Edukasi Islami: Jurnal Pendidikan Islam, VOL: 15/No: 03 **P-ISSN: 2252-8970**
DOI: 10.30868/ei.v15i03.10808 **E-ISSN: 2581-1754**

Date Received	:	**August 2026**
Date Revised	:	**October 2026**
Date Accepted	:	**October 2026**
Date Published	:	**October 2026**

PREDICTORS OF STUDENTS' MORAL (AKHLAK) FORMATION IN ISLAMIC BOARDING SCHOOLS: THE ROLES OF CHARACTER EDUCATION PROGRAMS, ACTIVE LEARNING, AND PARENTAL INVOLVEMENT

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Kata Kunci:
Akhlak; Pendidikan Karakter; Pembelajaran Aktif; Keterlibatan Orang Tua; Pesantren; PLS-SEM

ABSTRAK

Penelitian ini menguji sejauh mana Program Pendidikan Karakter, Metode Pembelajaran Aktif, dan Keterlibatan Orang Tua secara simultan memprediksi pembentukan akhlak santri di pesantren, sebuah konteks berasrama yang masih jarang dikaji secara kuantitatif. Dengan desain survei eksplanatori potong lintang, data dikumpulkan dari 359 santri di enam pesantren di Jawa Barat yang dipilih melalui stratified purposive sampling dengan alokasi proporsional dan telah mengikuti program pendidikan karakter minimal satu tahun. Data dianalisis dengan Partial Least Squares Structural Equation Modeling (PLS-SEM) menggunakan SEMinR. Model pengukuran memenuhi kriteria reliabilitas, validitas konvergen, dan validitas diskriminan (HTMT < 0,85), serta tidak menunjukkan bias metode umum (full collinearity VIF 1,79–1,92). Ketiga prediktor menjelaskan 47,5% varians pembentukan akhlak (R^2 = 0,475). Keterlibatan Orang Tua merupakan prediktor terkuat (β = 0,454; t = 9,501; p < 0,001; f^2 = 0,263), diikuti Program Pendidikan Karakter (β = 0,240; t = 4,286; p < 0,001; f^2 = 0,060). Sebaliknya, Metode Pembelajaran Aktif tidak signifikan pada uji dua arah α = 0,05 (β = 0,111; t = 1,957; p = 0,050; f^2 = 0,013). Temuan ini menunjukkan bahwa dalam lingkungan berasrama, akhlak santri lebih banyak dibentuk oleh keteladanan dan pembiasaan yang dilembagakan serta keterlibatan keluarga daripada oleh metode pembelajaran di kelas semata. Secara teoretis, penelitian ini mengintegrasikan konsep ta'dib dengan perspektif kemitraan sekolah dan keluarga; secara praktis, pesantren perlu melembagakan kemitraan dengan

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orang tua dan menautkan pembelajaran aktif dengan praktik pembiasaan akhlak.

Keywords:
Akhlak; Character Education; Active Learning; Parental Involvement; Pesantren; PLS-SEM

ABSTRACT

This study examines the extent to which Character Education Programs, the Active Learning Method, and Parental Involvement jointly predict students' moral (akhlak) formation in Indonesian Islamic boarding schools (pesantren), a residential context that remains under-examined in quantitative research. Using a cross-sectional explanatory survey, data were collected from 359 santri in six pesantren in West Java who were selected through stratified purposive sampling with proportional allocation and had participated in a character education program for at least one year. The data were analyzed with partial least squares structural equation modeling (PLS-SEM) in SEMinR. The measurement model met the criteria for reliability, convergent validity, and discriminant validity (HTMT < 0.85), and no common method bias was detected (full collinearity VIFs 1.79–1.92). The three predictors explained 47.5% of the variance in moral formation (R^2 = 0.475). Parental Involvement was the strongest predictor (β = 0.454, t = 9.501, $p < .001$, f^2 = 0.263), followed by the Character Education Program (β = 0.240, t = 4.286, $p < .001$, f^2 = 0.060). By contrast, the Active Learning Method was not significant under a two-tailed test at $\alpha = .05$ (β = 0.111, t = 1.957, p = .050, f^2 = 0.013). The findings suggest that, in a boarding environment, akhlak is shaped more by institutionalized modeling and habituation and by family involvement than by classroom pedagogy alone. Theoretically, the study integrates the Islamic concept of ta'dib with the school and family partnership perspective; practically, pesantren should institutionalize partnerships with parents and link active learning to the habituation of akhlak.

A. INTRODUCTION

Moral formation of young people is a central concern of education systems worldwide, and it carries particular weight in Muslim societies, where education is understood not merely as the transfer of knowledge but as the cultivation of *adab* and *akhlak* (al-Attas, 1980; Halstead, 2007). In Indonesia, this mandate has historically been carried by *pesantren* (Islamic boarding schools). Law No. 18 of 2019 on Pesantren formally recognizes their function in educating *santri* (students) to be knowledgeable, devout, and of noble character (Republic of Indonesia, 2019). Recent reviews show that pesantren cultivate character through role modeling, habituation, curriculum integration, and an institutional culture that operates as a hidden curriculum (Homsiyah et al., 2026; Ma'arif & Arif, 2026). At the same time, pesantren learning models are shifting toward digital learning (Suresman et al., 2025), and technological change and globalization pose new challenges to character education in pesantren (Ma'arif & Arif, 2026). Understanding which educational factors most strongly sustain akhlak in this changing environment is therefore both a scholarly and a practical priority.

In the Islamic educational tradition, akhlak is not a collection of isolated behaviors but a settled disposition of the soul from which good conduct flows readily. For this reason, al-Attas (1980) argued that the proper term for Islamic education is *ta'dib*, the instilling of *adab*, in which knowledge (*'ilm*) is realized in right action (*'amal*). Halstead (2007) similarly describes Islamic moral education as grounded in divinely revealed values rather than in individual moral autonomy, and as requiring both knowledge of right conduct and the motivation to act on it, with the character of the Prophet as the exemplar to be emulated. This perspective has three implications for empirical research. First, akhlak formation requires deliberate institutional programs that translate values into daily routines. Second, the pedagogy through which values are taught matters, because internalization depends on engagement rather than passive reception; the pesantren tradition itself contains dialogical methods such as *syawir* or *musyawarah* (Munir & Mohd Nor, 2021). Third, the family is regarded as the first school (*al-madrasah al-ula*) of the child, so the home remains a locus of moral education even after the child enters a boarding institution. These three implications correspond to the institutional, pedagogical, and familial factors examined in this study.

Empirical evidence on each factor is growing but uneven. With regard to institutional programs, a comprehensive meta-analysis of 214 studies found a small but significant average positive effect of character education programs ($g = 0.24$), with larger effects for mentoring programs and for approaches such as moral dilemma discussion (Brown et al., 2023), while Berkowitz (2021) identifies prioritization, relationships, intrinsic motivation, modeling, empowerment, and developmental pedagogy as the design principles of effective programs. Studies of pesantren likewise emphasize the exemplary conduct (*uswah hasanah*) of the kiai and teachers as a primary channel of moral learning (Al Wasim et al., 2026; Homsiyah et al., 2026). Although empirical character education research now spans conceptualization, measurement, associations, impact, implementation, and development (Oldham & McLoughlin, 2026), studies of pesantren remain predominantly qualitative, conceptual, or review-based, and they rarely estimate the magnitude of program effects relative to other factors (Al Wasim et al., 2026; Homsiyah et al., 2026; Ma'arif & Arif, 2026).

With regard to pedagogy, a meta-analysis of 104 studies found that active learning produces higher achievement than traditional lecturing in the humanities and social sciences (Kozanitis & Nenciovici, 2023), active and student-centered learning has been shown to foster self-regulated and self-directed learning among Indonesian students (Amiruddin et al., 2023), and problem-oriented learning in civic and moral education has been found to improve moral judgment and behavior (Tian & Tang, 2025). Yet these outcomes are either academic, cognitive, and self-regulatory, or they arise in courses explicitly designed for moral education. Whether general active learning methods also predict the broader, dispositional construct of akhlak in a residential religious setting has not been established. With regard to the family, meta-analytic evidence indicates that positive parenting is associated with more prosocial behavior (Wong et al., 2021) and, across 76 studies, that relational forms of parental involvement are associated with students' academic and behavioral outcomes across age groups and nationalities (Jeynes, 2024). Family involvement at home has been shown to support students' social-emotional development through their engagement in school (Martinez-Yarza et al., 2024). In Indonesia, parental involvement has been shown to condition the relationship between the internalization of character education and students' life skills (Thahir et al., 2026). Nevertheless, most of this evidence comes from day schools, where parents and children share a household. In a boarding context, a longitudinal study found that boarding was associated with adolescents' depressive symptoms through weakened school connectedness rather than through reduced parent and child closeness (Leng & Dayimu, 2025), which suggests that family bonds may survive physical separation. Even so, the role of parents in the moral formation of children who live away from home is theoretically ambiguous and empirically underexplored.

Taken together, the literature leaves four issues unresolved. First, institutional, pedagogical, and familial factors are usually studied in isolation, so their relative contributions to akhlak remain unknown. Second, quantitative evidence from pesantren is scarce compared with qualitative and conceptual work; the available PLS-SEM evidence on teacher role modeling and habituation comes mainly from non-boarding public schools (Ismail et al., 2025). Third, it is unclear whether parental involvement retains its relevance when students live in a boarding institution that assumes much of the daily parenting role. Fourth, the evidence on active learning focuses on cognitive and self-regulatory outcomes rather than on moral dispositions. Addressing these issues requires a model that estimates several paths simultaneously among latent constructs and that is oriented toward explaining variance in a key target construct. Partial least squares structural equation modeling (PLS-SEM) is suited to this purpose because it is a composite-based, prediction-oriented method that estimates multiple relationships concurrently with relatively few distributional assumptions (Hair et al., 2022; Hair & Alamer, 2022).

The novelty and contribution of this study are therefore threefold. Contextually, it provides quantitative evidence from residential pesantren, a setting in which the boundaries between school, dormitory, and family are distinctive. Theoretically, it integrates the Islamic concept of *ta'dib* (al-Attas, 1980) with the overlapping spheres of influence perspective on school, family, and community partnerships (Epstein, 2011), modeling institutional programs, classroom pedagogy, and family involvement as three concurrent spheres of akhlak formation. Empirically, it estimates the relative magnitude of each sphere, reporting effect sizes, p-values, and confidence intervals rather than

significance alone. Accordingly, this study addresses two research questions: (1) To what extent do the Character Education Program, the Active Learning Method, and Parental Involvement jointly explain students' moral formation in pesantren? (2) Which of these factors is the strongest predictor?

Theoretical Framework and Hypotheses

Character Education Program and moral formation. Within the *ta'dib* framework, a structured program provides the routines, rules, and exemplars through which values are practiced until they become dispositions (al-Attas, 1980). Programs in pesantren typically combine congregational worship, discipline systems, mentoring by *ustadz*, and dormitory life, which together enact the modeling and habituation mechanisms identified in the character education literature (Berkowitz, 2021; Ma'arif & Arif, 2026). Meta-analytic evidence supports a positive effect of such programs (Brown et al., 2023). Hence: **H1**: The Character Education Program positively predicts students' moral formation.

Active Learning Method and moral formation. Active learning, encompassing discussion, collaboration, and problem solving, increases students' engagement and their capacity to reason about value-laden problems (Amiruddin et al., 2023; Tian & Tang, 2025). In Islamic education, student-centered and inquiry-based approaches are advocated to connect religious concepts with students' contemporary concerns (Usiono et al., 2026), and in pesantren, dialogical traditions such as *syawir* offer an indigenous form of active learning (Munir & Mohd Nor, 2021). Engagement of this kind is expected to support the understanding and internalization of moral values. Hence: **H2**: The Active Learning Method positively predicts students' moral formation.

Parental Involvement and moral formation. According to the overlapping spheres perspective, children's development is optimized when the family and the school share goals and communicate continuously (Epstein, 2011). Parental involvement, including communication, support, and direct involvement, is consistently associated with better behavioral outcomes and prosocial behavior (Jeynes, 2024; Wong et al., 2021). In Islamic terms, parents retain their responsibility as the child's first educators even when the child is entrusted to a pesantren. Hence: **H3**: Parental Involvement positively predicts students' moral formation.

B. METHOD

Research Design

This study employed a quantitative, cross-sectional, explanatory survey design to test the hypothesized relationships among the Character Education Program (CEP), the Active Learning Method (ALM), Parental Involvement (PI), and Students' Moral Formation (SMF). Because all constructs were measured at one point in time, the estimated paths are interpreted as predictive associations rather than as evidence of causality. The research procedure is summarized in Figure 1.

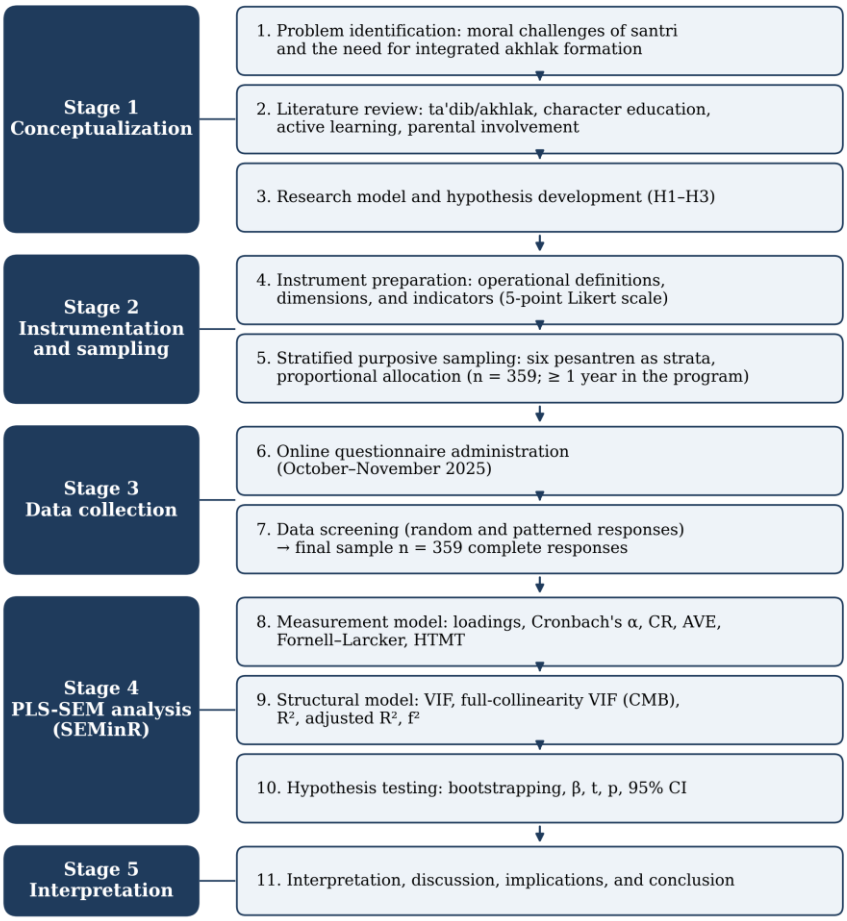


Figure 1. Research Procedure

Population, Sampling, and Respondents

The population comprised santri enrolled in six pesantren in West Java, Indonesia, with approximately 16,900 santri in total. A stratified purposive sampling technique was used, with each pesantren treated as a stratum. The total sample of 359 was allocated to the six strata in proportion to their size, using $n_i = (N_i/N) \times 359$, where N_i is the number of santri in pesantren i and N is the total population. Proportional allocation ensured that each pesantren was represented according to its share of the population, so that larger pesantren did not dominate the sample and smaller pesantren were not under-represented. The resulting allocation is presented in Table 1; the names of the pesantren are anonymized.

Table 1. Proportional Allocation of the Sample across Strata (Pesantren)

Pesantren	Santri (N_i)	$N_i/N \times 359$	Sample (n_i)	% of sample
Pesantren A	6,000	127.46	127	35.4
Pesantren B	3,000	63.73	64	17.8
Pesantren C	3,000	63.73	64	17.8
Pesantren D	2,500	53.11	53	14.8
Pesantren E	1,200	25.49	26	7.2
Pesantren F	1,200	25.49	25	7.0
Total	16,900	359.00	359	100.0

Note. Pesantren names are anonymized. N_i = number of santri in each pesantren. Allocations were rounded to whole numbers; one of the two allocations of 25.49 was rounded up so that the total equals 359.

Within each stratum, respondents were selected purposively on the basis of two inclusion criteria: (a) having participated in the pesantren's character education program for at least one year, so that the program could plausibly have shaped the respondents' conduct, and (b) having parents who were involved in their education, so that Parental Involvement could be meaningfully assessed. Purposive selection within strata was appropriate because the research questions concern students who have been exposed to both a character education program and parental involvement for a sufficient period.

The unit of analysis was the individual student. Only santri completed the questionnaire; teachers and parents were not respondents. Accordingly, Parental Involvement was measured as perceived by the students, which is appropriate because the students' experience of their parents' involvement is the proximal channel through which such involvement is expected to shape their conduct. The questionnaire was distributed online to the target respondents in October and November 2025. Before analysis, the data were screened to detect problematic responses, and respondents who answered randomly or gave patterned (straight-lined) responses were removed to avoid response bias (Hair et al., 2022). This procedure yielded 359 respondents, distributed across the six pesantren as shown in Table 1, who had completed the entire questionnaire and met the inclusion criteria.

The adequacy of the sample was assessed with the inverse square root method (Kock & Hadaya, 2018). At $\alpha = .05$ and a statistical power of 80%, a minimum sample of 275 is required to detect a path coefficient of 0.15, so the sample of 359 is adequate for effects of that magnitude. Detecting a path of 0.111, the size observed for H2, however, would require approximately 502 respondents; this point is relevant to the interpretation of H2 and is revisited in the Discussion.

Instruments and Operational Definitions

All constructs were measured reflectively on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). Table 2 presents the operational definition, dimensions, number of items, indicator codes, and theoretical basis of each construct. Character Education Program was measured with three items reflecting integrity, discipline, and responsibility; Active Learning Method with four items reflecting participation, interactivity, and creativity in learning; Parental Involvement with four items reflecting communication, support, and direct involvement in the child's education; and Students' Moral Formation with three items reflecting the santri's akhlak in daily conduct. The

contextual validity of the instrument for pesantren was established empirically within the PLS-SEM measurement model, through indicator loadings, internal consistency, convergent validity, and discriminant validity, as reported in the Results. The complete questionnaire is available from the corresponding author upon reasonable request.

Table 2. Operational Definitions of the Constructs

Construct	Operational definition and dimensions	Items	Codes	Theoretical basis
Character Education Program (CEP)	Santri's perception of the extent to which the pesantren's structured character program is implemented; dimensions: integrity, discipline, responsibility	3	CEP1–CEP3	Berkowitz (2021); Brown et al. (2023)
Active Learning Method (ALM)	Santri's perception of learning that requires their active engagement; dimensions: participation, interactivity, creativity	4	ALM1–ALM4	Amiruddin et al. (2023); Tian & Tang (2025)
Parental Involvement (PI)	Santri's perception of their parents' involvement in their education at the pesantren; dimensions: communication, support, direct involvement	4	PI1–PI4	Epstein (2011); Jeynes (2024)
Students' Moral Formation (SMF)	Santri's self-reported akhlak as a stable disposition that is expressed consistently in daily conduct	3	SMF1–SMF3	al-Attas (1980); Halstead (2007)

Note. All items use a five-point Likert scale. Item codes correspond to the original codes ProPen (CEP), MetPem (ALM), ParOra (PI), and PemAkh (SMF). The complete questionnaire is available from the corresponding author.

Data Analysis

The data were analyzed with PLS-SEM using the SEMinR package in R (Hair et al., 2021). PLS-SEM was chosen because the study aims to explain variance in a target construct, estimates several paths simultaneously, and does not require multivariate normality (Hair et al., 2022; Sarstedt et al., 2022). The analysis followed the two-stage evaluation and reporting guidelines for PLS-SEM (Becker et al., 2023; Hair et al., 2024).

In the first stage, the measurement model was evaluated. Indicator reliability was assessed through outer loadings, with values of 0.708 or higher preferred and values between 0.40 and 0.70 retained when their removal would not raise composite reliability or AVE above the thresholds (Hair et al., 2022). Internal consistency was assessed with Cronbach's alpha and composite reliability (ρc), with values between 0.70 and 0.95 considered satisfactory. Convergent validity required an average variance extracted (AVE) of at least 0.50. Discriminant validity was assessed with the Fornell–Larcker criterion and, as the primary criterion, the heterotrait-monotrait ratio (HTMT), with values below 0.85 indicating adequate discriminant validity (Henseler et al., 2015).

In the second stage, the structural model was evaluated. Collinearity among predictors was checked using inner VIF values (below 3). Path coefficients were tested with bootstrapping using 1,000 subsamples and two-tailed tests at $\alpha = .05$. For each path, a 95% confidence interval was computed from the bootstrap standard deviation ($\beta \pm 1.96 \times SD$); a hypothesis was supported when $p < .05$ and the confidence interval excluded zero (Hair et al., 2022). Explanatory power was assessed with R^2 and adjusted R^2, and effect sizes with f^2 (0.02, 0.15, and 0.35 indicating small, medium, and large effects). Because all constructs were measured with a single self-report instrument,

common method bias (CMB) was assessed with the full collinearity VIF approach, in which values of 3.3 or lower indicate that the model is free of CMB (Kock, 2015; Podsakoff et al., 2024).

C. RESULTS AND DISCUSSION

Results

Respondent Profile

The 359 respondents were santri from diverse socioeconomic backgrounds (Table 3). Most came from merchant families (40%), followed by farming families (35%) and families of teachers or religious leaders (25%). This distribution indicates that the sample covers rural, commercial, and religiously educated households, which is relevant because family background may shape both the form and the intensity of parental involvement.

Table 3. Respondent Profile (n = 359)

Characteristic	Category	Percentage
Parents' occupational background	Merchants	40%
	Farmers	35%
	Teachers or religious leaders	25%

Note. Percentages are rounded to the nearest whole number.

Measurement Model

Table 4 shows that 13 of the 14 outer loadings exceeded 0.708. The loadings ranged from 0.837 to 0.877 for ALM, from 0.812 to 0.848 for CEP, from 0.810 to 0.875 for SMF, and from 0.697 to 0.838 for PI. The only loading below 0.708 was PI4 (0.697). It was retained because it exceeds 0.40, contributes to the content domain of direct parental involvement, and its construct's composite reliability (0.866) and AVE (0.618) are well above the thresholds (Hair et al., 2022). Cronbach's alpha ranged from 0.778 (CEP) to 0.887 (ALM) and composite reliability from 0.866 (PI) to 0.922 (ALM), all within the recommended range of 0.70 to 0.95. The alpha values of PI (0.794) and CEP (0.778) are satisfactory, whereas those of SMF (0.806) and ALM (0.887) are good; none exceeds 0.95, so item redundancy is not a concern. AVE values ranged from 0.618 to 0.747, confirming convergent validity.

Table 4. Measurement Model: Indicator Loadings, Reliability, and Convergent Validity

Construct	Indicator	Loading	Cronbach's α	CR (ρc)	AVE
Active Learning Method (ALM)	ALM1	0.873	0.887	0.922	0.747
	ALM2	0.869			
	ALM3	0.877			
	ALM4	0.837			
Parental Involvement (PI)	PI1	0.796	0.794	0.866	0.618
	PI2	0.838			
	PI3	0.807			
	PI4	0.697[a]			
Character Education Program (CEP)	CEP1	0.834	0.778	0.871	0.691
	CEP2	0.812			
	CEP3	0.848			
Students' Moral Formation (SMF)	SMF1	0.810	0.806	0.885	0.721
	SMF2	0.875			
	SMF3	0.860			

Note. CR = composite reliability; AVE = average variance extracted. Thresholds: loading ≥ 0.708; α and CR between 0.70 and 0.95; AVE ≥ 0.50 (Hair et al., 2022). [a] Retained because the loading is above 0.40 and the construct's CR and AVE exceed the thresholds.

Discriminant validity is reported in Table 5. Under the Fornell–Larcker criterion (Hair et al., 2022), the square root of each construct's AVE (diagonal) exceeded its correlations with the other constructs. The HTMT values ranged from 0.575 to 0.790, below the conservative threshold of 0.85 (Henseler et al., 2015). The highest value was observed between PI and SMF (0.790), which is theoretically plausible given their conceptual proximity, yet still indicates that the two constructs are empirically distinct.

Table 5. Discriminant Validity: Fornell–Larcker Criterion and HTMT

Construct	1	2	3	4
1. Active Learning Method	**0.864**	0.613	0.747	0.575
2. Parental Involvement	0.507	**0.786**	0.676	0.790
3. Character Education Program	0.624	0.527	**0.832**	0.687
4. Students' Moral Formation	0.491	0.637	0.548	**0.849**

Note. Diagonal values (bold) are the square roots of AVE; values below the diagonal are latent construct correlations; values above the diagonal are HTMT ratios, all below 0.85 (Henseler et al., 2015).

Collinearity and Common Method Bias

As shown in Table 6, the inner VIF values of the three predictors ranged from 1.493 to 1.815, so collinearity does not bias the path estimates. The full collinearity VIFs of all four constructs ranged from 1.787 to 1.924, below the threshold of 3.3. Therefore, there is no indication that common method bias contaminated the model (Kock, 2015).

Table 6. Collinearity Assessment and Common Method Bias Test

Construct	Inner VIF (predictor of SMF)	Full collinearity VIF
Active Learning Method	1.763	1.787
Parental Involvement	1.493	1.886
Character Education Program	1.815	1.924
Students' Moral Formation	–	1.906

Note. Inner VIF < 3 indicates no critical collinearity (Hair et al., 2022); full collinearity VIF ≤ 3.3 indicates no common method bias (Kock, 2015).

Structural Model and Hypothesis Testing

The structural model is presented in Figure 2 and the hypothesis tests in Table 7. The three predictors jointly explained 47.5% of the variance in Students' Moral Formation (R^2 = 0.475; adjusted R^2 = 0.471). Under the commonly used benchmarks of 0.25, 0.50, and 0.75 for weak, moderate, and substantial explanatory power, this value lies just below the moderate level. Because acceptable R^2 levels depend on the research context, and many unmeasured influences operate on behavioral outcomes in education, this level of explained variance is meaningful (Hair et al., 2022). The small difference between R^2 and adjusted R^2 indicates that the model is not overfitted.

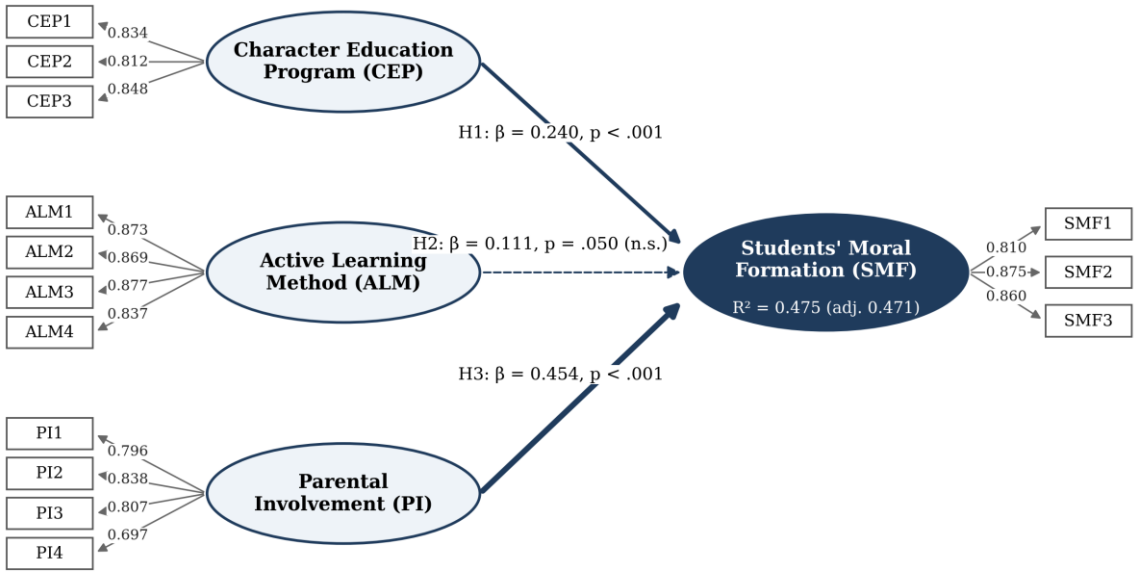


Figure 2. Structural Model Results (PLS-SEM)

Table 7. Structural Model and Hypothesis Testing Results

Hypothesis (path)	β	SD	t	p	95% CI	f^2	Decision
H1: CEP → SMF	0.240	0.056	4.286	< .001	[0.130, 0.349]	0.060	Supported
H2: ALM → SMF	0.111	0.057	1.957	.050	[−0.001, 0.223]	0.013	Not supported
H3: PI → SMF	0.454	0.048	9.501	< .001	[0.361, 0.548]	0.263	Supported

Note. β = standardized path coefficient; SD = bootstrap standard deviation; p-values are two-tailed; CI = 95% confidence interval computed as β ± 1.96 × SD (1,000 bootstrap subsamples). R^2 (SMF) = 0.475; adjusted R^2 = 0.471. Decision rule: p < .05 and CI excluding zero. f^2 thresholds: 0.02 small, 0.15 medium, 0.35 large.

Parental Involvement had the strongest relationship with moral formation (β = 0.454, t = 9.501, p < .001), with a medium effect size approaching large (f^2 = 0.263); H3 is supported. The Character Education Program also had a significant positive relationship (β = 0.240, t = 4.286, p < .001) with a small effect size (f^2 = 0.060); H1 is supported. The Active Learning Method, however, did not reach significance. Its t-value of 1.957 falls just below the two-tailed critical value of 1.96 (p = .050), its 95% confidence interval includes zero, and its effect size is negligible (f^2 = 0.013). Therefore, H2 is not supported. Although a one-tailed test of the directional hypothesis would yield p = .025, we apply the more conservative two-tailed criterion, which is the standard in PLS-SEM hypothesis testing (Hair et al., 2022), and we interpret the ALM path as a weak association that cannot be distinguished from zero with the present sample.

Discussion

Why Parental Involvement Is the Strongest Predictor in a Boarding Context

The finding that Parental Involvement is the strongest predictor may appear counterintuitive, since santri live away from home and the pesantren assumes much of the daily parenting role. Several mechanisms can explain it. First, the choice to enroll a child in a pesantren is itself an expression of parents' moral aspirations, so parents who are involved tend to hold values congruent with those of the institution. Their involvement reinforces rather than competes with the pesantren's program, creating the overlap between spheres that Epstein (2011) identifies as optimal for development. Second, physical separation changes the form of involvement without eliminating it. Visits, telephone contact, correspondence with *musyrif* (dormitory supervisors), and holiday periods at home make parental expectations psychologically present. Evidence from a boarding context is consistent with this reasoning: the adverse association between boarding and adolescents' depressive symptoms operated through school connectedness rather than through weakened parent and child closeness (Leng & Dayimu, 2025), and relational forms of involvement, such as expectations and communication, are those most consistently associated with students' behavioral outcomes (Jeynes, 2024). Parental involvement may also work indirectly, by strengthening students' engagement with their school (Martinez-Yarza et al., 2024). Third, in Islamic understanding, respect for parents (*birr al-walidain*) is itself an element of akhlak, so perceiving parents as engaged may motivate santri to act in ways that honor them. These mechanisms are consistent with meta-analytic evidence linking parental involvement to behavioral outcomes and prosocial behavior (Jeynes, 2024; Wong et al., 2021) and with Indonesian evidence that parental involvement strengthens the benefits of character education (Thahir et al., 2026). The present study extends this evidence by showing that the family's role persists, and is even the most prominent, in a residential religious setting.

A methodological caution is nonetheless warranted. Because both PI and SMF were reported by students, part of their association may reflect students' general perception of a supportive moral environment. The full collinearity test did not detect CMB, but multi-informant data from parents and teachers would provide a stronger test in future research.

The Character Education Program as Institutionalized Ta'dib

The significant but smaller contribution of the Character Education Program indicates that structured programs matter, but that their contribution is partly shared with the other spheres. From the *ta'dib* perspective, a program shapes akhlak when it is embodied in exemplary conduct and daily habituation rather than when it exists only as a formal curriculum (al-Attas, 1980). Pesantren research shows that the kiai's exemplarity, dormitory life, and institutional culture often carry more moral weight than the written curriculum (Al Wasim et al., 2026; Homsiyah et al., 2026), and a PLS-SEM study of 567 Indonesian students found that habituation and teacher role modeling were stronger predictors of students' religious spirit than the physical provision of worship facilities (Ismail et al., 2025). Even among the youngest santri, independence is cultivated through direct exemplification, guided assistance, and motivational reinforcement rather than through instruction alone (Rohmah et al., 2026). The small effect size ($f^2 = 0.060$) is also consistent with the small average effect ($g = 0.24$) reported in the meta-analysis of character education programs (Brown et al., 2023). One plausible explanation is that the quality of implementation varies across pesantren, and that a program's contribution depends on whether its values are modeled and reinforced consistently, which is the core of Berkowitz's (2021) principles of modeling and relationships. Further research could test the kiai's and teachers' modeling as a mediating mechanism between the program and akhlak.

Why the Active Learning Method Has a Weak and Non-Significant Relationship

The absence of a significant relationship between the Active Learning Method and moral formation is theoretically informative. Active learning primarily targets academic achievement, cognitive engagement, and self-regulation (Amiruddin et al., 2023; Kozanitis & Nenciovici, 2023), whereas akhlak, understood as a stable disposition, requires not only knowledge of right conduct but also the motivation to act on it and exemplars to emulate (Halstead, 2007), which pesantren cultivate mainly through role modeling and habituation outside the classroom (Ma'arif & Arif, 2026). Where active pedagogy has been found to improve moral outcomes, it was applied directly to moral content, as in moral dilemma discussion programs (Brown et al., 2023) and problem-oriented learning in civic and moral education courses (Tian & Tang, 2025). In general subjects, active learning may enhance understanding of values without necessarily changing conduct, so its relationship with akhlak is likely to be indirect, for example through moral reasoning or religious understanding. In addition, once the stronger contributions of family and program are controlled, the unique contribution of pedagogy becomes small, as reflected in the negligible f^2 of 0.013.

Two further explanations deserve attention. First, the dormitory peer environment may channel much of the influence that classroom interaction would otherwise exert; research shows that classmates' collective moral disengagement and the quality of student and teacher relationships shape individual moral development (Bjärehed et al., 2024; Kim et al., 2024), and a longitudinal study of Indonesian Muslim adolescents found that peers influence one another's religiosity (Shen et al., 2023). Second, as noted in the Method section, the sample of 359 is adequate for detecting paths of 0.15 or more but not paths as small as 0.111 (Kock & Hadaya, 2018). The result should therefore be read as evidence that the direct relationship between ALM and akhlak is, at most, small, rather than as proof that active learning is irrelevant. Future

studies with larger samples should test whether ALM relates to akhlak indirectly through moral reasoning, peer climate, or teacher modeling.

Theoretical and Practical Implications

Theoretically, the results support a tri-sphere model of akhlak formation in which family involvement and institutionalized *ta'dib* are the principal drivers and classroom pedagogy plays a secondary role. This refines the overlapping spheres perspective (Epstein, 2011) for residential Islamic education by showing that physical separation does not reduce the family's sphere of influence, and it gives empirical weight to al-Attas's (1980) argument that moral education is primarily a matter of disciplined practice and exemplary guidance. Practically, three implications follow. First, pesantren should institutionalize partnerships with parents through regular communication, joint religious activities, and guidance for parents during home visits and holidays, so that the values practiced at home and in the pesantren remain aligned. Second, character education programs should be evaluated for their implementation quality, particularly the consistency of modeling by kiai, ustadz, and musyrif, rather than for their formal content alone. Third, active learning should be linked explicitly to moral application, for example through discussion of real moral dilemmas, service activities, and reflection that connect classroom discussion to dormitory life.

Limitations and Future Research

This study has several limitations. The cross-sectional design precludes causal inference, so longitudinal or intervention designs are needed to establish temporal ordering. All constructs were measured through student self-reports, so future research should combine student, parent, and teacher reports and behavioral indicators of akhlak. The sample was drawn from six pesantren in one province, which limits generalizability; multigroup analyses across types of pesantren (salaf, modern, and integrated) and regions would clarify boundary conditions. Finally, 52.5% of the variance in moral formation remains unexplained, which suggests that variables such as peer climate, the modeling of kiai and teachers, and students' religiosity should be incorporated as additional predictors or mediators, and that the model's out-of-sample predictive power should be assessed with PLSpredict.

D. CONCLUSION

This study shows that the Character Education Program, the Active Learning Method, and Parental Involvement jointly explain 47.5% of the variance in the moral (akhlak) formation of santri in six pesantren in West Java, a level close to the moderate benchmark. Parental Involvement is the strongest predictor, with a medium effect, followed by the Character Education Program, with a small effect, whereas the Active Learning Method is not significant under a two-tailed test at the 5% level and has a negligible effect. These findings indicate that, even in a boarding environment, akhlak is shaped chiefly by the family and by institutionalized modeling and habituation, consistent with the concept of *ta'dib*, rather than by classroom pedagogy alone. Pesantren should therefore strengthen structured partnerships with parents and ensure that character programs are enacted through consistent exemplary practice, while future studies should use longitudinal and multi-informant designs to test the indirect role of active learning.

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