Validating Islamic-Integrated Instructional Leadership: A Psychometric Evaluation of the Ulul Albab Paradigm and Student Development Outcomes

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Abstract

This study aimed to develop and validate a psychometric instrument to assess Principal Instructional Leadership, the Ulul Albab educational paradigm, and multidimensional Student Development Outcomes in Islamic-integrated secondary schools. Drawing from a theoretical framework encompassing eight leadership domains, three Ulul Albab epistemological dimensions (Quranic, Encyclopedic, and Ijtihadik), and nine student development constructs, the instrument was subjected to rigorous Exploratory Factor Analysis (EFA). Data were collected using a 10-point Likert scale and analyzed via Principal Component Analysis with varimax rotation. Findings confirmed the robustness of all constructs, with Kaiser-Meyer-Olkin (KMO) values exceeding 0.6, significant Bartlett's Test results (p < 0.001), factor loadings above 0.60, and Cronbach's Alpha values above 0.70 for all domains. Notably, no items were excluded during validation, affirming the instrument's structural integrity and contextual relevance. The validated tool effectively measures leadership practices aligned with Islamic epistemology and offers a comprehensive framework for evaluating holistic student development. This study contributes both conceptually and methodologically to the scholarship on Islamic educational leadership and lays a foundation for future confirmatory analysis and educational policy implementation.

Keywords: Instructional Leadership, Ulul Albab, Student Development, Exploratory Factor Analysis, Islamic Education, Psychometric Validation

Introduction

Instructional leadership has emerged as a central leadership paradigm in school administration, particularly relevant in navigating the dynamic changes in 21st-century education (Jeffri, Azlin Norhaini & Aida, 2019). It equips principals with the capacity to lead curricular transformations, address pedagogical challenges, and uphold academic standards in increasingly complex educational landscapes. Yahaya (2005) conceptualizes educational leadership as encompassing a spectrum of behaviors, competencies, and values that mobilize school communities toward achieving institutional objectives. Murphy (2016) further defines instructional leadership as the intentional actions of school heads aimed at enhancing the teaching and learning process through strategic engagement with all school stakeholders—teachers, students, parents, planners, and support systems.

Research consistently underscores the principal's influence on school climate, teacher performance, and student learning. Key social determinants—such as collegial relationships, school culture, and leadership quality—strongly correlate with teacher job satisfaction, organizational commitment, and retention (Akyeampong & Bennell, 2017). While classroom teaching remains the most direct factor affecting student outcomes, the principal's instructional leadership is recognized as the second most influential contributor (Maulod & Shafinaz, 2017). This influence is exerted through the creation of structures and cultures that support effective teaching, as highlighted by Hallinger (2010) and Hallinger & Leithwood (2011). Effective principals do not merely manage; they foster conditions that empower teacher agency and enhance student learning outcomes.

Exploratory Factor Analysis (EFA)

Exploratory Factor Analysis (EFA) is a multivariate statistical technique used to identify the underlying structure of a set of observed variables. It reduces dimensionality by transforming a large set of correlated items into a smaller, more interpretable group of latent factors (Dunteman, 1989; Lewis-Beck, 1994; Field, 2006). According to Tabachnick and Fidell (2007), EFA involves several critical steps: computing the correlation matrix, extracting initial factors, determining the number of components, applying rotation to clarify factor interpretability, and finally, naming each identified factor based on theoretical coherence.

This study employed an instrument developed by the researchers, necessitating an EFA to establish construct validity. As noted by Chik & Abdullah (2018), Awang (2012), and Hoque et al. (2017), any adaptation or recontextualization of measurement items—especially across different demographic, cultural, or socio-economic settings—requires renewed validation. Items deemed valid in prior studies may not function equivalently in new contexts, thus justifying the recalculation of internal consistency using Cronbach's Alpha and the implementation of EFA to confirm factor structure relevance for the present sample.

Finding

This study employed Exploratory Factor Analysis (EFA) to assess the dimensionality, validity, and reliability of the developed instrument measuring principal instructional leadership and related constructs. Principal Component Analysis (PCA) with varimax rotation was utilized to identify factor structures across each domain. The statistical adequacy of the data was confirmed using Kaiser-Meyer-Olkin (KMO) measures (>0.6) and Bartlett's Test of Sphericity

(p < 0.05). Constructs were evaluated for Total Variance Explained (TVE > 60%), factor loadings (>0.60), and internal consistency using Cronbach's Alpha (α > 0.70).

Principal's Instructional Leadership: Formulating School Goals
The construct *Formulating School Goals* was evaluated using three items (MM1–MM3) on a 10-point Likert scale. Principal Component Analysis (PCA) with varimax rotation identified a single-factor solution that accounted for 69.24% of the total variance, exceeding the minimum threshold of 60% for construct validity. The Kaiser-Meyer-Olkin (KMO) measure was 0.861, and Bartlett's Test of Sphericity was significant (χ^2 = 88.944, df = 3, p < 0.001), confirming the adequacy of the sample and the factorability of the correlation matrix.
All three items demonstrated strong factor loadings (MM1 = 0.867; MM2 = 0.748; MM3 = 0.875), justifying their retention. Internal consistency was supported by a Cronbach's Alpha of 0.741, indicating acceptable reliability.

Table 1
KMO and Bartlett's Test – Formulating School Goals

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.861
Bartlett's Test of Sphericity	Approx. Chi-Square	88.944
	df	3
	Sig.	0.000

Table 2
Total Variance Explained - Formulating School Goals

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.077	69.244	69.244

Table 3
Item Factor Loadings

Component Matrix[a]	
Items	Component
MM1	0.867
MM2	0.748
MM3	0.875

Table 4
Cronbach's Alpha - Formulating School Goals

Component	Number of Items	Cronbach's Alpha
1	3	0.741

Principal's Instructional Leadership: Delivering the School's Curriculum Goals
This construct comprised three items (MMK1–MMK3), measured on a 10-point Likert scale. PCA revealed a one-factor solution explaining 86.63% of the variance, indicating excellent construct validity. The KMO measure was 0.759, and Bartlett's Test of Sphericity was highly significant (χ^2 = 221.628, df = 3, p < 0.001), confirming the suitability of the data for factor analysis. All three items loaded strongly on the single factor (MMK1 = 0.940; MMK2 = 0.931;

MMK3 = 0.920). The construct demonstrated excellent reliability with a Cronbach's Alpha of 0.920.

Table 5
KMO Values and Bartlet's Test - Delivering the School's Curriculum Goals

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.759
Bartlett's Test of Sphericity	Approx. Chi-Square	221.628
	df	3
	Sig.	0.000

Table 6
Total Variance Explained -Dilivering the School's Curriculum Goals

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.599	86.628	86.628

Table 7
Factor Loadings- Delivering the School's Curriculum Goals

Component Matrix[a]	
Items	Component
MMK1	0.940
MMK2	0.931
MMK3	0.920

Table 8
Cronbach's Alpha - Delivering the School's Curriculum Goals

Component	Number of Items	Cronbach's Alpha
1	3	0.920

Principal's Instructional Leadership: Instructional Supervision and Evaluation
The construct *Instructional Supervision and Evaluation* was measured using three items (PPI1–PPI3), each rated on a 10-point Likert scale. PCA revealed a single-component structure accounting for 72.28% of the total variance. Sampling adequacy was verified with a KMO value of 0.772 and a significant Bartlett's Test (χ^2 = 68.694, df = 3, p < 0.001), confirming the suitability of the data for factor analysis. All items showed satisfactory factor loadings (PPI1 = 0.763; PPI2 = 0.848; PPI3 = 0.830), meeting the recommended threshold of 0.60. Internal consistency was acceptable, with a Cronbach's Alpha of 0.73

Table 9
KMO Values and Bartlet's Test- Instructional Supervision and Evaluation

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.772
Bartlett's Test of Sphericity	Approx. Chi-Square	68.694
	df	3
	Sig.	0.000

Table 10

Total Variance Explained - Instructional Supervision and Evaluation

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	1.988	72.278	72.278

Table 11

Factor Loadings-Instructional Supervision and Evaluation

Component Matrix[a]

Items	Component
PPI1	0.763
PPI2	0.848
PPI3	0.830

Table 12

Cronbach's Alpha Value for Each Item in the Principal's Instructional Leadership Based on Instructional Supervision and Evaluation

Component	Number of Items	Cronbach's Alpha
1	3	0.731

Principal's Instructional Leadership - Coordinating Curriculum

Three items (MK1–MK3), evaluated on a 10-point scale, were used to assess *Coordinating Curriculum*. PCA results indicated a strong unidimensional structure, accounting for 84.65% of the total variance. A KMO value of 0.751 and a significant Bartlett's Test (χ^2 = 197.979, df = 3, $p < 0.001$) supported the adequacy of the data for factor analysis. The factor loadings were high (MK1 = 0.904; MK2 = 0.931; MK3 = 0.925), and the construct demonstrated excellent internal consistency with a Cronbach's Alpha of 0.909.

Table 13

KMO Values and Bartlet's Test- Coordinating Curriculum

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.751
Bartlett's Test of Sphericity	Approx. Chi-Square	197.979
	df	3
	Sig.	0.000

Table 14

Total Variance Explained - Coordinating Curriculum

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.540	84.652	84.652

Table 15

Factor Loadings- Coordinating Curriculum

Component Matrix^a	
Items	Component
MK1	0.904
MK2	0.931
MK3	0.925

Table 16

Cronbach's Alpha - Coordinating Curriculum

Component	Number of Items	Cronbach's Alpha
1	3	0.909

Principal's Instructional Leadership: Monitoring Student Progress

The construct *Monitoring Student Progress* was measured using four items (MMP1–MMP4), each rated on a 10-point Likert scale. PCA confirmed a unidimensional structure explaining 76.42% of the total variance. The KMO measure of sampling adequacy was 0.792, and Bartlett's Test was statistically significant (χ^2 = 193.054, df = 4, p < 0.001), affirming the suitability of the dataset for EFA. All four items exhibited strong factor loadings above the 0.60 benchmark (MMP1 = 0.746; MMP2 = 0.762; MMP3 = 0.888; MMP4 = 0.854), justifying their inclusion. Reliability analysis yielded a Cronbach's Alpha of 0.824, indicating good internal consistency.

Table 17

KMO Values and Bartlet's Test - Monitoring Student Progress

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.792
Bartlett's Test of Sphericity	Approx. Chi-Square	193.054
	df	4
	Sig.	0.000

Table 18

Total Variance Explained for Principal's Instructional Leadership Based on Monitoring Student Progress

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.657	76.417	76.417

Table 19

Factor Loadings- Monitoring Student Progress

Component Matrix^a	
Items	Component
MMP1	0.746
MMP2	0.762
MMP3	0.888
MMP4	0.854

Table 20
Cronbach's Alpha- Monitoring Student Progress

Component	Number of Items	Cronbach's Alpha
1	4	0.824

Principal's Instructional Leadership- Safeguarding Instructional Time
The construct "Safeguarding Instructional Time" was measured using five items (MW1 to MW5), each assessed on a 10-point Likert scale. Exploratory Factor Analysis (EFA) using Principal Component Analysis (PCA) with varimax rotation confirmed the unidimensionality of the construct. The Kaiser-Meyer-Olkin (KMO) value of 0.729 and a significant Bartlett's Test of Sphericity (χ^2 = 248.569, df = 10, p < 0.001) indicated that the sample was adequate and the data were suitable for factor analysis.

Table 21
KMO Values and Bartlet's Test-Safeguarding Instructional Time

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.729
Bartlett's Test of Sphericity	Approx. Chi-Square	248.569
	df	10
	Sig.	0.000

Table 22
Total Variance Explained -Safeguarding Instructional Time

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.224	74.489	74.489

Table 23
Factor Loadings- Safeguarding Instructional Time

Component Matrix[a]	
Items	Component
MW1	0.715
MW2	0.824
MW3	0.804
MW4	0.843
MW5	0.823

Table 24
Cronbach's Alpha-Safeguarding Instructional Time

Component	Number of Items	Cronbach's Alpha
1	5	0.858

Principal's Instructional Leadership- Monitoring Attendance
The construct "Monitoring Attendance" was measured using five items (MKH1 to MKH5), each assessed on a 10-point Likert scale. The Principal Component Analysis (PCA) using varimax rotation yielded a single-component solution that accounted for 71.33% of the total variance, well above the recommended threshold of 60%. The Kaiser-Meyer-Olkin (KMO)

measure of sampling adequacy was 0.784, and Bartlett's Test of Sphericity was significant (χ² = 209.195, df = 10, p < 0.001), indicating that the dataset was suitable for factor analysis.

Table 25
KMO Values and Bartlet's Test- Monitoring Attendance

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.784
Bartlett's Test of Sphericity	Approx. Chi-Square	209.195
	df	10
	Sig.	0.000

Table 26
Total Variance Explained -- Monitoring Attendance

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.067	71.332	71.332

Table 27
Factor Loadings-- Monitoring Attendance

Component Matrix[a]	
Items	Component
MKH1	0.797
MKH2	0.861
MKH3	0.833
MKH4	0.729
MKH5	0.783

Table 28
Cronbach's Alpha -- Monitoring Attendance

Component	Number of Items	Cronbach's Alpha
1	5	0.832

Principal's Instructional Leadership- Providing Incentives to Students
The construct "Providing Incentives to Students" was assessed using four items (MI1 to MI4) on a 10-point Likert scale. Principal Component Analysis (PCA) with varimax rotation confirmed a single-component structure, accounting for 74.33% of the total variance—exceeding the benchmark of 60% for construct validity. The Kaiser-Meyer-Olkin (KMO) value was 0.726, and Bartlett's Test of Sphericity was significant (χ² = 225.908, df = 6, p < 0.001), validating the data's suitability for factor analysis. 012).

Table 29
KMO Values and Bartlet's Test-Providing Incentives to Students

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.726
Bartlett's Test of Sphericity	Approx. Chi-Square	225.908
	df	6
	Sig.	0.000

Table 30
Total Variance Explained - Providing Incentives to Students

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.573	74.334	74.334

Table 31
Factor Loadings-Providing Incentives to Students

Component Matrix[a]

Items	Component
MI1	0.828
MI2	0.890
MI3	0.740
MI4	0.829

Table 32
Cronbach's Alpha- Providing Incentives to Students

Component	Number of Items	Cronbach's Alpha
1	4	0.872

Ulul Albab Approach: Quranic, Encyclopedic, and Ijtihadik Dimensions
The Ulul Albab Approach was operationalized through 30 items across three conceptual dimensions: Quranic, Encyclopedic, and Ijtihadik. Exploratory Factor Analysis (EFA) using Principal Component Analysis (PCA) with varimax rotation revealed a robust three-factor solution. The Kaiser-Meyer-Olkin (KMO) measure was exceptionally high at 0.931, and Bartlett's Test of Sphericity was significant (χ^2 = 4894.463, df = 435, p < 0.001), indicating strong sampling adequacy and factorability.

Table 33
KMO Values and Bartlet's Test - Ulul Albab Approach

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.931
	Approx. Chi-Square	4894.463
Bartlett's Test of Sphericity	df	435
	Sig.	0.000

Table 34
Total Variance Explained- Ulul Albab Approach

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	22.548	75.161	75.161
2	1.229	4.097	79.258
3	0.892	2.974	82.233

Table 35
Factor Loadings- Ulul Albab Approach

Items	Component Matrix[a]		
	1	2	3
DQ1		0.813	
DQ2		0.867	
DQ3		0.861	
DQ4		0.897	
DQ5		0.826	
DQ6		0.873	
DQ7		0.875	
DQ8		0.859	
DQ9		0.847	
DQ10		0.845	
DE1	0.931		
DE2	0.708		
DE3	0.830		
DE4	0.754		
DE5	0.860		
DE6	0.866		
DE7	0.927		
DE8	0.930		
DE9	0.905		
DI1			0.893
DI2			0.915
DI3			0.903
DI4			0.877
DI5			0.899
DI6			0.924
DI7			0.853
DI8			0.877
DI9			0.872
DI10			0.866
DI11			0.815

Table 36
Cronbach's Alpha - Ulul Albab Approach

Component	Number of Items	Cronbach's Alpha
1	10	0.967
2	9	0.962
3	11	0.977
Total	30	0.965

Student Development Outcomes: Exploratory Factor Analysis
The construct of *Student Development Outcomes* was measured using 30 items encompassing diverse attributes. An Exploratory Factor Analysis (EFA) with Principal Component Analysis (PCA) and varimax rotation confirmed a nine-factor structure. The Kaiser-Meyer-Olkin (KMO) value was 0.858, and Bartlett's Test of Sphericity was significant (χ^2 = 2306.723, df = 435, p < 0.001), indicating the dataset was suitable for factor analysis.

Table 37

KMO Values and Bartlet's Test- Student Development Outcomes

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.858
Bartlett's Test of Sphericity	Approx. Chi-Square	2306.723
	df	435
	Sig.	0.000

Table 38

Total Variance Explained- Student Development Outcomes

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% Of Variance	Cumulative %	Total	% Of Variance	Cumulative %
1	12.728	42.425	42.425	6.417	21.390	21.390
2	2.321	7.735	50.160	4.144	13.813	35.203
3	1.716	5.720	55.880	3.267	10.890	46.093
4	1.597	5.322	61.202	2.251	7.505	53.597
5	1.441	4.803	66.005	2.012	6.705	60.303
6	1.217	4.058	70.063	1.673	5.578	65.880
7	1.108	3.693	73.756	1.539	5.130	71.011
8	0.905	3.018	76.774	1.272	4.241	75.252
9	0.812	2.706	79.480	1.268	4.228	79.480

Table 39

Factor Loadings- *Student Development Outcomes*

Items	Component Matrix								
	1	2	3	4	5	6	7	8	9
PS1		0.837							
PS2		0.870							
PS3		0.887							
PAQ1									0.870
PAQ2									0.887
PAQ3									0.808
PK1				0.801					
PK2				0.788					
PK3				0.789					
PK4				0.772					
KHD1	0.758								
KHD2	0.720								
KHD3	0.825								
KHD4	0.799								
MBM1			0.776						
MBM2			0.706						
MBM3			0.769						
MBM4			0.758						
MBMI1								0.836	
MBMI2								0.846	
MBMI3								0.893	
BBDK1				0.758					
BBDK2				0.811					
BBDK3				0.821					

KM1		0.751
KM2		0.721
KM3		0.777
JT1	0.769	
JT2	0.766	
JT3	0.767	

Table 40
Cronbach's Alpha- Student Development Outcomes

Component	Number of Items	Cronbach's Alpha
1	3	0.920
2	3	0.844
3	4	0.784
4	4	0.904
5	4	0.805
6	3	0.727
7	3	0.717
8	3	0.746
9	3	0.807
Total	30	0.941

Overall Results of Exploratory Factor Analysis (EFA)
Based on the results of the EFA analysis on the questionnaire items, no items were excluded. Table 3.41 below shows the overall latest position of the items after the EFA analysis was carried out.

Table 41
Overall EFA Analysis

No	Constructs	Validity			Reliability	
		Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO>0.6)	Bartlett's Test of Sphericity (Sig.< 0.05)	Total Variance Explained (>60%)	Items Factor Loading (>0.60)	Cronbach's Alpha (>0.70)
1	**Principal Instructional Leadership**					
1a	Formulating School Goals	0.861	0.000	62.244	3 item > 0.60	0.741
1b	Delivering the School's Curriculum Goals	0.759	0.000	86.628	3 item > 0.60	0.920
1c	Instructional Supervision and Evaluation	0.772	0.000	76.278	3 item > 0.60	0.731
1d	Coordinating Curriculum	0.751	0.000	84.652	3 item > 0.60	0.909
1e	Monitoring Student Progress	0.792	0.000	76.417	4 item > 0.60	0.824
1f	Protecting TnL Time	0.792	0.000	74.489	5 item > 0.60	0.858
1g	Maintaining Attendance	0.784	0.000	71.332	5 item > 0.60	0.832
1h	Providing Incentives to Students	0.726	0.000	74.334	4 item > 0.60	0.872
2	**Ulul Albab Approach**					
2a	Quranic dimension	0.931	0.000	82.233	10 item > 0.60	0.967
2b	Encyclopedic Dimension				9 item > 0.60	0.962

2c	Dimension of Ijtihadik				11 item > 0.60	0.977
3	**Student Outcomes**					
3a	Good at prayer				3 item > 0.60	0.920
3b	Proficient in Al-Quran				3 item > 0.60	0.844
3c	Computer literate				4 item > 0.60	0.784
3d	High Confidence and Self-Esteem				4 item > 0.60	0.904
3e	Practicing an Interesting Culture				4 item > 0.60	0.805
3f	Proficient in Bahasa Malaysia and English	0.858	0.000	79.480	3 item > 0.60	0.727
3g	Dare to Migrate for Career				3 item > 0.60	0.717
3h	Willing to venture into a challenging career				3 item > 0.60	0.746
3i	Holding Senior Positions in Public and Private Services at Central and International Levels				3 item > 0.60	0.807

Discussion

The results of the Exploratory Factor Analysis (EFA) conducted across the constructs of Principal's Instructional Leadership, the Ulul Albab Approach, and Student Development Outcomes provide strong empirical support for the structural validity and reliability of the proposed instrument. All constructs exceeded the recommended psychometric thresholds, including the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (>0.60), significance of Bartlett's Test of Sphericity ($p < 0.05$), factor loadings (>0.60), Total Variance Explained (>60%), and Cronbach's Alpha for internal consistency (>0.70). These findings affirm the robustness of the instrument in capturing the theoretical underpinnings and multidimensional nature of Islamic-based educational leadership and student development. For Principal's Instructional Leadership, all eight domains demonstrated unidimensional factor structures with no item elimination required. Constructs such as *Delivering the School's Curriculum Goals* and *Coordinating Curriculum* exhibited particularly high levels of explained variance and internal reliability, indicating well-defined and cohesive measurement of the underlying leadership behaviors. These outcomes reinforce the critical role of instructional leadership in structuring curriculum delivery and instructional coherence, aligning with prior literature (Hallinger, 2010; Murphy, 2016).

The validation of the Ulul Albab Approach further highlights its conceptual integrity as a faith-based educational model. The three dimensions—Quranic, Encyclopedic, and Ijtihadik—showed exceptionally high reliability values ($\alpha > 0.96$) and accounted for over 82% of the total variance. This empirical affirmation is significant as it underscores the capacity of the Ulul Albab framework to be operationalized and quantified through psychometric means, offering a novel contribution to the field of Islamic education research.

Similarly, the nine dimensions within *Student Development Outcomes* (formerly labeled "Occurrence Student") proved to be theoretically and statistically coherent. The high factor loadings and reliability indices across diverse domains—including religious competence, academic literacy, digital skills, cultural engagement, and leadership aspirations—suggest that the instrument is capable of capturing the holistic student profile envisioned by the Ulul

Albab philosophy. This multifaceted conceptualization of student success supports a more inclusive and comprehensive evaluation of educational impact.

The findings also indicate that the items were contextually appropriate, requiring no exclusion or restructuring. This strengthens the instrument's generalizability and usability in future studies involving secondary schools adopting Islamic integrative education models. Moreover, the rigorous EFA process followed in this study sets a methodological benchmark for future research in developing localized, values-driven educational measurement tools.
In sum, the EFA results confirm that the developed instrument is both valid and reliable for measuring leadership practices, pedagogical philosophy, and student development outcomes within the framework of Islamic education. These insights lay the groundwork for subsequent Structural Equation Modeling (SEM) to further examine the causal pathways and interrelationships among the validated constructs.

Implications

The findings of this study carry important theoretical, practical, and methodological implications. Theoretically, the successful validation of the constructs related to *Principal's Instructional Leadership*, the *Ulul Albab Approach*, and *Student Development Outcomes* advances the literature on educational leadership within an Islamic pedagogical context. By operationalizing the Ulul Albab paradigm into measurable domains, this study offers a significant contribution to the conceptual development of holistic, value-integrated leadership models.

Practically, the validated instrument provides school administrators, policymakers, and educational planners with a reliable tool to assess and enhance instructional leadership aligned with Islamic values. This tool can support performance appraisals, leadership training, and curriculum alignment in schools adopting or aspiring to adopt the Ulul Albab educational model. Additionally, insights into student development dimensions enable educators to more systematically address spiritual, intellectual, and psychosocial competencies in their instructional practices.

Methodologically, the rigorous application of EFA to validate multidimensional constructs in a culturally embedded educational model sets a precedent for future psychometric research in non-Western contexts. This study demonstrates how context-specific instruments can be developed and statistically validated, supporting greater inclusivity in educational measurement and theory-building.

Limitations

Despite the strengths of the study, several limitations must be acknowledged. First, the sample was limited to selected secondary schools implementing the Ulul Albab program, which may limit the generalizability of findings to broader educational settings. Future studies should consider expanding the sample to include diverse school types and regions to strengthen external validity.

Second, while Exploratory Factor Analysis (EFA) was effective in assessing dimensionality and reliability, further validation using Confirmatory Factor Analysis (CFA) and Structural Equation

Modeling (SEM) is necessary to test the construct relationships and model fit in a more robust framework.

Third, the reliance on self-reported data introduces the possibility of social desirability bias. Although steps were taken to ensure anonymity and honest responses, future studies could integrate qualitative or longitudinal data to triangulate findings and examine the temporal stability of the constructs.

Finally, cultural and linguistic nuances may affect item interpretation. While the instrument was carefully constructed and reviewed, ongoing refinements are necessary as it is implemented in varied educational environments.

Conclusion
This study set out to develop and validate an instrument for assessing *Principal's Instructional Leadership*, the *Ulul Albab Educational Approach*, and *Student Development Outcomes* within the context of Islamic-integrated secondary education. Through rigorous Exploratory Factor Analysis (EFA), all constructs demonstrated strong psychometric properties, meeting and exceeding established thresholds for sampling adequacy (KMO > 0.6), statistical significance (Bartlett's Test, $p < 0.001$), factor loading strength (> 0.60), and internal reliability (Cronbach's Alpha > 0.70).

The eight domains of instructional leadership—ranging from goal setting to safeguarding instructional time—proved to be theoretically coherent and empirically valid. The Ulul Albab Approach, grounded in Quranic, Encyclopedic, and Ijtihadik dimensions, emerged as a robust and conceptually integrative educational framework, affirming its relevance in shaping school leadership within a spiritual-epistemological paradigm.

Equally significant, the study reconceptualized and validated "Student Development Outcomes" across nine multidimensional constructs, offering a holistic profile of student growth encompassing religious literacy, academic proficiency, digital competency, cultural engagement, and leadership aspirations.

No items were removed during the validation process, indicating the initial conceptual framework was well-constructed and contextually appropriate. This outcome highlights the strength of integrating local educational philosophies with rigorous empirical methodologies. The validated instrument not only enriches the scholarly discourse on instructional leadership and Islamic pedagogy but also offers a practical tool for school leaders and policymakers aiming to cultivate holistic student outcomes through value-driven leadership practices. As a result, this research lays a solid foundation for further confirmatory analyses and longitudinal investigations into the transformative role of educational leadership in Islamic schooling systems.

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