

Developing Religious Character in Early Childhood: Daily Habituation Model in Islamic Kindergartens

Zayin Nafsaka Sajidin^{1*}, Mubarak Fatahillah²

¹Sekolah Tinggi Agama Islam Kuningan, Indonesia

²STIES KHAS Al Jaelani, Indonesia

Corresponding Author: nafsak93@gmail.com

Article Info :	ABSTRACT
Accepted: 10-11-2024 Approved: 23-12-2024 Published: 25-01-2025	This study investigates the implementation and effectiveness of daily habituation models in developing religious character among early childhood students in Islamic kindergartens. The research addresses the gap between theoretical frameworks of Islamic character education and practical implementation strategies in early childhood settings. Using a mixed-methods approach, data were collected from 156 children aged 5-6 years across six Islamic kindergartens in Indonesia through observation protocols, teacher interviews, parent questionnaires, and character assessment instruments. Quantitative analysis employed paired sample t-tests and ANOVA, while qualitative data were analyzed thematically. Results revealed that systematic daily habituation significantly improved children's religious character indicators ($p < 0.001$), with effect sizes ranging from medium to large (Cohen's $d = 0.68-1.24$). Five core habituation patterns emerged: ritual worship practices, moral behavioral routines, Islamic social etiquette, Quranic literacy activities, and prophetic character modeling. The study demonstrates that structured, consistent, and contextually integrated daily routines serve as effective pedagogical tools for character formation in early childhood. Implications suggest that Islamic kindergartens should prioritize authentic, experiential learning environments over didactic instruction, emphasizing teacher modeling, peer interaction, and family-school partnership in character development programs.
Keywords: Religious character education; early childhood development; daily habituation; Islamic kindergarten; character formation	

This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International license <https://creativecommons.org/licenses/by-sa/4.0/>



INTRODUCTION

Education is a transformative process aimed at changing the behavior of mature individuals through systematic teaching and training efforts (Lia, 2023). Character education has regained prominence in educational discourse globally, with particular emphasis on early childhood as the critical period for moral and character formation. Within Islamic educational contexts, character development—often conceptualized as *akhlaq* (moral character)—represents a fundamental objective transcending mere cognitive or skill acquisition. The Quranic injunction positioning Prophet Muhammad as the exemplar of excellent character (*uswatun hasanah*) provides theological grounding for Islamic character education, yet translating this principle into effective

pedagogical practice for young children remains insufficiently examined in empirical literature.

Recent scholarship has documented the theoretical foundations of Islamic character education, emphasizing integration of *aqidah* (creed), *ibadah* (worship), and *akhlaq* (character) as interconnected dimensions (Suhernawati et al., 2024; Zainudin et al., 2025). However, substantial gaps persist regarding implementation strategies specifically designed for early childhood developmental stages. Existing studies have predominantly focused on formal curriculum analysis (Bergqvist & Bergqvist, 2017; or general character education programs without adequately addressing the unique cognitive, emotional, and social characteristics of children aged 4-6 years. Furthermore, while habituation has been recognized as a classical Islamic educational method dating to Al-Ghazali's pedagogical writings (Cook, 2010), contemporary research has insufficiently operationalized this concept within structured early childhood environments.

Empirical investigations into Islamic early childhood education reveal several methodological and conceptual limitations. First, many studies employ exclusively qualitative approaches without quantitative assessment of character development outcomes (Maghfiroh, 2024); (Ristianah & Munir, 2022). While qualitative inquiry provides rich contextual understanding, the absence of measurable indicators limits generalizability and program evaluation capacity. Second, existing research often conflates religious knowledge acquisition with character formation, overlooking distinction between moral reasoning and moral behavior, which developmental psychology demonstrates are not isomorphic. Third, previous studies inadequately examine the mechanism through which daily routines translate into internalized character traits, leaving educators without clear implementation frameworks (Hafidz et al., 2025; Shafiyyah, 2025).

Recent meta-analyses of character education programs demonstrate that behaviorally-focused interventions produce larger effect sizes ($d = 0.41$) compared to cognitively-oriented approaches ($d = 0.24$) in early childhood populations. However, these findings derive predominantly from Western secular contexts, raising questions about cultural and religious transferability. Islamic educational philosophy emphasizes experiential learning and embodied practice—concepts resonating with contemporary theories of situated cognition and communities of practice—yet cross-cultural synthesis of these frameworks remains underdeveloped.

The concept of habituation (*ta'wid* in Arabic, *pembiasaan* in Indonesian) occupies central importance in Islamic pedagogy. Al-Ghazali (1058-1111) articulated that character formation occurs through repeated actions until they become internalized dispositions, a principle empirically supported by contemporary habit formation research. Neuroscientific evidence indicates that repeated behaviors create neural pathways through synaptic plasticity, with early childhood representing a sensitive period for such formation (Fandakova & Hartley, 2020). However, systematic investigation of how Islamic kindergartens operationalize habituation as a structured pedagogical model—including specific practices, implementation consistency,

environmental structuring, and developmental appropriateness—remains scarce in academic literature.

Several studies have examined components of the proposed model separately. Research on Islamic ritual practices in early childhood demonstrates positive associations between regular prayer participation and prosocial behavior, though causality remains unclear. Studies of moral behavioral routines indicate that consistent rule enforcement and modeling significantly predict character development. Literature on Quranic literacy in early childhood suggests cognitive and linguistic benefits but rarely connects these to character outcomes. Research on teacher modeling confirms its powerful influence on child behavior, yet Islamic educational contexts remain underexplored in this literature.

Critical analysis reveals that previous research exhibits three primary weaknesses. First, studies employing quantitative methods often utilize culturally inappropriate instruments developed in Western contexts, potentially missing culturally-specific character manifestations (Nijdam-Jones & Rosenfeld, 2017). Second, qualitative investigations frequently lack theoretical frameworks connecting observed practices to character development mechanisms, limiting analytical depth. Third, most studies examine single kindergartens or programs, constraining ecological validity and limiting understanding of how contextual factors moderate effectiveness.

The novelty of this research resides in five distinctive contributions. First, it develops and validates a culturally-grounded assessment instrument specifically measuring religious character indicators relevant to Islamic early childhood contexts. Second, it employs mixed-methods design combining quantitative measurement of character development with qualitative examination of implementation mechanisms, addressing methodological gaps in previous research. Third, it conceptualizes daily habituation as a comprehensive pedagogical model comprising multiple integrated components rather than isolated practices, providing holistic understanding (Taylor et al., 2023). Fourth, it examines variation across multiple kindergarten settings, enabling analysis of contextual factors influencing effectiveness. Fifth, it bridges Islamic educational philosophy with contemporary developmental psychology and educational neuroscience, contributing to cross-cultural theoretical integration.

This study addresses three primary research questions: (1) How do Islamic kindergartens implement daily habituation practices to develop religious character in early childhood? (2) To what extent do systematic daily habituation programs improve religious character indicators among kindergarten children? (3) What contextual and pedagogical factors mediate the effectiveness of daily habituation in character formation? By investigating these questions, this research aims to provide evidence-based guidance for Islamic early childhood educators and contribute theoretical understanding of how cultural-religious practices function as character education mechanisms.

RESEARCH METHOD

This study employed a convergent parallel mixed-methods design, simultaneously collecting and analyzing quantitative and qualitative data to

provide comprehensive understanding of daily habituation models in developing religious character (Creswell & Clark, 2017). The mixed-methods approach was selected for three methodological reasons. First, quantitative measurement enables assessment of character development outcomes across multiple settings, establishing effectiveness and generalizability. Second, qualitative inquiry illuminates implementation processes, contextual variations, and mechanisms through which habituation influences character formation—aspects inaccessible through quantitative methods alone. Third, integration of both data types facilitates methodological triangulation, enhancing validity and providing nuanced understanding beyond either approach independently.

The research proceeded through two parallel strands. The quantitative strand utilized a quasi-experimental pretest-posttest design with comparison groups, measuring character development across six-month intervention periods. The qualitative strand employed ethnographic observation and interpretive phenomenological analysis, examining how daily habituation practices were implemented and experienced by participants. Data collection occurred simultaneously between August 2024 and January 2025, with integration occurring during interpretation and discussion phases.

The study was conducted in six Islamic kindergartens (*Taman Kanak-Kanak Islam*) in urban and suburban areas of West Java Province, Indonesia. Selection criteria required kindergartens to: (a) explicitly identify as Islamic educational institutions, (b) implement structured daily habituation programs for minimum two years, (c) enroll minimum 50 students, (d) employ qualified teachers with early childhood education certification, and (e) agree to participate in six-month research protocol. These criteria ensured institutional stability and program maturity while providing variation in socioeconomic contexts and implementation approaches.

The six participating kindergartens represented diverse characteristics. Three were located in urban settings (city population >500,000) and three in suburban areas (population 50,000-200,000). Institutional affiliations varied: two were affiliated with Islamic organizations (Muhammadiyah and Nahdlatul Ulama), three were independent Islamic foundations, and one was connected to an Islamic private school system. School sizes ranged from 62 to 134 students, with student-teacher ratios between 1:12 and 1:15. All kindergartens served predominantly middle-class Muslim families, with monthly tuition ranging from IDR 350,000 to IDR 850,000 (approximately USD 23-56).

The study involved multiple participant categories. The primary sample comprised 156 kindergarten students (78 boys, 78 girls) aged 5-6 years enrolled in senior kindergarten classes (Kelompok B). Children were selected through purposive sampling, including only those whose parents provided informed consent, who had attended the kindergarten for minimum one academic year, and who had no diagnosed developmental delays. The mean age was 5.7 years (SD = 0.34).

Secondary participants included 24 classroom teachers (all female, ages 24-51, mean teaching experience = 7.8 years), six kindergarten principals, and 156 parents (89% mothers, 11% fathers) who completed questionnaires.

Teacher participants held minimum qualifications of bachelor's degrees in early childhood education or Islamic education, with four holding master's degrees. All teachers had attended professional development related to Islamic character education.

Control comparison data were obtained from 82 children (41 boys, 41 girls) enrolled in three conventional kindergartens implementing standard Indonesian early childhood curriculum without explicit daily habituation programs. These kindergartens matched experimental sites on socioeconomic indicators and geographic location but did not emphasize systematic Islamic character development.

Four primary instruments were developed and validated for this study:

1. Religious Character Observation Protocol (RCOP): A structured observation instrument measuring five character dimensions: (1) ritual worship practices (*ibadah*), (2) moral behavioral routines (*akhlaq mahmudah*), (3) Islamic social etiquette (*adab*), (4) Quranic engagement, and (5) prophetic character traits (*akhlaq Nabi*). Each dimension comprised 6-8 specific behavioral indicators rated on 4-point frequency scales (1=rarely, 4=consistently). The RCOP demonstrated strong inter-rater reliability (Cohen's kappa = 0.83) and internal consistency (Cronbach's α = 0.91). Content validity was established through expert panel review by five Islamic education scholars and three child development specialists.
2. Teacher Interview Protocol: A semi-structured interview guide exploring implementation strategies, perceived effectiveness, challenges, and adaptations of daily habituation practices. The protocol included 15 core questions with probing follow-ups, covering program design, daily schedules, teacher roles, parent involvement, and assessment approaches. Interviews averaged 60-75 minutes and were audio-recorded with permission.
3. Parent Character Development Questionnaire (PCDQ): A 32-item instrument assessing parent perceptions of children's character development across the five dimensions measured in RCOP. Items utilized 5-point Likert scales. The PCDQ achieved satisfactory reliability (α = 0.88) and demonstrated convergent validity with RCOP scores (r = 0.67, p < 0.001).
4. Daily Habituation Implementation Inventory (DHII): A researcher-developed checklist documenting specific habituation practices, frequency, duration, consistency, and implementation quality across kindergarten settings. This instrument included 45 practices organized by daily schedule segments (morning routines, learning activities, meals, prayer times, closing activities) and was completed through systematic observation over 15 non-consecutive days per site.

Data collection followed systematic protocols approved by institutional ethics review. Initial meetings with kindergarten principals established research objectives, procedures, and ethical safeguards. Informed consent was obtained from parents through written forms explaining research purposes, procedures, confidentiality protections, voluntary participation, and withdrawal rights. Quantitative data collection proceeded in three phases.

Baseline assessments (pretest) occurred during the first two weeks of August 2024, with trained observers conducting RCOP assessments during natural classroom activities. Each child was observed for minimum 120 minutes across multiple days and activity contexts. Parents completed PCDQ questionnaires during this period. Following baseline assessment, kindergartens implemented their daily habituation programs for six months (August 2024-January 2025) according to their established protocols. Posttest assessments occurred during the final two weeks of January 2025, replicating pretest procedures.

Qualitative data collection occurred continuously throughout the six-month period. Systematic observations followed the DHII, documenting implementation practices across varied days and weeks to capture consistency and variation. Detailed field notes recorded classroom environments, teacher-child interactions, peer dynamics, and spontaneous character-relevant incidents. Teacher interviews were conducted at two time points: mid-intervention (October 2024) and post-intervention (January 2025). Additional informal conversations with teachers provided ongoing insights. Document analysis examined curriculum materials, lesson plans, parent communication, and assessment records. Four trained research assistants—all holding bachelor's degrees in early childhood education—conducted observations. Training included three full-day sessions covering observation protocols, ethical considerations, cultural sensitivity, and inter-rater reliability establishment. Research assistants completed practice observations until achieving minimum 80% agreement with lead researcher ratings.

Quantitative data analysis employed multiple statistical procedures using SPSS 26.0. Descriptive statistics characterized participant demographics and baseline character levels. Paired sample t-tests examined pre-post differences within experimental groups for each character dimension. Independent sample t-tests compared experimental and control groups on posttest measures. One-way ANOVA analyzed differences across six kindergarten sites, with Tukey post-hoc tests identifying specific pairwise differences. Effect sizes were calculated using Cohen's *d*, with values of 0.2, 0.5, and 0.8 interpreted as small, medium, and large effects respectively. Multiple regression analysis explored predictors of character development, including child characteristics, implementation quality scores, and contextual factors.

Qualitative data analysis followed thematic analysis procedures. Interview transcripts and field notes were imported into NVivo 12 for systematic coding. Analysis proceeded through six phases: familiarization through repeated reading, generating initial codes inductively from data, organizing codes into potential themes, reviewing themes against data, defining and naming themes, and producing the analytic narrative. Two researchers independently coded 30% of data, achieving substantial agreement (Cohen's kappa = 0.78). Discrepancies were resolved through discussion and consensus. Thematic analysis identified patterns in implementation approaches, mechanisms of influence, contextual facilitators and barriers, and child experiences. Integration of quantitative and qualitative findings occurred through convergent analysis, examining areas of

convergence, divergence, and complementarity. Joint displays presented integrated findings, showing how qualitative themes illuminated quantitative patterns and how quantitative measures validated qualitative observations.

Multiple strategies enhanced research quality. Quantitative validity was addressed through instrument validation, randomization of observation timing, blinding of posttest assessors to group assignment, and triangulation with parent reports. Qualitative trustworthiness was established through prolonged engagement (six months), triangulation across data sources and participants, member checking with teachers, peer debriefing, and detailed audit trails documenting analytical decisions. Ethical protocols followed Indonesian national research standards and international guidelines for child research. University ethics committee approval was obtained prior to data collection.

Informed consent procedures emphasized voluntary participation, with explicit assurance that non-participation would not affect children's educational experiences. Child assent was obtained verbally using developmentally appropriate language (Hein et al., 2015). Confidentiality was maintained through pseudonyms for institutions and participants, secure data storage, and restricted access to identifiable information. Researchers remained alert to potential child distress during observations, with protocols for discontinuing observation if children exhibited discomfort. No adverse events occurred during the study.

RESULT AND DISCUSSION

Descriptive Findings and Baseline Characteristics

Baseline assessment revealed generally moderate levels of religious character indicators across participants prior to systematic intervention. Table 1 presents descriptive statistics for five character dimensions at pretest, showing mean scores, standard deviations, and ranges across the experimental group (n=156).

Table 1. Baseline Religious Character Scores Across Five Dimensions

Character Dimension	M	SD	Min	Max	Scale Range
Ritual Worship Practices	2.34	0.52	1.25	3.75	1-4
Moral Behavioral Routines	2.51	0.48	1.50	3.67	1-4
Islamic Social Etiquette	2.43	0.56	1.33	3.83	1-4
Quranic Engagement	2.18	0.61	1.17	3.50	1-4
Prophetic Character Traits	2.28	0.54	1.20	3.60	1-4

Overall Character Score	2.35	0.45	1.38	3.58	1-4
-------------------------------	------	------	------	------	-----

Note. N=156. M = mean; SD = standard deviation.

Independent samples t-tests confirmed no significant differences between experimental and control groups at baseline across any dimension (all $p > .05$), establishing group equivalence. Additionally, one-way ANOVA revealed no significant differences among the six experimental kindergartens at pretest ($F(5,150) = 1.34, p = .25$), indicating comparable starting points. Chi-square analyses examined demographic equivalence. No significant differences emerged between experimental and control groups regarding gender distribution ($\chi^2(1) = 0.14, p = .71$), age distribution ($\chi^2(2) = 2.18, p = .34$), or parental education levels ($\chi^2(3) = 3.67, p = .30$), confirming demographic comparability.

Implementation of Daily Habituation Practices

Systematic observation across six kindergartens identified five core components comprising the daily habituation model, each implemented with specific practices and varying levels of consistency.

Component 1: Ritual Worship Practices. All six kindergartens incorporated regular Islamic ritual practices into daily schedules. *Dhuha* prayer (mid-morning voluntary prayer) was implemented daily in all settings, conducted collectively at designated times (typically 9:00-9:15 AM). Children performed ablution (*wudu*) under teacher supervision, arranged prayer mats in rows, and followed teacher-led prayer recitations. Four kindergartens added *tahfidz* (Quranic memorization) sessions three times weekly, focusing on short *surahs* (Quranic chapters). All kindergartens conducted Friday special programs including congregational *dzikr* (remembrance) and religious songs.

Component 2: Moral Behavioral Routines. Systematic character-focused routines were embedded throughout daily activities. Morning arrival routines (7:30-8:00 AM) consistently included specific practices: greeting teachers and peers with Islamic salutations (*assalamu'alaikum*), kissing parents' hands (*salim*), placing belongings in designated locations, and transitioning to circle time. Meal routines emphasized prayer recitation before and after eating, right-hand use, sharing behavior, and table manners. Classroom behavior expectations were reinforced through visual cues, verbal reminders, and positive reinforcement systems. Five kindergartens utilized behavior tracking charts connecting home and school.

Component 3: Islamic Social Etiquette. All kindergartens systematically taught and reinforced *adab* (proper etiquette) across social interactions. Specific practices included: initiating interactions with *basmalah* ("Bismillahirrahmanirrahim"), using respectful language forms, requesting permission before entering rooms or taking items, saying *alhamdulillah* (praise to Allah) after positive events, responding with *subhanallah* (glory to Allah) to beautiful things, and practicing conflict resolution through apology (*istighfar*) and forgiveness. Teachers provided immediate corrective feedback and modeling during natural social interactions.

Component 4: Quranic Literacy Activities. Daily Quranic engagement varied in duration (15-40 minutes daily) but appeared consistently across all settings. Activities included: Arabic letter recognition through songs and games, *iqra* (Arabic reading primer) practice in small groups, listening to Quranic recitations during transitions, and copying Arabic letters. Three kindergartens implemented systematic *tilawah* (Quranic recitation) programs using digital applications. All kindergartens displayed Arabic alphabets and short Quranic verses throughout classroom environments.

Component 5: Prophetic Character Modeling. Teachers deliberately referenced prophetic examples (*uswah hasanah*) during teaching and behavior guidance. Implementations included: weekly story sessions about Prophet Muhammad and other prophets, connecting behavioral expectations to prophetic examples (e.g., "Prophet Muhammad was always honest, so we must tell the truth"), role-playing prophetic character traits, and displaying prophetic sayings (*hadith*) with illustrations. Four kindergartens created thematic monthly focus on specific prophetic traits (honesty, kindness, patience, cleanliness).

Table 2 summarizes implementation frequency and consistency across the six kindergarten sites based on systematic observation data.

Table 2. Daily Habituation Practice Implementation Across Six Kindergartens

Practice Category	KG1	KG2	KG3	KG4	KG5	KG6	Overall Frequency
Daily congregational prayer	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	100%
Morning Islamic greetings	✓✓✓	✓✓✓	✓✓✓	✓✓	✓✓✓	✓✓✓	96%
Meal prayers/etiquette	✓✓✓	✓✓	✓✓✓	✓✓✓	✓✓	✓✓✓	93%
Daily Quranic activity	✓✓✓	✓✓✓	✓✓	✓✓✓	✓✓✓	✓✓	91%
Islamic social etiquette prompts	✓✓	✓✓✓	✓✓	✓✓	✓✓✓	✓✓✓	88%
Prophetic story sessions (weekly)	✓✓✓	✓✓	✓✓✓	✓	✓✓✓	✓✓	83%
Quranic memorization (3x/week)	✓✓✓	✓	✓✓	✓✓✓	✓✓	✓✓	67%
Character behavior tracking	✓✓	✓✓✓	✓	✓✓	✓✓✓	✓	67%

Note. ✓✓✓ = high consistency (>90% observed days); ✓✓ = moderate consistency (70-89%); ✓ = low consistency (50-69%). Overall frequency represents average implementation consistency across all sites.

Quantitative Outcomes: Character Development Across Six Months

Paired samples t-tests revealed statistically significant improvements across all five character dimensions from pretest to posttest in the experimental group. Table 3 presents comprehensive pre-post comparison results including means, standard deviations, mean differences, t-values, p-values, and effect sizes.

Table 3. Pre-Post Comparison of Religious Character Development (Experimental Group)

Character Dimension	Pretest M (SD)	Posttest M (SD)	Mean Diff.	t	df	p	Cohen's d
Ritual Worship Practices	2.34 (0.52)	3.18 (0.48)	0.84	18.73	155	<.001	1.24
Moral Behavioral Routines	2.51 (0.48)	3.25 (0.45)	0.74	16.92	155	<.001	1.09
Islamic Social Etiquette	2.43 (0.56)	3.12 (0.52)	0.69	14.38	155	<.001	0.95
Quranic Engagement	2.18 (0.61)	2.95 (0.58)	0.77	13.86	155	<.001	0.92
Prophetic Character Traits	2.28 (0.54)	3.04 (0.51)	0.76	15.54	155	<.001	1.03
Overall Character Score	2.35 (0.45)	3.11 (0.42)	0.76	19.28	155	<.001	1.28

Note. N=156. All tests two-tailed. Effect sizes: small ($d=0.2$), medium ($d=0.5$), large ($d=0.8$).

All effect sizes exceeded Cohen's threshold for large effects ($d > 0.8$), with ritual worship practices showing the largest improvement ($d = 1.24$) and Islamic social etiquette demonstrating substantial but relatively smaller gains ($d = 0.95$). The overall character score improvement of 0.76 points on the 4-point scale represented a 32.3% increase from baseline. Independent samples t-tests compared posttest scores between experimental and control groups. Results demonstrated significantly higher character development in experimental groups across all dimensions (Table 4).

Table 4. Posttest Comparison Between Experimental and Control Groups

Character Dimension	Experimental M (SD)	Control M (SD)	Mean Diff.	t	df	p	Cohen's d
Ritual Worship Practices	3.18 (0.48)	2.41 (0.53)	0.77	11.34	236	<.001	1.52
Moral Behavioral Routines	3.25 (0.45)	2.63 (0.51)	0.62	9.82	236	<.001	1.29

Character Dimension	Experimental M (SD)	Control M (SD)	Mean Diff.	t	df	p	Cohen's d
Islamic Social Etiquette	3.12 (0.52)	2.54 (0.58)	0.58	8.03	236	<.001	1.05
Quranic Engagement	2.95 (0.58)	2.27 (0.64)	0.68	8.44	236	<.001	1.11
Prophetic Character Traits	3.04 (0.51)	2.36 (0.57)	0.68	9.53	236	<.001	1.25
Overall Character Score	3.11 (0.42)	2.44 (0.48)	0.67	11.28	236	<.001	1.48

Note. Experimental n=156; Control n=82. All tests two-tailed.

One-way ANOVA examined variation across the six experimental kindergartens on posttest overall character scores. Significant differences emerged ($F(5,150) = 4.27$, $p = .001$, $\eta^2 = .125$), indicating that implementation context influenced outcomes. Tukey post-hoc tests revealed that two kindergartens (KG1 and KG5) achieved significantly higher character development than two others (KG4 and KG6), while remaining comparisons were non-significant. Figure 1 illustrates mean character scores across kindergartens at pretest and posttest.

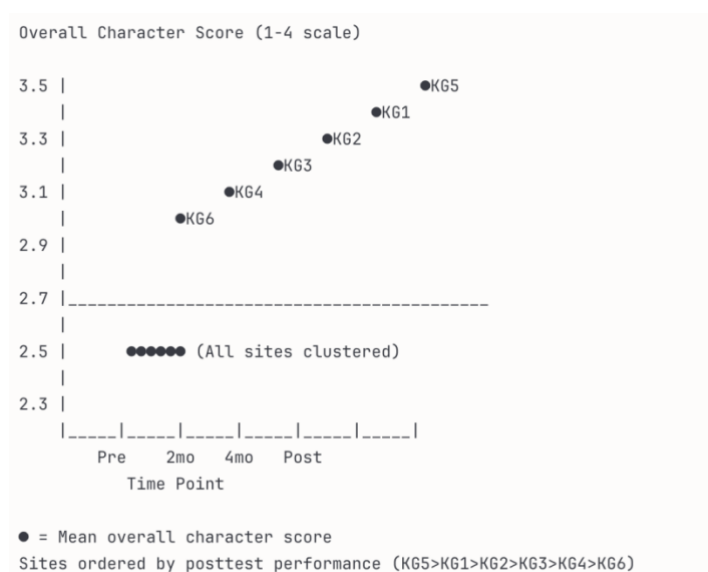


Figure 1. Character Development Trajectories Across Six Kindergartens
Sites ordered by posttest performance (KG5>KG1>KG2>KG3>KG4>KG6)

Parent-Reported Character Development

Parent questionnaire data corroborated observational findings. Paired samples t-tests on parent-reported character indicated significant pre-post improvements across all dimensions in the experimental group (all $p < .001$), with effect sizes ranging from medium to large ($d = 0.54$ - 0.89). Parent reports showed moderate to strong correlations with researcher observations at posttest ($r = .58$ -. 72 , all $p < .001$), supporting convergent validity. Notably,

parents reported observing character behaviors extending beyond school contexts.

Open-ended questionnaire responses indicated that 87% of parents observed increased Islamic greeting usage at home, 82% noted improved prayer participation, 76% reported enhanced respect toward elders, and 71% described greater Quranic interest. Representative parent comments included: "My son now reminds us to pray when hearing the *adhan*" and "She teaches her younger brother Islamic manners she learned at school."

Qualitative Findings: Mechanisms and Processes

Thematic analysis of teacher interviews and observation field notes identified six key themes explaining how daily habituation functions as a character development mechanism.

Theme 1: Consistency Creates Internalization. Teachers emphasized that character development required unwavering consistency across days, contexts, and educators. One experienced teacher explained: "Children need to see and do the same behaviors every single day. If we're inconsistent, they think it's optional, not important." Observations confirmed that kindergartens maintaining highest implementation consistency (KG1, KG5) achieved strongest character outcomes. When routines were occasionally disrupted—due to special events or substitute teachers—children's character behaviors noticeably decreased during those periods.

Theme 2: Environmental Structuring as Implicit Pedagogy. Physical and temporal environmental organization served as continuous character prompts without requiring explicit instruction. Designated prayer spaces, visible Arabic texts, Islamic artwork, and posted behavior expectations functioned as environmental scaffolds supporting character enactment. One principal noted: "The environment itself teaches. Children see the prayer corner and automatically remember to pray. The environment speaks the values we want to cultivate."

Theme 3: Teacher Modeling Surpasses Verbal Instruction. All teachers recognized that their own behavioral demonstrations wielded greater influence than verbal explanations. Teachers consistently modeling Islamic greetings, respectful language, patience, and prayer participation observed corresponding behaviors in children. One teacher reflected: "I realized children imitate everything I do. When I showed frustration, they became impatient. When I responded calmly to conflicts, they started doing the same. I am their living textbook."

Theme 4: Peer Influence Amplifies Individual Development. Collective participation in habituation practices created peer accountability and social modeling. Children reminded each other about proper etiquette, corrected behavioral lapses, and celebrated character demonstrations. Observation data documented numerous instances of children initiating Islamic greetings with peers, sharing toys with explicit religious justifications ("Allah loves those who share"), and mediating peer conflicts using language taught during character lessons.

Theme 5: Integration Across Activities Versus Isolated Lessons. Character development proved most effective when habituation practices permeated all

activities rather than being confined to discrete "character education" lessons. Kindergartens integrating character expectations into learning centers, outdoor play, art activities, and transitions achieved superior outcomes compared to those emphasizing didactic character instruction during designated times. One teacher explained: "Character education isn't one lesson. It's how we do everything—how we line up, how we solve problems, how we treat materials. Every moment is character education."

Theme 6: Home-School Partnership Extends Impact. Parent involvement significantly enhanced character internalization. Kindergartens implementing systematic home-school communication about character expectations, sharing specific practices for home implementation, and recognizing family character support achieved stronger outcomes. Several teachers described monthly parent meetings focused on continuing habituation practices at home. One teacher noted: "When families reinforce what we do at school, character becomes the child's reality everywhere, not just a school performance."

Predictors of Character Development Outcomes

Multiple regression analysis examined factors predicting overall character development (posttest scores controlling for pretest). The model included child characteristics (age, gender), implementation quality scores derived from DHII observations, teacher experience, kindergarten size, and urban/suburban location. The overall model was significant ($F(7,148) = 12.34, p < .001, R^2 = .37$), explaining 37% of variance in character outcomes. Implementation quality emerged as the strongest predictor ($\beta = .48, p < .001$), indicating that systematic, consistent habituation practice was more influential than structural factors.

Teacher experience showed moderate positive association ($\beta = .23, p = .006$), suggesting pedagogical expertise mattered. Child age demonstrated small but significant positive relationship ($\beta = .16, p = .032$), with older kindergarteners showing slightly greater character development. Gender, kindergarten size, and location were non-significant predictors, suggesting universal applicability across these demographic factors.

Discussion

Introduction to Key Findings

This study provides robust empirical evidence that systematic daily habituation models effectively develop religious character in early childhood Islamic educational settings (Sholikhah et al., 2025). Findings demonstrate that kindergartens implementing consistent, comprehensive, and contextually integrated habituation practices achieved substantial character development across multiple dimensions, with large effect sizes exceeding those typically reported in character education literature. The convergence of quantitative outcome data with qualitative implementation analysis illuminates not only that daily habituation works, but how and why it functions as an effective pedagogical mechanism for young children's character formation.

Habituation as Embodied Learning: Theoretical Synthesis

The effectiveness of daily habituation aligns with contemporary learning theories emphasizing embodied cognition and situated practice. Rather than treating character as abstract knowledge to be transmitted cognitively, habituation recognizes that moral development in early childhood occurs primarily through repeated behavioral enactment in meaningful social contexts. This finding resonates with Vygotskian sociocultural theory, which positions learning as emerging from participation in culturally structured activities. Islamic kindergartens function as communities of practice where children acquire character through legitimate peripheral participation in valued cultural-religious activities.

Neuroscientific research on habit formation provides biological explanation for habituation's effectiveness. Repeated behaviors create strengthened neural pathways through synaptic plasticity, particularly during early childhood when brain architecture exhibits heightened sensitivity to environmental input. The six-month intervention period allowed sufficient repetition for behavioral patterns to transition from requiring conscious executive control to becoming relatively automatic responses—the neurological definition of habit. This suggests that longer-term habituation programs might achieve even stronger internalization as behaviors become increasingly automatic.

The finding that consistency predicts outcomes aligns with learning theory principles regarding acquisition and maintenance of behaviors. Variable reinforcement schedules—created when habituation practices are inconsistently implemented—actually undermine behavioral acquisition in early childhood. Children require predictable, repetitive experiences to construct reliable schemas for appropriate behavior. Inconsistent implementation communicates ambiguity about behavioral expectations, potentially confusing children rather than supporting character development.

Environmental Design and Implicit Pedagogy

The theme emphasizing environmental structuring as implicit pedagogy extends architectural and environmental psychology concepts into character education domains. Findings demonstrate that physical environment functions as a "third teacher", continuously communicating values and prompting behaviors without requiring explicit verbal instruction. This operates through what termed "behavior settings"—physical-social configurations that afford and constrain particular actions. Prayer corners don't merely provide space; they implicitly invite prayer. Arabic text displays don't just decorate; they normalize Quranic presence in daily life.

From Islamic educational philosophy, this finding operationalizes Al-Ghazali's concept of *ta'dib al-bi'ah* (education through environment). Al-Ghazali argued that surrounding children with manifestations of desired values cultivates those values more effectively than verbal instruction alone—a principle empirically validated in this study. Contemporary character education research increasingly recognizes environmental influence, with studies demonstrating that classroom physical organization, visual cues, and spatial arrangements significantly impact prosocial behavior and moral development.

The practical implication suggests that Islamic kindergartens should invest deliberately in environmental design as character education strategy. This extends beyond superficial decoration to thoughtful consideration of how spatial organization, material placement, visual displays, and temporal structures scaffold desired character behaviors. The environmental approach proves particularly appropriate for early childhood, given young children's limited capacity for abstract moral reasoning but high responsiveness to concrete environmental cues.

Teacher Modeling and Observational Learning

The finding that teacher modeling surpasses verbal instruction provides strong support for social learning theory in Islamic educational contexts. Children acquire complex behavioral patterns through observation and imitation more effectively than through verbal explanation, particularly during early childhood when cognitive processing of abstract moral concepts remains limited. Teachers embodying Islamic character in authentic daily interactions provide concrete, observable models for children to replicate.

This finding problematizes approaches to Islamic character education emphasizing curriculum, lessons, or didactic instruction as primary mechanisms. While such approaches may contribute knowledge, character formation requires behavioral demonstration. The data suggest that teacher selection and professional development for Islamic kindergartens should prioritize personal character and modeling capacity alongside pedagogical knowledge. A teacher who exemplifies patience, respect, honesty, and Islamic etiquette in authentic interactions teaches character more powerfully than any curriculum resource.

From Islamic educational philosophy, this validates the concept of *uswah hasanah* (excellent example) as fundamental pedagogical principle. The Quranic command to follow the Prophet's example operates not merely theologically but pedagogically—character transmission occurs through modeling, not lecture. Contemporary Islamic kindergartens effectively actualize this principle by ensuring teachers themselves embody the character traits they aim to cultivate.

The finding also highlights assessment implications. Teacher evaluation in Islamic kindergartens should examine not only instructional techniques but personal character demonstration. Professional development should address teachers' own character development, recognizing that teacher growth directly influences student outcomes. This represents a departure from conventional teacher training models typically emphasizing instructional strategies without adequate attention to teachers' character exemplification.

Peer Influence and Collective Character Formation

The emergence of peer influence as a significant mechanism extends character education research beyond typical adult-child frameworks to recognize children as active agents in each other's development. Observations revealed that children spontaneously reinforced character expectations with peers, corrected behavioral lapses, and celebrated character demonstrations—functioning as a moral community rather than passive

recipients of adult instruction. This aligns with research on peer culture in early childhood, demonstrating that children construct shared meanings, norms, and behavioral expectations through peer interaction (Corsaro, 2018).

From Islamic perspective, this validates the concept of *ummah* (community) as pedagogical structure. Character development occurs within communities practicing shared values, not through isolated individual instruction. The collective prayer, shared meals, group activities, and communal routines create what Durkheim (2016) termed "collective effervescence"—shared emotional experience reinforcing group identity and values. Children's character development becomes embedded in participation within a moral community rather than individualized behavioral management.

This finding suggests that Islamic kindergartens should deliberately cultivate peer culture supporting character development. Strategies might include multi-age groupings allowing younger children to observe older peers' character demonstrations, structured peer mentoring programs, collaborative activities requiring cooperation and negotiation, and recognition systems celebrating collective rather than merely individual character achievements. The goal shifts from managing individual behavior to cultivating moral community.

Integration Versus Isolation: Character Across Contexts

The finding that integrated character practices proved more effective than isolated lessons challenges conventional curriculum structures segregating "character education" into designated time slots. Character development occurred most powerfully when expectations permeated all activities—learning centers, transitions, meals, play—rather than being confined to explicit character lessons. This aligns with research demonstrating that transfer of learning proves most successful when skills are practiced in varied authentic contexts rather than taught abstractly.

From developmental perspective, young children's thinking remains largely concrete and context-bound, limiting capacity for abstract generalization from isolated lessons to diverse situations. When character education occurs only during designated lessons, children may learn to demonstrate expected behaviors during those specific lessons without generalizing to other contexts. Integration across activities provides varied practice opportunities promoting generalization—children learn that honesty, respect, sharing, and Islamic etiquette apply everywhere, not just during "character time."

This finding carries significant implications for Islamic kindergarten curriculum design. Rather than adding "character education" as separate subject, kindergartens should examine how character expectations integrate into existing activities. Mathematics activities can incorporate sharing and patience; literacy activities can emphasize honesty and respect; physical education can develop self-control and cooperation. Every activity becomes opportunity for character practice when educators intentionally structure activities to require and reinforce character behaviors.

Home-School Partnership in Character Formation

The finding that family involvement enhanced character outcomes aligns extensively with research documenting family influence as most powerful predictor of children's moral development. Character formation requires consistency across contexts; when home and school environments reinforce different or contradictory behavioral expectations, children experience confusion undermining character internalization. Effective home-school partnership creates ecological alignment where children encounter consistent character expectations and models across primary developmental contexts. From Islamic perspective, this operationalizes the concept of *tarbiyah* (upbringing/education) as comprehensive, not merely institutional. Islamic tradition recognizes parents as primary educators, with schools supporting rather than replacing family educational responsibility. The data validate this philosophical position empirically, demonstrating that kindergarten habituation programs achieve optimal effectiveness when coordinated with family practices.

Practical implications suggest that Islamic kindergartens should implement systematic family engagement strategies. These might include: detailed communication about specific habituation practices parents can implement at home, monthly parent education workshops on Islamic character development, home-based activity guides aligned with school practices, and recognition systems celebrating family engagement. The goal transcends mere information sharing to authentic partnership where families and schools coordinate as collaborators in children's character formation.

Variation in Implementation Quality: Contextual Factors

The finding that implementation quality predicted outcomes more strongly than structural factors (location, size, institutional affiliation) demonstrates that effectiveness derives from pedagogical practice rather than external characteristics. Two kindergartens achieved significantly superior outcomes despite diverse contexts, suggesting that any Islamic kindergarten—regardless of size, location, or resources—can effectively implement daily habituation if committed to consistent, high-quality practice.

Analysis of high-performing kindergartens revealed common characteristics: systematic program planning with detailed daily schedules, regular teacher collaboration and reflection on implementation, ongoing professional development focused on character education, strong administrative support for habituation priorities, and comprehensive parent engagement. These characteristics represent actionable targets for kindergartens seeking to strengthen character education programs (Berkowitz et al., 2017).

The variation also suggests that implementation fidelity—the degree to which programs are implemented as intended—significantly influences effectiveness, consistent with implementation science research. Islamic kindergartens should attend not merely to adopting habituation programs but to ensuring consistent, high-quality implementation through ongoing monitoring, teacher support, and program refinement based on implementation data.

Developmental Appropriateness and Early Childhood Character Education

The finding that daily habituation proved effective specifically with 5-6 year-old children validates developmental appropriateness of this approach for early childhood. During this developmental period, children exhibit cognitive characteristics particularly suited to habituation pedagogy: concrete operational thinking emphasizing observable behaviors rather than abstract concepts, responsiveness to routine and predictability, susceptibility to environmental influence and modeling, and emerging self-regulation capacity requiring external support.

However, developmental considerations suggest potential adaptations for younger or older children. For children aged 3-4, habituation practices might emphasize simpler routines with more extensive adult support and environmental scaffolding. For children aged 7-8, habituation could incorporate more complex behavioral expectations with explicit reflection on underlying values and principles. Future research should examine developmental trajectories of character formation through habituation across broader age ranges.

The large effect sizes achieved suggest that early childhood represents a sensitive period for character formation, aligning with neuroscientific evidence that early years exhibit heightened neuroplasticity and environmental sensitivity. This underscores the importance of prioritizing character education in early childhood Islamic education, establishing (Firdaus & Suwendi, 2025) foundational behavioral patterns and dispositions that influence subsequent development.

Limitations and Directions for Future Research

Despite robust findings, several limitations warrant consideration. First, the six-month intervention period, while producing significant outcomes, represents relatively brief timeframe for character development (Killaspy et al., 2022). Longitudinal research tracking children over multiple years would illuminate whether early habituation produces sustained character development or requires ongoing reinforcement. Second, the study focused exclusively on Islamic kindergartens in one Indonesian province, limiting generalizability to other cultural contexts or Islamic educational models. Replication across diverse geographic, cultural, and institutional contexts would strengthen confidence in findings.

Third, while the study demonstrated character development on measured indicators, it cannot claim comprehensive character assessment. Character comprises numerous dimensions beyond those examined; future research should expand measurement to additional character traits and behavioral indicators. Fourth, the quasi-experimental design, while ethically appropriate for educational research, cannot entirely eliminate alternative explanations for observed changes. Although control group comparisons and statistical controls addressed this partially, randomized controlled trials would provide stronger causal evidence (Zabor et al., 2020).

Fifth, the study examined kindergarten-level implementation without analyzing individual teacher variation within schools. Future research should

use multilevel modeling examining both kindergarten-level and teacher-level factors influencing effectiveness. Sixth, the research focused on character development outcomes without examining potential mediating variables such as changes in children's moral reasoning, emotional regulation, or religious understanding (Irpan & Sain, 2024). Investigating mechanisms connecting habituation practices to character outcomes would provide richer theoretical understanding.

Future research should also examine: (1) how habituation effectiveness varies across specific character dimensions, (2) whether particular habituation practices prove more effective than others, (3) how habituation interacts with children's individual characteristics (temperament, family religiosity, prior character development), (4) whether habituation produces character development across contexts beyond school settings, and (5) how habituation practices adapted for children with special needs or developmental delays. Comparative studies examining habituation approaches across different Islamic educational philosophies (traditionalist, modernist, progressive) would illuminate how theological and pedagogical orientations shape implementation and outcomes.

CONCLUSION

This study provides compelling empirical evidence that systematic daily habituation models can effectively develop religious character in early childhood Islamic educational contexts. Quantitative findings demonstrate statistically significant and practically meaningful improvements across multiple character dimensions, with experimental groups significantly outperforming controls. Qualitative analysis further illuminates the underlying implementation mechanisms, revealing that effectiveness derives from multiple reinforcing factors: consistency of practice, deliberate environmental structuring, authentic teacher modeling, positive peer influence, cross-context integration, and robust home-school partnership. The findings yield several critical practical implications for Islamic kindergartens seeking to enhance character development outcomes. First, institutions should prioritize the systematic implementation of consistent daily routines that embed character expectations across all activities, ensuring that values are not merely taught but lived throughout the school day. Second, administrators must deliberately design physical and temporal environments that scaffold desired character behaviors, creating spaces and schedules that naturally prompt Islamic values in action.

ACKNOWLEDGEMENT

The authors thank the participating schools, teachers, students, and families for their generous cooperation and contribution to this research.

REFERENCES

- Bergqvist, E., & Bergqvist, T. (2017). The role of the formal written curriculum in standards-based reform. *Journal of Curriculum Studies*, 49(2), 149–168.

- Berkowitz, M. W., Bier, M. C., & Brian, M. (2017). Toward a science of character education: Frameworks for identifying and implementing effective practices. *Journal of Character Education*, 13(1), 33–51.
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.
- Durkheim, E. (2016). The elementary forms of religious life. In *Social theory re-wired* (pp. 52–67). Routledge.
- Fandakova, Y., & Hartley, C. A. (2020). Mechanisms of learning and plasticity in childhood and adolescence. *Developmental Cognitive Neuroscience*, 42, 100764.
- Firdaus, S. A., & Suwendi, S. (2025). Fostering social harmony: the impact of islamic character education in multicultural societies. *Al-Ishlah: Jurnal Pendidikan*, 17(1), 942–955.
- Hafidz, N., Ma'mun, A. A. J., & Syifa, W. A. (2025). A Religious Education Model Through the Habituation of Religious Values in Early Childhood. *JOYCED: Journal of Early Childhood Education*, 5(1), 1–14.
- Hein, I. M., De Vries, M. C., Troost, P. W., Meynen, G., Van Goudoever, J. B., & Lindauer, R. J. L. (2015). Informed consent instead of assent is appropriate in children from the age of twelve: Policy implications of new findings on children's competence to consent to clinical research. *BMC Medical Ethics*, 16(1), 76.
- Irpan, I., & Sain, Z. H. (2024). The crucial role of Islamic religious education in shaping children's character: Psychological and spiritual review. *QALAMUNA: Jurnal Pendidikan, Sosial, Dan Agama*, 16(1), 383–392.
- Killaspy, H., Harvey, C., Brasier, C., Brophy, L., Ennals, P., Fletcher, J., & Hamilton, B. (2022). Community-based social interventions for people with severe mental illness: a systematic review and narrative synthesis of recent evidence. *World Psychiatry*, 21(1), 96–123.
- Lia, N. C. (2023). Jurnal Analyzing Therapy for Children with Special Needs: Slow Learners and Mentally Impaired Using the Literature Review Method: Menganalisis Terapi Anak Berkebutuhan Khusus: Slow Learner dan Tunagrahita dengan Metode Tinjauan Pustaka. *Asesment: Journal of Counseling Guidance*, 1(2), 43–52.
- Maghfiroh, L. (2024). Pendidikan Akhlak Anak Usia Dini Menurut Imam Al-Ghozali. *MAANA: Jurnal Pendidikan Islam Anak Usia Dini*, 3(1), 53–67.
- Nijdam-Jones, A., & Rosenfeld, B. (2017). Cross-cultural feigning assessment: A systematic review of feigning instruments used with linguistically, ethnically, and culturally diverse samples. *Psychological Assessment*, 29(11), 1321.
- Ristianah, N., & Munir, M. (2022). Pendidikan Karakter Pada Anak Usia Dini Melalui Model Pembelajaran Sentra. *INTIZAM: Jurnal Manajemen Pendidikan Islam*, 6(1), 35–52.

- Shafiyyah, S. N. (2025). Implementing value-based habituation to support religious character formation in early childhood. *Journal of Islamic Early Childhood Education (JOIECE): PIAUD-Ku*, 4(1), 40–51.
- Sholikah, K. N. F., Wijayanti, R. K., Miftahudin, M., Darsinah, D., & Wulandari, M. D. (2025). Habituation Strategies for Developing Religious and Moral Values in Schools. *Academia Open*, 10(1), 10–21070.
- Suherawati, S., Riadi, H., Rusnawati, R., & Jamiatussoleha, S. (2024). Integration of Aqidah-Tauhid and Islamic Character Based on Malay Local Wisdom in Islamic Religious Education. *Belajea: Jurnal Pendidikan Islam*, 9(2), 161–180.
- Taylor, R., Bowyer, P., & Fisher, G. (2023). *Kielhofner's model of human occupation*. Lippincott Williams & Wilkins.
- Zabor, E. C., Kaizer, A. M., & Hobbs, B. P. (2020). Randomized controlled trials. *Chest*, 158(1), S79–S87.
- Zainudin, A., Supandi, A. F., & Masrurroh, A. (2025). Development of a Character Education Model Based on Aswaja An-Nahdliyah Values and Local Wisdom in Islamic Higher Education. *Tafkir: Interdisciplinary Journal of Islamic Education*, 6(1), 226–244.