International Journal of Learning Reformation in Elementary Education
Vol. 5, No. 01, pp. 180-190
journal.iistr.org/index.php/IJLREE
DOI: 10.56741/IISTR.ijlree.002016

Testing the Effectiveness of the Cantol Roudhoh Method in Early Reading Acquisition

A Quasi-Experimental Study Among Islamic Kindergarten Learners

[1]Ulfah Amini*, [2]Eti Nurhayati, [1]Dian Widiantari
Corresponding Author: *asesorulfah1@gmail.com
[1] Universitas Islam Bunga Bangsa, Cirebon, Indonesia
[2] Universitas Islam Negeri Siber Syekh Nurjati, Cirebon, Indonesia

ARTICLE INFO

Article history
Received 22 January 2026
Revised 13 February 2026
Accepted 22 February 2026

ABSTRACT

Early reading acquisition remains a persistent challenge in early childhood education, particularly in identifying instructional strategies that align with the cognitive and developmental characteristics of young learners. Although the Cantol Roudhoh method has been widely applied in Indonesian Islamic kindergarten settings, empirical evidence supporting its effectiveness through rigorous quantitative analysis remains limited. This study aimed to examine the effectiveness of the Cantol Roudhoh method in improving early reading skills among Group A learners in an Islamic kindergarten in Cirebon Regency, Indonesia. A quasi-experimental design using a one-group pretest–posttest approach was employed. The participants consisted of 25 children selected through saturated sampling. Data were collected using a structured early reading assessment instrument that had undergone expert validation and reliability testing, yielding a Cronbach's Alpha coefficient exceeding 0.70. Descriptive analysis revealed a notable increase in students' reading performance, with the mean score rising from 7.44 in the pretest to 17.30 in the posttest. Inferential statistical analysis further confirmed a statistically significant difference between the two measurements ($t = 14.687$, $p < 0.05$). These findings indicate that the Cantol Roudhoh method effectively enhances early reading acquisition through multisensory and associative learning processes. The study provides empirical support for the integration of structured multisensory instructional strategies in Islamic early childhood education and contributes to the growing body of literature on effective approaches to early literacy development.

Keywords
Cantol Roudhoh Method
Early Reading Acquisition
Islamic Kindergarten Education
Multisensory Learning
Quasi-Experimental Design

This is an open-access article under the CC–BY-SA license.

Introduction

Early reading ability is a foundational component of early childhood education, as it shapes later academic achievement and long-term literacy development [1]. During the early years, children undergo rapid cognitive and linguistic growth, making this period highly sensitive to instructional approaches that align with their developmental characteristics [2]. Effective early literacy instruction must therefore integrate cognitive readiness, multisensory engagement, and meaningful interaction [3]–[4].

Despite increasing awareness of developmentally appropriate literacy practices, many early childhood classrooms still rely on conventional instructional strategies that emphasize rote memorization and repetitive drilling [5]. Such approaches often limit active engagement and fail to stimulate higher-order cognitive processes in early learners [6]–[7]. Contemporary educational discourse increasingly emphasizes innovative and student-centered learning models that promote interaction, creativity, and multisensory engagement [8]–[9]. Teacher professionalism and instructional competence also play a crucial role in determining the effectiveness of learning implementation in early childhood settings [10]–[11].

In Islamic early childhood institutions such as Raudhatul Athfal (RA), instructional innovation remains essential to ensure that learning models are aligned with children's developmental characteristics [12]. Active learning approaches have been widely recommended as alternatives to traditional lecture-dominated methods in primary and early education contexts [13]. Therefore, integrating structured yet playful phonics-based strategies such as the Cantol Roudhoh method may represent a relevant pedagogical innovation within this framework [14].

The Cantol Roudhoh method has emerged in Indonesian early childhood education as a playful, phonics-based strategy that integrates cantol (visual hooks), rhythmic songs, storytelling, and associative imagery [15]. The method is designed to reduce cognitive burden by grouping syllables by vowel pattern (a, i, u, e, o) and linking them to meaningful visual representations [16]. In practice, the method is widely implemented in Islamic early childhood

institutions [17]. However, its use has been largely pedagogical and practice-based rather than empirically validated through rigorous quantitative research designs.

Although several descriptive reports and practitioner reflections have suggested the method's practical benefits, empirical studies that employ inferential statistical analysis to test its effectiveness remain limited. Furthermore, research specifically examining the Cantol Roudhoh method in Islamic kindergarten contexts using quasi-experimental designs remains scarce. This gap limits the method's recognition within broader academic literacy discourse and reduces its potential for systematic integration into evidence-based educational policy.

Therefore, this study aims to examine the effectiveness of the Cantol Roudhoh method in improving early reading ability among Islamic kindergarten learners using a quasi-experimental one-group pretest–posttest design. By providing statistically grounded evidence within a structured research framework, this study seeks to contribute not only practical insights for early childhood educators but also theoretical reinforcement of multisensory associative learning principles in early literacy development.

Literature Review

A. Early Reading Development in Early Childhood

Early reading development is a fundamental component of emergent literacy that enables children to recognize symbols, develop phonological awareness, and interpret simple written language [18]. Emergent literacy theory emphasizes that literacy acquisition begins long before formal schooling and is shaped by early interactions with print and language [19]. Research consistently demonstrates that early phonological awareness and letter knowledge are strong predictors of later reading achievement [20].

Instructional strategies that align with children's developmental characteristics are critical during this sensitive period. Play-based and interactive literacy instruction has been shown to foster stronger engagement and deeper learning compared to drill-based approaches [21]. Moreover, structured early literacy interventions implemented during preschool significantly improve foundational reading skills, particularly when instruction integrates meaningful engagement and cognitive scaffolding [22].

These findings indicate that early reading instruction must move beyond rote memorization toward developmentally appropriate, interactive, and cognitively supportive learning environments.

B. Multisensory and Associative Learning Approaches

Multisensory learning theory posits that information presented through multiple sensory channels enhances encoding and retention. Cognitive research suggests that dual coding and multimodal input strengthen neural integration processes [23]. In early literacy contexts,

multisensory reading instruction has demonstrated positive effects on phonological awareness and decoding skills [24].

Associative learning mechanisms further explain how linking symbols with visual and auditory cues enhances memory consolidation. Structured phonics instruction that integrates visual, auditory, and kinesthetic elements has been found to produce significant gains in early reading ability [25]. These approaches are particularly effective in emotionally supportive and play-oriented environments, where intrinsic motivation facilitates learning engagement [21].

Collectively, empirical evidence supports the theoretical premise that multisensory associative strategies enhance early decoding skills and accelerate reading readiness among preschool learners.

C. Cantol Roudhoh Method in Early Literacy Instruction

The Cantol Roudhoh method represents a contextual adaptation of multisensory associative learning within Indonesian early childhood education. The method integrates rhythmic singing, storytelling, and visual hooks (cantol) to support syllable recognition and simple word decoding. By grouping syllables based on vowel patterns and attaching them to concrete visual imagery, the method aims to reduce cognitive load while strengthening associative memory [26].

Previous classroom-based studies have reported improvements in children's early reading performance following implementation of the Cantol Roudhoh method [27]. However, many of these studies rely primarily on descriptive observation and limited statistical testing. Furthermore, empirical investigations employing rigorous quasi-experimental designs and validated measurement instruments remain relatively scarce, particularly within Raudhatul Athfal (Islamic kindergarten) contexts [28].

D. Limitations of Previous Empirical Studies

Although prior findings suggest positive pedagogical outcomes, several methodological limitations remain evident. Many studies lack inferential statistical validation, structured control procedures, and clear theoretical grounding within established literacy frameworks. Research also rarely situates the Cantol Roudhoh method within broader multisensory learning theory or associative memory models [29]. These gaps indicate the need for more rigorous empirical investigation using validated instruments and controlled quasi-experimental procedures.

E. Research Positioning

Based on the reviewed literature, multisensory associative approaches demonstrate strong theoretical and empirical potential for enhancing early reading development. Nevertheless, systematic quantitative validation of the Cantol Roudhoh method within Islamic early

childhood settings remains limited [30]. Therefore, the present study positions itself to provide statistically grounded evidence through a quasi-experimental design, thereby strengthening the theoretical and empirical legitimacy of this instructional approach.

Material and Methods

A. Research Design

This study employed a quantitative, quasi-experimental design with a one-group pretest–posttest model. This design was selected to examine the effectiveness of the Cantol Roudhoh method in improving early reading skills by comparing participants' performance before and after the intervention [31]. The quasi-experimental approach is widely used in educational research when random assignment is not feasible, but controlled measurement of treatment effects is required [32]. The one-group pretest–posttest model allows researchers to assess changes attributable to an intervention within a natural classroom setting.

B. Research Setting and Participants

The study was conducted at RA Nahdliyatul Athfal Assalam, Cirebon Regency, Indonesia, over eight months during the 2024/2025 academic year. The population consisted of all Group A students enrolled in the institution. Due to the relatively small population, saturated sampling (census technique) was employed, whereby all accessible participants were included in the study [33]. The final sample comprised 25 children aged 4–5 years. All participants were actively enrolled students who had not yet achieved optimal early reading ability, as determined by preliminary classroom observations. The intervention was integrated into regular classroom activities to maintain ecological validity, ensuring that findings reflected authentic educational conditions [32].

C. Intervention Procedure

The intervention involved systematic implementation of the Cantol Roudhoh method during early reading instruction. The method integrates visual hooks (cantol), rhythmic songs, and storytelling activities designed to strengthen associative memory in recognizing letters and syllables. Multisensory instructional approaches such as these are theoretically supported by research indicating that integrated visual–auditory–kinesthetic input enhances literacy acquisition [34]. The treatment was delivered by the classroom teacher, who had prior experience in early childhood instruction and was briefed on standardized implementation procedures. To ensure procedural consistency and internal validity, the intervention was conducted under the following controls: identical classroom environment, consistent instructional duration, uniform learning materials, and the same teacher facilitating all sessions. The intervention was implemented over multiple instructional meetings until the planned treatment cycle was completed.

D. Research Instrument

Data were collected using a structured early reading ability test consisting of 16 items. The instrument measured three key indicators of emergent literacy development: letter recognition, syllable reading, and simple word identification. The scoring system used a structured rubric appropriate for early childhood assessment. Higher scores indicated better early reading ability.

E. Validity and Reliability

Before administration, the instrument underwent content validity assessment through expert judgment involving two specialists in early childhood education and literacy development. Content validity ensures that test items adequately represent the intended construct [35]. Instrument reliability was examined using Cronbach's Alpha to measure internal consistency. A reliability coefficient of $\alpha \geq 0.70$ was considered acceptable, indicating adequate internal consistency for research purposes [36].

F. Data Collection Procedure

Data collection was carried out in two stages. Pretest administered before the implementation of the Cantol Roudhoh method to determine baseline reading ability. Posttest administered after completion of the intervention to measure improvement. All assessments were conducted in a structured classroom setting under teacher supervision to maintain procedural consistency and reduce potential confounding variables [32].

G. Data Analysis Techniques

The collected data were analyzed using both descriptive and inferential statistics. Descriptive statistics were used to determine the distribution and category of children's reading ability. To test the effectiveness of the intervention, a paired-samples t-test was conducted at the 0.05 significance level. The paired t-test is appropriate for comparing two related means within the same group to determine whether statistically significant differences exist [37].

Results and Discussions

This study investigated the effectiveness of the Cantol Roudhoh method in improving early reading ability among Group A children at RA Nahdliyatul Athfal Assalam Dukuhwidara, Cirebon Regency. The findings are presented sequentially based on pre-test and post-test measurements to demonstrate the magnitude and significance of the improvement after the intervention. The initial measurement of children’s reading ability before the implementation of the Cantol Roudhoh method is presented in Table 1. The data illustrate the baseline literacy condition of the participants before the pedagogical treatment.

Table 1. Category of Children's Reading Ability Method (Pre-Test)

Category	Score Range	F	%
High	X ≥ 12	0	0%
High enough	8-11	10	40%
Less High	X ≤ 7	15	60%
Total		25	100%

Based on Table 1, none of the children reached the high reading category before the intervention. The majority of participants (60%) were still classified in the low category, while only 40% reached the moderate level. The mean score of 7.44 further confirms that the overall early reading ability of Group A children was still below the expected developmental standard.

This condition indicates that conventional early reading instruction previously implemented in the classroom had not optimally facilitated children's phonological awareness and symbol recognition. From a theoretical perspective, early literacy development requires multisensory stimulation and meaningful engagement to strengthen memory pathways in young learners. The low baseline performance, therefore, justifies the need for an alternative instructional approach that is more developmentally appropriate and cognitively engaging.

Following the implementation of the Cantol Roudhoh method, a post-test was administered to measure changes in children's reading ability. The results are summarized in Table 2.

Table 2. Categorization of Children's Reading Ability (Post-Test)

Category	Score Range	F	%
High	X ≥ 12	24	96%
High enough	8-11	1	4%
Less High	X ≤ 7	0	0%
Total		25	100%

The post-intervention data demonstrate a substantial improvement in children's reading performance. As many as 96% of children reached the high category, and no participants remained in the low category. The mean score increased sharply to 17.3, indicating that most children achieved the level of development categorized as developing as expected and developing very well.

The statistical analysis using the t-test further confirms the effectiveness of the intervention. The calculated value (t_0 = 14.687) was significantly higher than the critical t-table value at the 5% significance level (t = 1.714; df = 23). This indicates that the improvement in reading ability before and after the implementation of the Cantol Roudhoh method is statistically significant. The effectiveness gain reached 56%, reflecting a strong practical impact of the method in classroom implementation.

This study offers three main contributions. First, it provides empirical quantitative evidence of the Cantol Roudhoh method using inferential statistical testing, addressing the

current lack of rigorously tested data. Second, it situates the method within a multisensory associative learning framework, thereby extending its theoretical grounding beyond localized pedagogical practice. Third, it contextualizes the findings within Islamic early childhood education, a setting that remains underrepresented in international early literacy research. These contributions strengthen the method's academic legitimacy and expand its relevance beyond its local implementation context.

From a pedagogical standpoint, the significant improvement can be explained by the multisensory design embedded in the Cantol Roudhoh method. The integration of singing, playing, storytelling, and visual hooks aligns with principles of quantum learning and early childhood cognitive theory, which emphasize that young children learn more effectively through rhythmic repetition, emotional engagement, and concrete visual association. This multimodal stimulation strengthens neural encoding of letter–sound correspondence.

Another important finding is that the Cantol Roudhoh method appears to reduce children's cognitive load during early reading acquisition. By grouping syllables based on similar vowel sounds (a, i, u, e, o) and attaching them to meaningful visual hooks, the method provides structured scaffolding that supports memory retrieval. This mechanism is consistent with associative learning theory, which posits that meaningful linkage between symbols and images accelerates retention in early learners.

The results of this study also reinforce previous findings that playful and child-centered literacy instruction significantly enhances early reading outcomes. However, this study contributes additional empirical evidence specifically within the context of RA (Islamic early childhood education), where structured phonics-based playful methods are still relatively underutilized. This contextual contribution strengthens the practical relevance of the present research.

In addition, classroom observations during the intervention indicated increased student engagement, enthusiasm, and participation. Children showed higher attention spans and were more willing to attempt syllable decoding tasks. This behavioral shift suggests that the effectiveness of the Cantol Roudhoh method is not solely cognitive but also motivational, which is a critical factor in early literacy development.

Beyond its practical classroom implications, this study contributes theoretically to early literacy research by empirically reinforcing multisensory associative learning principles within Islamic early childhood education contexts. By demonstrating statistically significant improvement through structured visual–auditory–kinesthetic integration, the findings support the argument that associative memory scaffolding enhances early decoding skills. This contribution extends existing literature by situating the Cantol Roudhoh method within a

broader theoretical framework rather than viewing it solely as a localized instructional technique.

Despite the strong improvement observed, the findings should be interpreted cautiously. The quasi-experimental design without a control group limits the ability to attribute causality exclusively to the intervention. External variables such as teacher interaction intensity and classroom climate may also have contributed to the observed gains. Nevertheless, the magnitude of the statistical difference indicates that the findings strongly suggest that the Cantol Roudhoh method contributed substantially to the observed improvement.

Overall, the findings confirm that the Cantol Roudhoh method is an effective, developmentally appropriate, and practically implementable strategy for enhancing early reading skills in kindergarten settings. The method not only improves decoding ability but also fosters positive learning engagement, making it highly relevant for early childhood educators seeking innovative literacy instruction approaches.

Conclusion

This study examined the effectiveness of the Cantol Roudhoh method in improving early reading acquisition among Group A learners in an Islamic kindergarten setting using a quasi-experimental design. The findings demonstrate a statistically significant improvement in children's reading performance following the intervention, indicating that structured multisensory associative instruction can substantially enhance early literacy outcomes. Theoretically, this study strengthens empirical support for multisensory learning and associative memory principles in early childhood reading instruction. By positioning the Cantol Roudhoh method within this framework, the research contributes to bridging practical instructional strategies with established cognitive learning theories. Practically, the results provide evidence-based justification for integrating playful, rhythmic, and image-based associative techniques in early literacy classrooms. Nevertheless, this study has limitations. The absence of a control group restricts the ability to attribute causality exclusively to the intervention. Future research is recommended to employ randomized controlled designs, larger sample sizes, and longitudinal measurements to further validate the long-term effectiveness of multisensory reading interventions across diverse early childhood contexts.

Conflict of Interest

The authors declare no conflict of interest.

References

[1] S. Rvachew and R. Savage, "Preschool foundations of early reading acquisition," *Paediatr. Child Health*, vol. 11, no. 9, pp. 589–593, Nov. 2006, doi: 10.1093/pch/11.9.589.

[2] L. G. Katz, "A developmental approach to the education of young children," *Singapore J. Educ.*, vol.

14, no. 1, pp. 1–12, Jan. 1994, doi: 10.1080/02188799408547721.
[3] S. B. Neuman, "Explaining and understanding early literacy," *Investig. Sobre Lect.*, no. 2, pp. 7–14, Feb. 2015, doi: 10.37132/isl.v0i2.1.
[4] D. Cahyani and S. R. Arfanaldy, "Teachers' environmental management practices for risk-inclusive play in elementary schools: A systematic review," *Int. J. Learn. Reform. Elem. Educ.*, vol. 5, no. 01, pp. 44–55, 2026, doi: 10.56741/IISTR.ijlree.001462.
[5] W. H. Teale, J. L. Hoffman, and K. A. Paciga, "Where is NELP leading preschool literacy instruction?," *Educ. Res.*, vol. 39, no. 4, pp. 311–315, May 2010, doi: 10.3102/0013189X10369830.
[6] R. C. Granger, B. L. Klein, M. S. Abbott, and B. M. Galina, "Skill development and cognitive approaches to educating young children," *J. Sch. Psychol.*, vol. 15, no. 2, pp. 152–164, Jun. 1977, doi: 10.1016/0022-4405(77)90031-0.
[7] T. Udin and S. R. Arfanaldy, "Trend in improving teacher competence in innovative learning at primary school," *Al Ibtida - J. Pendidik. Guru MI*, vol. 12, no. 1, pp. 170-187, Jun. 2025, doi: 10.24235/al.ibtida.snj.v12i1.19929.
[8] S. Rifky *et al.*, *Buku Ajar Model dan Strategi Pembelajaran*. Jambi: PT. Sonpedia Publishing Indonesia, 2024.
[9] F. M. Riska *et al.*, *Strategi Pembelajaran 5.0*. Solok: PT Mafy Media Literasi Indonesia, 2024.
[10] E. Ahyani, S. Rifky, S. Muharam, N. P. Murnaka, Kadiyo, and E. M. Dhunani, "Implementation of teacher performance management to improve education quality," *Cendikia Media J. Ilm. Pendidik.*, vol. 14, no. 4, pp. 391–398, 2024, doi: 10.35335/cendikia.v14i4.4855.
[11] S. Rifky, S. Paling, O. Arifudin, and P. S. Narayanti, "Professionalism of educators in learning development," *Int. J. Teach. Learn.*, vol. 2, no. 2, pp. 579–588, 2024, [Online]. Available: https://injotel.org/index.php/12/article/view/93
[12] S. Rifky, T. Malahayati, T. Udin, A. F. Bakhtiar, and L. Sambudi, "Manajemen pelatih ekstrakulikuler di RA Ma'arif Langut Kabupaten Indramayu," *J. Jendela Bunda Progr. Stud. PG-PAUD Univ. Muhammadiyah Cirebon*, vol. 10, no. 2, pp. 59–67, Feb. 2023, doi: 10.32534/jjb.v10i2.4521.
[13] T. Udin and S. R. Arfanaldy, "Literature analysis on active learning models as an alternative to the dominance of lecture methods in public elementary schools," *Edu Cendikia J. Ilm. Kependidikan*, vol. 5, no. 01, pp. 23–32, 2025, doi: 10.47709/educendikia.v5i01.
[14] R. Nurlianharkah, I. Y. Rahmawati, and D. Kristiana, "Implementasi metode Cantol Roudhoh berbasis modul dalam mengembangkan kemampuan membaca permulaan anak usia dini," *J. Paedagogy*, vol. 9, no. 4, p. 877, Oct. 2022, doi: 10.33394/jp.v9i4.5654.
[15] A. Latifah and M. Panji Ramadan, "Upaya peningkatan kemampuan membaca dini murid tk melalui metode Cantol Roudhoh," *J. El-Audi*, vol. 3, no. 1, pp. 17–24, Aug. 2022, doi: 10.56223/elaudi.v3i1.45.
[16] N. C. Yusnita and Dara Aisyah, "Use of learning to read methods without spelling in early childhood reading," *Outl. J. Educ.*, vol. 4, no. 1, pp. 25–32, Feb. 2025, doi: 10.61730/oje.v4i1.321.
[17] R. A. Nurul Hafizah, "Implementation of thematic learning in Raudhatul Atfhal Al-Ghazali Medan," *Contin. Educ. J. Sci. Res.*, vol. 1, no. 1, pp. 1–10, Dec. 2020, doi: 10.51178/ce.v1i1.1.
[18] E. Nurhayati, I. El Fitri, D. Durtam, and J. Jazariyah, "Educational computer game and their implications on early children's language skill," *J. Obs. J. Pendidik. Anak Usia Dini*, vol. 6, no. 6, pp. 6766–6776, Nov. 2022, doi: 10.31004/obsesi.v6i6.3488.
[19] G. J. Whitehurst and C. J. Lonigan, "Child development and emergent literacy," *Child Dev.*, vol. 69, no. 3, pp. 848–872, Jun. 1998, doi: 10.1111/j.1467-8624.1998.tb06247.x.
[20] C. J. Lonigan, C. Schatschneider, and L. Westberg, "Identification of children's skills and abilities linked to later outcomes in reading, writing, and spelling," *Developing Early Literacy*, pp. 55-79, 2008, ch 2, doi: 10.1037/e579742009-001.
[21] K. Hirsh-Pasek, R. Michnick Golinkoff, L. E. Berk, and D. Singer, *A Mandate for Playful Learning in Preschool*. Oxford University Press, 2008. doi: 10.1093/acprof:oso/9780195382716.001.0001.
[22] B. A. Wasik and A. H. Hindman, "Improving vocabulary and pre-literacy skills of at-risk preschoolers through teacher professional development.," *J. Educ. Psychol.*, vol. 103, no. 2, pp. 455–469, May 2011, doi: 10.1037/a0023067.
[23] L. Shams and A. R. Seitz, "Benefits of multisensory learning," *Trends Cogn. Sci.*, vol. 12, no. 11, pp. 411–417, Nov. 2008, doi: 10.1016/j.tics.2008.07.006.
[24] L. C. Ehri, S. R. Nunes, S. A. Stahl, and D. M. Willows, "Systematic phonics instruction helps students learn to read: Evidence from the national reading panel's Meta-analysis," *Rev. Educ. Res.*, vol. 71, no. 3, pp. 393–447, Sep. 2001, doi: 10.3102/00346543071003393.
[25] "The Nation's Report Card: Mathematics 2009 State Snapshot Reports for Grade 4: Rhode Island,"

2009. doi: 10.1037/e603712009-001.
[26] H. Yusup and M. Marhun, "Analisis terhadap metode Cantol Roudhoh dalam pembelajaran membaca permulaan pada anak usia 4-5 tahun," *J. Ris. Pendidik. Guru Paud*, vol. 3, no. 1, pp. 7–12, Jul. 2023, doi: 10.29313/jrpgp.v3i1.1760.
[27] E. Nurhayati, "Literasi awal Al-Qur'an untuk anak usia dini dengan teknik Reading Aloud," *AWLADY: J. Pendidik. Anak*, vol. 5, no. 1, pp. 113-125, Mar. 2019, doi: 10.24235/awlady.v5i1.3981.
[28] H. F. Hayyu, B. Y. Wulansari, M. A. Mutaqin, and N. Bustari, "Enhancing early literacy: The impact of the Hubbul Ilmii book on reading skills in Malaysian children aged 5-6 years," *Golden Age J. Ilm. Tumbuh Kembang Anak Usia Dini*, vol. 9, no. 2, pp. 237–245, Jun. 2024, doi: 10.14421/jga.2024.92-05.
[29] Nurjanah, I. C. Kansil, I. Masturoh, and D. Hanwar, "Multisensory learning: Improving conceptual understanding through an intuitive sensory approach," *J. Pedagog.*, vol. 1, no. 6, pp. 56–64, Dec. 2024, doi: 10.62872/7ygyx095.
[30] L. Ruhaena and M. Moordiningsih, "Multisensory model: Implementation and contribution of home early literacy stimulation," *J. Psikol.*, vol. 46, no. 2, pp. 117-129, Aug. 2019, doi: 10.22146/jpsi.39593.
[31] J. W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications, 2014.
[32] W. R. Shadish, T. D. Cook, and D. T. Campbell, *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin., 2002.
[33] Sugiyono, *Metode Penelitian Kuantitatif*. Bandung: Alfabeta, 2020.
[34] P. S. Narayanti, S. A. Pranajaya, I. Sucianti, S. Rifky, and Hajerina, "Values education in the era of globalization: Preparing students to face an increasingly competitive world," *Int. J. Teach. Learn.*, vol. 2, no. 3, pp. 615–626, 2024, [Online]. Available: https://injotel.org/index.php/12/article/view/96
[35] J. W. Creswell, *Educational Research : Planning, conducting, and evaluating quantitative and qualitative research*, Fourth. Boston: Pearson Education, 2011.
[36] J. Nunnally and I. Bernstein, *Psychometric theory*. New York: McGraw-Hill, 1994.
[37] A. Field, *Discovering statistics using IBM SPSS Statistics*. Sage Publications, 2018.

Authors



Ulfah Amini is a School Supervisor at the Department of Education of Cirebon Regency, West Java (Pembina Utama Muda IV/C) since 2013. She is also a PPGP facilitator and instructor, BAN-PDM West Java assessor, and lecturer at UIBBC and UT UPBJJ Bandung. She holds a bachelor's degree from UNINUS Bandung, a master's degree from Universitas Kuningan, and is currently pursuing a Doctoral degree in Islamic Education Management at UIBBC. Her interests include early childhood, primary, and junior secondary education. (email: asesorulfah1@gmail.com).



Prof. Dr. Eti Nurhayati is a Professor of Educational Psychology in the Department of Islamic Guidance and Counseling at UIN Siber Syekh Nurjati Cirebon, Indonesia. She earned her bachelor's degree in Islamic education from IAIN Jakarta, a master's degree in psychology from Universitas Padjadjaran (UNPAD), and a Doctoral degree in Guidance and Counseling from Universitas Pendidikan Indonesia (UPI). Her expertise includes educational psychology, Islamic education, guidance and counseling, early childhood education, and gender studies. (email: etinurhayati@uinssc.ac.id).



Dian Widiantari is an academic and education practitioner in Islamic Educational Management, currently serving as Head of the master's Program in Islamic Educational Management at the Postgraduate School of Universitas Islam Bunga Bangsa Cirebon. She earned her bachelor's degree in Islamic education (PAI) from STAI PUI Majalengka, a master's degree in Islamic education, and a Doctoral degree in Islamic Education from UIN Sunan Gunung Djati Bandung. Her expertise includes Islamic educational management, developmental and general psychology, parenting education, and school–family partnerships, and qualitative research methodology. (email: widiantariesya@gmail.com).