aijis Afkâruna International Journal of Islamic Studies e-ISSN: 3025-8588

Afkaruna: International Journal of Islamic Studies (AIJIS)
Vol. 4 No. 2, October 2026, 344-373
https://ejournal.uiidalwa.ac.id/index.php/aijis

Learning Environment Interactions, Socio-Cognitive Processes, and Academic Resilience in Pesantren-Based Higher Education

Putri Sahida[1*], Taufiqurrahman[2] Hajer Albshkar[3]
[1,2] Universitas Ibrahimy, Situbondo, Indonesia
[3] University of Zawia, Zawiya, Libya
[1]baharisyahida@gmail.com, [2]taufiqrm3@gmail.com [3]h.elbashkar@zu.edu.ly
*Correspondence

DOI: 10.38073/aijis.v4i2.6316

Received: 15 July 2026	Revised: 20 August 2026	Accepted: 14 September 2026	Published: 30 October 2026

Abstract

As traditional Islamic boarding schools (pesantren) in Indonesia formalize legal-theological training (*tafaqquh fi al-din*), Ma'had Aly Salafiyah Syafi'iyah Sukorejo Situbondo pioneers a hybrid educational paradigm (*azdiwaj baina at-thariqah*), integrating classical seminary traditions with contemporary university methodologies. This study examines how this environment shapes socio-cognitive processes and academic resilience among *mahasantri*. Using a qualitative phenomenological single-case study grounded in socio-constructivist principles, data were collected through semi-structured interviews with twelve key informants, participant observations, and documentary analysis. Findings show that student-led deliberations (*musyawarah*) and senior peer-tutoring (*Ada'*) facilitate Vygotsky's Zone of Proximal Development (ZPD) and strengthen Bandura's self-efficacy, while positioning faculty as formal rectifiers (*mushahhih*). Furthermore, residential support systems involving mentors (*musyrif/musyrifah*) and peer solidarity help mitigate academic stress. Despite infrastructure limitations, noise pollution, and technological restrictions, *mahasantri* demonstrate spatial agency through flexible study patterns and collective endurance, transforming constraints into opportunities for self-regulated learning. This study demonstrates that communal discipline and moral etiquette (*'adab*) complement intellectual autonomy, bridging Western educational psychology and traditional Islamic pedagogy. It also provides an operational framework and policy recommendations for developing and accrediting pesantren-based higher education.

Keywords : *Ma'had Aly, Learning Environment, Socio-Cognitive Process, Academic Resilience, Pesantren Education.*

INTRODUCTION

Learning environments in modern higher education are increasingly recognized not merely as physical backdrops, but as dynamic socio-constructive ecosystems that

How to Cite this Article
Sahida, Putri, Taufiqurrahman, and Hajer Albshkar. "Learning Environment Interactions, Socio-Cognitive Processes, and Academic Resilience in Pesantren-Based Higher Education." *Afkaruna: International Journal of Islamic Studies (AIJIS)* 4, no. 2 (October 2026): 344–373. https://doi.org/10.38073/aijis.v4i2.6316.

Copyright © 2026 The Author(s)
This article is licensed under CC-BY-SA

actively shape student engagement, critical inquiry, and cognitive development[1,2]. Grounded in social constructivism, contemporary educational paradigm asserts that knowledge acquisition is an inherently interactive process where meaning is negotiated through dialogue, collaboration, and shared inquiry within a learning community[3,4]. In Islamic higher education, this interactive dynamic carries an added dimension: learning is inextricably linked to moral refinement, academic etiquette *(adab),* and spiritual responsibility[5]. Social interactions within Islamic pedagogical contexts serve not only to transmit intellectual content, but also to build student self-efficacy, reflective capacity, and holistic character[6]. Consequently, evaluating how physical spaces, peer interactions, and instructional methods converge is essential for understanding intellectual growth in specialized higher education settings.

In Indonesia, pesantren (traditional Islamic boarding schools) have long functioned as the bedrock of Islamic scholarship, institutionalizing character formation, and preparing religious elites[7]. To formalize and elevate traditional legal-theological training (tafaqquh fi al-din), Ma'had Aly was established as a higher education framework integrated within the national educational system[8]. As the pioneer and oldest institution of its kind, Ma'had Aly Salafiyah Syafi'iyah Sukorejo Situbondo operationalizes a unique hybrid paradigm known internally as azdiwaj baina at-thariqah a synthesis of traditional pesantren pedagogy *(at-thariqah at-taqlidiyyah)* and modern university methodologies *(at-thariqah at-jami'ah al-mu'ashirah)*[9]. In this setting, mahasantri (higher education seminary students) navigate a dual-status identity: they are enrolled in degree-granting higher education while remaining bound by strict boarding school regulations. Learning occurs through intense daily routines, classical text analysis *(halaqah),* nightly peer deliberations *(musyawarah),* and jurisprudence forums *(bahtsul masail),* creating a distinct academic culture.

Despite the growing body of literature on Islamic education, existing scholarship remains fragmented. Empirical studies on pesantren and Ma'had Aly predominantly

[1] John W. Bennett, *The Ecological Transition: Cultural Anthropology and Human Adaptation* (Oxford: Pergamon Press, 1976).
[2] I. S. Mansour, D., Korver, T., & Fraser, "The Diaphragm: An Underestimated Option in Contraception," *European Journal of Contraception and Reproductive Health Care* 15, no. 4 (2010): 233–40.
[3] H. Tajfel and J. C. Turner, "An Integrative Theory of Intergroup Conflict," in *The Social Psychology of Intergroup Relations*, ed. W. G. Austin and S. Worchel (Monterey, CA: Brooks-Cole, 1979).
[4] Yuberti, *Teori Pembelajaran Dan Pengembangan Bahan Ajar Dalam Pendidikan* (Anugerah Utama Raharja, 2014).
[5] A. Syar'i, "Filsafat Pendidikan Islam," *Inspiratif Pendidikan*, 2020, 1–4.
[6] Nelly Marhayati and Pasmah Chandra, *Pendekatan Kognitif Sosial Pada Pembelajaran Pendidikan Agama Islam*, 3, no. 2 (2020): 250–70.
[7] Azyumardi Azra, *Pendidikan Islam: Tradisi Dan Modernisasi Menuju Milenium Baru* (Logos Wacana Ilmu, 1999); Zamakhsyari Dhofier, *Tradisi Pesantren: Studi Tentang Pandangan Hidup Kyai* (1982); Muh. Idris Usman, *Pesantren Sebagai Lembaga Pendidikan Islam*, 14 (2013): 101–19.
[8] Michael Noetel et al., "Video Improves Learning in Higher Education: A Systematic Review," *Review of Educational Research* 91, no. 2 (April 2021): 204–36, https://doi.org/10.3102/0034654321990713.
[9] Ma'had Aly Salafiyah Syafi'iyah Sukorejo, "Sejarah Ma'had Aly Salafiyah Syafi'iyah Situbondo: Kader Ahli Fikih Dan Usul Fikih," preprint, Ma'had Aly Salafiyah Syafi'iyah Sukorejo, June 27, 2026.

analyze institutional transformation, curriculum design, or kiai leadership in isolation[10]. Other studies explore social interactions and academic resilience primarily within generic secondary boarding schools or undergraduate campuses[11]. Crucially, there is a scarcity of research examining how peer-led deliberations *(musyawarah),* physical spatial constraints (such as shared facilities with secondary-level traditional students), and early-stage technological restrictions function together as an integrated learning environment. How mahasantri adapt to these simultaneous socio-cognitive demands and physical limitations to build cognitive independence and academic resilience remains undertheorized.[12]

To bridge this empirical gap, this study offers a novel theoretical synthesis by integrating Vygotsky's (1978) Zone of Proximal Development and Social Constructivism (Wertsch, 1988), Bandura's (1997) Self-Efficacy Theory, Lave and Wenger's (1991) Communities of Practice, and psychological resilience frameworks[13]. By focusing on Ma'had Aly Sukorejo Situbondo, this research investigates the interactive mechanics of a pesantren-based higher education environment. Specifically, the inquiry examines how daily learning routines and mandatory nightly musyawarah sessions structure cognitive scaffolding and self-directed learning among mahasantri, while also evaluating how the socio-religious ecosystem cultivates psychological resilience and adaptive strategies amidst physical spatial constraints and technological limitations.

METHOD

This study utilized a qualitative phenomenological single-case study design incorporating Grounded Theory analytical principles[14]. A phenomenological paradigm was adopted to uncover the direct lived experiences of actors navigating the socio-cognitive dynamics and spatial realities of a pesantren-based higher education environment. Rather than measuring isolated variables, the design prioritized uncovering how mahasantri (higher education seminary students) and faculty members construct

[10] Khoiriyah and Ahmad Ali Riyadi, "Changes in the Tradition of Islamic Studies at Pesantren: A Grounded Theory Approach," *Ta'dib: Jurnal Pendidikan Islam* 28, no. 1 (2023): 63–71.
[11] Lalufiansyah Ringgi and Setyo Mustaqim Ariyanto, "Hubungan Interaksi Sosial Dengan Motivasi Belajar Pada Mahasiswa," *Hubungan Interaksi Sosial Dengan Motivasi Belajar Pada Mahasiswa* 2, no. 6 (2023): 2339; Z. Muna, "Hubungan Antara Dukungan Sosial Dengan Resiliensi Akademik Pada Santri Akhir Pesantren Modern Al-Zahrah," *INSIGHT: Jurnal Penelitian Psikologi* 2, no. 2 (2024): 303–14; Nur Azizah Aulia Rahma and Suryanto, "Peningkatan Kemandirian Santri Akselerasi Di Pondok Pesantren," *Edukatif: Jurnal Ilmu Pendidikan* 4, no. 1 (2022): 1111–18, https://doi.org/10.31004/edukatif.v4i1.1921.
[12] Baqi, Subkhana Adzim, "Perkembangan Pondok Pesantren Daruth Tholibiin Dan Implikasinya Terhadap Penanaman Nilai-Nilai Islam Di Kecamatan Lengkong, Kabupaten Nganjuk 1987-2022 | Islamic Insights Journal," accessed November 5, 2026, https://islamicinsights.ub.ac.id/index.php/insights/article/view/67.
[13] Edith H. Grotberg and Bernard van Leer Foundation, *A Guide to Promoting Resilience in Children: Strengthening the Human Spirit* (1995); Ann S. Masten, "Ordinary Magic: Resilience Processes in Development," *American Psychologist* 56, no. 3 (2001): 227; Sheldon Cohen and Thomas A. Wills, "Stress, Social Support, and the Buffering Hypothesis," *Psychological Bulletin* 98, no. 2 (1985): 310.
[14] John W. Creswell, *Qualitative Inquiry and Research Design: Choosing Among Five Traditions* (SAGE Publications, 1998); Barney G. Glaser, *Advances in the Methodology of Grounded Theory* (Sociology Press, 1978).

meaning from daily instructional routines, classical text study, and environmental constraints. The inquiry intentionally focused on the Marhalah Ula (M1) female cohort at Ma'had Aly Salafiyah Syafi'iyah Sukorejo, Situbondo, to capture micro-level socio-spatial interactions and cognitive adaptation strategies. The researcher acted as the primary instrument (key instrument), maintaining prolonged field engagement and communicative rapport to facilitate unobtrusive observation and authentic participant reflection between February and June 2026.

Data Sources and Participants

Data were gathered using a purposive sampling strategy across distinct administrative and academic tiers within the institution. Primary data comprised in-depth semi-structured interviews with twelve key informants divided into two functional groups: faculty members and administrators, and mahasantri. The informant pool included key institutional leadership and faculty members specifically the Executive Board Secretary (Katib) Ustadz Khoruddin (DNS-KH), senior lecturer Ustadz Ahmad Hamdi (DNS-AH), alongside lecturers and dormitory supervisors coded as DNS-MD, DNS-AR, DNS-SR, and DNS-DM. The student informant pool comprised seven female mahasantri across the M1 cohort, coded as MHS-NB, MHS-IA, MHS-FI, MHS-VN, MHS-FN, MHS-CP, and MHS-AS. Secondary data encompassed institutional documentation, including official curriculum handbooks, academic regulations, non-academic evaluation instruments tracking ubudiyah (worship) and discipline points, observational field notes, archival history from the official institution portal (maalysitubondo.ac.id), and student-produced scholarly publications. These publications included Gamis magazine a periodical authored by M1 students containing analytical essays and the *Tanwirul Afkar* bulletin, both serving as documentary evidence of applied jurisprudential reasoning and writing traditions.

Data Collection Procedures

Data collection proceeded through three integrated qualitative techniques, including semi-structured in-depth interviews, participant observations, and documentary analysis. Semi-structured interviews explored pedagogical strategies, non-academic evaluation systems, and personal learning challenges. Participant observations captured the daily academic cycle, including dawn text readings *(halaqah),* formal daytime lectures, mandatory nightly peer deliberations *(musyawarah),* and adaptive learning behaviors, such as late-night nomadic study habits in quiet corners of the complex to bypass ambient dormitory noise. Documentary analysis verified regulatory policies and student academic outputs against observational and interview data.

Data Analysis Framework

Data analysis followed an interactive qualitative model proposed by Miles[15] combined with a four-stage systematic coding framework[16] and theoretical sensitivity coding[17]. Raw textual data underwent initial line-by-line coding using gerunds to capture active processes. Constant comparative analysis was then applied during focused coding to consolidate concepts into four core analytical categories: instructional methods, daily disciplinary routines, social relationships, and environmental challenges. Theoretical coding synthesized these categories into overarching core themes. To achieve theoretical depth, Glaser's "Six Cs" coding family paradigm was operationalized directly within the narrative prose: intensive social relations, peer familiarity, and faculty mentorship served as the primary cause initiating active engagement within the structural context of Ma'had Aly Sukorejo, which is rooted in tafaqquh fi al-din and classical text *(turats)* study. Rigorous daily schedules and mandatory nightly musyawarah functioned as the prerequisite conditions for intellectual processing, while socio-religious support systems and peer solidarity formed the contingent buffering mechanisms enabling students to endure physical facility constraints and fatigue. The ultimate consequence of this structural interaction was the cultivation of cognitive independence, self-directed study habits, and enhanced jurisprudential efficacy among mahasantri.

Trustworthiness and Ethical Considerations

Methodological rigor and data validity were established using Lincoln and Guba's qualitative criteria for trustworthiness, encompassing credibility, transferability, confirmability, and dependability.[18] Credibility was established through prolonged field immersion over five months, from February to June 2026, alongside persistent observation of routine academic cycles. Triangulation was systematically implemented: source triangulation cross-verified student accounts against statements from faculty members and dormitory supervisors *(musyrif/musyrifah),* while method triangulation corroborated interview accounts with direct observational field notes and archived institutional handbooks. Transferability was ensured by providing thick, detailed descriptions of the institutional context, daily routines, and participant demographics, allowing readers to evaluate applicability to similar pesantren-based higher education settings. Confirmability was maintained through systematic member-checking debriefs with key informants to validate transcriptions and interpretive accuracy prior to final synthesis. Ethical standards were strictly observed through informed consent, voluntary participation, and full anonymization of student participants.

---

[15] M. B. Miles, A. M. Huberman, and J. Saldana, *Qualitative Data Analysis: A Methods Sourcebook* (Washington, DC: SAGE Publications, 2014).
[16] H. A. Qureshi, *Melampaui Konflik Paradigma: Instrumen Pengodean Empat Langkah Untuk Grounded Theory* (2017).
[17] Glaser, *Advances in the Methodology of Grounded Theory*.
[18] Y. S. Lincoln and E. G. Guba, *Naturalistic Inquiry* (Beverly Hills, CA: SAGE Publications, 1985).

This section should provide detailed information about the methods used in the whole of research process (identification of the research variables, subjects, instruments, and analysis techniques). The sufficient information is needed so that the information can be useful for further researchers. Quoting definitions directly from the books should be avoided in this section.

RESULTS AND DISCUSSION

Daily Discipline and Cognitive Scaffolding in Musyawarah Deliberations

The empirical evidence demonstrates that instructional delivery at Ma'had Aly Salafiyah Syafi'iyah Sukorejo is heavily anchored in student-centered group deliberations (musyawarah), which account for approximately 90% of overall instructional time in formal academic settings (MHS-VN). This approach effectively synthesizes traditional seminary learning styles with contemporary university seminar formats. Rather than functioning as primary sources of information who deliver continuous lectures, faculty members (muhadlir) intentionally assume the role of formal rectifiers (mushahhih) and evaluators. Lecturers step in at the conclusion of student presentations to validate textual interpretations, resolve unanswered inquiries, and correct analytical missteps (DNS-MD; MHS-CP). This structural shift aligns with Alison King's (1993) paradigm of transitioning "from sage on the stage to guide on the side," fundamentally altering the classroom power dynamic and forcing mahasantri to assume ownership over their cognitive processes.

This pedagogical structure operationalizes Vygotsky's (1978) Zone of Proximal Development (ZPD) and Social Constructivism (Wertsch, 1988; Podolskiy, 2012). Prior to the arrival of the lecturer, mahasantri independently initiate discussions, present arguments, and cross-reference classical jurisprudential treatises (kitab turats) alongside contemporary digital databases (DNS-AH; MHS-NB). Within this peer-dominated space, learning occurs through peer-to-peer cognitive scaffolding (Wood et al., 1976), wherein advanced students provide linguistic and hermeneutical cues to less proficient peers, pushing their collective understanding beyond what individual study permits. As noted by informants, musyawarah and jurisprudence debates (bahtsul masail) constitute the internal "soul" (ruh) of the institution (MHS-FN; DNS-KH). By wrestling with complex legal texts prior to faculty intervention, mahasantri build strong self-efficacy beliefs. Overcoming initial hesitation and defending legal deductions in public forums provides enactive mastery experiences, transforming anxiety into academic self-reliance.

Strict forum etiquette (adab al-bahs) serves as a non-cognitive regulatory mechanism within this socio-cognitive environment. Standard operating procedures dictate that audience members cannot interrupt presenters mid-argument; instead, critiques must follow structured sequences before final validation by the mushahhih (MHS-VN). This adherence to academic discipline ensures that intellectual debate remains rigorous, respectful, and focused on textual fidelity rather than personal confrontation.

Table 1. Comparison of Traditional Lecture Mode and Ma'had Aly Musyawarah Mode

Instructional Aspect	Traditional Bandongan / Lecture Mode	Ma'had Aly Musyawarah Mode	Socio-Cognitive Function & Theoretical Framework
Primary Knowledge Source	Faculty member / Lecturer	Student presenters & peer debate	Peer-mediated knowledge construction
Faculty Role	Dominant speaker / Information provider	Formal rectifier (*mushahhih*) & guide	"Guide on the side" facilitator
Student Engagement	Passive listening & note-taking	Active presentation, defense, & inquiry	Enactive mastery & self-efficacy generation
Textual Consultation	Single commentary source	Multi-reference cross-checking (*turats* & digital)	Cognitive flexibility & deep textual literacy
Session Closure	Summary of lecture content	Formal rectification (*tashih*) & clarification	Scaffolding closure within the Zone of Proximal Development

The cognitive autonomy fostered in musyawarah sessions is systematically reinforced by a rigorous daily schedule operating continuously from pre-dawn to late night. The instructional cycle begins immediately after Subuh prayers (05:15 WIB) with morning classical text readings (halaqah) and text recitations (Alfiyah), transitions into formal university lectures until mid-afternoon, and culminates in mandatory nightly musyawarah from 20:00 to 22:00 WIB. This highly structured routine instills self-regulated learning behaviors, embedding intellectual engagement directly into the rhythm of daily life.

To support junior students (Marhalah Ula/M1) experiencing cognitive overload or textual difficulty, the institution implements a peer-tutoring system known as Ada'. Operating in small circles of up to five students, senior graduate students (Marhalah Tsaniyah/M2) provide individualized mentorship late into the night. This structured peer tutoring serves as a secondary zone of proximal development, where the cognitive distance between senior tutors and junior learners is minimal, facilitating accessible explanations of complex Arabic grammar *(Nahw/Sharaf)* and jurisprudential rules *(Qawa'id Fiqhiyyah).*[19]

[19] Subkhana Adzim Baqi and Miftakhus Sifa' Bahrul Ulumiyah, "Evaluation And Analysis Of The Integration Of Islamic Values Through Religious Practices In Building Student Character Atmi Darul Hikmah Mojosari," *DAS CONFERENCE INTERNATIONAL SERIES* 2 (September 2025): 13–23.

Table 2. Daily Schedule and Pedagogical Dynamics of Ma'had Aly Students

Time Range (WIB)	Activity & Session	Pedagogical Format	Socio-Cognitive & Developmental Purpose
05:15 07:00	Post-Subuh *Halaqah* & *Alfiyah* Recitation	Classical text reading & choral recitation	Behavioral routine building & linguistic foundation
08:00 13:30	Formal Academic Lectures	Interactive presentation & lecturer *tashih*	Conceptual mapping & methodological grounding
20:00 22:00	Mandatory Nightly *Musyawarah*	Peer-led group debate & text analysis	ZPD operationalization & peer cognitive scaffolding
22:00 24:00	*Ada'* Peer-Led Small Group Tutoring	Mentorship by senior M2 graduate tutors	Micro-level scaffolding & affective support for M1 learners

The systematic cultivation of legal reasoning is further structured by specialized instructional frameworks, such as the "Four Steps to Mastering Legal Rules" (Empat Langkah Menguasai Kaidah Fikih) developed by senior faculty (DNS-KH). This framework guides students through a progression from choral recitation to real-world legal problem solving.

Table 3. Four-Step Instructional Framework for Mastering Legal Maxims (Qawa'id Fiqhiyyah) at Ma'had Aly Sukorejo

Step / Phase	Operational Activity	Student & Faculty Roles	Learning Outcome & Behavioral Target
Collective Recitation	Reciting legal maxims jointly for 5 7 minutes	Choral reading guided by faculty	Phonetic familiarization & rote memory initialization
Textual Presentation	Presenting passages from classical legal texts	Student presentation with peer debate	Application of maxims to classical jurisprudential texts
Behavioral Setoran	Individual oral examination of memorized maxims	One-on-one evaluation by faculty	Verbatim retention & behavioral accountability
Contemporary Analysis	Solving modern legal issues via maxims	Independent inquiry & group defense	High-order cognitive synthesis & contemporary legal competence

Academic evaluation extends beyond cognitive testing to include non-cognitive standards, specifically the complete oral recitation of classical texts like Alfiyah as a prerequisite for semester examinations, alongside continuous assessment of forum etiquette (adab). Furthermore, because faculty members maintain academic relationships with cohorts over extended multi-year periods, instructional feedback remains personalized and continuous. The synthesis of active peer deliberation, rigorous daily discipline, structured peer scaffolding, and multi-dimensional evaluation forces mahasantri to shift from passive recipients of knowledge into self-directed, resilient scholars.

Social Ecosystem, Stress Buffering, and Academic Resilience Amidst Environmental Constraints

The empirical findings demonstrate that academic survival and cognitive growth within Ma'had Aly Salafiyah Syafi'iyah Sukorejo are fundamentally sustained by a dense socio-relational ecosystem. Within this boarding school ecosystem, *mahasantri* interact with three distinct tiers of educators: *muhadlir* (visiting scholars and domain experts who deliver periodic guest lectures), *mudarris* (regular academic faculty who conduct weekly coursework), and musyrif/musyrifah (resident mentors who provide 24/7 residential

oversight) (DNS-MD). The resident mentors fulfill a pivotal socio-emotional role, acting as loco parentis who assist students with both academic challenges and non-academic grievances, such as financial management and personal well-being (DNS-MD; DNS-AR).

Faculty-student relationships are characterized by emotional accessibility and informal fluidity while remaining strictly governed by traditional academic etiquette (adab al-'alim wa al-muta'allim) (MHS-NB). Furthermore, living together 24/7 in shared dormitories fosters deep peer solidarity (ikatan batin), which functions as a primary social asset preventing academic attrition and drop-outs (MHS-NB; MHS-AS). In the framework of Communities of Practice (Lave & Wenger, 1991), this relational ecosystem facilitates legitimate peripheral participation, allowing junior mahasantri to internalize academic norms through continuous immersion. According to the Stress Buffering Hypothesis (Cohen & Wills, 1985), dense socio-religious support networks buffer individuals against acute academic stress, transforming potentially overwhelming workloads into shared collective endurance.

Table 4. Three-Tier Educator Roles and Relational Dynamics in the Ma'had Aly Social Ecosystem

Educator Tier	**Functional Role & Time Commitment**	**Relational Profile & Scope of Support**	**Theoretical & Developmental Impact**
Muhadir (Visiting Scholar)	Periodic guest lecturer & domain expert	Formal, high-authority intellectual guidance	Benchmark for advanced academic & jurisprudential mastery
Mudarris (Regular Lecturer)	Weekly course instructor & discussion supervisor	Fluid, accessible, and peer-like yet grounded in *adab*	Intellectual facilitation & formal text rectification (*tashih*)
Musyrif / *Musyrifah* (Resident Mentor)	24/7 residential mentor & cohort coordinator	*Loco parentis*, holistic academic & pastoral counselor	Immediate emotional buffer & relational stress reduction
Peer Cohort (*Taman Santri*)	24/7 co-resident learning community	Deep emotional bond (*ikatan batin*) & shared survival network	Collective resilience & attrition mitigation

A notable empirical nuance emerges regarding gendered participation styles within formal musyawarah sessions. Observations and interview data indicate marked behavioral contrasts between male and female classes. Male musyawarah sessions are

characterized by direct, competitive, and confrontational debates ("babat habis"), where students readily polarize into pro and contra factions to test argumentative strength (MHS-FI). Conversely, female musyawarah sessions exhibit a more cautious, empathetic, and consensus-oriented tone. Female mahasantri frequently exercise emotional self-restraint (sungkan) and pause during peer corrections to reflect rather than immediately counter-debate (DNS-MD; MHS-IA; MHS-FI). Senior faculty confirm that while institutional standards and analytical expectations remain identical across genders (DNS-KH), female students prioritize relational harmony and collective psychological safety (Markus & Kitayama, 1991). This gendered dynamic highlights how socio-cultural norms shape the expression of cognitive discourse within a shared pedagogical model.

Table 5. Comparative Analysis of Gendered Academic Deliberation and Interactional Styles

Interactional Dimension	**Male Class Deliberation (Putra)**	**Female Class Deliberation (Putri)**	**Underlying Socio-Cognitive Mechanism**
Debate Posture	Highly ambitious, direct, & confrontational ("babat habis")	Cautious, reflective, & consensus-seeking	Conflict-driven vs. harmony-driven inquiry
Response to Peer Critique	Immediate counter-argumentation & factional debate	Quiet pause, self-reflection, & emotional processing	Independent self vs. interdependent/relational self (Markus & Kitayama, 1991)
Relational Consideration	Low priority on emotional friction during debate	High consideration of peer feelings (*sungkan*)	Preservation of psychological safety within peer circle
Faculty Facilitation Role	Moderator controlling debate temperature	Encouraging voice & reassuring constructive feedback	Gender-sensitive pedagogical scaffolding

In addition to cognitive demands, mahasantri navigate substantial physical and environmental challenges. Infrastructure at Ma'had Aly Sukorejo remains minimal and basic (DNS-DM; MHS-CP). Female classrooms directly adjoin administrative offices, commercial cooperatives, and dining halls, exposing students to persistent noise pollution during lectures and examination periods (MHS-FI). Furthermore, shared spatial proximity with secondary-level traditional students (santri reguler) creates schedule friction, as mahasantri operate on inverted sleep and study cycles ("they sleep, we study; they study, we sleep") (MHS-AS). Dormitory libraries also lack specialized research

literature, while personal laptop and internet access remain restricted during early semesters.

To maintain academic momentum amidst these physical constraints and personal fatigue (MHS-IA), mahasantri develop active coping strategies. First, students adopt a "nomadic" learning pattern (pola belajar nomaden), seeking quiet study environments in non-conventional spaces such as dormitory courtyards, emergency stairwells, rooftop decks, or late-night study sessions post-23:00 WIB (MHS-FI). Second, as formal peer-tutoring (Ada') tapers off in senior semesters, students undergo a mental survival transformation, shifting from reliance on structured institutional support toward autonomous self-study and text verification (MHS-FI). Third, collective solidarity acts as a shared coping mechanism, embedding individual endurance within a mutual commitment to graduate together without falling behind (MHS-AS).

Table 6. Environmental Stressors, Adaptive Coping Strategies, and Resilience Constructs

Environmental / Physical Stressor	**Empirical Manifestation at Campus**	**Adaptive Coping Strategy**	**Psychological Resilience Construct**
Noise Pollution & Shared Space	Classrooms adjacent to busy commercial cooperatives & *santri reguler* facilities	Nomadic Learning Pattern: Relocating to stairwells, rooftops, & post-23:00 WIB study	Environmental mastery & spatial agency
Infrastructure & Library Limits	Carpeted floor seating (*lesehan*) & limited *turats* collections in dorms	Multi-Source Cross-Checking: Borrowing texts across cohorts & maximizing library visits	Resourcefulness & problem-solving efficacy
Academic Fatigue & Routine Load	Dense 24-hour cycle from pre-dawn to late night	Collective Solidarity: Shared peer accountability & mutual emotional encouragement	Social buffering & relational endurance
Tapering of Formal Mentorship	Reduction of *Ada'* peer tutoring in senior cohorts	Mental Survival Shift: Transitioning to independent textual verification	Autonomous self-efficacy & resilience maturity

These adaptive strategies demonstrate that psychological resilience among mahasantri is not a static trait, but an active, developmental process built through environmental negotiation and social support. External social support (I Have) provided

by mentors and peers nurtures internal identity (I Am) as custodians of Islamic scholarship, which ultimately yields individual self-efficacy and adaptive competence (I Can). Physical spatial limitations and technological restrictions do not paralyze student learning; rather, they serve as a catalyst that forces mahasantri to cultivate cognitive independence, emotional endurance, and creative spatial adaptation within traditional Islamic higher education.

Synthesis of the Hybrid Model: Communities of Practice Bridging Traditional and Contemporary Pedagogies

The educational ecosystem of Ma'had Aly Salafiyah Syafi'iyah Sukorejo operationalizes a hybrid educational paradigm (azdiwaj baina at-thariqah), effectively synthesizing traditional seminary traditions (at-thariqah at-taqlidiyyah) with contemporary university methodologies (at-thariqah at-jami'ah al-mu'ashirah). Analyzed through Lave and Wenger's Communities of Practice (CoP) framework, the institution functions as an integrated learning community defined by a shared domain of knowledge, a joint enterprise, and a collective repertoire. The domain is anchored in tafaqquh fi al-din (deep legal-theological mastery), while the joint enterprise involves navigating the dual demands of traditional boarding school discipline alongside formal degree-granting higher education. The shared repertoire consists of classical commentaries (turats), jurisprudential maxims *(qawa'id fiqhiyyah),* specialized linguistic skills, and formal debate protocols *(adab al-bahs).* Within this framework, azdiwaj is not merely an administrative compromise, but a socio-cultural synthesis where traditional text-based authority and modern critical inquiry mutually reinforce one another.

The trajectory of mahasantri development within this hybrid model illustrates the structural mechanics of legitimate peripheral participation. Entering as novice learners in the *Marhalah Ula* (M1) cohort, students initially occupy peripheral positions characterized by foundational text recitations, morning halaqah, and reliance on structured peer-tutoring *(Ada')*. As they internalize both the moral etiquette (adab) of at-thariqah at-taqlidiyyah and the analytical inquiry of *at-thariqah at-jami'ah al-mu'ashirah,* their participation evolves toward full community membership. Traditional practices such as verbatim maxim retention (setoran) and deferring to the lecturer as a formal rectifier (mushahhih) provide the linguistic precision and historical grounding necessary for intellectual confidence. Simultaneously, contemporary methods such as independent paper presentations, multi-reference digital cross-checking, and contributing to institutional journals like *Gamis* and *Tanwirul Afkar* propel students into active creators of legal discourse who apply classical jurisprudence to modern societal issues.

Crucially, this Community of Practice resolves potential tensions between traditional textual fidelity and modern academic autonomy. Rather than treating classical pesantren routines and university-level critical thinking as contradictory paradigms, the institutional culture of Ma'had Aly Sukorejo positions them as complementary phases of cognitive maturation. Traditional insistence on textual rigor and faculty validation safeguards intellectual continuity, preventing ungrounded legal deduction, while modern research

frameworks prevent intellectual stagnation by challenging students to address contemporary socio-legal realities. By embedding modern academic inquiry within the daily rhythms of traditional seminary life, Ma'had Aly Sukorejo demonstrates that a pesantren-based higher education institution can produce scholars who are simultaneously rooted in classical Islamic heritage *(turats)* and adaptively competent in modern academic discourse.[20]

Socio-Cognitive Scaffolding, Self-Regulated Learning, and Academic Resilience in Pesantren-Based Higher Education

The empirical findings demonstrate that the instructional ecosystem at Ma'had Aly Salafiyah Syafi'iyah Sukorejo successfully transforms mahasantri from passive knowledge recipients into highly autonomous, self-regulated learners. This cognitive transformation is driven by three interconnected structural pillars: the overwhelming reliance on student-led group deliberations *(musyawarah)* that reposition faculty members as formal rectifiers *(mushahhih);* a multi-tiered socio-cognitive scaffolding architecture operating through nightly peer debates and specialized senior mentorship *(Ada');* and the continuous internalization of a 24-hour daily discipline anchored in traditional academic etiquette *(adab al-bahs).* The convergence of structured behavioral routine and intellectual autonomy fosters cognitive self-reliance, critical inquiry, and legal reasoning self-efficacy among students preparing for scholarly leadership.

These empirical insights both corroborate and extend contemporary international literature on Self-Regulated Learning (SRL) and learner support systems in higher education. The findings align closely with meta-analytic evidence demonstrating that perceived social support significantly enhances students' self-regulated learning capacities and academic engagement. Within Ma'had Aly, social support provided by resident mentors *(musyrif)* and senior peer tutors *(Ada')* serves as an essential social precursor to SRL development. Furthermore, the deliberate shift of faculty roles from primary lecturers to formal evaluators who grant students the autonomy to wrestle with complex legal texts prior to intervention mirrors the autonomy support framework highlighted by Mammadov and Schroeder[21], which posits that instructor autonomy support directly drives positive learning outcomes, self-determination, and intrinsic motivation.

The structured integration of self-regulation strategies across the continuous 24-hour residential routine confirms broader empirical consensus identifying cognitive, metacognitive, and motivational self-regulation as primary determinants of academic performance in higher education settings (Amelia & Suyasa, 2025; Luo & Zhou, 2024;

[20] Alpin Harianto and Afdhalul Akhyar, "The Historiography of Hadith during the Mutaqaddimin Period (2nd-4th Centuries AH): From Early Codification to Methodological Consolidation," *Afkaruna: International Journal of Islamic Studies (AIJIS)* 4, no. 2 (October 2026): 303–20, https://doi.org/10.38073/aijis.v4i2.5688.

[21] S. Mammadov and K. Schroeder, "A Meta-Analytic Review of the Relationships between Autonomy Support and Positive Learning Outcomes," *Contemporary Educational Psychology* 75 (2023), https://doi.org/10.1016/j.cedpsych.2023.102235.

Zhao et al., 2025). Effective motivational self-regulation strategies play a crucial role in maintaining student effort amidst demanding academic schedules (Learning and Individual Differences, 2024). Moreover, the institutional mechanism of withholding immediate faculty intervention until peer debate reaches a resolution exemplifies the concept of optimal regulation support articulated by Radović et al. (2024), preventing over-scaffolding and encouraging deep cognitive processing. Crucially, while existing SRL literature heavily emphasizes individualistic, digital, or blended learning environments (Alhazbi et al., 2024; Luo & Zhou, 2024; Zhao et al., 2025), this study offers a novel empirical contribution by demonstrating that robust SRL mechanisms can be effectively cultivated within a communal, traditional seminary matrix through the synergy of communal behavioral discipline, oral tradition, and moral etiquette.

The development of cognitive independence and academic endurance within this ecosystem can be interpreted through several complementary socio-cognitive frameworks. Operating within Vygotsky's (1978) Zone of Proximal Development (ZPD) and social constructivist paradigms (Podolskiy, 2012; Wertsch, 1988), the nightly musyawarah sessions and Ada' mentorship function as collective scaffolding spaces where advanced peers provide linguistic and methodological guidance to junior learners (Wood et al., 1976). From Bandura's (1997) self-efficacy perspective, public argumentation and successful resolution of jurisprudential dilemmas generate enactive mastery experiences, converting initial academic anxiety into domain-specific self-efficacy. This dynamic is facilitated by the faculty's adoption of a "guide on the side" role (King, 1993), which forces students into higher-order analytical inquiry. Furthermore, traditional academic etiquette (adab al-bahs) serves as an essential non-cognitive self-regulatory mechanism, ensuring that intense intellectual debate remains intellectually rigorous, emotionally safe, and respectful within the community.

The theoretical and empirical findings of this study yield significant implications across multiple domains. Practically, the study provides an operational blueprint for traditional Islamic seminaries and residential higher education institutions seeking to integrate classical text mastery with modern academic rigor without sacrificing institutional heritage. From a policy perspective, national education authorities and institutional administrators should design quality assurance frameworks that evaluate not only standardized cognitive outputs, but also institutionalize peer-led scaffolding networks, structured group deliberations, and non-cognitive character evaluations. Theoretically, this research expands global educational psychology by demonstrating that self-regulated learning and socio-cognitive development are fully compatible with and indeed enhanced by communal, tradition-anchored religious educational environments.

The empirical findings of this study demonstrate that the educational ecosystem at Ma'had Aly Salafiyah Syafi'iyah Sukorejo operates as an integrated socio-cognitive environment that successfully transforms mahasantri from passive listeners into autonomous, self-regulated learners and resilient scholars. This developmental shift is driven by a fundamental pedagogical re-orientation wherein student-led deliberations *(musyawarah)* dominate instructional time, effectively shifting faculty members

(muhadlir) from authoritative information providers into formal rectifiers *(mushahhih)* and facilitators. Cognitive self-reliance is systematically sustained through a continuous 24-hour routine that combines classical text analysis *(halaqah),* daytime university lectures, mandatory nightly debates, and senior peer tutoring *(Ada')*. Furthermore, the institution's dense socio-relational ecosystem encompassing resident mentors *(musyrif/musyrifah)* and peer cohorts buffers environmental stressors such as ambient noise pollution, minimal infrastructure, and technological restrictions. Faced with these constraints, mahasantri exercise active spatial agency through nomadic study patterns and collective solidarity, cultivating an enduring capacity for self-directed learning and jurisprudential reasoning.

Social Ecosystem, Stress Buffering, and Academic Resilience Amidst Environmental Constraints

The empirical insights from Ma'had Aly Sukorejo both corroborate and extend contemporary global literature across educational psychology, self-regulated learning, Communities of Practice, and academic resilience. The finding that structured daily routines and instructor facilitation foster cognitive autonomy aligns directly with extensive meta-analytic research confirming that perceived social support and instructor autonomy support are critical drivers of student self-regulation, intrinsic motivation, and positive academic outcomes[22]. The systematic execution of cognitive, metacognitive, and motivational self-regulation strategies throughout the 24-hour cycle reinforces global literature identifying self-regulated learning (SRL) strategies as primary determinants of academic performance in higher education[23]. Effective motivational self-regulation strategies play a crucial role in maintaining student effort amidst demanding academic schedules[24]. Moreover, withholding immediate faculty intervention until peer debate reaches a resolution exemplifies the concept of optimal regulation support articulated by Radović[25], which demonstrates that avoiding over-scaffolding encourages deeper cognitive processing. Crucially, while mainstream higher education literature primarily

[22] Mammadov and Schroeder; Z. Martínez-López et al., "Perceived Social Support and Self-Regulated Learning: A Systematic Review and Meta-Analysis," *International Journal of Educational Research Open* 5 (2023), https://doi.org/10.1016/j.ijedro.2023.100291.

[23] A. R. Amelia and P. T. Y. S. Suyasa, "The Impacts of Self-Regulated Learning on University Students: A Scoping Review," *International Journal of Application on Social Science and Humanities* 3, no. 2 (2025), https://doi.org/10.24912/ijassh.v3i2.35510; R. Z. Luo and Y. L. Zhou, "The Effectiveness of Self-Regulated Learning Strategies in Higher Education Blended Learning: A Five Years Systematic Review," *Journal of Computer Assisted Learning* 40, no. 6 (2024): 3005–29, https://doi.org/10.1111/jcal.13052; C. Villa-Torrano et al., "Using Learning Design and Learning Analytics to Promote, Detect and Support Socially-Shared Regulation of Learning: A Systematic Literature Review," *Computers & Education* 232 (2025), https://doi.org/10.1016/j.compedu.2025.105261.

[24] Silvia Murgia et al., "Relationship between Speech Intelligibility and Comprehension in the Presence of Poor Acoustics and Poor Voice Quality," *The Journal of the Acoustical Society of America* 153, no. 3_supplement (March 2023): A172–A172, https://doi.org/10.1121/10.0018561.

[25] S. Radović et al., "Investigating the Effects of Different Levels of Students' Regulation Support on Learning Process and Outcome: In Search of the Optimal Level of Support for Self-Regulated Learning," *Computers & Education* 215 (2024), https://doi.org/10.1016/j.compedu.2024.105041.

evaluates SRL within digital, analytics-driven, or blended learning environments[26], this study offers a novel empirical contribution by proving that robust SRL mechanisms can be effectively cultivated within a traditional, faith-based residential matrix through communal discipline, oral traditions, and moral etiquette.

Furthermore, the peer-dominated deliberative structure of musyawarah and the Ada' tutoring system resonate strongly with international literature on peer collaboration and socially-shared regulation of learning in higher education[27]. The institutional architecture of Ma'had Aly exemplifies an advanced Community of Practice within higher education, matching benchmarked CoP frameworks observed across European and North American universities[28]. By embedding academic reflection directly within daily residential living, the institution expands traditional CoP theory into specialized higher education settings, demonstrating how authentic workplace-like legal reasoning and textual assessment occur within seminarian communities[29].

The dense relational network formed by resident mentors and peer cohorts strongly supports broader psychological literature identifying perceived social support, positive teacher support, and institutional solidarity as vital stress-buffering mechanisms that mitigate academic burnout, reduce anxiety, and boost academic performance[30]. These findings confirm that scale-validated social support dimensions such as emotional, informational, and instrumental assistance are essential for university students navigating rigorous residential environments[31]. These insights align closely with contextual empirical studies conducted across Indonesian Islamic boarding schools and universities,

[26] S. Alhazbi et al., "Using Learning Analytics to Measure Self-Regulated Learning: A Systematic Review of Empirical Studies in Higher Education," *Journal of Computer Assisted Learning* 40, no. 4 (2024): 1658–74, https://doi.org/10.1111/jcal.12982; Luo and Zhou, "The Effectiveness of Self-Regulated Learning Strategies in Higher Education Blended Learning: A Five Years Systematic Review"; Villa-Torrano et al., "Using Learning Design and Learning Analytics to Promote, Detect and Support Socially-Shared Regulation of Learning: A Systematic Literature Review."

[27] V. Schürmann, N. Marquardt, and D. Bodemer, "Conceptualization and Measurement of Peer Collaboration in Higher Education: A Systematic Review," *Small Group Research* 55, no. 1 (2024), https://doi.org/10.1177/10464964231200191; Villa-Torrano et al., "Using Learning Design and Learning Analytics to Promote, Detect and Support Socially-Shared Regulation of Learning: A Systematic Literature Review."

[28] N. Messi, "A Benchmarking Study on Existing Communities of Practice in Higher Education Institutions: A Comparison between Europe and US," *Innovations in Education and Teaching International* 62, no. 1 (2025): 180–89, https://doi.org/10.1080/14703297.2024.2319186.

[29] J. Tummons, "Learning, Instruction and Assessment in the Workplace: Applying and Augmenting Communities of Practice Theory," *Studies in Continuing Education* 47, no. 2 (2025): 403–17, https://doi.org/10.1080/0158037X.2024.2372490.

[30] Z. Cai and Q. Meng, "Academic Resilience and Academic Performance of University Students: The Mediating Role of Teacher Support," *Frontiers in Psychology* 16 (2025), https://doi.org/10.3389/fpsyg.2025.1463643; S. Dong, H. Ge, and W. Su, "Enhancing Psychological Well-Being in College Students: The Mediating Role of Perceived Social Support and Resilience in Coping Styles," *BMC Psychology* 12 (2024), https://doi.org/10.1186/s40359-024-01902-7; K. Li, H. Wang, and O. L. Siu, "How and When Resilience Can Boost Student Academic Performance: A Weekly Diary Study on the Roles of Self-Regulation Behaviors, Grit, and Social Support," *Journal of Happiness Studies* 25 (2024), https://doi.org/10.1007/s10902-024-00749-4.

[31] T. C. V Bruno et al., "Development and Validity Evidence on the Scale of Perceived Social Support for University Students (EPSSEU) during the Period of Social Restrictions," *BMC Public Health* 24 (2024), https://doi.org/10.1186/s12889-024-18882-3.

which identify social support, academic self-efficacy, and spiritual patience *(shabru)* as decisive buffers against academic stress and burnout[32], alongside administrative models that foster student disciplinary character[33]. Additionally, the adaptive strategies developed by mahasantri specifically their nomadic study habits and late-night spatial renegotiations provide a compelling counter-perspective to digital divide literature. While global studies emphasize systemic vulnerabilities created by digital infrastructure gaps in online learning[34], mahasantri demonstrate high contextual adaptation and digital resilience[35], leveraging physical resourcefulness, multi-source textual cross-checking, and peer collaboration to maintain intellectual rigor.

The theoretical mechanics underlying the success of Ma'had Aly Sukorejo's hybrid educational model *(azdiwaj baina at-thariqah)* can be explained through several converging socio-cognitive and psychological paradigms. Operating within Vygotsky's (1978) Zone of Proximal Development (ZPD) and social constructivist paradigms [36], the nightly musyawarah sessions and Ada' tutoring circles function as an operational ZPD where senior students and more competent peers provide linguistic *(Nahw/Sharaf)* and hermeneutical *(Usul Fiqh)* cues to junior learners[37]. This collective scaffolding allows junior mahasantri to perform complex textual analyses beyond their individual capabilities. As learners internalize these analytical frameworks, external scaffolding naturally tapers off (fading), driving the transition toward autonomous cognitive processing. The transition of faculty roles from dominant speakers to formal rectifiers *(mushahhih)* reflects Alison King's "guide on the side" model. By requiring mahasantri to independently present, defend, and debate classical legal passages prior to validation, the institution structures repeated opportunities for enactive mastery experiences the most potent source of self-efficacy[38]. Successfully defending a complex legal argument in front

[32] A. Basith et al., "The Role of Social Support and Academic Resilience on Students' Academic Stress," *COUNS-EDU: The International Journal of Counseling and Education* 10, no. 2 (2025): 20–31, https://doi.org/10.23916/00202501051520; Hamka et al., "Social Support, Self-Efficacy and Spirituality in Reducing Academic Stress of Students in Indonesia," *Health Education* 125, no. 4 (2025): 535–49, https://doi.org/10.1108/HE-09-2024-0107; S. Nurhidayah, M. Hanoum, and I. Arlinda, "Academic Self Efficacy and Social Support for Academic Burnout in Islamic Boarding School Students," *Educenter: Jurnal Ilmiah Pendidikan* 3, no. 3 (2024): 323–29, https://doi.org/10.55904/educenter.v3i3.1396; K. Qotrunnada and N. U. Hasanat, "The Roles of Patience and Social Support on the Academic Stress of Undergraduate Students," *Gadjah Mada Journal of Psychology* 11, no. 2 (2025), https://doi.org/10.22146/gamajop.90412.

[33] Asep Syarifuddin Hidayat, Nur Rohim Yunus, and Muhammad Ishar Helmi, "Contribution of Fair Law Enforcement in Reducing the Culture of Corruption," *International Journal of Social Science And Human Research* 06, no. 04 (April 2023), https://doi.org/10.47191/ijsshr/v6-i4-49.

[34] Y. Tang and H. Tseng, "Exploring Academic Librarians' Perception of OER through the Lens of Technology Acceptance Model," *The Journal of Academic Librarianship* 49, no. 5 (2023): 102769.

[35] S. P. Hammond et al., "Children's, Parents' and Educators' Understandings and Experiences of Digital Resilience: A Systematic Review and Meta-Ethnography," *New Media & Society* 26, no. 5 (2024): 3018–42, https://doi.org/10.1177/14614448241232065.

[36] Andrey I. Podolskiy, "Vygotsky's Zone of Proximal Development," in *Encyclopedia of the Sciences of Learning*, no. 4 (2012), 2:3485–87; James V Wertsch, *Vygotsky and the Social Formation of Mind* (Harvard University Press, 1988).

[37] David Wood, Jerome S. Bruner, and Gail Ross, "The Role of Tutoring in Problem Solving," *Journal of Child Psychology and Psychiatry* 17, no. 2 (1976): 89–100.

[38] Albert Bandura, *Self-Efficacy: The Exercise of Control* (New York: W.H. Freeman and Company, 1997).

of peers and receiving ultimate validation from the mushahhih transforms student anxiety into robust academic confidence and self-regulated learning capability.[39]

Viewed through Lave and Wenger's framework, Ma'had Aly Sukorejo forms a mature Community of Practice wherein novice mahasantri undergo legitimate peripheral participation, gradually internalizing the shared repertoire of classical texts (turats), legal maxims *(qawa'id fiqhiyyah),* and formal debate etiquette *(adab al-bahs).* Traditional academic etiquette *(adab)* serves as a non-cognitive self-regulatory mechanism, ensuring that intense intellectual debate remains respectful, constructive, and oriented toward truth rather than personal ego. The psychological endurance demonstrated by mahasantri amid physical constraints, noise pollution, and demanding routines is explained by Cohen and Wills' (1985) Stress Buffering Hypothesis and Grotberg's (1995) resilience framework. External social resources (I Have) provided by mentors and peers reinforce students' internalized identity as custodians of religious scholarship (I Am), which fosters personal problem-solving efficacy (I Can), converting environmental stress into shared resilience maturity[40]. Furthermore, the gender-differentiated dynamics observed in female classes reflect Markus and Kitayama's (1991) interdependent self-construal theory; female mahasantri prioritize collective psychological safety and peer emotional well-being (sungkan), demonstrating that self-regulated learning and critical inquiry can be effectively expressed through consensus-oriented, relational harmony rather than aggressive debate[41].

The theoretical and empirical findings of this study yield significant implications across multiple domains. Practically, this study provides an operational blueprint for traditional Islamic seminaries, residential colleges, and boarding higher education institutions seeking to integrate classical text mastery with modern academic rigor without sacrificing institutional heritage. Institutional leaders can replicate multi-tiered peer tutoring *(Ada')* and student-led musyawarah structures to foster self-regulated learning, reduce student attrition, and ease instructional burdens on faculty. From a policy perspective, national education authorities and quality assurance agencies should adopt holistic accreditation frameworks that move beyond rigid metrics focused solely on physical infrastructure or formal classroom hours. Guidelines should formally recognize peer-led scaffolding networks, mandatory residential deliberation forums, and non-cognitive character evaluations *(adab)* as legitimate, credit-bearing indicators of educational quality and institutional effectiveness. Theoretically, this research bridges a major gap between Western-centric educational psychology and traditional Islamic

[39] Siti Khoiroh, Risna Risna, and Sari Febriani, "The Traces of Al-Ghazali's Philosophical Thought in the Fiqh Framework of Sheikh Nawawi al-Bantani's Kasifatussaja in the 19th Century," *Afkaruna: International Journal of Islamic Studies (AIJIS)* 3, no. 1 (September 2025): 85–96, https://doi.org/10.38073/aijis.v3i1.3324.

[40] Masten, "Ordinary Magic: Resilience Processes in Development"; Muhammad Bagus' Aufus Shofi and Nurul Hidayah, "Resiliensi Psikologis Santri Tahfidz Dalam Menghadapi Tekanan Akademik Dual-Curriculum Di PP Hidayatul Qurro Pikatan Wonodadi Kabupaten Blitar," *Arus Jurnal Sosial Dan Humaniora* 6, no. 1 (2026): 752–60.

[41] Ryan Patrick O'Meara, "Communities of Practice and Legitimate Peripheral Participation: Teacher Learning in Social and Situated Contexts" (Old Dominion University, 2020).

pedagogy by proving that Self-Regulated Learning (SRL), Zone of Proximal Development (ZPD), and Communities of Practice (CoP) operate effectively within a 24-hour traditional pesantren environment. This deconstructs the false dichotomy between traditional religious education and modern academic autonomy, demonstrating that communal discipline, moral etiquette *(adab)*, and traditional lisan practices serve as the foundational bedrock for cultivating resilient, self-directed, and critically minded scholars.

Self-Regulated Learning, Social Support Systems, and Student Autonomy in a Traditional Pesantren Matrix

The empirical findings of this study demonstrate that the educational ecosystem at Ma'had Aly Salafiyah Syafi'iyah Sukorejo operates as an integrated socio-cognitive environment that successfully transforms mahasantri from passive listeners into autonomous, self-regulated learners and resilient scholars. This developmental shift is driven by a fundamental pedagogical re-orientation wherein student-led deliberations *(musyawarah)* dominate instructional time, effectively shifting faculty members *(muhadlir)* from authoritative information providers into formal rectifiers *(mushahhih)* and facilitators. Cognitive self-reliance is systematically sustained through a continuous 24-hour routine that combines classical text analysis *(halaqah),* daytime university lectures, mandatory nightly debates, and senior peer tutoring *(Ada')*. Furthermore, the institution's dense socio-relational ecosystem encompassing resident mentors *(musyrif/musyrifah)* and peer cohorts buffers environmental stressors such as ambient noise pollution, minimal infrastructure, and technological restrictions. Faced with these constraints, mahasantri exercise active spatial agency through nomadic study patterns and collective solidarity, cultivating an enduring capacity for self-directed learning and jurisprudential reasoning.[42]

The empirical insights from Ma'had Aly Sukorejo both corroborate and extend contemporary global literature across educational psychology, self-regulated learning, Communities of Practice, and academic resilience. The finding that structured daily routines and instructor facilitation foster cognitive autonomy aligns directly with extensive meta-analytic research confirming that perceived social support and instructor autonomy support are critical drivers of student self-regulation, intrinsic motivation, and positive academic outcomes[43]. The systematic execution of cognitive, metacognitive, and motivational self-regulation strategies throughout the 24-hour cycle reinforces global literature identifying self-regulated learning (SRL) strategies as primary determinants of academic performance in higher education[44]. Effective motivational self-regulation

[42] Retno Endah Kusuma Wardani and Nasrulloh Nasrulloh, "The Role of Hadith in Shaping Digital Spirituality: An Analysis of Texts on Controlling the Gaze and the Heart," *Pelita: Jurnal Studi Islam Mahasiswa UII Dalwa* 3, no. 1 (November 2025): 93–106, https://doi.org/10.38073/pelita.v3i1.3649.

[43] Mammadov and Schroeder, "A Meta-Analytic Review of the Relationships between Autonomy Support and Positive Learning Outcomes"; Martínez-López et al., "Perceived Social Support and Self-Regulated Learning: A Systematic Review and Meta-Analysis."

[44] Amelia and Suyasa, "The Impacts of Self-Regulated Learning on University Students: A Scoping Review"; Luo and Zhou, "The Effectiveness of Self-Regulated Learning Strategies in Higher Education

strategies play a crucial role in maintaining student effort amidst demanding academic schedules. Moreover, withholding immediate faculty intervention until peer debate reaches a resolution exemplifies the concept of optimal regulation support articulated by Radovic[45], which demonstrates that avoiding over-scaffolding encourages deeper cognitive processing. Crucially, while mainstream higher education literature primarily evaluates SRL within digital, analytics-driven, or blended learning environments[46], this study offers a novel empirical contribution by proving that robust SRL mechanisms can be effectively cultivated within a traditional, faith-based residential matrix through communal discipline, oral traditions, and moral etiquette.

Furthermore, the peer-dominated deliberative structure of musyawarah and the Ada' tutoring system resonate strongly with international literature on peer collaboration and socially-shared regulation of learning in higher education[47]. The institutional architecture of Ma'had Aly exemplifies an advanced Community of Practice within higher education, matching benchmarked CoP frameworks observed across European and North American universities. By embedding academic reflection directly within daily residential living, the institution expands traditional CoP theory into specialized higher education settings, demonstrating how authentic workplace-like legal reasoning and textual assessment occur within seminarian communities.

The dense relational network formed by resident mentors and peer cohorts strongly supports broader psychological literature identifying perceived social support, positive teacher support, and institutional solidarity as vital stress-buffering mechanisms that mitigate academic burnout, reduce anxiety, and boost academic performance[48]. These findings confirm that scale-validated social support dimensions such as emotional, informational, and instrumental assistance are essential for university students navigating rigorous residential environments. These insights align closely with contextual empirical studies conducted across Indonesian Islamic boarding schools and universities, which identify social support, academic self-efficacy, and spiritual patience *(shabru)* as decisive buffers against academic stress and burnout, alongside administrative models that foster student disciplinary character. Additionally, the adaptive strategies developed by mahasantri specifically their nomadic study habits and late-night spatial renegotiations provide a compelling counter-perspective to digital divide literature. While global studies

Blended Learning: A Five Years Systematic Review"; A. H. AL-Qadri et al., "The Prevalence of the Academic Learning Difficulties: An Observation Tool," *Heliyon* 7, no. 10 (2021), https://doi.org/10.1016/j.heliyon.2021.e08164.

[45] Radović et al., "Investigating the Effects of Different Levels of Students' Regulation Support on Learning Process and Outcome: In Search of the Optimal Level of Support for Self-Regulated Learning."

[46] Alhazbi et al., "Using Learning Analytics to Measure Self-Regulated Learning: A Systematic Review of Empirical Studies in Higher Education."

[47] Schürmann, Marquardt, and Bodemer, "Conceptualization and Measurement of Peer Collaboration in Higher Education: A Systematic Review"; Villa-Torrano et al., "Using Learning Design and Learning Analytics to Promote, Detect and Support Socially-Shared Regulation of Learning: A Systematic Literature Review."

[48] K. Litwic-Kaminska et al., "Resilience, Positivity and Social Support as Perceived Stress Predictors among University Students," *International Journal of Environmental Research and Public Health* 20, no. 19 (2023), https://doi.org/10.3390/ijerph20196892.

emphasize systemic vulnerabilities created by digital infrastructure gaps in online learning, *mahasantri* demonstrate high contextual adaptation and digital resilience, leveraging physical resourcefulness, multi-source textual cross-checking, and peer collaboration to maintain intellectual rigor[49].

The theoretical mechanics underlying the success of Ma'had Aly Sukorejo's hybrid educational model (azdiwaj baina at-thariqah) can be explained through several converging socio-cognitive and psychological paradigms. Operating within Vygotsky's (1978) Zone of Proximal Development (ZPD)[50] and social constructivist paradigms[51], the nightly musyawarah sessions and Ada' tutoring circles function as an operational ZPD where senior students and more competent peers provide linguistic (Nahw/Sharaf) and hermeneutical *(Usul Fiqh)* cues to junior learners[52]. This collective scaffolding allows junior mahasantri to perform complex textual analyses beyond their individual capabilities. As learners internalize these analytical frameworks, external scaffolding naturally tapers off (fading), driving the transition toward autonomous cognitive processing. The transition of faculty roles from dominant speakers to formal rectifiers (mushahhih) reflects Alison King's "guide on the side" model[53]. By requiring mahasantri to independently present, defend, and debate classical legal passages prior to validation, the institution structures repeated opportunities for enactive mastery experiences the most potent source of self-efficacy. Successfully defending a complex legal argument in front of peers and receiving ultimate validation from the mushahhih transforms student anxiety into robust academic confidence and self-regulated learning capability.

Viewed through Lave and Wenger's framework, Ma'had Aly Sukorejo forms a mature Community of Practice wherein novice mahasantri undergo legitimate peripheral participation[54], gradually internalizing the shared repertoire of classical texts *(turats)*, legal maxims *(qawa'id fiqhiyyah)*, and formal debate etiquette (adab al-bahs). Traditional academic etiquette *(adab)* serves as a non-cognitive self-regulatory mechanism, ensuring that intense intellectual debate remains respectful, constructive, and oriented toward truth rather than personal ego. The psychological endurance demonstrated by mahasantri amid physical constraints, noise pollution, and demanding routines is explained by Cohen and Wills' Stress Buffering Hypothesis and Grotberg's resilience framework[55]. External social resources (I Have) provided by mentors and peers reinforce students' internalized identity as custodians of religious scholarship (I Am), which fosters personal problem-solving efficacy (I Can), converting environmental stress into shared resilience

[49] Hammond et al., "Children's, Parents' and Educators' Understandings and Experiences of Digital Resilience: A Systematic Review and Meta-Ethnography."
[50] Podolskiy, "Vygotsky's Zone of Proximal Development."
[51] Podolskiy.
[52] Wood, Bruner, and Ross, "The Role of Tutoring in Problem Solving."
[53] Lana Bridi et al., "The Influences of Faith on Illness Representations and Coping Procedures of Mental and Cognitive Health among Aging Arab Refugees: A Qualitative Study," *Frontiers in Psychiatry* 14 (2023), https://doi.org/10.3389/fpsyt.2023.1083367.
[54] Jean Lave and Etienne Wenger, *Situated Learning: Legitimate Peripheral Participation* (Cambridge University Press, 1991).
[55] Cohen and Wills, "Stress, Social Support, and the Buffering Hypothesis."

maturity[56]. Furthermore, the gender-differentiated dynamics observed in female classes reflect Markus and Kitayama's interdependent self-construal theory; female mahasantri prioritize collective psychological safety and peer emotional well-being (sungkan), demonstrating that self-regulated learning and critical inquiry can be effectively expressed through consensus-oriented, relational harmony rather than aggressive debate[57].

The theoretical and empirical findings of this study yield significant implications across multiple domains. Practically, this study provides an operational blueprint for traditional Islamic seminaries, residential colleges, and boarding higher education institutions seeking to integrate classical text mastery with modern academic rigor without sacrificing institutional heritage.[58] Institutional leaders can replicate multi-tiered peer tutoring *(Ada')* and student-led musyawarah structures to foster self-regulated learning, reduce student attrition, and ease instructional burdens on faculty. From a policy perspective, national education authorities and quality assurance agencies should adopt holistic accreditation frameworks that move beyond rigid metrics focused solely on physical infrastructure or formal classroom hours. Guidelines should formally recognize peer-led scaffolding networks, mandatory residential deliberation forums, and non-cognitive character evaluations *(adab)* as legitimate, credit-bearing indicators of educational quality and institutional effectiveness. Theoretically, this research bridges a major gap between Western-centric educational psychology and traditional Islamic pedagogy by proving that Self-Regulated Learning (SRL), Zone of Proximal Development (ZPD), and Communities of Practice (CoP) operate effectively within a 24-hour traditional pesantren environment. This deconstructs the false dichotomy between traditional religious education and modern academic autonomy, demonstrating that communal discipline, moral etiquette *(adab)*, and traditional oral practices serve as the foundational bedrock for cultivating resilient, self-directed, and critically minded scholars.

CONCLUSION

This study concludes that the learning ecosystem at Ma'had Aly Salafiyah Syafi'iyah Sukorejo Situbondo effectively synthesizes traditional seminary scholarship *(at-thariqah at-taqlidiyyah)* with contemporary higher education standards *(at-thariqah at-jami'ah al-mu'ashirah)* through a hybrid educational paradigm *(azdiwaj baina at-thariqah).* The institutional dominance of student-led group deliberations *(musyawarah)* and senior peer-tutoring *(Ada')* operationalizes the Zone of Proximal Development (ZPD) and self-efficacy frameworks by re-orienting faculty roles into formal rectifiers *(mushahhih),* while a dense residential social ecosystem *(musyrif/musyrifah* and peer cohorts) acts as a stress buffer that fosters academic resilience and spatial agency amid

[56] Grotberg and Foundation, *A Guide to Promoting Resilience in Children: Strengthening the Human Spirit*.
[57] Hazel R. Markus and Shinobu Kitayama, "Culture and the Self: Implications for Cognition, Emotion, and Motivation," *Psychological Review* 98, no. 2 (1991): 224.
[58] Fathima Shaheema Mk, Fathima Shirin Pm, and Hassan Shareef Kp, "Zahrawiyya Program as a Model of Integrated Islamic Education for Women in Malabar," *Afkaruna: International Journal of Islamic Studies (AIJIS)* 4, no. 2 (October 2026): 205–26, https://doi.org/10.38073/aijis.v4i2.5816.

physical and technological constraints. Ultimately, these findings make a significant theoretical contribution by bridging Western educational psychology specifically Self-Regulated Learning (SRL) and Communities of Practice (CoP) with Islamic pedagogy, deconstructing the assumption that traditional religious discipline and moral etiquette *(adab)* obstruct intellectual autonomy, and proving instead that they serve as the foundational bedrock for cultivating resilient, self-directed, and critical scholars.

Practically and policy-wise, this research offers an operational blueprint for traditional Islamic higher education institutions seeking to modernize their curricula without compromising institutional heritage, while urging education policymakers to expand accreditation metrics beyond physical infrastructure to formally incorporate peer-led scaffolding networks, communal deliberations, and non-cognitive character evaluations *(adab)*. Nevertheless, this qualitative single-case study focusing on a female student cohort presents inherent empirical generalizability limitations. Consequently, future research should undertake multi-site comparative studies across diverse Ma'had Aly campuses in Southeast Asia, employ longitudinal quantitative designs to track cognitive gain and psychological well-being over time, and execute comprehensive cross-gender comparative analyses.

DECLARATION OF AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

In the preparation of this manuscript, the author(s) utilized Gemini (Google AI) to assist with English language editing, grammatical refinement, and structural formatting of the narrative text. All outputs were subsequently reviewed and revised by the author(s), who assume full responsibility for the final content of the publication.

AUTHOR CONTRIBUTION STATEMENT

Putri Sahida: Conceptualization, Methodology, Field Data Collection, Formal Analysis, Writing Original Draft. Taufiqurrahman: Data Curation, Formal Analysis, Theoretical Synthesis, Writing Review & Editing. Hajer Albshkar: Validation, Contextual Literature Review, Writing Review & Editing..

FUNDING STATEMENT

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

DATA AVAILABILITY STATEMENT

The qualitative data supporting the findings of this study (interview transcripts, observational field notes, and document analysis records) are available from the corresponding author upon reasonable request, subject to ethical considerations and privacy protection for the study participants.

DECLARATION OF INTERESTS

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

ACKNOWLEDGMENT

The authors express their sincere gratitude to the institutional leadership, faculty members (*muhadlir* and *mudarris*), residential mentors (*musyrif* and *musyrifah*), and *mahasantri* of Ma'had Aly Salafiyah Syafi'iyah Sukorejo Situbondo for their invaluable support, openness, and cooperation throughout the research process.

REFERENCES

Alhazbi, S., A. Al-Ali, A. Tabassum, A. Al-Ali, A. Al-Emadi, T. Khattab, and M. A. Hasan. "Using Learning Analytics to Measure Self-Regulated Learning: A Systematic Review of Empirical Studies in Higher Education." *Journal of Computer Assisted Learning* 40, no. 4 (2024): 1658–74. https://doi.org/10.1111/jcal.12982.

AL-Qadri, A. H., W. Zhao, M. Li, M. H. Al-khresheh, and A. Boudouaia. "The Prevalence of the Academic Learning Difficulties: An Observation Tool." *Heliyon* 7, no. 10 (2021). https://doi.org/10.1016/j.heliyon.2021.e08164.

Amelia, A. R., and P. T. Y. S. Suyasa. "The Impacts of Self-Regulated Learning on University Students: A Scoping Review." *International Journal of Application on Social Science and Humanities* 3, no. 2 (2025). https://doi.org/10.24912/ijassh.v3i2.35510.

Azra, Azyumardi. *Pendidikan Islam: Tradisi Dan Modernisasi Menuju Milenium Baru*. Logos Wacana Ilmu, 1999.

Bandura, Albert. *Self-Efficacy: The Exercise of Control*. New York: W.H. Freeman and Company, 1997.

Baqi, Subkhana Adzim. "Perkembangan Pondok Pesantren Daruth Tholibiin Dan Implikasinya Terhadap Penanaman Nilai-Nilai Islam Di Kecamatan Lengkong, Kabupaten Nganjuk 1987-2022 | Islamic Insights Journal." Accessed November 5, 2026. https://islamicinsights.ub.ac.id/index.php/insights/article/view/67.

Baqi, Subkhana Adzim, and Miftakhus Sifa' Bahrul Ulumiyah. "Evaluation And Analysis Of The Integration Of Islamic Values Through Religious Practices In Building Student Character Atmi Darul Hikmah Mojosari." *DAS CONFERENCE INTERNATIONAL SERIES* 2 (September 2025): 13–23.

Basith, A., S. Fitriyadi, I. Suwanto, D. Mariana, Kamaruddin, and M. S. Rahman. "The Role of Social Support and Academic Resilience on Students' Academic Stress." *COUNS-EDU: The International Journal of Counseling and Education* 10, no. 2 (2025): 20–31. https://doi.org/10.23916/00202501051520.

Bennett, John W. *The Ecological Transition: Cultural Anthropology and Human Adaptation*. Oxford: Pergamon Press, 1976.

Bridi, Lana, Dahlia A. Kaki, Behnan Albahsahli, Dania Abu Baker, Xara Khan, Raghad Aljenabi, Nissma Bencheikh, Melody K. Schiaffino, Alison A. Moore, and Tala Al-Rousan. "The Influences of Faith on Illness Representations and Coping Procedures of Mental and Cognitive Health among Aging Arab Refugees: A

Qualitative Study." *Frontiers in Psychiatry* 14 (2023). https://doi.org/10.3389/fpsyt.2023.1083367.

Bruno, T. C. V, I. D. D. Custódio, L. A. A. de Menezes-Junior, A. L. Meireles, A. C. M. Neves, S. M. Barroso, and J. C. C. Carraro. "Development and Validity Evidence on the Scale of Perceived Social Support for University Students (EPSSEU) during the Period of Social Restrictions." *BMC Public Health* 24 (2024). https://doi.org/10.1186/s12889-024-18882-3.

Cai, Z., and Q. Meng. "Academic Resilience and Academic Performance of University Students: The Mediating Role of Teacher Support." *Frontiers in Psychology* 16 (2025). https://doi.org/10.3389/fpsyg.2025.1463643.

Cohen, Sheldon, and Thomas A. Wills. "Stress, Social Support, and the Buffering Hypothesis." *Psychological Bulletin* 98, no. 2 (1985): 310.

Creswell, John W. *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. SAGE Publications, 1998.

Dhofier, Zamakhsyari. *Tradisi Pesantren: Studi Tentang Pandangan Hidup Kyai*. 1982.

Dong, S., H. Ge, and W. Su. "Enhancing Psychological Well-Being in College Students: The Mediating Role of Perceived Social Support and Resilience in Coping Styles." *BMC Psychology* 12 (2024). https://doi.org/10.1186/s40359-024-01902-7.

Glaser, Barney G. *Advances in the Methodology of Grounded Theory*. Sociology Press, 1978.

Grotberg, Edith H., and Bernard van Leer Foundation. *A Guide to Promoting Resilience in Children: Strengthening the Human Spirit*. 1995.

Hamka, K. Khatimah, Sunariyo, D. Putriana, and Sudarman. "Social Support, Self-Efficacy and Spirituality in Reducing Academic Stress of Students in Indonesia." *Health Education* 125, no. 4 (2025): 535–49. https://doi.org/10.1108/HE-09-2024-0107.

Hammond, S. P., G. Polizzi, C. Duddy, Y. Bennett-Grant, and K. J. Bartholomew. "Children's, Parents' and Educators' Understandings and Experiences of Digital Resilience: A Systematic Review and Meta-Ethnography." *New Media & Society* 26, no. 5 (2024): 3018–42. https://doi.org/10.1177/14614448241232065.

Harianto, Alpin, and Afdhalul Akhyar. "The Historiography of Hadith during the Mutaqaddimin Period (2nd-4th Centuries AH): From Early Codification to Methodological Consolidation." *Afkaruna: International Journal of Islamic Studies (AIJIS)* 4, no. 2 (October 2026): 303–20. https://doi.org/10.38073/aijis.v4i2.5688.

Hidayat, Asep Syarifuddin, Nur Rohim Yunus, and Muhammad Ishar Helmi. "Contribution of Fair Law Enforcement in Reducing the Culture of Corruption." *International Journal of Social Science And Human Research* 06, no. 04 (April 2023). https://doi.org/10.47191/ijsshr/v6-i4-49.

Khoiriyah, and Ahmad Ali Riyadi. "Changes in the Tradition of Islamic Studies at Pesantren: A Grounded Theory Approach." *Ta'dib: Jurnal Pendidikan Islam* 28, no. 1 (2023): 63–71.

Khoiroh, Siti, Risna Risna, and Sari Febriani. "The Traces of Al-Ghazali's Philosophical Thought in the Fiqh Framework of Sheikh Nawawi al-Bantani's Kasifatussaja in the 19th Century." *Afkaruna: International Journal of Islamic Studies (AIJIS)* 3, no. 1 (September 2025): 85–96. https://doi.org/10.38073/aijis.v3i1.3324.

Lave, Jean, and Etienne Wenger. *Situated Learning: Legitimate Peripheral Participation*. Cambridge University Press, 1991.

Li, K., H. Wang, and O. L. Siu. "How and When Resilience Can Boost Student Academic Performance: A Weekly Diary Study on the Roles of Self-Regulation Behaviors, Grit, and Social Support." *Journal of Happiness Studies* 25 (2024). https://doi.org/10.1007/s10902-024-00749-4.

Lincoln, Y. S., and E. G. Guba. *Naturalistic Inquiry*. Beverly Hills, CA: SAGE Publications, 1985.

Litwic-Kaminska, K., A. Błachnio, I. Kapsa, Ł. Brzeziński, J. Kopowski, M. Stojković, D. Hinić, et al. "Resilience, Positivity and Social Support as Perceived Stress Predictors among University Students." *International Journal of Environmental Research and Public Health* 20, no. 19 (2023). https://doi.org/10.3390/ijerph20196892.

Luo, R. Z., and Y. L. Zhou. "The Effectiveness of Self-Regulated Learning Strategies in Higher Education Blended Learning: A Five Years Systematic Review." *Journal of Computer Assisted Learning* 40, no. 6 (2024): 3005–29. https://doi.org/10.1111/jcal.13052.

Mammadov, S., and K. Schroeder. "A Meta-Analytic Review of the Relationships between Autonomy Support and Positive Learning Outcomes." *Contemporary Educational Psychology* 75 (2023). https://doi.org/10.1016/j.cedpsych.2023.102235.

Mansour, D., Korver, T., & Fraser, I. S. "The Diaphragm: An Underestimated Option in Contraception." *European Journal of Contraception and Reproductive Health Care* 15, no. 4 (2010): 233–40.

Marhayati, Nelly, and Pasmah Chandra. *Pendekatan Kognitif Sosial Pada Pembelajaran Pendidikan Agama Islam*. 3, no. 2 (2020): 250–70.

Markus, Hazel R., and Shinobu Kitayama. "Culture and the Self: Implications for Cognition, Emotion, and Motivation." *Psychological Review* 98, no. 2 (1991): 224.

Martínez-López, Z., S. Nouws, E. Villar, M. E. Mayo, and C. Tinajero. "Perceived Social Support and Self-Regulated Learning: A Systematic Review and Meta-Analysis." *International Journal of Educational Research Open* 5 (2023). https://doi.org/10.1016/j.ijedro.2023.100291.

Masten, Ann S. "Ordinary Magic: Resilience Processes in Development." *American Psychologist* 56, no. 3 (2001): 227.

Messi, N. "A Benchmarking Study on Existing Communities of Practice in Higher Education Institutions: A Comparison between Europe and US." *Innovations in Education and Teaching International* 62, no. 1 (2025): 180–89. https://doi.org/10.1080/14703297.2024.2319186.

Miles, M. B., A. M. Huberman, and J. Saldana. *Qualitative Data Analysis: A Methods Sourcebook*. Washington, DC: SAGE Publications, 2014.

Mk, Fathima Shaheema, Fathima Shirin Pm, and Hassan Shareef Kp. "Zahrawiyya Program as a Model of Integrated Islamic Education for Women in Malabar." *Afkaruna: International Journal of Islamic Studies (AIJIS)* 4, no. 2 (October 2026): 205–26. https://doi.org/10.38073/aijis.v4i2.5816.

Muna, Z. "Hubungan Antara Dukungan Sosial Dengan Resiliensi Akademik Pada Santri Akhir Pesantren Modern Al-Zahrah." *INSIGHT: Jurnal Penelitian Psikologi* 2, no. 2 (2024): 303–14.

Murgia, Silvia, Bisma N. Choudhry, Mary M. Flaherty, and Pasquale Bottalico. "Relationship between Speech Intelligibility and Comprehension in the Presence of Poor Acoustics and Poor Voice Quality." *The Journal of the Acoustical Society of America* 153, no. 3_supplement (March 2023): A172–A172. https://doi.org/10.1121/10.0018561.

Noetel, Michael, Shantell Griffith, Oscar Delaney, Taren Sanders, Philip Parker, Borja del Pozo Cruz, and Chris Lonsdale. "Video Improves Learning in Higher Education: A Systematic Review." *Review of Educational Research* 91, no. 2 (April 2021): 204–36. https://doi.org/10.3102/0034654321990713.

Nurhidayah, S., M. Hanoum, and I. Arlinda. "Academic Self Efficacy and Social Support for Academic Burnout in Islamic Boarding School Students." *Educenter: Jurnal Ilmiah Pendidikan* 3, no. 3 (2024): 323–29. https://doi.org/10.55904/educenter.v3i3.1396.

O'Meara, Ryan Patrick. "Communities of Practice and Legitimate Peripheral Participation: Teacher Learning in Social and Situated Contexts." Old Dominion University, 2020.

Podolskiy, Andrey I. "Vygotsky's Zone of Proximal Development." In *Encyclopedia of the Sciences of Learning*, 2:3485–87. no. 4. 2012.

Qotrunnada, K., and N. U. Hasanat. "The Roles of Patience and Social Support on the Academic Stress of Undergraduate Students." *Gadjah Mada Journal of Psychology* 11, no. 2 (2025). https://doi.org/10.22146/gamajop.90412.

Qureshi, H. A. *Melampaui Konflik Paradigma: Instrumen Pengodean Empat Langkah Untuk Grounded Theory*. 2017.

Radović, S., N. Seidel, D. Menze, and R. Kasakowskij. "Investigating the Effects of Different Levels of Students' Regulation Support on Learning Process and Outcome: In Search of the Optimal Level of Support for Self-Regulated Learning." *Computers & Education* 215 (2024). https://doi.org/10.1016/j.compedu.2024.105041.

Rahma, Nur Azizah Aulia, and Suryanto. "Peningkatan Kemandirian Santri Akselerasi Di Pondok Pesantren." *Edukatif: Jurnal Ilmu Pendidikan* 4, no. 1 (2022): 1111–18. https://doi.org/10.31004/edukatif.v4i1.1921.

Ringgi, Lalufiansyah, and Setyo Mustaqim Ariyanto. "Hubungan Interaksi Sosial Dengan Motivasi Belajar Pada Mahasiswa." *Hubungan Interaksi Sosial Dengan Motivasi Belajar Pada Mahasiswa* 2, no. 6 (2023): 2339.

Schürmann, V., N. Marquardt, and D. Bodemer. "Conceptualization and Measurement of Peer Collaboration in Higher Education: A Systematic Review." *Small Group Research* 55, no. 1 (2024). https://doi.org/10.1177/10464964231200191.

Shofi, Muhammad Bagus' Aufus, and Nurul Hidayah. "Resiliensi Psikologis Santri Tahfidz Dalam Menghadapi Tekanan Akademik Dual-Curriculum Di PP Hidayatul Qurro Pikatan Wonodadi Kabupaten Blitar." *Arus Jurnal Sosial Dan Humaniora* 6, no. 1 (2026): 752–60.

Sukorejo, Ma'had Aly Salafiyah Syafi'iyah. "Sejarah Ma'had Aly Salafiyah Syafi'iyah Situbondo: Kader Ahli Fikih Dan Usul Fikih." Preprint, Ma'had Aly Salafiyah Syafi'iyah Sukorejo, June 27, 2026.

Syar'i, A. "Filsafat Pendidikan Islam." *Inspiratif Pendidikan*, 2020, 1–4.

Tajfel, H., and J. C. Turner. "An Integrative Theory of Intergroup Conflict." In *The Social Psychology of Intergroup Relations*, edited by W. G. Austin and S. Worchel. Monterey, CA: Brooks-Cole, 1979.

Tang, Y., and H. Tseng. "Exploring Academic Librarians' Perception of OER through the Lens of Technology Acceptance Model." *The Journal of Academic Librarianship* 49, no. 5 (2023): 102769.

Tummons, J. "Learning, Instruction and Assessment in the Workplace: Applying and Augmenting Communities of Practice Theory." *Studies in Continuing Education* 47, no. 2 (2025): 403–17. https://doi.org/10.1080/0158037X.2024.2372490.

Usman, Muh. Idris. *Pesantren Sebagai Lembaga Pendidikan Islam*. 14 (2013): 101–19.

Villa-Torrano, C., W. Suraworachet, E. Gómez-Sánchez, J. I. Asensio-Pérez, M. L. Bote-Lorenzo, A. Martínez-Monés, Q. Zhou, M. Cukurova, and Y. Dimitriadis. "Using Learning Design and Learning Analytics to Promote, Detect and Support Socially-Shared Regulation of Learning: A Systematic Literature Review." *Computers & Education* 232 (2025). https://doi.org/10.1016/j.compedu.2025.105261.

Wardani, Retno Endah Kusuma, and Nasrulloh Nasrulloh. "The Role of Hadith in Shaping Digital Spirituality: An Analysis of Texts on Controlling the Gaze and the Heart." *Pelita: Jurnal Studi Islam Mahasiswa UII Dalwa* 3, no. 1 (November 2025): 93–106. https://doi.org/10.38073/pelita.v3i1.3649.

Wertsch, James V. *Vygotsky and the Social Formation of Mind*. Harvard University Press, 1988.

Wood, David, Jerome S. Bruner, and Gail Ross. "The Role of Tutoring in Problem Solving." *Journal of Child Psychology and Psychiatry* 17, no. 2 (1976): 89–100.

Yuberti. *Teori Pembelajaran Dan Pengembangan Bahan Ajar Dalam Pendidikan*. Anugerah Utama Raharja, 2014.