

Towards an Islamic Self-Regulated Learning (I-SRL) Framework: Integrating Az-Zarnuji's Epistemology with Contemporary Learning Theory

(Menuju Kerangka Islamic Self-Regulated Learning (I-SRL): Integrasi Epistemologi Az-Zarnuji dengan Teori Pembelajaran Kontemporer)

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Article Information

Received : June 01, 2026

Revised : July 03, 2026

Accepted : July 07, 2026

Publish : July 21, 2026

Please cite this article in APA Style as:

Husniah, R., Natalia, P. D., Asisah, S., & Hakim, A. (2026). Towards an Islamic Self-Regulated Learning (I-SRL) framework: Integrating Az-Zarnuji's epistemology with contemporary learning theory (*Menuju kerangka Islamic Self-Regulated Learning (I-SRL): Integrasi epistemologi Az-Zarnuji dengan teori pembelajaran kontemporer*). *Journal of Islamic Education and Intellectual Discourse (JIED)*, 2(2), 210–229. <https://doi.org/10.37304/jied.v2i02.26090>

ABSTRACT

Purpose: This study aims to analyze the integration of Self-Regulated Learning (SRL) theory with the epistemology of learning in *Ta'lim al-Muta'allim* by *Burhan al-Islam* Az-Zarnuji. **Method:** Employing a qualitative library research design with a comparative approach, this study examines relevant classical and contemporary literature through conceptual and thematic analysis to identify the epistemological convergence and distinction between SRL theory and Az-Zarnuji's learning framework. **Findings:** The findings reveal that while conventional SRL emphasizes psychological and cognitive mechanisms, *Ta'lim al-Muta'allim* foregrounds a profound ethical and spiritual epistemology. They converge on the necessity of self-regulation; however, the study finds that Az-Zarnuji's framework significantly extends conventional SRL through fundamental dimensions such as *niyyah* (intention), *adab*, ethical self-discipline, and spirituality. **Future Research:** Therefore, this study proposes the Islamic Self-Regulated Learning (I-SRL) model as a conceptual framework that integrates SRL principles with Islamic values, including intention, *adab*, and the blessing of knowledge. **Implications:** Theoretically, this study contributes significantly to Islamic educational scholarship by formalizing the Islamic Self-Regulated Learning (I-SRL) model. This framework redefines modern autonomous learning by ensuring that cognitive-regulative strategies are deeply rooted in moral responsibility and the ultimate pursuit of *barakah* (the blessing of knowledge), thus providing a comprehensive pedagogical model for twenty-first-century education. **Novelty:** The novelty of this study lies in the theoretical development of the I-SRL model. Rather than merely conducting a comparative analysis, this study pioneers a structural synthesis where classical Islamic concepts (*niyyah*, *adab*,

ethical discipline, and *barakah*) are operationalized to theoretically expand and elevate conventional SRL within contemporary Islamic education contexts.

Keywords: Self-Regulated Learning (SRL); Ta'lim al-Muta'allim; Islamic Self-Regulated Learning (I-SRL); self-regulation; Islamic education.

ABSTRAK

Tujuan: Penelitian ini bertujuan untuk menganalisis integrasi teori Self-Regulated Learning (SRL) dengan epistemologi pembelajaran dalam kitab Ta'lim al-Muta'allim karya Burhan al-Islam Az-Zarnuji. **Metode:** Dengan menggunakan desain penelitian kualitatif berbasis studi kepustakaan dan pendekatan komparatif, penelitian ini mengkaji literatur klasik dan kontemporer yang relevan melalui analisis konseptual dan tematik untuk mengidentifikasi titik temu serta perbedaan epistemologis antara teori SRL dan kerangka pembelajaran Az-Zarnuji. **Hasil:** Temuan penelitian menunjukkan bahwa meskipun SRL konvensional menekankan mekanisme psikologis dan kognitif, Ta'lim al-Muta'allim menonjolkan epistemologi etis dan spiritual yang mendalam. Keduanya memiliki titik temu pada pentingnya regulasi diri; namun, studi ini menemukan bahwa kerangka pemikiran Az-Zarnuji secara signifikan memperluas SRL konvensional melalui dimensi-dimensi fundamental seperti niat (*niyyah*), adab, disiplin diri etis, dan spiritualitas. **Kontribusi:** Secara teoretis, penelitian ini memberikan kontribusi yang signifikan terhadap keilmuan pendidikan Islam melalui perumusan model Islamic Self-Regulated Learning (I-SRL). Kerangka kerja ini mendefinisikan ulang pembelajaran mandiri modern dengan memastikan bahwa strategi regulatif-kognitif berakar kuat pada tanggung jawab moral dan pencarian keberkahan ilmu (*barakah*), sehingga menghasilkan model pedagogis yang komprehensif untuk pendidikan abad ke-21. **Kebaruan:** Kebaruan penelitian ini terletak pada pengembangan teoretis model I-SRL. Alih-alih sekadar melakukan analisis komparatif, studi ini memelopori sintesis struktural di mana konsep-konsep Islam klasik (*niat*, *adab*, *disiplin etis*, dan *keberkahan*) dioperasionalkan untuk secara teoretis memperluas dan mengangkat SRL konvensional di dalam konteks pendidikan Islam kontemporer. **Penelitian Selanjutnya:** Oleh karena itu, penelitian ini mengusulkan model Islamic Self-Regulated Learning (I-SRL) sebagai kerangka konseptual yang mengintegrasikan prinsip-prinsip SRL dengan nilai-nilai Islam, seperti *niat*, *adab*, dan *keberkahan ilmu*.

Kata Kunci: Self-Regulated Learning (SRL); Ta'lim al-Muta'allim; Islamic Self-Regulated Learning (I-SRL); Regulasi Diri; Pendidikan Islam.

Introduction

The changing landscape of twenty-first-century education has positioned autonomous learning, self-management, and metacognitive awareness as core competencies that determine learners' academic success. The OECD (2024) identifies self-regulation as a pivotal construct in the Learning Compass 2030 framework, emphasizing meta-learning as a transformative competence that enables learners to understand, direct, and improve their own learning processes. In line with this position, UNESCO (2024) stresses that technology-based educational transformation must remain centered on human agency, critical thinking, and learners' capacity to manage learning responsibly. Thus, self-

regulation in learning is no longer merely an additional attribute; it is a foundational necessity that determines resilience and learning effectiveness in an increasingly open and hyper-digitalized educational environment.

Within educational psychology, this autonomy is predominantly conceptualized through the framework of Self-Regulated Learning (SRL). Foundational literature (Zimmerman, 2002; Pintrich, 2004; Panadero, 2017) comprehensively maps SRL as an active, complex system where learners set goals, monitor cognitive processes, manage motivation, and consciously reflect on outcomes. However, a critical synthesis of these conventional SRL models reveals a significant limitation: they are primarily rooted in a secular-pragmatic paradigm that heavily emphasizes how to learn efficiently, yet often overlooks the deeper epistemological questions of why one learns and how knowledge acquisition shapes moral character. In contemporary educational contexts, where learners frequently face not only cognitive overload but also ethical disorientation, academic burnout, and the fragmentation of knowledge, relying solely on cognitive-behavioral regulation is insufficient.

Addressing these contemporary challenges requires a profound paradigmatic shift that re-integrates cognitive autonomy with ethical and spiritual discipline. In this regard, engaging with classical Islamic educational scholarship is not merely a historical reflection, but a crucial intellectual endeavor. Az-Zarnuji's work offers a sophisticated epistemology where the pursuit of knowledge is inextricably bound to the cultivation of the soul (*tarbiyah al-ruhiyah*), intention (*niyyah*), and ethical self-restraint (*wara'*). It provides a holistic pedagogical compass that connects the act of learning to moral responsibility and the ultimate pursuit of *barakah* (the blessing of knowledge), dimensions that are fundamentally absent in modern SRL frameworks.

Despite its relevance, there remains a critical gap in the literature. Previous academic engagements with *Ta'lim al-Muta'allim* have largely been descriptive and normative, treating the text primarily as a manual for traditional student etiquette rather than a comprehensive epistemological system capable of engaging in rigorous dialogue with modern psychological theories.

Therefore, this study moves beyond a simple comparative analysis to propose a structural synthesis between Az-Zarnuji's classical epistemology and contemporary SRL constructs. By operationalizing Az-Zarnuji's ethical-spiritual dimensions within a modern regulatory framework, this research formally pioneers the development of the Islamic Self-Regulated Learning (I-SRL) Framework. This theoretical contribution aims to redefine autonomous learning, offering a comprehensive, value-laden pedagogical model that equips twenty-first-century learners to achieve not only academic excellence but also moral integrity and spiritual depth.

Theoretical Framework

The urgency of SRL is further reinforced by recent empirical findings. Maulida and Rahayu (2025) show that SRL strategies positively **contribute** to the academic achievement of vocational high school students by strengthening motivation, self-evaluation, adaptive learning strategies, time management,

and the use of technology. Asmarani and Wijayanti (2025) also show that, among university students, goal-setting, planning, and evaluation tend to fall into a good category, whereas the ability to maintain focus and control distractions remains at a moderate level.

Other studies indicate that metacognitive awareness has a positive correlation with academic achievement, meaning that students with higher metacognitive awareness tend to demonstrate better learning outcomes (Aprilia et al., 2025). In addition, systematic studies of metacognition affirm that planning, monitoring, evaluation, and decision-making strategies contribute to increased achievement, motivation, problem-solving ability, and learner responsibility (Widianti & Suryani, 2026). These findings indicate that contemporary educational problems cannot be addressed solely through expanded access to information; they require the formation of internal discipline, goal orientation, and reflective awareness in the learning process.

In the context of Islamic education, the need for learning models that cultivate self-regulation has become increasingly important. Digital transformation and shifting learning cultures require Islamic educational institutions not merely to preserve the transmission of knowledge but also to develop learners' autonomy, perseverance, and self-control in learning (UNESCO, 2024). This is crucial because Islamic education traditionally does not view learning as a purely cognitive activity, but also as a process of cultivating adab, rectifying intention, and disciplining the self.

Research on adab-based Islamic education shows that an effective educational process in the Islamic tradition requires the integration of knowledge, character, and learning-purpose orientation (Rahmawati & Sulistyowati, 2025). Studies on the integration of knowledge and morality from the perspective of *Ta'lim al-Muta'allim* also affirm that Islamic pedagogy is characterized by the interconnection between mastery of knowledge and the formation of learners' ethical personality. Therefore, the discourse of SRL has potential points of convergence with the Islamic pedagogical tradition, especially when self-regulation is understood not only as an individual psychological mechanism but also as a value-oriented governance of the self.

Within this horizon, *Burhan al-Islam* Az-Zarnuji's *Ta'lim al-Muta'allim* gains strong academic relevance. This classical work of Islamic education specifically discusses the adab of seekers of knowledge, intention, the selection of teachers, respect for knowledge, perseverance, strategies for repetition, consultation, *wara'*, and *tawakkal* in the learning process (Az-Zarnuji, n.d.). To this day, the text remains widely studied in pesantren and traditional Islamic educational institutions in Indonesia.

A number of contemporary studies show that *Ta'lim al-Muta'allim* remains an important reference for the formation of learning character, santri discipline, adab-based education, and the integration of knowledge and morality. Fadhillah et al. (2023) show that the contents of this book are applied in shaping *santri* learning ethics. *Ta'lim al-Muta'allim* remains relevant in forming *santri* learning ethics in the era of globalization, although its implementation faces challenges related to the social and economic backgrounds of *santri* (Hidayat & Mulyani, 2025). Other findings also indicate that the study of this book contributes to the formation of honesty, obedience to teachers, and the internalization of character

messages in *santri* life (Afifah & Hartatik, 2023). Thus, *Ta'lim al-Muta'allim* exists not merely as a classical text but also as a normative source that continues to operate in contemporary Islamic educational practice.

To move beyond a descriptive-normative comparison, this study proposes a structural synthesis that integrates, modifies, and expands conventional SRL dimensions through the epistemological principles found in *Ta'lim al-Muta'allim*. While modern SRL theory—particularly Zimmerman's (2002) triadic phases (forethought, Performance, and Self-Reflection) and Pintrich's (2004) multi-dimensional areas—operates on a secular-cognitive plane, Az-Zarnuji's framework injects a metaphysical and ethical anchor. The formulation of the Islamic Self-Regulated Learning (I-SRL) Framework does not merely overlay religious terms onto psychological concepts; rather, it fundamentally elevates the scope of self-regulation from a temporary academic mechanism into a holistic governance of the self (*tarbiyah al-nafs*).

The conceptual integration through which the I-SRL framework emerges is structured across three expanded phases:

1) The Spiritualized forethought Phase (The Orientation of Soul): In conventional SRL, the forethought phase is strictly limited to cognitive goal-setting, task analysis, and self-efficacy beliefs. In the I-SRL framework, this phase is fundamentally reconstructed by integrating Az-Zarnuji's concepts of *niyyah* (purification of intention) and *ikhtiyar* (thoughtful selection of teachers and peers). Goal-setting is no longer driven by pragmatic-materialistic outcomes or competitive performance goals, but is elevated toward seeking the pleasure of God (*ridha* Allah) and the preservation of societal welfare. *Niyyah* acts as the primary motivational engine that provides resilient intrinsic energy, preventing academic burnout in hyper-digitalized learning environments.

2) The Ethically-Regulated Performance Phase (The Mastery of Adab): During the performance phase, conventional SRL emphasizes cognitive strategies, time management, and environmental structuring. The I-SRL framework expands this dimension by operationalizing *adab* (ethical discipline/propriety) and *wara'* (ethical caution/mindfulness). Environmental control is not just about avoiding digital distractions; it involves a spiritual filter (*wara'*) where the learner consciously distances themselves from unethical behaviors, intellectual dishonesty, and trivial matters that diminish the capacity of the intellect. Furthermore, individual effort is balanced with social-collaborative strategies such as *musyawarah* (consultation) and respect for academic authority (teachers), creating an ethically-guided learning environment.

3) The Transcendent Self-Reflection Phase (The Pursuit of *Barakah*): Conventional self-reflection relies on self-judgment and causal attributions regarding academic performance. The I-SRL framework transforms this phase into a dual mechanism of *muhasabah* (critical self-examination/spiritual auditing) and *tawakkal* (absolute trust in God). Success is not evaluated solely through quantitative grades or cognitive mastery, but through the lens of *barakah*, the ethical and spiritual productivity of the acquired knowledge. Causal attribution is balanced: while failures trigger *muhasabah* to improve individual efforts and internal discipline, success is met with gratitude (*syukur*), preventing intellectual arrogance.

Through this conceptual mechanism, the I-SRL framework successfully bridges modern

educational psychology with classical Islamic epistemology. By embedding *niyyah*, *adab*, *wara'*, and *barakah* into the core regulatory loop, the framework redefines the autonomous learner as an agent who is not only cognitively proficient but also spiritually aligned and ethically accountable.

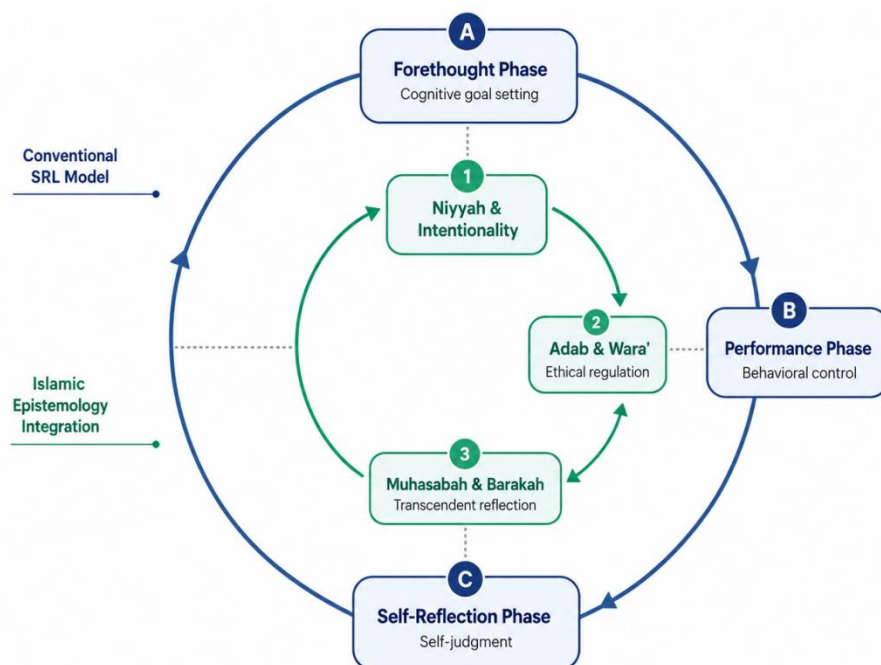


Figure 1. The Conceptual Model of Islamic Self-Regulated Learning (I-SRL) Framework

Source: Developed by the authors

The significance of this study is supported by the large ecosystem of Islamic education in Indonesia, where the number of *pesantren* in the 2024/2025 academic year reached approximately 42,000 institutions (Kementerian Agama RI, 2025), with the largest concentration located on the island of Java. This demonstrates that classical Islamic pedagogy remains relevant in contemporary educational practice. Furthermore, bibliometric analysis of innovative learning strategies emphasizes the need for pedagogical models that integrate Islamic scholarly traditions with the demands of modern learning (Zainuddin & Rofiq, 2024). Therefore, rereading *Ta'lim al-Muta'allim* through the lens of SRL has strategic value for enriching pedagogical frameworks in Islamic educational institutions.

Methodology

This study employs a qualitative approach in the form of comparative-analytical library research. A qualitative approach was selected because the study aims to explore, analyze, and interpret the epistemological concepts of learning contained in the classical text *Ta'lim al-Muta'allim*, while comparing them in depth with contemporary SRL theory. As library research, all data used in this study derive from written sources, including the primary text of *Ta'lim al-Muta'allim*, theoretical literature on SRL, and relevant secondary studies. The comparative-analytical character of this study

lies in its attempt to compare and identify conceptual convergences and differences between the two frameworks so that a more comprehensive theoretical contribution can be formulated.

The data sources in this study are divided into two main categories: primary and secondary sources. The primary data source consists of *Burhan al-Islam* Az-Zarnuji's *Ta'lim al-Muta'allim Tariq al-Ta'allum*, both in its original Arabic text and in Indonesian translations whose validity is recognized. In addition, classical works by leading SRL scholars such as Zimmerman, Pintrich, and Schunk also serve as primary sources, particularly publications that contain foundational conceptual frameworks on self-regulation in learning.

Secondary sources include accredited journal articles, books on the epistemology of Islamic education, previous research on *Ta'lim al-Muta'allim*, studies of SRL in Islamic educational contexts, and other supporting literature relevant to the research focus. The selection of secondary sources prioritizes publications from the last five years (2021-2026) to ensure the currency of findings, although classical works with fundamental theoretical value are also used where necessary.

Data collection was conducted through a systematic and iterative process of digital and manual searching, reading, note-taking, and coding of the relevant written sources. To ensure a structured investigation, all collected data were organized into an analytical matrix that cross-referenced modern psychological parameters with classical Islamic concepts.

The data analysis proceeded through a rigorous three-stage analytical procedure designed to transition systematically from textual interpretation to theoretical synthesis:

1) Thematic Content Analysis: This stage involved an in-depth, textual reading of Az-Zarnuji's *Ta'lim al-Muta'allim* to extract latent and manifest meanings regarding student autonomy. Open coding was applied to isolate specific concepts, rhetorical structures, and behavioral guidelines. These codes were then clustered into overarching themes representing classical self-regulation (e.g., *niyyah* as intentionality, *wara'* as environmental/ethical control, and *muhasabah* as self-evaluation).

2) Comparative Matrix Mapping: A comparative analysis was then executed by constructing a dual-axis analytical matrix. The horizontal axis consisted of contemporary SRL dimensions based on Zimmerman's (2002) and Pintrich's (2004) models, such as goal-setting, metacognitive monitoring, effort regulation, help-seeking, and self-reflection. The vertical axis contained the newly clustered concepts from *Ta'lim al-Muta'allim*. Through this juxtaposed mapping, the study systematically identified conceptual convergences (where the two frameworks overlap), conceptual divergences (where their philosophical roots separate), and the unique epistemological boundaries of each tradition.

3) Synthesis and Framework Formulation (The I-SRL Construction): Rather than leaving the findings as a simple comparative list, a synthesis procedure was conducted to formulate the Islamic Self-Regulated Learning (I-SRL) Framework. This process involved an inductive-deductive loop where the cognitive-behavioral steps of conventional SRL were structurally modified, expanded, and elevated by embedding the spiritual-ethical principles of Az-Zarnuji. The criteria for integration

required that any classical concept included must actively enhance or address a documented limitation within conventional SRL (e.g., utilizing *niyyah* to sustain intrinsic motivation against modern digital burnout).

To ensure high data validity, credibility, and interpretive rigor, this library research employed three strict validation strategies tailored for textual scholarship: first, source triangulation. This was achieved by cross-examining multiple authoritative editions and Indonesian translations of *Ta'lim al-Muta'allim* against its original Arabic text to prevent linguistic bias or mistranslation. Furthermore, contemporary empirical data regarding SRL challenges in modern Islamic boarding schools (*pesantren*) were cross-referenced to anchor the classical text within modern realities.

Second, theoretical triangulation. To prevent an ideological or biased interpretation, the data were analyzed simultaneously through multiple theoretical perspectives, drawing from contemporary educational psychology (Zimmerman, Pintrich, Schunk) and Islamic educational philosophy (such as al-Attas or al-Ghazali's concepts of *adab*). This multi-paradigmatic lens guaranteed that both the psychological and spiritual dimensions were treated with equal academic rigor. And third, prolonged textual engagement. The researchers maintained an extended and iterative engagement with the core texts over several months, conducting multiple rounds of reading, re-coding, and peer debriefing to minimize subjective bias and ensure that the final structural formulation of the I-SRL model accurately reflects the true epistemological depth of both traditions.

Results

1. *The Epistemology of Learning in Ta'lim al-Muta'allim*

The thematic analysis of *Ta'lim al-Muta'allim* demonstrates that Az-Zarnuji's epistemology of learning is systematically anchored upon three core axes: (1) teleological-value orientation, (2) the procedural governance of the learning process, and (3) the ethical formation of the learning subject. Rather than positioning learning merely as a cognitive-acquisition activity, the text structures it as an integrated ethical, spiritual, and methodological pursuit (Az-Zarnuji, n.d.).

At the foundational level, Az-Zarnuji establishes *niyyah* (intention) as the primary epistemic requirement of learning. He explicitly formulates: "*yanbaghi li-thalib al-'ilmi an yanwiya fi ta'allumihi ridha Allahi ta'ala wa al-dar al-akhirah wa izalata al-jahli 'an nafsih wa 'an sa'ir al-juhhal*" (learners must intend their learning to seek God's pleasure, happiness in the hereafter, and the eradication of ignorance from themselves and others) (Az-Zarnuji, n.d.). In this formulation, intention operates as the initial orientation mechanism that defines learning goals and determines the spiritual legitimacy of learning outcomes.

Beyond intention, Az-Zarnuji outlines the selection of the object of knowledge as a critical step, stating: "*yanbaghi li-thalib al-'ilmi an yakhtara min kulli 'ilmin ahsanahu wa ma yahtaju ilaihi fi amri dinihi fi al-hal, tsumma ma yahtaju ilaihi fi al-ma'al*" (learners should choose the best and most needed knowledge, first for immediate religious obligations and subsequently for long-term future needs) (Az-Zarnuji, n.d.). This textual evidence reveals that learning in Az-Zarnuji's framework is selective, hierarchical, and needs-

based, establishing clear intellectual priorities.

The validation of knowledge acquisition is further tied to the selection of teachers. The text notes: *"amma ikhtiyar al-ustadz fayanbaghi an yakhtara al-a'lama wa al-awra'a wa al-asanna"* (the teacher selected should be the most knowledgeable, the most pious, and the more mature or older) (Az-Zarnuji, n.d.). Here, the teacher's authority is derived not just from functional content transmission, but from moral integrity and spiritual lineage, making the student-teacher relationship an epistemic necessity.

In terms of learning strategies, Az-Zarnuji mandates dialogical and collaborative actions, specifically recommending *mudzakarah* (mutual review), *munadzarah* (scholarly debate), and *mutharahah* (deep dialogue). He cautions: *"wa la budda li-thalib al-'ilmi min al-mudzakarah wa al-munadzarah wa al-mutharahah, fayanbaghi an yakuna kullu dzalika bi al-inshaf wa al-ta'anni wa al-ta'ammul"* (students must engage in mutual review, argumentative discussion, and deep dialogue with principles of fairness, calmness, and careful deliberation) (Az-Zarnuji, n.d.). The text explicitly warns against using debate to defeat opponents, emphasizing that its sole purpose must be to make the truth manifest.

Furthermore, behavioral and environmental control is operationalized through the concepts of *wara'* (ethical caution/mindfulness), perseverance, and peer selection. Regarding peers, the text dictates: *"wa amma ikhtiyar al-syarik fayanbaghi an yakhtara al-mujidda wa al-wari'a wa sahib al-thab'i al-mustaqim al-mutafahhim, wa yafirru min al-kaslan"* (a study companion should be diligent, pious, upright in character, and capable of understanding, while laziness must be avoided) (Az-Zarnuji, n.d.). *Wara'*, which includes managing consumption and physical habits, is positioned as a safeguard for inner cognitive clarity and the attainment of *barakah* (the blessing of knowledge).

Finally, self-reflection is structurally manifested through a continuous evaluation of intention, behavioral rectitude, and the ongoing assessment of the long-term utility of the knowledge being acquired. Based on these textual data, Az-Zarnuji's learning epistemology can be synthesized into four structural themes: (1) transcendental purpose orientation, (2) ethical-selective choice of knowledge and agents, (3) disciplined collaborative execution, and (4) holistic reflection grounded in spiritual accountability.

2. The Construction of Self-Regulated Learning in Contemporary Theory

The textual and conceptual analysis of contemporary educational psychology literature establishes that Self-Regulated Learning (SRL) is structurally predicated on the assumption that learners are active, agentic subjects. Within this paradigm, learners are not passive recipients of instruction; rather, they proactively manage their own learning loops by systematically controlling their cognition, motivation, behavior, and immediate learning environment.

Structurally, Zimmerman's (2002) triadic model maps this autonomous process into a continuous, cyclical loop consisting of three successive phases that directly feed into one another:

1) The Forethought Phase: This baseline phase occurs before to the actual execution of learning and is divided into two distinct categories: task analysis and self-motivation beliefs. Task analysis consists of goal-setting (deciding on specific outcomes) and strategic planning (selecting appropriate methods to

achieve those goals). These cognitive steps are driven by self-motivation beliefs, which include self-efficacy (confidence in one's capability), outcome expectations (beliefs about the ultimate rewards of success), and intrinsic interest (the inherent value placed on the task itself).

2) The Performance Phase: This phase takes place during the actual learning process and focuses on the twin mechanisms of self-control and self-observation. Self-control operationalizes the planning from the first phase by deploying specific task strategies, imagery, self-instruction, time management, and deliberate attention focusing. Simultaneously, self-observation requires the learner to conduct real-time self-recording or mental monitoring to track their ongoing progress and detect cognitive bottlenecks.

3) The Self-Reflection Phase: Occurring after the learning task is complete, this phase involves self-judgment and self-reaction. Self-judgment requires learners to engage in self-evaluation by comparing their actual performance against their initial goals or external standards. This leads to causal attribution, where the learner mentally designates the specific reasons behind their success or failure (such as effort, ability, or task difficulty). These attributions trigger self-reactions, which can be adaptive (modifying strategies for the next task) or defensive (withdrawing effort due to dissatisfaction). The outcomes of this phase directly reshape the learner's self-beliefs, thereby initiating the next forethought phase.

Pintrich (2004) further expands and elaborates this cyclical loop by cross-referencing four distinct organizational phases—(1) Planning and Structuring, (2) Monitoring, (3) Control, and (4) Reflection—across four explicit, operational domains: (a) The Cognitive Domain: Moving from the activation of prior knowledge during the planning phase, to the active monitoring of comprehension, the deployment of cognitive strategies during control, and the final evaluation of cognitive efficiency during reflection. (b) The Motivational and Affective Domain: Involving the initial activation of motivation (e.g., self-efficacy, task-value orientation), the monitoring of shifting emotional states (such as anxiety or boredom), the active control of motivation through self-reward or self-talk, and the final affective reactions to performance outcomes.

(c) The Behavioral Domain: Encompassing the planning of overt effort, the continuous monitoring of actual time and effort expended, the direct regulation of persistence and proactive help-seeking behaviors to resolve task difficulties, and the final reflection on behavioral outcomes. (d) The Contextual Domain: Operating through the initial mapping of classroom constraints and task demands, the ongoing monitoring of shifting environmental conditions, the active structuring or adapting of the physical learning environment to minimize distractions, and the final evaluation of context-driven variables.

Within this contemporary architecture, effort regulation represents a core benchmark of learning resilience, defined precisely as the learner's capacity to shield their attention and maintain high persistence when facing competing external distractions or cognitive fatigue. Furthermore, help-seeking behavior is formally integrated as an adaptive and highly proactive strategy; it dictates that a self-regulated learner remains fundamentally relational, knowing exactly when, how, and from whom (teachers or peers) to secure external resources to optimize their individual goal attainment. Ultimately, contemporary SRL constructs position the learner as an autonomous, self-contained manager who

continuously monitors, adjusts, and alters their internal cognitive states and external behaviors to achieve quantified academic success.

3. *Synthesis: Comparative Analysis and the Emergence of the I-SRL Model*

To clearly delineate the boundaries, overlaps, and the original theoretical contribution of this study, the textual findings from *Ta'lim al-Muta'allim* and the structural dimensions of contemporary SRL are cross-referenced in Table 1.

Table 1. Comparative Matrix and the Theoretical Formulation of the I-SRL Framework

Dimensions / Phases	Conventional SRL (Zimmerman / Pintrich)	<i>Ta'lim al-Muta'allim</i> (Az-Zarnuji)	Unique Contribution / Extension (I-SRL Framework)
Phase 1: Planning / Motivation (Forethought)	Secular-pragmatic goal-setting, task analysis, self-efficacy, and individual performance targets.	<i>Niyyah</i> (purification of intention), seeking <i>Ridha</i> Allah, and selective prioritization of essential knowledge.	Spiritualized Forethought: Infuses a metaphysical purpose into planning; <i>niyyah</i> acts as a permanent motivational anchor that protects against digital burnout and performance anxiety.
Phase 2: Execution / Control (Performance)	Cognitive strategies, attention focusing, time management, and environmental structuring.	Mastery of Adab, practicing <i>Wara'</i> (ethical caution/dietary discipline), and selection of virtuous peers.	Ethically-Regulated Performance: Expands environmental control beyond spatial mechanics into moral filtering; environmental and sensory hygiene (<i>wara'</i>) shields cognitive focus.
Phase 3: Relational Engagement	Help-seeking behavior treated as an adaptive strategy to resolve individual task bottlenecks.	Absolute <i>Ta'dzim</i> (reverence) toward teachers, collaborative <i>Musyawarah</i> , <i>Mudzakarah</i> , and <i>Munadzarah</i> .	Sacred-Relational Learning: Reconceptualizes help-seeking from a transactional tool into an ethical partnership; respect for academic authority serves as an epistemic channel for knowledge transmission.
Phase 4: Evaluation / Reaction (Self-Reflection)	Self-judgment against performance criteria; causal attribution linked to strategic effort and skill.	<i>Muhasabah</i> (critical spiritual auditing) and <i>Tawakkal</i> (absolute reliance on God).	Transcendent Self-Reflection: Evaluation transcends quantitative metrics; outcomes are analyzed through the acquisition of <i>Barakah</i> (beneficial knowledge), preventing both intellectual arrogance and despair.

Discussion

The comparison between Az-Zarnuji's epistemology of learning and modern self-regulated learning (SRL) theory reveals important structural similarities, although their underlying assumptions differ fundamentally. At the structural level, both place goal setting as the foundation of learning. Intention (*niyyah*) in *Ta'lim al-Muta'allim* directs the entire learning process and determines the blessing of knowledge (Az-Zarnuji, n.d.), whereas Zimmerman (2002) places goal-setting in the forethought phase. A clear goal orientation positively contribute to academic achievement by strengthening motivation and self-evaluation (Maulida & Rahayu, 2025). Thus, both the classical Islamic tradition and modern learning theory recognize the importance of goal awareness as a mechanism that directs learning.

Both frameworks also emphasize the importance of self-monitoring during the learning process. The concepts of *muhasabah* and *muraqabah* in *Ta'lim al-Muta'allim* functionally operate as mechanisms of self-reflection similar to self-observation in Zimmerman's (2002) theory, although *muhasabah* has a stronger spiritual dimension. In empirical studies, *muhasabah* or metacognitive monitoring, in Pintrich's (2004) terms, has been shown to correlate positively with academic performance (Aprilia et al., 2025) and to increase learners' responsibility (Schraw & Dennison, 1994; Panadero, 2017). Moreover, the integration of spiritual awareness with cognitive aspects strengthens learners' ability to monitor and evaluate their thinking processes, thereby making self-reflection more effective (Hidayati & Rahman, 2025).

In the dimension of effort management, both frameworks recognize the importance of perseverance in facing learning obstacles. Az-Zarnuji emphasizes *juhd* (earnest effort) and *shabr* (patience) as prerequisites for success, aligning with the concepts of effort regulation and self-control in Zimmerman's theory, which emphasize attention management, time management, and resilience in facing distractions. Asmarani and Wijayanti (2025) find that the ability to manage effort is an important aspect of student self-regulation. In line with Schunk and Zimmerman (2012), Asmarani and Wijayanti (2025) affirm that effort regulation is essential for maintaining commitment to learning goals despite difficulties, although it often becomes a weak point when learners face digital distractions.

Both frameworks also acknowledge the importance of seeking assistance. In *Ta'lim al-Muta'allim*, the relationship with the teacher is not only ethical but also epistemic: the teacher is selected on the basis of scholarly and moral quality (Az-Zarnuji, n.d.). In SRL theory, help-seeking behavior is treated as an adaptive strategy when learners become aware of their limitations (Newman, 2002; Karabenick & Berger, 2013). Although their relational contexts differ, both frameworks regard help-seeking not as a sign of weakness but as part of effective learning strategy.

Self-reflection is also an important similarity between the two. Az-Zarnuji emphasizes continuous evaluation of intention and learning outcomes, while Zimmerman (2002) places self-

reflection as a phase for assessing outcomes and adjusting strategies for subsequent tasks. Although structural similarities exist, fundamental differences remain, especially in epistemology, goals, motivation, and indicators of success. These differences can be explained more clearly through the following comparative table:

Table 2. Paradigmatic Comparison between Ta'lim al-Muta'allim and SRL

Aspect	Ta'lim al-Muta'allim	Self-Regulated Learning	Main Difference
Epistemological foundation	Spiritual-teleological: knowledge as a trust and a means of self-improvement toward God; integration of knowledge, faith, and action.	Empirical-psychological: learning as a cognitive-motivational process that can be measured, controlled, and objectively evaluated.	TM emphasizes moral-spiritual purposes, whereas SRL emphasizes measurability and evidence-based self-improvement.
Goal orientation	God's pleasure, happiness in the hereafter, benefit for the self and the community, and removal of ignorance.	Academic achievement, measurable competence, improved performance, and self-efficacy.	TM emphasizes eschatological and moral orientation, whereas SRL is worldly and measurable.
Motivational mechanism	Purity of intention, <i>tawakkal</i> , orientation to the hereafter, and awareness of the blessing of knowledge.	Self-efficacy, intrinsic motivation, task value, and outcome expectations.	TM emphasizes moral-spiritual motivation, whereas SRL emphasizes internal motivation and measurable goals.
Self-monitoring	<i>Muhasabah</i> (spiritual introspection), <i>muraqabah</i> (awareness of God), and continuous evaluation of intention.	Metacognitive monitoring, self-observation, progress tracking, and strategy adjustment.	TM emphasizes spiritual and moral dimensions, whereas SRL is cognitive-process oriented.
Indicators of success	Blessing of knowledge, benefit for the self and the community, character formation, and conformity with God's will.	Academic performance, achievement of learning goals, and increased competence.	TM is measured spiritually and socially, whereas SRL is measured academically and objectively.
Teacher-student relationship	The teacher is selected according to moral and intellectual quality; <i>ta'dzim</i> is a prerequisite.	The teacher functions as a facilitator; help-seeking is an adaptive strategy.	TM emphasizes an ethical-epistemic relationship, whereas SRL emphasizes instructional and adaptive functions.
Evaluation of process	Holistic: includes intention, adab, the beneficial value of knowledge, and spiritual impact.	Empirical evidence-based: causal attribution, strategy analysis, and behavioral adjustment.	TM prioritizes value and moral evaluation, whereas SRL prioritizes objective and strategic evaluation.

Table 2 shows that the difference between the two frameworks is not merely terminological; it reflects fundamental differences in how the learning subject, the validity of knowledge, and the

ultimate purpose of learning are understood. Az-Zarnuji builds an epistemology of learning upon a spiritual-theological foundation that positions knowledge as a trust, whereas SRL theory is constructed on an empirical-psychological foundation that understands learning as a process that can be measured and improved. The integration of the two can generate a more holistic learning model (Aziz & Wulandari, 2025).

The primary distinctiveness of *Ta'lim al-Muta'allim* lies in the integration of spiritual-moral dimensions throughout the entire process of self-regulation. The concept of *muraqabah*, namely awareness that God constantly observes, functions not only as a mechanism of moral evaluation but also as a driver of continuous self-regulation (Az-Zarnuji, n.d.). In addition, the concepts of *taqwa* and *tazkiyah al-nafs* can strengthen learners' cognitive, emotional, and behavioral dimensions (Hidayati & Rahman, 2025).

The second distinctiveness lies in the concept of *barakah* as an indicator of learning success. The blessing of knowledge is understood as the grace that emanates from knowledge acquired in the proper way, so that it becomes beneficial and brings goodness (Hidayat & Setiawan, 2025; Rahma & Yusuf, 2025). The third distinctiveness is the emphasis on *adab* as a prerequisite for learning effectiveness. Rahmawati and Sulistyowati (2025) affirm that *adab* functions as cultural scaffolding that forms learning subjects who are not only cognitively competent but also morally responsible.

By contrast, the distinctiveness of SRL lies in its evidence-based approach, which enables every component of self-regulation to be measured, tested, and improved through research (Zimmerman, 2002; Pintrich, 2004; Panadero, 2017). This approach enables the development of valid and reliable assessment instruments to measure the quality of self-regulation. Another distinctive feature is adaptation to context and strategic flexibility. Pintrich (2004) explicitly positions context as a domain to be regulated, making SRL highly adaptive to diverse educational settings. A third distinctive feature is its emphasis on individual agency without a spiritual dimension, making the theory more universal (Zimmerman, 2002; Schunk & Zimmerman, 2008), but also comparatively less meaning-laden.

The dialogue between *Ta'lim al-Muta'allim* and self-regulated learning opens the possibility of developing an Islamic learning model that is evidence-informed while remaining rooted in spiritual values. *Ta'lim al-Muta'allim* can contribute spiritual dimensions, value orientation, and the concept of *barakah* as a reinforcement of intrinsic motivation. Meanwhile, SRL theory can contribute methodological frameworks, assessment instruments, and evidence-based strategies (Widianti & Suryani, 2026; Hidayat & Mulyani, 2025). Such a theoretical synthesis is important for Islamic educational institutions that stand at the intersection between preserving tradition and adapting to the demands of the age (Nurlaila & Hasbi, 2024; Marwah et al., 2024).

The integration between Az-Zarnuji's *Ta'lim al-Muta'allim* and self-regulated learning (SRL) theory produces a pedagogical framework that emphasizes not only cognitive and metacognitive

aspects but also spirituality and adab as learning foundations. This synthesis shows that the concept of learning in the classical Islamic tradition has epistemological compatibility with modern SRL theory and even complements it through a spiritual-divine orientation absent from secular Western approaches.

In the context of contemporary Islamic pedagogy, this contribution is significant because it bridges the dichotomy between value-based education and competency-based learning. *Ta'lim al-Muta'allim* offers the dimensions of ethics, intention, and the blessing of knowledge, while SRL provides a systematic framework for how learners manage the learning process independently and reflectively. Thus, the resulting framework is not only theoretical but also applicable in responding to the challenges of twenty-first-century education and the digital era (OECD, 2024; UNESCO, 2024).

This integrated framework may be called Islamic Self-Regulated Learning (I-SRL), a conceptual model synthesized from the learning principles in *Ta'lim al-Muta'allim* and the SRL components proposed by Zimmerman (2000, 2002) and Pintrich (2004). This model positions self-regulation not merely as a psychological process but also as a spiritual practice (*riyadhah al-nafs*) directed toward the attainment of beneficial knowledge.

Structurally, I-SRL consists of three main phases parallel to the classical SRL model, but enriched with Islamic values. First, the forethought phase is based on intention and spiritual-divine purposes. At this stage, learners establish learning goals that are not only academic but also spiritual. The concept of intention in *Ta'lim al-Muta'allim* becomes the core of motivational regulation, exceeding goal setting in modern SRL. Az-Zarnuji emphasizes that the intention to learn must be directed toward seeking God's pleasure and practicing knowledge (Az-Zarnuji, n.d.). This aligns with task value and intrinsic motivation in Pintrich's (2004) framework, but with a stronger theological dimension.

Second, the performance phase is based on adab and learning strategies. At this stage, the learning process is controlled through cognitive, metacognitive, and behavioral strategies. *Ta'lim al-Muta'allim* emphasizes adab toward teachers, earnestness (*jiddiyyah*), continuity (*istiqamah*), and methods such as memorization, comprehension, and *munadzarah* (Setyawan & Hidayah, 2017). These correspond to SRL strategies such as self-monitoring, time management, and help-seeking (Zimmerman & Schunk, 2011). The difference lies in the integration of moral dimensions as internal controllers of learning behavior.

Third, the self-reflection phase is based on muhasabah and spiritual evaluation. Evaluation in I-SRL does not only concern academic achievement but also moral and spiritual reflection. In *Ta'lim al-Muta'allim*, learning success is measured by the benefit of knowledge and moral transformation (Shofiyyah et al., 2022). This expands the concept of self-evaluation in SRL into a holistic reflection that includes affective and spiritual dimensions.

As an illustration, a *santri* studying fiqh does not merely set a target to understand the material,

but also rectifies the intention for God, maintains adab toward the teacher as a form of behavioral regulation, and conducts self-evaluation concerning whether the knowledge has been practiced through muhasabah. This process demonstrates the integration of self-regulation and spiritual awareness. Thus, I-SRL can be understood as a *tauhid*-based model of self-regulation that integrates cognition, metacognition, motivation, and spirituality into a unified learning system.

The theoretical implications of the I-SRL framework extend far beyond a mere synthesis of two traditions; it fundamentally modifies, extends, and enriches conventional SRL theory. While conventional SRL operates predominantly within a secular, cognitive-behavioral paradigm that often isolates the mechanics of learning from broader moral accountability, I-SRL redefines learner autonomy as an ethical and spiritual agency. In this extended framework, cognitive regulation is no longer an end in itself but a functional mechanism for *tazkiyah al-nafs* (purification of the soul). Consequently, I-SRL advances educational theory by demonstrating that intrinsic motivation and self-regulation can be profoundly sustained by eschatological orientations—such as the pursuit of *barakah* (blessing) and divine pleasure. This offers a substantial theoretical expansion, providing a value-laden antidote to the secular performance anxiety, hyper-competitiveness, and academic burnout prevalent in modern education.

Furthermore, this study significantly enriches contemporary Islamic educational discourse, character education, and the concept of holistic education. By operationalizing adab not merely as a static set of moral rules, but as an active, self-regulatory mechanism that governs attention, environmental control (*wara'*), and peer interactions, I-SRL bridges the long-standing dichotomy between value-based character education and competency-based cognitive learning. Learner autonomy is thus reconceptualized: to be an autonomous learner in the I-SRL framework is not to be completely detached from authority, but to be fiercely independent in cognitive execution while remaining deeply anchored in divine accountability and epistemic reverence for teachers.

Crucially, the findings of this study resonate with and contribute to broader international debates on alternative epistemologies and the integration of non-Western educational theories. As global educational discourse increasingly critiques the dominance of Eurocentric, purely utilitarian learning models, the I-SRL framework offers a robust, structurally coherent non-Western alternative. It answers the call of global bodies like UNESCO for a more humanistic and holistic education by proving that classical Islamic epistemologies possess sophisticated pedagogical frameworks capable of addressing twenty-first-century challenges. By elevating classical Islamic pedagogy from a localized historical artifact into an internationally dialogical theory, I-SRL provides a blueprint for a global educational paradigm that honors both intellectual rigor and spiritual depth.

Practically, the I-SRL framework can be implemented in various Islamic educational models, from *pesantren* to higher education. At the curriculum level, educational institutions can integrate SRL indicators with values of adab and intention. For example, in addition to cognitive outcomes, the

curriculum can include affective outcomes such as sincerity in learning and discipline (Hasanah & Nurdyansyah, 2024). At the pedagogical level, teachers can develop learning strategies that encourage value-based self-regulation, such as daily reflection through *muhasabah* learning journals, discussion-based learning through *munadzarah*, and the habituation of learning adab. Research indicates that such approaches are effective in forming religious character and *santri* discipline (Afifah & Hartatik, 2023; Fadhilah et al., 2023).

In the context of digital learning, I-SRL can serve as a framework for developing ethical digital literacy. The integration of SRL and technology has been shown to improve academic performance (Rahman & Setiawan, 2026), but without values it may lead to shallow learning. Therefore, the I-SRL approach ensures that technology use remains within the ethical parameters of Islam (Kusuma & Pratiwi, 2026; UNESCO, 2024). At the institutional level, with more than 42,000 *pesantren* in Indonesia (Kemenag RI, 2025), the implementation of I-SRL has the potential to produce systemic impact in improving the quality of Islamic education nationally.

Although the I-SRL conceptual framework offers a significant conceptual contribution, this study has several limitations. The model developed remains conceptual and has not yet been empirically tested through quantitative or mixed-methods approaches. The synthesis focuses on *Ta'lim al-Muta'allim* as the main source, and therefore does not yet include other classical Islamic literatures, such as the works of al-Ghazali and others. The research context is also limited to Islamic education in Indonesia, so generalization to global contexts requires comparative studies across cultures and educational systems.

Based on these limitations, future research agendas may be directed toward several areas. The development of an Islamic-value-based I-SRL measurement instrument is a key priority, followed by experimental studies to test the model's effectiveness in improving learning outcomes and character. In addition, the integration of I-SRL with AI-based learning approaches is a strategic area, given the future trend of education that is increasingly technology-based (Wulandari & Setiawan, 2025; Widiarti & Suryani, 2026).

Conclusions

This study moves beyond a descriptive comparison between modern Self-Regulated Learning (SRL) theory and the classical epistemology of *Ta'lim al-Muta'allim* to formally conceptualize the Islamic Self-Regulated Learning (I-SRL) framework. Theoretically, this research contributes significantly to the broader educational discourse by redefining learner autonomy. It demonstrates that cognitive-behavioral regulation can be fundamentally enriched by spiritual agency, where *niyyah* (intention), *adab* (ethical discipline), *wara'* (environmental mindfulness), and *barakah* (the blessing of knowledge) serve as core regulatory mechanisms. The I-SRL framework thus advances contemporary educational psychology by offering a robust, non-Western pedagogical model that effectively

addresses the moral vacuum often found in secular-pragmatic learning theories. Practically and pedagogically, the implications of this study are highly strategic for modern Islamic educational institutions, ranging from traditional *pesantren* to Islamic higher education. In terms of curriculum relevance, I-SRL provides a concrete blueprint for educators and policymakers to design learning experiences that seamlessly integrate competency-based targets with character education. By adopting this framework, institutions can formulate learning objectives, pedagogical strategies (such as *mudzakarah* and *munadzarah*), and holistic evaluation metrics that are not only academically rigorous but also spiritually grounded, thereby cultivating learners who are intellectually autonomous, emotionally resilient, and ethically responsible. Despite its significant conceptual contributions, this study acknowledges its limitation as a theoretical synthesis. Therefore, the future potential of the I-SRL framework relies heavily on its empirical operationalization. Future research should prioritize the development of valid and reliable I-SRL measurement instruments, followed by experimental studies across diverse Islamic educational settings to evaluate its direct impact on academic achievement, moral development, and student engagement. Furthermore, investigating the application of I-SRL in hyper-digitalized learning environments will be crucial for establishing ethical digital literacy, ensuring that contemporary technology-assisted learning remains firmly anchored in the timeless values of Islamic epistemology.

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