <https://doi.org/10.1080/19325037.2021.1955232>
- Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia. (2014). *Peraturan Menteri Pendidikan dan Kebudayaan Nomor 137 Tahun 2014 tentang Standar Nasional Pendidikan Anak Usia Dini*. Jakarta: Biro Hukum dan Organisasi.
- Pinto, C. T., Guedes, L., Pinto, S., & Nunes, R. (2024). Spiritual intelligence: A scoping review on the gateway to mental health. *Global Health Action*, 17(1), 2362310. <https://doi.org/10.1080/16549716.2024.2362310>
- Pratiwi, H., Ismail, M., Noor Haida, R., & Yarliani, I. (2025). Contextualizing sexuality education in early childhood: Leadership, curriculum, and cultural negotiation in Indonesia. *Journal of Research in Childhood Education*. <https://doi.org/10.1080/02568543.2025.2539874>
- Rojo-Ramos, J., Manzano-Redondo, F., Barrios-Fernandez, S., García-Gordillo, M. A., & Adsuar, J. C. (2021). Early childhood education teachers' perception of outdoor learning activities in the Spanish region of Extremadura. *Sustainability (Switzerland)*, 13(16), 8986. <https://doi.org/10.3390/su13168986>
- Rouse, E. (2024). One teacher's journey towards a spiritual pedagogy—an auto ethnographical narrative of epistemological beliefs and practice. *International Journal of Children's Spirituality*, 29(2), 49–62. <https://doi.org/10.1080/1364436X.2024.2308887>
- Sebastián-López, M., & González, R. M. (2020). Mobile learning for sustainable development and environmental teacher education. *Sustainability (Switzerland)*, 12(22), 9757. <https://doi.org/10.3390/su12229757>
- Subandi, G., Eriyanti, R. W., Karmiyati, D., Nurfaisal, & Widodo, J. (2025). A response to the character crisis: Can a digital Islamic character education based on local wisdom be the solution? *Perspectives in Education*, 43(3), 236–253. <https://doi.org/10.38140/pie.v43i3.8097>
- Baidowi, A. . (2020). Penanaman Karakter Pada Siswa Melalui Kegiatan Intrakurikuler dan Ekstrakurikuler Di Sekolah Dasar Terpadu Islam. *EDUCARE: Journal of Primary Education*, 1(3), 303–322. <https://doi.org/10.35719/educare.v1i3.31>

- Oktari, R., Juliastuti, J., Budiana, I., Nurrita, T., & Abnisa, A. P. (2025). Analysis of the Success in Instilling Religious and Moral Values in Early Childhood. *Al Tahdzib: Jurnal Pendidikan Islam Anak Usia Dini*, 4(1), 1–16. <https://doi.org/10.54150/altahdzib.v4i1.632>
- Mutinah, M., Srifariyati, S., Nursidik, N., & Etika, C. . (2024). Implementasi Metode Drill dalam Hafalan Surat Pendek Juz 30 Pada Anak Usia Dini. *Al Tahdzib: Jurnal Pendidikan Islam Anak Usia Dini*, 3(1), 27–34. <https://doi.org/10.54150/altahdzib.v3i1.331>
- Jannah, S. F., Adawiyah, R., & Abnisa, A. P. (2025). The relationship between Islamic value-based school regulation counseling and the academic atmosphere in schools. *Journal of Comprehensive Education*, 1(01), 99–108. <https://ejournal.sultanpublishing.com/index.php/JournalofComprehensiveEducation/article/view/13>
- Jalaluddin, M., Mahmudah, M., & Bashori, A. H. (2025). The influence of verbal and non-verbal communication of Islamic education teachers on students' learning motivation. *Journal of Comprehensive Education*, 1(01), 76–86. <https://ejournal.sultanpublishing.com/index.php/JournalofComprehensiveEducation/article/view/11>
- Suyono, S., Alimudin, A., Bashori, A. H., & Riezqulloh, A. (2025). Life skills-based curriculum in Islamic boarding schools. *Journal of Comprehensive Education*, 1(01), 36–44. <https://ejournal.sultanpublishing.com/index.php/JournalofComprehensiveEducation/article/view/5>