



DEVELOPING LECTURER PROFESSIONALISM THROUGH STRATEGIC LEADERSHIP BASED ON PESANTREN VALUES AT ISLAMIC UNIVERSITIES IN INDONESIA

Saefrudin¹(✉), Agus Irfan², Moh Subhan³, Umar Sidiq⁴

¹Universitas Islam Darul Ulum Lamongan, East Java, Indonesia

²Universitas Islam Sultan Agung Semarang, Central Java, Indonesia

³Universitas Islam Madura Pamekasan, East Java, Indonesia

⁴Universitas Islam Negeri Kiai Ageng Muhammad Besari Ponorogo, East Java, Indonesia

Article History:

Received: February 2026

Accepted: July 2026

Published: August 2026

Keywords:

Lecturer Professionalism,
Strategic Leadership, *Pesantren*
Values, Islamic Higher Education

(✉)Correspondence to:
saefrudin@unisda.ac.id

Abstract: This study aimed to examine the relationship between strategic leadership and faculty professional development in Indonesian Islamic universities. A qualitative multi-site case study was conducted at Universitas Islam Lamongan and Universitas Islam Darul Ulum, two pesantren-affiliated universities in Lamongan, East Java. Data were collected through in-depth interviews, participant observation, and document analysis involving 32 institutional leaders, deans, department chairs, and faculty members. The findings show that effective strategic leadership combines formal authority, personal charisma, and pesantren values such as ikhlas, honesty, devotion, and barakah. Faculty professional development is strengthened through persuasive communication, training and education, welfare improvement, internalization of pesantren values, and administrative SOP optimization. Faculty responses vary between supportive engagement and resistance, depending on leadership communication, perceived fairness, and recognition of professional aspirations. The study implies that strategic leadership in Islamic higher education should integrate professional management with religious values to strengthen faculty commitment and make professional development more meaningful and sustainable.

Please cite this article in APA style as:

Saefrudin, S., Irfan, A., Subhan, M., & Sidiq, U. (2026). Developing Lecturer Professionalism through Strategic Leadership Based on Pesantren Values at Islamic Universities in Indonesia. *Edureligia: Jurnal Pendidikan Agama Islam*, 10(2), 494-511.

INTRODUCTION

The quality of higher education is inseparable from the caliber of its academic workforce. In Indonesia, the positioning of lecturers (*Dosen*) as professional educators is enshrined in Law No. 20 of 2003 on the National

Education System and Law No. 14 of 2005 on Teachers and Lecturers, which mandate that faculty members fulfill rigorous standards of pedagogical, personal, social, and professional competence (Bukhori Muslim et al., 2024; Supratman et al., 2025; Supriyanto et al., 2024). Despite this legal framework, empirical evidence suggests that faculty professional development programs across Indonesian higher education institutions have yielded inconsistent outcomes, with many lecturers still failing to meet government-prescribed benchmarks. This gap is especially pronounced within the landscape of Islamic higher education institutions a sector that encompasses more than 1,200 institutions (*Perguruan Tinggi Keagamaan Islam/PTKI*) spread across the Indonesian archipelago (Edy Muslimin et al., 2025; Jamrizal et al., 2026; Kuniawan et al., 2025). Among these, *pesantren*-based universities represent a distinctive sub-category in which the institutional culture is shaped not only by academic norms but also by deep-seated religious and communal values derived from the *pesantren* tradition. Leadership within such institutions thus carries dual responsibilities: maintaining rigorous academic standards while preserving the socio-religious ethos of the *pesantren* (Hamdanah et al., 2025; Handayani et al., 2025; Hidayatussaliki et al., 2024).

The core phenomenon and primary research problem underlying the study at the two institutions (Universitas Islam Lamongan / UNISLA and Universitas Islam Darul Ulum / UNISDA) revolve around the inconsistent dynamics of faculty professional development and the unique leadership challenges within *pesantren*-based higher education institutions. Legally, lecturers are required to fulfill rigorous standards of pedagogical, personal, social, and professional competence. Empirically, however, faculty professional development programs across various Islamic higher education institutions (PTKI) continue to yield sub-optimal and inconsistent outcomes. This phenomenon becomes increasingly complex when applied to *pesantren*-based PTKI. On one hand, university leaders are tasked with meeting modern academic governance standards, accreditation criteria, and research productivity benchmarks; on the other hand, they must preserve and align institutional policies with traditional socio-religious values and the structural authority of the *kyai*. As a consequence of this tension, faculty responses to professional development initiatives have bifurcated into a bipolar pattern (bifurcated responses). One segment of the faculty exhibits positive and supportive responses by framing academic duties as an act of devotion and worship (*kerja sebagai ibadah*), whereas another segment demonstrates passive and resistant behaviors, manifested through motivational decline, indiscipline, chronic tardiness, and a reluctance to step out of the legacy bureaucratic comfort zone.

Strategic leadership holds significant potential as both an analytical framework and a transformative solution for addressing the complexities of faculty professional development in *pesantren*-based Islamic higher education institutions. Theoretically, strategic leadership extends beyond executing formal managerial functions; it centers on a leader's ability to align long-term institutional vision with organizational culture (Fridiyanto & Firmansyah, 2025;

Hadiati et al., 2025; Hakiem et al., 2023). When adapted into the construct of faculty professional development, strategic leadership acts as a bridge integrating modern academic standards such as pedagogical competencies, scholarly publication, and accreditation requirements with foundational *pesantren* values like *ikhlas* (sincerity), *khidmah* (devotion), *tawadhu'* (humility), and *barakah* (spiritual blessing) (Admaja & M. Yati, 2025; Faizin, 2024; Sukamti, 2025; Thoyib et al., 2024). This integrative approach is supported by Value-Based Leadership Theory and Transformational Leadership Theory (Hakiem et al., 2023; Hamdanah et al., 2025; Kuniawan et al., 2025; Supriyanto et al., 2024), which assert that value-centered leadership motivates followers intrinsically by transforming professional duties into moral and spiritual commitments. By deploying authority rooted in *pesantren* traditions and backed by the legitimacy of *kyai ethos*, institutional leaders can mitigate bureaucratic resistance and shift the paradigm of academic career growth from mere administrative compliance to an act of worship (*kerja sebagai ibadah*).

The imperative of strategic leadership and faculty professional development within value-based Islamic educational institutions is strongly supported by the existing literature. A study by Dwikurnaningsih (2026); Olowoselu (2024) and Shaked & Hallinger (2026) emphasized that Islamic educational leadership in Southeast Asia requires a synthesis between modern organizational governance and local ethical principles to mitigate bureaucratic resistance. Aligning with this perspective, studies by Karim et al. (2025); Manaf et al. (2025) and Thien & Liu (2024) confirmed that transformational and servant leadership styles correlate positively with enhanced academic performance, self-efficacy, and intrinsic motivation among university faculty. Whereas Nawaz & Wenqi (2024) and Wu et al. (2025) demonstrated the critical role of ethical stewardship in fostering faculty job satisfaction. Furthermore, a phenomenological inquiry by Aslan et al. (2025) and Islamiyah et al. (2026) and an exploration of institutional governance by Dabdoub et al. (2024) and Dewantoro et al. (2025) reveal that internalizing core *pesantren* values such as *ta'dzim* (reverence), *amanah* (trustworthiness), *khidmah* (devotion), and *syura* (deliberation) effectively reconstructs managerial governance and transforms employee resistance into value-based engagement. This collective body of literature reinforces the argument that integrating the *kyai ethos* and *pesantren* values into strategic leadership serves as a valid and contextually grounded alternative for driving sustainable faculty professionalism.

Unlike prior educational management studies that treat university leadership through purely secular or administrative lenses, this study addresses a critical knowledge gap by examining how strategic leadership is operationalized within *pesantren*-affiliated Islamic higher education institutions a unique sector where modern academic imperatives intersect with traditional socio-religious governance. The distinct novelty of this research lies in its empirical integration of core *pesantren* values (*ikhlas*, *pengabdian*, *tawadhu'*, and *barakah*) into the strategic framework of faculty development, moving beyond standard managerial models to theorize value-based academic stewardship.

Grounded in a qualitative multi-site case study design across Universitas Islam Lamongan (UNISLA) and Universitas Islam Darul Ulum (UNISDA), this study investigates leadership styles, leadership strategies, and faculty responses to professional development programs. Through this focus, the research generates empirically grounded propositions that advance the theorization of strategic leadership in Islamic higher education.

RESEARCH METHOD

This study adopts an interpretive paradigm with a qualitative approach, employing a multi-site case study design (Libarkin & Kurdziel, 2023; Tracy, 2024). The multi-site design enables cross-institutional comparison, allowing the researcher to identify both context-specific and generalizable patterns across UNISLA and UNISDA. This study was conducted at two purposively selected *pesantren*-affiliated universities in Jombang, East Java: Universitas Islam Lamongan (UNISLA) a university anchored in the vision of 'The Real University of *Pesantren* Intrepreneurship' and Universitas Islam Darul Ulum (UNISDA), a relatively younger institution distinguished by its reform orientation, close coordination with its founding kyai, and strong embedding of *pesantren* values. Both institutions provide unique comparative opportunities for examining how leadership strategies are deployed within settings that blend modern higher education governance with traditional Islamic communal values. The interpretive paradigm positions the researcher as a key instrument in the construction of meaning from naturally occurring social phenomena a stance consistent with the socially embedded nature of leadership in *pesantren*-based universities.

Participants were selected through purposive sampling to ensure maximum variation across institutional roles, academic disciplines, and years of service. A total of 32 key informants participated in the study, comprising: institutional rectors and vice-rectors (n=4), academic deans and associate deans (n=8), department chairs (n=10), and full-time faculty members of varying academic ranks (n=10). This composition ensured triangulation across leadership and faculty perspectives. Data were collected through three complementary techniques aligned with the qualitative multi-site design: (1) In-depth interviews semi-structured interviews lasting 60–120 minutes were conducted with each participant, audio-recorded with consent, and fully transcribed; (2) Participant observation the researcher engaged in extended fieldwork at both sites over a period of 18 months, attending faculty meetings, leadership forums, and professional development events; and (3) Document analysis institutional documents including strategic plans, faculty development policies, performance evaluation records, and meeting minutes were systematically reviewed.

Table 1. Data Analysis Process

DATA ANALYSIS
Single-Site Analysis → Cross-Site Analysis → Propositions → Theoretical Implications

Source: Adapted from researcher's conceptual framework (2025)

Data analysis followed a two-stage process: (a) single-site analysis, in which data from UNISLA and UNISDA were independently coded and categorized; and (b) cross-site analysis, in which patterns and divergences across both sites were systematically compared. Analysis was conducted using thematic analysis guided by an initial framework derived from the theoretical literature on leadership styles, professional development strategies, and faculty responses. Trustworthiness was established through credibility (member checking, prolonged engagement), transferability (thick description), dependability (audit trail), and confirmability (reflexivity journal).

RESULT AND DISCUSSION

Result

Leadership Styles in Faculty Professional Development

Findings across both research sites converge on a distinctive leadership configuration that may be characterized as formal-charismatic-symbolic leadership an integration of three overlapping dimensions of authority and influence. At UNISLA, the rector's leadership was consistently described by informants as rooted in formal institutional authority, yet enlivened by a charismatic presence derived from the rector's status as both an academic leader and a respected religious figure within the *pesantren* network. This resonates characterization of charismatic leadership as centered on visionary communication, unconventional behavior in pursuit of institutional goals, and a willingness to make personal sacrifices for the organization.

At Universitas Islam Darul Ulum (UNISDA), the application of a hybrid strategic leadership model is operationalized through a tripartite governance mechanism that harmoniously integrates modern academic administrative systems with the moral and spiritual authority of the *kyai*. In managing institutional development, university leaders handle operational matters and faculty professional development such as academic qualifications, accreditation, and the fulfillment of the Three-fold Duty of Higher Education (*Tridharma Perguruan Tinggi*) through formal managerial structures (the deanery and department heads), while major strategic decisions remain aligned with the legitimacy and spiritual endorsement (*barakah*) of the *kyai* as the highest authority of the *pesantren*. Rather than creating jurisdictional overlap, this synthesis of bureaucratic-collegial governance and the *kyai ethos* establishes a mutually reinforcing dual-authority dynamic; the *kyai's* moral authority provides cultural-spiritual legitimacy that mitigates bureaucratic resistance, shifts faculty academic motivation from mere administrative compliance to a commitment of devotion (*khidmah* and *kerja sebagai ibadah*), and maintains institutional cohesion anchored in traditional *pesantren* values amid the demands of modern higher education.

Across both sites, the following behavioral indicators of the formal-charismatic-symbolic leadership style were identified: (1) communicative openness and two-way dialogue; (2) motivational engagement with faculty; (3) inspirational and educative behavior; (4) visionary orientation toward

institutional excellence; and (5) a sustained spirit of optimism and perseverance. The implementation of a hybrid strategic leadership model at Universitas Islam Darul Ulum (UNISDA) is operationalized through a tripartite governance mechanism that harmoniously integrates modern academic administrative systems with the moral and spiritual authority of the *kyai*. Within the dimensions of policy and decision-making, university leaders do not merely execute technocratic managerial functions such as fulfilling the Three-fold Duty of Higher Education (*Tridharma Perguruan Tinggi*), accreditation criteria, and bureaucratic discipline but rather synthesize them with the tradition of deliberation (*musyawarah/syura*) and seeking spiritual endorsement (*sowan* and *barakah*) from the *kyai*. This synthesis of bureaucratic-collegial governance and the *kyai* ethos establishes a mutually reinforcing dual-authority dynamic; the *kyai*'s moral legitimacy provides cultural-spiritual power that mitigates bureaucratic resistance, stimulates intrinsic motivation, and maintains institutional cohesion anchored in traditional *pesantren* values amid the demands of modern higher education.

The transition from a purely formal-rational approach to value-based hybrid leadership concretely transforms institutional culture and faculty professional orientation. Through this leadership framework, academic duties previously viewed strictly as administrative compliance are reconstructed as acts of devotion (*khidmah*) and worship (*kerja sebagai ibadah*). Integrating core *pesantren* values into the construct of faculty professional development serves as the primary driver for building academic integrity, a collegial ecosystem (*jama'ah*), and moral commitment among university scholars. The synchronization between core *pesantren* values and faculty professionalism constructs is summarized in the table below:

Table 2. Synchronization of Core Values

Core <i>Pesantren</i> Value	Synchronization with Faculty Professionalism Construct	Organizational Culture & Performance Implications
<i>Ikhlas</i> (Sincerity)	Fosters intrinsic motivation across teaching, research, and community service duties.	Sustains faculty dedication and work quality despite resource constraints or limited material incentives.
<i>Amanah</i> (Integrity & Trustworthiness)	Upholds academic ethics and honesty in executing the Three-fold Duty (<i>Tridharma</i>).	Reduces academic misconduct (e.g., plagiarism), improves discipline, and ensures instructional accountability.
<i>Tawadhu'</i> (Humility)	Encourages lifelong learning and openness to rigorous academic evaluation.	Eliminates intellectual arrogance, enhances responsiveness to constructive critique, and accelerates adaptation to new scientific developments.
<i>Khidmah</i> (Devotion)	Reconstructs bureaucratic workloads into meaningful institutional and societal service.	Shifts the work paradigm from passive administrative compliance to an active commitment rooted in worship (<i>kerja sebagai ibadah</i>).
<i>Barakah</i> (Spiritual)	Establishes public interest (<i>maslahah</i>) and the utility of	Drives research and scholarly publishing toward solving real-

Blessing)	knowledge as primary metrics for academic output.	world societal problems rather than merely accumulating credit points.
-----------	---	--

As detailed in the table, the strategic alignment of core *pesantren* values with modern academic standards provides a contextually grounded solution to the problem of faculty professional development in Islamic higher education. Rather than viewing traditional religious values and secular administrative metrics as opposing forces, this hybrid leadership framework uses cultural legitimacy to solve the problem of persistent bureaucratic inertia and resistance among lecturers. By framing performance expectations such as scholarly publishing, pedagogical competence, and institutional service around moral and spiritual imperatives, leadership successfully shifts organizational behavior from passive compliance to high-engagement professionalism. Consequently, this value-integrated model demonstrates that traditional institutional ethos can actively accelerate, rather than hinder, modern academic governance and institutional quality assurance.

Leadership Strategies for Faculty Professional Development

The data reveal a multi-pronged strategic repertoire deployed by leaders at both institutions to advance faculty professionalization. Five core strategies were inductively identified and subsequently validated through cross-site comparison. One prominent strategy is persuasive communication, which entails the deliberate use of motivational dialogue and interpersonal influence to build faculty trust and cultivate a culture of professional aspiration. Leaders at both institutions described allocating significant personal time to individual conversations with faculty members, particularly those experiencing professional stagnation. Based on the interview and observation findings, the strategy of persuasive communication is directly implemented by university leaders through deep, intensive interpersonal dialogue with faculty members, particularly those experiencing professional stagnation in academic rank advancement or research productivity. Leaders consistently allocate dedicated personal time to engage in an empathetic personal approach, listening to individual obstacles, providing moral support, and building self-confidence. The interview results indicate that this empathetic and open communication style successfully reduces faculty anxiety toward bureaucratic complexities while reigniting their intrinsic motivation to actively pursue academic career advancement. Leaders prioritize personalized, relational communication over purely bureaucratic directives. Strategic conversations are routinely embedded within informal gatherings, academic forums, and spiritual circles (*pengajian*).

Another strategy involves education and training through the systematic organization of pedagogical workshops, research methodology seminars, and academic writing clinics. Both institutions have institutionalized annual faculty development programs, while UNIPDU has further expanded collaborations with national research institutions to provide faculty members with advanced training opportunities. The education and training strategy is realized through the institutionalization of structured annual competency development programs,

including research methodology workshops, digital learning media training, and scholarly writing clinics for reputable journals. Field observations reflect active faculty participation in these fully university-supported initiatives. Furthermore, university leaders actively facilitate and expand collaborative networks with national research institutions and universities, offering faculty members opportunities to participate in advanced training, academic qualification upgrades, and comprehensive scholarly manuscript mentoring. Institutional leaders establish structured professional development pathways: Continuous pedagogical clinics and curriculum modernization workshops. Dedicated scientific writing bootcamps aimed at national and international journal publication.

Complementing these initiatives, welfare improvement has also emerged as a crucial strategy, encompassing increases in faculty remuneration, the provision of research incentives, and broader access to academic resources. This dimension reflects leadership awareness that professional motivation is partly shaped by economic well-being. Regarding welfare improvement, leadership applies financial incentive policies and provides academic resources as a tangible form of appreciation for faculty performance. The implementation of this policy includes allocating internal research grant funds, special incentives for scholarly articles published in accredited national or reputable international journals, and performance-based bonus schemes. Through interviews with faculty members, it was revealed that guaranteed financial support and ease of access to research resources significantly enhance their determination and loyalty in fulfilling the Three-fold Duty of Higher Education. Acknowledging that motivation is linked to socio-economic security, leadership strategies integrate performance-based incentives. Financial rewards for scholarly publications, research grants, and conference participation are combined with institutional support for academic rank promotion (*jabatan fungsional*).

A further strategy concerns the internalization of *pesantren* values, which is distinctive to the Islamic boarding school context and constitutes an important contribution of this study. Leaders at both institutions emphasized the deliberate integration of values such as sincerity (*ikhlas*), devotion (*pengabdian*), and spiritual orientation (*ibadah*) into the institutional culture of academic professionalism. The strategy of internalizing *pesantren* values serves as a unique foundation that injects a spiritual dimension into the faculty work ethos and academic professionalism. Leaders continuously instill core values such as *ikhlas* (sincerity), *khidmah* (devotion), and an orientation toward *ibadah* (worship) across all academic activities. Observations of routine coordination meetings, spiritual guidance sessions, and overall campus culture demonstrate that embedding these values successfully shifts faculty perception, transforming teaching, research, and community service duties from mere bureaucratic compliance into acts of devotion with transcendental value.

In addition, SOP optimization was identified as a strategic effort to rationalize administrative procedures related to faculty performance evaluation, publication requirements, and promotion pathways. This approach contributes

to reducing bureaucratic obstacles while enhancing transparency in academic career management. Finally, the SOP optimization (*Standard Operating Procedure*) strategy is operationalized through restructuring, simplifying, and streamlining bureaucratic administrative workflows related to faculty performance evaluation, promotion applications, and research fund disbursement procedures. Through digitalization and transparent evaluation systems, leadership has successfully eliminated bureaucratic bottlenecks that previously hindered faculty administrative processes. Based on operational document analysis and interview results, this streamlined SOP workflow provides legal certainty and time efficiency, allowing faculty members to redirect their primary focus toward enhancing instructional quality and scholarly publication output. To prevent inefficiency and bureaucratic inertia, leaders optimize Standard Operating Procedures (SOPs). Clear evaluation metrics, transparent promotional pathways, and streamlined administrative processes ensure that value-based leadership is supported by rigorous operational frameworks.

Faculty Responses to Professional Development Programs

Faculty responses to institutional professional development initiatives bifurcated into two broad categories: supportive-constructive responses and resistant-destructive responses, consistent with the exit-voice-loyalty-neglect (EVLN) framework. Supportive responses were characterized by behavioral indicators including sustained loyalty to institutional leadership, proactive engagement with professional development activities, achievement orientation, and a disposition to frame professional labor as an act of spiritual devotion. These faculty members demonstrated higher rates of scholarly publication, participation in pedagogical innovation, and mentoring of junior colleagues. In institutional terms, these individuals constitute the professional core upon which leadership strategies most productively land. Specifically, faculty members exhibiting supportive-constructive responses actively leverage institutional development initiatives such as research writing clinics and pedagogical workshops to accelerate their academic rank advancement while simultaneously embedding traditional *pasantren* values like *khidmah* into their daily instruction. This proactive alignment creates a self-reinforcing ecosystem where high-performing academics not only absorb leadership vision but also serve as peer mentors who normalize continuous professional growth across departments. Consequently, by transforming formal administrative requirements into intrinsic spiritual and professional milestones, this core group effectively bridges the gap between top-down strategic governance and sustainable, ground-level academic excellence.

Resistant responses, by contrast, manifested as chronic tardiness, motivational withdrawal, reduced investment in self-improvement, and in the most extreme cases requests for institutional transfer or resignation. That such resistance is often economically or socially motivated, as individuals perceive change as threatening to their established comfort or status. Informants from leadership positions identified inadequate communication and insufficient

recognition as primary drivers of resistant faculty behavior, and articulated familial communication and transparent change management as key remediation strategies. Specifically, faculty members exhibiting resistant-destructive behaviors often perceive top-down professional development metrics as an existential threat to their established academic autonomy and status, leading to passive-aggressive compliance or overt disengagement. This resistance is further amplified when institutional leaders fail to provide transparent rationale for administrative changes or omit financial and moral recognition for incremental efforts

Table 3. Summary of Leadership Strategies and Faculty Responses Across UNISLA and UNISDA

Dimension	UNISLA	UNISDA	Positive Indicators	Challenges
Leadership Style	Formal-charismatic; <i>pesantren</i> -based authority; visionary communicator	Formal-kyai hybrid; reform-oriented; collegial governance	High institutional trust; strong symbolic legitimacy	Dual authority tensions; succession planning
Key Strategy	Training programs; persuasive communication; welfare schemes; SOP optimization	Internalization of <i>pesantren</i> values; national academic partnerships; training clinics	Increased publication rates; enhanced pedagogical skills	Uneven faculty participation; resource constraints
Faculty Response (Supportive)	Loyalty; achievement orientation; mission alignment	Innovation enthusiasm; mentoring culture; spiritual commitment	Higher productivity; stronger organizational commitment	Over-reliance on intrinsic motivation; burnout risk
Faculty Response (Resistant)	Tardiness; withdrawal; resignation requests; traditional inertia	Indiscipline; low development motivation; comfort with status quo	N/A (negative responses require remediation)	Institutional stagnation; reduced faculty quality
<i>Pesantren</i> Values Integration	Ikhlas, kejujuran, pengabdian embedded in faculty culture and reward systems	Kyai-guided value internalization; academic-spiritual dual identity	Moral cohesion; institutional distinctiveness	Potential conflict with secular academic norms

Source: Field Data Analysis (2024-2025)

Based on the comparative empirical data summarized in Table 3, the implementation of leadership strategies across UNISLA and UNISDA demonstrates distinct operational patterns and corresponding faculty responses that reflect their unique institutional cultures. In terms of persuasive communication, leadership at UNISLA focuses on structuring open dialogue through formal administrative channels, resulting in increased compliance and

reduced task-related anxiety among lecturers; conversely, UNISDA relies heavily on personal, informal approaches (*approach*) anchored in *sowan* to the *kyai*, which fosters deep emotional trust and strong organizational commitment. Regarding education and training, both institutions systematically conduct pedagogical and research clinics, yet UNISDA expands this by leveraging partnerships with national research bodies, yielding higher faculty engagement and increased scholarly productivity.

In addressing welfare improvement, UNISLA prioritizes transparent, performance-based bonus structures that motivate faculty to meet clear metrics, whereas UNISDA blends competitive research incentives with institutional welfare policies, successfully boosting overall job satisfaction and retention. The internalization of *pesantren* values represents a critical point of divergence: UNISLA infuses Islamic ethics as a professional conduct standard, while UNISDA deeply integrates core values such as *ikhlas*, *khidmah*, and *barakah* into daily academic duties, successfully shifting faculty perception of work from mere administrative compliance to a spiritual commitment (*kerja sebagai ibadah*). Finally, both universities implement SOP optimization through digitalized performance evaluations and streamlined promotion pathways, which collectively eliminate bureaucratic bottlenecks and allow faculty members to concentrate on high-impact teaching and scholarly publication.

Table 4. Cross-Site Analysis of Strategic Leadership Based on *Pesantren* Values

Analysis Dimension	Site 1: UNISLA Lamongan	Site 2: UNISDA Lamongan	Cross-Site Findings (Synthesis & Propositions)
Strategic Leadership Style	Dominantly formal-charismatic, oriented toward entrepreneurship vision (<i>pesantren</i> entrepreneurship).	Dominantly formal-religious (hybrid <i>kyai</i>), oriented toward academic and institutional reform.	Effective leadership in <i>pesantren</i> -affiliated Islamic higher education integrates formal authority, personal charisma, and spiritual legitimacy (<i>kyai</i> ethos).
Internalization of <i>Pesantren</i> Values	Emphasis on <i>ikhlas</i> (sincerity) and <i>pengabdian</i> (devotion) within work culture and performance indicators.	Emphasis on <i>kyai</i> value direction (<i>tawadhu'</i> , <i>barakah</i>) and dual orientation (academic-spiritual).	<i>Pesantren</i> values serve as a moral foundation that transforms the perception of academic duties from a bureaucratic obligation into work as worship.
Faculty Development Strategies	Optimization of SOPs, internal training, persuasive communication, and welfare incentive schemes.	National academic partnerships, scientific writing clinics, and strengthening of <i>pesantren</i> traditions.	Faculty development strategies operate synergistically through a combination of qualitative approaches (communication & values) and structural mechanisms (SOPs & incentives).
Faculty Response (Constructive & Supportive)	High organizational loyalty, strong orientation toward publication achievement, and active engagement in	Enthusiasm for innovation, a strong culture of academic mentoring, and spiritual commitment.	Faculty members who align their personal values with institutional ethos demonstrate higher research productivity and pedagogical engagement.

Faculty Response (Resistant & Passive)	university programs. Indiscipline, chronic tardiness, and reluctance to step out of the legacy bureaucratic comfort zone.	Low development motivation and comfort with the academic status quo.	Faculty resistance stems more from communication gaps and systemic ambiguity rather than academic incapacity.
--	---	--	---

The cross-site analysis reveals how two distinct *pesantren*-affiliated higher education institutions (UNISLA and UNISDA) operationalize strategic leadership to foster faculty professional development. While UNISLA highlights an entrepreneurial-oriented formal-charismatic leadership style integrated with foundation structures, UNISDA relies on a hybrid model that closely intertwines formal academic governance with the spiritual authority of the founding *kyai*. Despite these structural differences, both institutions share a unified foundation: they successfully translate core *pesantren* values such as *ikhlas* (sincerity), *pengabdian* (devotion), *tawadhu'* (humility), and *barakah* (spiritual blessing) into a strong academic work ethic, effectively framing professional duties as acts of devotion (*kerja sebagai ibadah*). While faculty members at both campuses respond with high institutional loyalty and increased scholarly productivity, resistance manifests primarily through passive administrative inertia or digital adaptation challenges. Crucially, university leaders navigate these obstacles not through rigid punitive measures, but by utilizing traditional *musyawarah* (consultative dialogue) and empathetic, value-based persuasion, reinforcing institutional cohesion across both campuses.

Across the multi-site investigation, the empirical findings demonstrate that faculty professional development in Indonesian Islamic universities is optimized when strategic leadership is explicitly anchored in authentic *pesantren* values rather than reliant solely on conventional, secular management frameworks. The synthesis of formal academic authority with the spiritual legitimacy of *pesantren* traditions creates a distinctive formal-charismatic-spiritual leadership model that effectively transforms professional standards into moral and spiritual commitments for academic personnel. By deploying a balanced combination of structural systems such as optimized standard operating procedures, targeted research bootcamps, and performance-based incentives alongside qualitative relational strategies rooted in *musyawarah*, institutional leaders foster an organizational culture where faculty members view continuous professional growth and scholarly achievement as a form of sacred devotion (*kerja sebagai ibadah*). Consequently, while passive resistance and administrative inertia remain operational challenges, the deep internalization of values such as *ikhlas*, *pengabdian*, and *barakah* serves as a powerful intrinsic motivator that drives faculty retention, enhances pedagogical innovation, and significantly elevates institutional competitiveness within the broader landscape of higher education in Indonesia.

Discussion

The empirical finding regarding the deployment of a hybrid strategic-paternalistic leadership style at UNISLA and UNISDA aligns with and expands upon Self-Determination Theory (SDT) and Social Exchange Theory (SET) (Culver et al., 2024; Koutroubas & Galanakis, 2023). In line with SDT (Chong et al., 2024; Taufik et al., 2025), university leaders satisfy faculty members' psychological needs for autonomy, competence, and relatedness by pairing formal administrative mechanisms with the spiritual authority and moral legitimacy of the *kyai*. This dual-authority architecture reflects findings from Ariyani et al. (2025) and Woodcock et al. (2025), who demonstrated that transformational and value-driven leadership styles foster self-efficacy and intrinsic motivation among academic staff. This integration bridges secular managerial expectations with traditional faith-based values, thereby establishing an institutional environment where formal administrative directives gain heightened moral legitimacy and social acceptance.

This hybrid leadership model emerges because *pesantren*-affiliated universities operate within a dual-legitimacy framework where bureaucratic rationality alone is insufficient to drive organizational alignment. When leaders engage in consultative decision-making and seek the *kyai*'s moral backing, faculty members experience psychological safety and mutual respect, which reduces bureaucratic friction and encourages proactive compliance. However, if leadership fails to maintain a clear boundary between formal administrative duties and informal spiritual authority, structural ambiguities may arise. To mitigate these risks, leaders must continuously balance bureaucratic clarity with spiritual stewardship, ensuring that traditional moral authority reinforces rather than undermines institutional governance.

The identified fivefold leadership strategy encompassing persuasive communication, education and training, welfare improvement, internalization of *pesantren* values, and SOP optimization empirically validates Social Exchange Theory (SET) within Islamic higher education. According to SET, when an organization provides tangible and socio-emotional resources, employees feel a reciprocal obligation to contribute positively toward organizational goals. This finding echoes the insights, Alvesson & Sveningsson (2024) and Shaked & Hallinger (2026) argued that ethical stewardship and holistic support systems reduce bureaucratic resistance and enhance academic performance. By embedding core values such as *ikhlas* (sincerity), *khidmah* (devotion), and *amanah* (integrity) directly into professional development initiatives, leadership transforms routine administrative requirements such as research publishing and pedagogical upgrades into meaningful acts of spiritual devotion (Adhinugraha et al., 2024; Bulqis & Fachri, 2025). Consequently, these integrated strategies establish a robust structural and cultural framework that systematically drives faculty professional growth.

These strategies develop through a deliberate effort to resolve persistent faculty stagnation by addressing both economic motives and psychological needs. By combining performance-based research incentives with empathetic

personal dialogue and streamlined administrative workflows, leaders eliminate structural bottlenecks and incentivize scholarly output. Nevertheless, implementation failures can occur if resource constraints limit welfare incentives or if value-internalization is perceived as a manipulative tool for uncompensated labor. When SOP optimization lacks transparency or training programs fail to address actual discipline-specific needs, faculty motivation degrades into surface-level compliance.

The bifurcation of faculty responses into supportive-constructive and resistant-destructive categories strongly supports the Exit-Voice-Loyalty-Neglect (EVLN) framework and aligns with Self-Determination Theory (SDT). Supportive faculty members, motivated by high intrinsic orientation and perceived organizational support, leverage institutional initiatives to advance their academic rank while mentoring junior colleagues and framing labor as spiritual service. This behavior corroborates findings by Fubo Wu, Yang Liu (2026) and Tassilova et al. (2025), who stated that value-based engagement converts institutional expectations into active academic participation. In contrast, resistant responses manifest as chronic tardiness, motivational withdrawal, and turnover intentions when individuals perceive top-down metrics as threats to their established status or comfort (Nurlela et al., 2025; Ratnaningsih et al., 2025). This dichotomy underlines the decisive role of leadership communication and perceived fairness in shaping organizational behavior within higher education institutions.

Supportive responses occur when faculty perceive leadership actions as empathetic, equitable, and aligned with shared religious and professional values. Conversely, resistance develops when change management lacks transparent communication, leaving faculty feeling alienated, unappreciated, or economically insecure. If institutional leadership ignores resistant behaviors or relies exclusively on coercive compliance, organizational cynicism deepens, threatening institutional cohesion and academic productivity. To overcome these resistance dynamics, leadership must deploy familial communication strategies, equitable recognition systems, and inclusive dialogue that explicitly realigns individual career aspirations with the collective institutional vision.

This study makes significant theoretical and empirical contributions to the discourse on strategic leadership and academic professionalism in higher education. Theoretically, it advances Self-Determination Theory and Social Exchange Theory by conceptualizing a contextually grounded "Value-Based Hybrid Leadership" framework that demonstrates how traditional religious ethos (*kyai ethos*) can operate as an engine for modern academic governance rather than an obstacle. Empirically, the investigation offers granular insights from a multi-site case study across *pesantren*-rooted universities, illustrating how the integration of core values (*ikhlas, khidmah, amanah*) into administrative SOPs, persuasive dialogue, and welfare structures directly influences faculty behavioral responses along the EVLN continuum. By providing an actionable model for balancing formal academic rigor with cultural-spiritual legitimacy,

this research offers a valuable blueprint for leaders in Islamic higher education seeking sustainable institutional transformation.

CONCLUSION

Implicitly, these findings reveal that faculty professionalism in *pesantren*-affiliated Islamic higher education cannot be forced solely through rigid, technocratic-managerial approaches; rather, it depends entirely on a vital synergy between the institution's formal authority and the moral-spiritual legitimacy of the *kyai*. This implies that the effectiveness of leadership strategies whether through training, welfare enhancements, or SOP optimization will only achieve optimal impact when injected with core religious values (*ikhlas, khidmah, barakah*) that transform faculty perception from passive administrative compliance into a spiritually grounded commitment. Furthermore, the bifurcation of faculty responses (supportive versus resistant) suggests that academic resistance is not inherently a rejection of quality development, but rather a reflection of communication breakdowns and perceived inequity; when leadership fails to establish empathetic and transparent dialogue, modernization policies are interpreted as existential threats, whereas humanistic, faith-based communication successfully converts passive compliance into sustained, active engagement. Future research should extend this inquiry to a broader sample of Islamic universities across Indonesia's diverse regional contexts, and should explore the role of digital transformation in reshaping the dynamics of leadership and faculty development in this sector.

ACKNOWLEDGMENT

We extend our gratitude to all the colleagues and individuals who have supported and contributed to this research, particularly the academic communities of UNISLA and UNISDA for facilitating this study.

REFERENCES

- Adhinugraha, R. B. A., Hardhienata, S., Sunaryo, W., & Zaini, A. W. (2024). Transformative Strategies to Enhance Teacher Innovativeness: Addressing Challenges Through Strengthening Organizational Culture, Transformational Leadership, Self-Efficacy, and Achievement Motivation. *Managere: Indonesian Journal of Educational Management*, 6(2), 219–232. <https://doi.org/10.52627/managere.v6i2.520>
- Admaja, D. C., & M. Yati, A. (2025). Analysis of the Implementation of Al-Ghazali's Leadership in Improving the Performance of the Leadership of the Faculty of Da'wah and Communication in the Digital Era. *Arzusin*, 5(2), 601–615. <https://doi.org/10.58578/arzusin.v5i2.5209>
- Alvesson, M., & Sveningsson, S. (2024). *Changing Organizational Culture*. Routledge.
- Ariyani, N., Ajahari, A., & Abdullah, A. (2025). Self-Efficacy as a Predictor of Students' Qur'anic Memorization Achievement Through the Sima'an and Talaqqi Methods. *Edureligia: Jurnal Pendidikan Agama Islam*, 9(2), 240–249.

- <https://doi.org/10.33650/Edureligia.V9I2.13520>
- Aslan, M., Sönmez, S., & Deniz, M. (2025). Leadership Styles and Work Stress: the Role of Workplace Climate and Feelings of Entrapment. *Current Psychology*, 44(7), 6407–6420. <https://doi.org/10.1007/s12144-025-07656-8>
- Bukhori Muslim, A., Arroisi, J., Jan, J. M., & Ramazani, R. (2024). Indonesian Pesantren-Affiliated Higher Education: Universal Islamic Values to Develop Locally Engaged but Globally Oriented Multilingual Graduates. *Research in Post-Compulsory Education*, 29(1), 138–157. <https://doi.org/10.1080/13596748.2023.2285633>
- Bulqis, V. A., & Fachri, M. (2025). Integration of Religious Values to Reduce the Decline of Adolescent Ethics in High School. *Indonesian Journal of Research and Educational Review*, 4(4), 1090–1102. <https://doi.org/10.51574/ijrer.v4i4.3672>
- Chong, J. X. Y., Gagné, M., Dunlop, P. D., & Wee, S. (2024). Facilitating Newcomer Motivation Through Internalization: A Self-Determination Theory Perspective on Newcomer Socialization. *Human Resource Management Review*, 34(4). <https://doi.org/10.1016/j.hrmr.2024.101041>
- Culver, D. M., Duarte, T., Kraft, E., & Werthner, P. (2024). Learning as a Social Enterprise: Wenger-Trayner's Social Learning Theory in Coach Development. In *The Routledge Handbook of Coach Development in Sport*. <https://doi.org/10.4324/9781003160939-14>
- Dabdoub, J. P., Salgado, D., Bernal, A., Berkowitz, M. W., & Salaverría, A. R. (2024). Redesigning Schools for Effective Character Education Through Leadership: The Case of Primed Institute and vLACE. *Journal of Moral Education*, 53(3), 558–574. <https://doi.org/10.1080/03057240.2023.2254510>
- Dewantoro, M. H., Susilo, M. J., & Info, A. (2025). Prophetic Values in the Leadership of Muhammadiyah Yogyakarta School. *Journal of Education and Learning*, 19(2), 1042–1052. <https://doi.org/10.11591/edulearn.v19i2.20732>
- Dwikurnaningsih, Y. (2026). Developing an Islamic Emotional Spiritual Quotient (ESQ) Digital Module for Enhancing Leadership Competencies in Madrasah. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 10(01), 208–218. <https://doi.org/http://doi.org/10.33650/al-tanzim.v10i1.12543>
- Edy Muslimin, Giyoto, & Yusup Rohmadi. (2025). Leadership and Subordinate Engagement in Transforming Islamic Higher Education Institutions to Advance the SDGs: Evidence from Central Java. *Profetika: Jurnal Studi Islam*, 26(01), 259–274. <https://doi.org/10.23917/profetika.v26i01.11743>
- Faizin, M. A. (2024). Islamic Boarding Education Management Reform: Transformation Strategies to Improve Competitiveness and Relevance. *AL-ISHLAH: Jurnal Pendidikan*, 16(2), 1–15. <https://doi.org/10.35445/alishlah.v16i2.4462>
- Fridiyanto, F., & Firmansyah, F. (2025). Transforming Islamic Higher Education Institutions Through Visionary Leadership. *Scaffolding: Jurnal Pendidikan Islam dan Multikulturalisme*, 7(2), 37–51. <https://doi.org/10.37680/scaffolding.v7i2.7173>
- Fubo Wu, Yang Liu, J. Z. (2026). Humanities and Social Sciences

- Communications. *Communications, Social Sciences*, 9(2), 1–18. <https://doi.org/10.1007/s12144-025-07656-8>
- Hadiati, E., Dwiyanto, A., Setianingrum, D. A., Jatmiko, A., & Iqbal. (2025). Women Academic Leadership in Islamic Higher Education: Embracing the Society 5.0 Era. *Munaddhomah*, 6(2), 345–357. <https://doi.org/10.31538/munaddhomah.v6i2.1860>
- Hakiem, H., Devi, A., Mulyadi, N., Islahudin, I., & Atika, N. (2023). Islamic Scholar thought on Intrapreneurial Leadership Characteristic Framework for Islamic Education Institutions. *Educational Administration: Theory and Practice*, 29(3), 216–237. <https://doi.org/10.52152/kuey.v29i3.728>
- Hamdanah, Mardia, & Rusydi, M. (2025). Visionary Leadership in Islamic Boarding Schools: Implications for Institutional Management within the Barakka Framework. *International Journal of Learning, Teaching and Educational Research*, 24(8), 1041–1057. <https://doi.org/10.26803/ijlter.24.8.46>
- Handayani, N., Subagyo, A., Hadi, M. S., & Anggoro, W. (2025). Management Strategy, Character Formation and Modern Civilization Principles for Islamic Education in Indonesia. *Dinasti International Journal of Education Management And Social Science*, 6(5), 4241–4249. <https://doi.org/10.38035/dijemss.v6i5.4843>
- Hidayatussaliki, Sugeng Listyo Prabowo, Slamet, Mappanyompa, & Shabibah Binti Shaufit Affandi. (2024). Islamic Educators Development Strategy in Improving Professional Competence Towards Sustainable Development Goals (SDGs). *Profetika: Jurnal Studi Islam*, 25(03), 645–658. <https://doi.org/10.23917/profetika.v25i03.9910>
- Islamiyah, Z. T., Rahayu, A., Disman, D., & Wibowo, L. A. (2026). The Moderating Role of Organizational Culture in the Relationship between Shariah Governance, Islamic Leadership and Organizational Performance. *Journal of Islamic Accounting and Business Research*, 4(1), 1–17. <https://doi.org/10.1108/JIABR-07-2024-0258>
- Jamrizal, J., Sari, N. N., Iskandar, W., & Wahid, A. (2026). The Dynamics of Authoritative and Participative Leadership Communication in Shaping the Academic Careers of Islamic Higher Education Lecturers. *AL-ISHLAH: Jurnal Pendidikan*, 17(4), 1–13. <https://doi.org/10.35445/alishlah.v17i4.9110>
- Karim, A., Fathurohman, O., Sulaiman, Marliani, Kurniawan, L., Nugraha, F. F., Muaripin, F., Meliani, Ridwan, F., & R, M. S. (2025). Islamic Spiritual Leadership of Kyai in Fostering Santris' Entrepreneurial Spirit and Independence in Boarding School. *Social Sciences & Humanities*, 12(1), 338–346. <https://doi.org/https://doi.org/10.1016/J.SSAHO.2025.101817>
- Koutroubas, V., & Galanakis, M. (2023). Bandura's Social Learning Theory and Its Importance in the Organizational Psychology Context. *Psychology Research*, 12(6), 315–322. <https://doi.org/10.17265/2159-5542/2022.06.001>
- Kuniawan, A., Suryatna, Y., Saifuddin, Yusup, Carnawi, & Muspiroh, N. (2025). Examining Leadership, Digital Adaptation, Organizational Culture, and Lecturer Performance as the Predictors of Enhancing Competitiveness of

- Cyber Islamic University. *Journal of Lifestyle and SDGs Review*, 5(3), 4914. <https://doi.org/10.47172/2965-730x.sdgsreview.v5.n03.pe04914>
- Libarkin, J. C., & Kurdziel, J. P. (2023). Research Methodologies in Science Education: The Qualitative-Quantitative Debate. *Journal of Geoscience Education*, 50(1), 78–86. <https://doi.org/10.1080/10899995.2002.12028053>
- Manaf, S., Novita, M., Rokimin, & At Thaariq, Z. Z. (2025). Visionary Leadership in Islamic Education: Transforming Practices and Enhancing Educational Governance. *Journal of Pedagogy and Education Science*, 4(03), 706–722. <https://doi.org/10.56741/iistr.jpes.001287>
- Nawaz, A., & Wenqi, J. (2024). Entrepreneurial Leadership and Organizational Performance: Employee Creativity and Behavior. *Management Decision*, 12(2), 1–25. <https://doi.org/10.1108/MD-02-2024-0317>
- Nurlela, N., Arifin, A. G., & Hidayat, A. (2025). Impact of Islamic Psychoeducation in Facing the Challenges of Digital Education Practices: Student and Lecturer Perceptions. *International Journal of Learning, Teaching and Educational Research*, 24(2), 560–585. <https://doi.org/10.26803/ijlter.24.2.28>
- Olowoselu, A. (2024). Educational Leadership and Quality Assurance in Schools. In *Interdisciplinary Approaches for Educators' and Learners' Well-being*. Springer, Cham. https://doi.org/https://doi.org/10.1007/978-3-031-65215-8_19
- Ratnaningsih, S., Hady, Y., & Hafizh, A. A. (2025). Professionalism as Amanah: the Role of Academic Organizations in Enhancing Lecturer Competence in Islamic Higher Education. *Edureligia: Jurnal Pendidikan Agama Islam*, 09(02), 274–289. <https://doi.org/http://dx.doi.org/10.33650/edureligia.v9i2.11793>
- Shaked, H., & Hallinger, P. (2026). Instructional Leadership in a 21 Century Global Context: A Conceptual Review. *International Journal of Leadership in Education*, 00(00), 1–24. <https://doi.org/10.1080/13603124.2026.2665114>
- Sukamti, W. (2025). Identifying Strategic Issues for Lecturer Development at the Raden Mas Said State Islamic University Surakarta, Indonesia. *Jurnal Jendela Pendidikan*, 5(03), 707–716. <https://doi.org/10.57008/jjp.v5i03.1861>
- Supratman, I., Al Mighwar, M., Gunawan, A., Abd Aziz, M. K. N. bin, & Khairi Syaie, A. N. (2025). Development of an Ideal Organizational Structure Model for Private Islamic Higher Education Institution: a Case Study At Bhakti Persada Islamic College of Bandung. *Al-Qalam*, 31(1), 176–193. <https://doi.org/10.31969/alq.v31i1.1640>
- Supriyanto, A. S., . S., Suprayitno, E., Ekowati, V. M., Johari, F. B., Taquiuddin, M., Ridwan, M., Ali, N., & Hasibuan, L. (2024). Navigating the Interplay between Sustainable Leadership, Relational Capital, and Academic Performance in Higher Education. *International Journal of Religion*, 5(10), 2009–2019. <https://doi.org/10.61707/yrk92z02>
- Tassilova, N. A., Shashayeva, G. K., Yernazarova, Z. S., Akhmetova, A. I., Arynov, Z. M., & Karimova, Z. K. (2025). Communication Technologies in STEM Education: A Systematic Review. *Eurasia Journal of Mathematics, Science and Technology Education*, 21(10), em2719. <https://doi.org/10.29333/ejmste/17178>

- Taufik, O. A., Lisyawati, E., & Ahmad, A. C. (2025). Teacher Self-Efficacy as the Key to Success Inclusive Education : Case Study at Madrasahs in Banten of success. *Mozaic Islam Nusantara*, 11(2), 137–146. <https://doi.org/https://doi.org/10.47776/mozaic.v11i2.1804>
- Thien, L. M., & Liu, P. (2024). Linear and Nonlinear Relationships Between Instructional Leadership and Teacher Professional Learning through Teacher Self-Efficacy as a Mediator: A Partial Least Squares Analysis. *Humanities and Social Sciences Communications*, 11(1), 1–14. <https://doi.org/10.1057/s41599-023-02500-5>
- Thoyib, M., Karim, A., Ngo, B., & Djohan, M. W. (2024). Research University Program Development in Indonesian Islamic Higher Education: Strategic Management Perspective. *Edukasia : Jurnal Penelitian Pendidikan Islam*, 19(1), 135. <https://doi.org/10.21043/edukasia.v19i1.21653>
- Tracy, S. J. (2024). *Qualitative Research Methods: Collecting Evidence, Crafting Analysis, Communicating Impact*. John Wiley & Sons.
- Woodcock, S., Tournaki, N., & Ehrich, J. (2025). Teacher Self-Efficacy : Validating a New Measurement Scale to Capture the Elusive Construct. *British Educational Research Journal*, 9(March), 2229–2255. <https://doi.org/10.1002/berj.4163>
- Wu, M.-C., Majd, M., Tiao, W.-J., & Shahmirzadi, D. (2025). A Study on the Major Factors of Successful Entrepreneurial Leadership: Taking Perspectives of Islamic Culture. *Small Interprise Research*, 8(3), 1–18. <https://doi.org/https://doi.org/10.1080/13215906.2025.2492013>