



BASIC ARABIC LANGUAGE LEARNING AND COGNITIVE DEVELOPMENT IN EARLY CHILDHOOD: A DEVELOPMENTAL PSYCHOLOGY PERSPECTIVE

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Abstract:

Language learning in early childhood plays a crucial role in shaping cognitive development. In Islamic early childhood education, basic Arabic language learning is not only positioned as a religious medium but also as a pedagogical instrument that supports children's cognitive growth. This article aims to analyze the relationship between basic Arabic language learning and early childhood cognitive development from the perspective of developmental psychology. Employing a qualitative approach through library research and conceptual analysis, this study examines theories of cognitive development and their relevance to early Arabic language instruction in Islamic preschool settings. The findings indicate that basic Arabic learning activities, particularly vocabulary recognition, phonological awareness, and symbolic association through play-based learning, significantly contribute to cognitive abilities such as memory, classification, symbol recognition, and early abstract thinking. These findings align with Piaget's cognitive developmental stages and Vygotsky's sociocultural theory, which emphasize language as a fundamental tool for thought and social interaction. Therefore, basic Arabic instruction for young children should be designed developmentally appropriate, contextual, and enjoyable to function not merely as linguistic exposure but also as a cognitive stimulation strategy in Islamic early childhood education.

Keywords: *basic Arabic learning; cognitive development; early childhood education; developmental psychology.*

Abstrak

Pembelajaran bahasa pada anak usia dini memiliki peran strategis dalam menstimulasi perkembangan kognitif anak, termasuk pembelajaran Bahasa Arab dasar dalam konteks pendidikan Islam. Artikel ini bertujuan untuk menganalisis keterkaitan antara pembelajaran Bahasa Arab dasar dengan perkembangan kognitif anak usia dini ditinjau dari perspektif psikologi perkembangan. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi pustaka yang diperkaya dengan analisis konseptual terhadap praktik

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pembelajaran Bahasa Arab di lembaga PAUD Islam. Hasil kajian menunjukkan bahwa pembelajaran Bahasa Arab dasar, khususnya pada aspek pengenalan kosakata sederhana, pelafalan bunyi (phonological awareness), serta asosiasi makna melalui aktivitas bermain, berkontribusi positif terhadap perkembangan kognitif anak, seperti kemampuan mengingat, mengelompokkan, mengenali simbol, dan berpikir simbolik. Temuan ini sejalan dengan teori perkembangan kognitif Piaget dan teori sosial-konstruktivis Vygotsky yang menekankan pentingnya bahasa sebagai alat berpikir dan interaksi sosial. Oleh karena itu, pembelajaran Bahasa Arab dasar pada anak usia dini perlu dirancang secara kontekstual, menyenangkan, dan sesuai dengan tahap perkembangan kognitif anak agar tidak hanya berfungsi sebagai pengenalan bahasa, tetapi juga sebagai sarana stimulasi kognitif dalam pendidikan Islam anak usia dini..

Kata kunci: Pembelajaran Bahasa Arab dasar; Perkembangan kognitif; Anak usia dini; Psikologi perkembangan

INTRODUCTION

Early childhood is not simply an early phase of schooling; it is the most consequential period in the architecture of human cognition. During these formative years, neural plasticity reaches its peak, allowing cognitive functions such as memory, symbolic reasoning, and language to develop at a pace that will never be replicated later in life. When educational stimulation during this critical window is weak or poorly designed, its consequences extend far beyond early learning delays, often crystallizing into long-term cognitive disparities (Ghosh, 2024). Despite the growing global emphasis on Early Childhood Education (ECE), substantial evidence indicates that many preschool settings still fail to provide linguistically rich and cognitively stimulating environments, particularly in low- and middle-income contexts where learning poverty remains pervasive (Spelke & Shutts, 2022). This paradox raises a fundamental question: how can early education claim to support cognitive development if language, the primary medium of thought, is insufficiently cultivated?

Language is not an accessory to cognitive development; it is its organizing force. Through language, children learn to categorize experiences, internalize symbols, and construct meaning from social interaction, processes that form the backbone of higher cognitive functioning. Studies have shown that children's ability to use language as a representational system significantly shapes their conceptual understanding and problem-solving capacity (Nasution, et al, 2023). Conversely, limited linguistic stimulation during the preschool years constrains information processing and weakens memory formation, effects that persist into later educational stages (Gauvain, 2022). This reality underscores the urgency of examining early language instruction not merely in terms of content, but in terms of

its cognitive function. In this context, basic Arabic language learning within Islamic early childhood education warrants critical scrutiny, not as a ritualistic or symbolic practice, but as a potential cognitive scaffold capable of strengthening foundational thinking skills when aligned with developmental principles.

Within Islamic early childhood education, Arabic language learning occupies a distinctive position, functioning simultaneously as a gateway to religious literacy and as an educational medium in early learning contexts. Mastery of basic Arabic enables children to engage, albeit at an elementary level, with foundational Islamic texts such as the Qur'an and Hadith, which form the epistemic core of Islamic education (Jufri et al., 2025). Beyond its textual function, Arabic also plays a formative role in shaping children's Islamic identity, fostering a sense of belonging and shared values within the Muslim community (Laming et al., 2025). Despite this centrality, Arabic instruction in early childhood settings is frequently framed as a ritualistic or symbolic requirement rather than as a pedagogically grounded learning process. Such positioning risks overlooking children's cognitive readiness and developmental needs, thereby reducing Arabic learning to mechanical exposure with limited educational impact (Ahmadi et al., 2025).

This pedagogical misalignment is further compounded by the persistent reliance on traditional instructional practices, particularly rote memorization, which often produces passive learning experiences and minimal cognitive engagement among young learners (Maulidin et al., 2024). In many contexts, Arabic instruction has yet to meaningfully integrate interactive strategies or age-appropriate learning technologies, despite their proven effectiveness in supporting early language acquisition. Addressing these limitations requires a reconceptualization of Arabic learning in early childhood education, one that prioritizes interaction, practice, and developmental relevance. Scholars have emphasized the importance of practice-based and communicative approaches to enhance children's motivation and linguistic competence (Jufri et al., 2025), alongside the need for clearly articulated learning objectives that balance instrumental, integrative-communicative, and pedagogical dimensions (Asmawi & Kasmiati, 2023). Reframing Arabic instruction along these lines positions it not merely as a vehicle for religious transmission, but as a cognitively meaningful component of holistic early childhood education.

Viewed through the lens of developmental psychology, the integration of Arabic language learning in early childhood education demands careful alignment between instructional practices and children's cognitive stages. At the preoperational stage, typically spanning ages 1.5 to 6 years, children begin to think symbolically while still lacking formal logical reasoning, making this period particularly receptive to language exposure that emphasizes meaning, representation, and experience rather than abstraction (Anwar, 2024). Introducing basic Arabic vocabulary, sounds, and symbols during this stage can effectively stimulate core cognitive processes such as memory retention, categorization, and

symbolic thinking when delivered through developmentally appropriate methods. Bruner's theory of discovery learning further reinforces this approach by highlighting the role of active exploration and experience in knowledge construction, positioning language learning as an experiential rather than transmissive process (Ahmadi, 2025a). Within this framework, Arabic learning becomes not only linguistically meaningful but also cognitively formative.

Despite this theoretical convergence, existing practices and scholarly discussions reveal a notable gap between developmental theory and pedagogical implementation in Arabic learning for young children. While recent studies have demonstrated the effectiveness of fun, play-based learning strategies—including games, songs, and interactive activities—in enhancing vocabulary retention and learner engagement (Musayyadah et al., 2025), as well as the benefits of multisensory approaches that combine visual, auditory, and kinesthetic stimuli (Hasan et al., 2024), these findings are often presented in isolation from a coherent developmental psychology framework. Moreover, limited attention has been given to the socio-cultural dimensions of Arabic learning, despite evidence that cultural relevance significantly shapes children's motivation and communicative competence (Ahmadi, 2025b). Consequently, there remains a lack of integrative analysis that systematically connects Arabic language instruction, cognitive developmental stages, and socio-cultural contexts in early childhood education. This study seeks to address this gap by examining basic Arabic learning as a cognitively grounded and developmentally informed practice, thereby repositioning it as a strategic component of holistic Islamic early childhood education.

This article seeks to explore how basic Arabic language learning contributes to early childhood cognitive development within Islamic preschool education, drawing upon key theories in developmental psychology.

RESEARCH METHODS

1. Research Design

This study employs a qualitative research design using a library-based and conceptual analytical approach. The research is not intended to measure learning outcomes empirically, but to critically examine the relationship between basic Arabic language learning and cognitive development in early childhood through the lens of developmental psychology (Sugiono, 2019). This design is appropriate for exploring theoretical alignment, pedagogical assumptions, and conceptual gaps within existing Arabic language instruction practices in Islamic early childhood education.

2. Data Sources

The primary data sources consist of academic literature relevant to early childhood cognitive development, language acquisition, and Arabic language learning in Islamic educational contexts. These include peer-reviewed journal articles, scholarly books, and research reports published within the last ten years to

ensure conceptual relevance and theoretical currency. Secondary sources such as policy documents and curriculum guidelines related to early childhood education and Arabic instruction were also consulted to contextualize pedagogical practices (Cresswell, 2009).

3. Data Collection Technique

Data were collected through systematic literature review procedures. Relevant publications were identified using academic databases and indexed journals focusing on early childhood education, developmental psychology, language learning, and Islamic education. Keywords such as early childhood cognitive development, basic Arabic language learning, developmental psychology, and Islamic preschool education were used to guide the selection process. The inclusion criteria emphasized theoretical clarity, methodological rigor, and relevance to early childhood contexts (Wallwey & Kajfez, 2023).

4. Data Analysis

The data were analyzed using qualitative content analysis and conceptual synthesis. Key concepts related to cognitive development stages, language learning strategies, and socio-cultural influences were identified and categorized (Miles et al., 2018). These concepts were then examined in relation to established developmental theories, particularly those proposed by Piaget, Vygotsky, and Bruner. Through comparative and interpretative analysis, the study identifies patterns, theoretical convergences, and pedagogical implications of basic Arabic learning for cognitive development in early childhood.

5. Trustworthiness and Rigor

To ensure the credibility and rigor of the analysis, triangulation of sources was applied by comparing insights across multiple theoretical perspectives and empirical studies. Conceptual consistency and logical coherence were maintained throughout the analysis to minimize interpretive bias. Additionally, the use of well-established developmental psychology frameworks enhances the theoretical validity of the findings (Nowell et al., 2017).

6. Ethical Considerations

As this study relies solely on secondary data and does not involve human participants, formal ethical clearance was not required. Nevertheless, academic integrity was upheld through proper citation and acknowledgment of all sources in accordance with ethical standards of scholarly research.

RESULTS AND DISCUSSION

1. Basic Arabic Learning as a Cognitive Scaffold in Early Childhood

The integration of developmental psychology principles into basic Arabic language learning significantly enhances cognitive scaffolding in early childhood education. At the preoperational stage, children utilize symbolic representation, making the introduction of simple Arabic vocabulary and sounds crucial for

fostering memory and symbolic thinking. This approach aligns with Piaget's theory, emphasizing that language learning at this stage strengthens symbolic functions rather than logical reasoning.

a. Cognitive Development through Language

Symbolic representation emerges as a central cognitive mechanism through which basic Arabic learning contributes to early childhood development. When children associate Arabic words with concrete objects, actions, or routine experiences, language functions as a representational system that mediates their understanding of the surrounding world. This process enables children to move beyond immediate sensory perception toward symbolic meaning-making, a hallmark of cognitive development in the preoperational stage. Rather than treating Arabic vocabulary as isolated linguistic units, meaningful contextualization allows children to internalize words as symbols linked to lived experience, thereby strengthening conceptual comprehension and environmental awareness (Rusydi & Musgamy, 2023). In this sense, basic Arabic learning supports the construction of mental representations that are essential for early reasoning and conceptual categorization.

Closely related to symbolic representation is the activation of memory processes through repetitive and rhythmic language exposure. The consistent repetition of Arabic vocabulary, particularly when embedded in songs, chants, or daily routines, enhances recall and recognition by reinforcing neural pathways associated with memory storage. Rhythmic pronunciation further facilitates cognitive encoding, as patterned sound structures are more easily retained and retrieved by young learners. This form of auditory repetition does not merely support rote memorization but establishes a cognitive foundation for later abstract thinking, where children begin to manipulate symbols mentally without direct sensory support (Rojana, 2024). Consequently, repetition and rhythm in Arabic learning function as strategic cognitive tools that strengthen memory capacity while preparing children for more complex forms of linguistic and conceptual processing.

b. Effective Teaching Strategies

Interactive learning methods play a decisive role in transforming basic Arabic instruction from passive exposure into an active cognitive experience for young children. Techniques such as storytelling, singing, and play-based activities create emotionally engaging contexts that invite children to participate, explore, and experiment with language. Through storytelling, children encounter Arabic vocabulary within coherent narratives that support meaning-making and sequential thinking, while singing and rhythmic play reinforce phonological awareness and auditory memory. These interactive practices align with early childhood learning principles that emphasize enjoyment and engagement as

prerequisites for sustained attention and effective learning. Empirical studies indicate that when children experience language learning as enjoyable and socially interactive, their motivation increases, leading to deeper cognitive processing and more durable learning outcomes (Ramdhani, 2024). Thus, interactivity is not merely a pedagogical technique but a cognitive catalyst that enhances children's capacity to internalize linguistic and conceptual knowledge.

Equally important is the role of a developmentally appropriate curriculum in ensuring that Arabic learning aligns with children's cognitive and emotional readiness. A curriculum that is sensitive to developmental stages avoids premature abstraction and instead prioritizes concrete experiences, gradual progression, and emotional safety. When instructional content and learning goals are calibrated to children's developmental needs, learning becomes cognitively accessible and emotionally meaningful. Research has shown that curricula designed around children's cognitive and affective characteristics foster more effective learning by reducing cognitive overload and supporting confidence and curiosity (Nuzula & Mufidah, 2024). In the context of Arabic learning, this implies a shift away from content-heavy or outcome-driven models toward pedagogical frameworks that emphasize process, interaction, and developmental coherence. Such curricular alignment strengthens not only linguistic acquisition but also broader cognitive and emotional development, reinforcing the integrative role of language learning in early childhood education.

c. Cognitive Development through Language

The development of categorization skills constitutes a foundational cognitive outcome of early Arabic language learning. When children are introduced to basic Arabic vocabulary, they begin to distinguish and classify sounds, words, and meanings as coherent linguistic units rather than as isolated auditory stimuli. This process enables children to recognize patterns, differentiate phonological features, and associate words with specific semantic categories, all of which are essential for early language processing and conceptual organization. Categorization in this context functions as a cognitive bridge between perception and meaning, allowing children to organize linguistic input into manageable structures. Research in early language development confirms that such classification processes significantly enhance children's ability to interpret and internalize language, thereby strengthening their broader cognitive capacities (Owen & Barnes, 2021).

Equally critical is the presence of a structured yet flexible learning environment that supports these emerging categorization abilities. An organized approach to Arabic instruction—characterized by clear routines, consistent exposure, and progressive complexity—helps children systematically arrange new information within their cognitive framework. At the same time,

instructional flexibility ensures that learning remains responsive to individual differences in pace and readiness. This balance between structure and adaptability enables children to integrate new linguistic knowledge without experiencing cognitive overload. Studies have shown that learning environments combining organization with pedagogical flexibility significantly enhance children's cognitive readiness for subsequent learning stages by promoting attention regulation, memory organization, and conceptual coherence (Munawaroh et al., 2021). In the context of early Arabic learning, such environments not only facilitate language acquisition but also lay the groundwork for more advanced cognitive and academic development.

d. Methods of Instruction

Engaging instructional techniques play a pivotal role in shaping children's attitudes toward Arabic language learning in early childhood education. Methods such as songs, storytelling, and interactive activities create affectively rich learning environments that invite active participation and sustained attention. When Arabic is presented through enjoyable and socially interactive experiences, children are more likely to develop positive emotional associations with the language, which in turn enhances motivation and willingness to engage. This affective engagement is not incidental; it directly influences cognitive processing by increasing focus, repetition, and meaningful interaction with linguistic input. Empirical studies indicate that enjoyable learning experiences significantly improve children's enthusiasm and participation, leading to more effective language internalization and stronger cognitive engagement (Rojana, 2024).

The integration of Arabic learning within a religious context further amplifies its pedagogical and cognitive significance. Embedding Arabic expressions in daily religious practices—such as simple prayers, Quranic recitations, and ritual greetings—provides children with authentic and meaningful contexts for language use. This contextualization allows children to perceive Arabic not merely as a classroom subject, but as a functional language embedded in their lived religious experience. Such practical exposure reinforces the relevance of Arabic in children's daily lives and strengthens the connection between language, meaning, and identity. Research suggests that language learning grounded in culturally and religiously meaningful practices enhances retention and internalization, as children associate linguistic forms with valued social and spiritual activities (Al-Harbi, 2019). Consequently, integrating Arabic within religious routines supports both linguistic development and the formation of early Islamic identity, positioning language learning as a holistic educational practice rather than an isolated instructional task.

2. Play-Based and Multisensory Strategies: Enhancing Cognitive Engagement

The findings further reveal that the effectiveness of Arabic language learning

in stimulating cognitive development is strongly influenced by instructional strategies. Play-based learning methods—such as songs, games, storytelling, and role-playing—significantly enhance children’s engagement and facilitate deeper cognitive processing. These approaches align with Bruner’s concept of discovery learning, where children actively construct knowledge through experience rather than passive reception. In this context, Arabic vocabulary acquisition becomes an exploratory activity, encouraging children to experiment with sounds and meanings in a low-pressure environment. The effectiveness of Arabic language learning in stimulating cognitive development is significantly enhanced by instructional strategies that incorporate play-based learning methods. These methods, including songs, games, storytelling, and role-playing, foster engagement and deeper cognitive processing, aligning with Bruner’s discovery learning concept. This approach allows children to actively construct knowledge through exploration, making vocabulary acquisition an engaging and low-pressure activity.

a. Play-Based Learning Methods

Engagement and motivation emerge as decisive factors in the effectiveness of early Arabic language learning, particularly when game-based learning (GBL) is employed as an instructional strategy. GBL transforms language learning from a task-oriented activity into an intrinsically motivating experience by embedding linguistic input within goal-directed play, challenge, and immediate feedback. In Arabic learning contexts, games that involve matching words, responding to cues, or cooperative problem-solving stimulate sustained attention and active participation, which are essential for deep cognitive processing. Empirical evidence suggests that increased motivation and engagement generated through GBL correlate with improved learning outcomes, as learners are more willing to invest cognitive effort and persist in language-related tasks (Eltahir et al., 2021). For young children, whose learning is closely tied to affect and enjoyment, such motivational dynamics are particularly critical in facilitating meaningful language acquisition.

Complementing game-based learning, guided play offers a pedagogical balance between child autonomy and instructional structure. In guided play, children are encouraged to explore language and social interaction freely, while educators subtly shape the learning environment and scaffold key concepts. This approach aligns with developmental theories that emphasize active meaning-making and social mediation in cognitive growth. Guided play has been shown to enhance language development, social competence, and executive functions by allowing children to experiment with linguistic forms in socially meaningful contexts (Fletcher et al., 2024). Within Arabic learning, guided play enables children to negotiate meaning, practice vocabulary, and engage in dialogue without the pressure of formal instruction (Skene et al., 2022). As a result,

language learning becomes a cognitively enriching process that supports both linguistic development and broader cognitive skills, reinforcing the value of play-based pedagogy in early childhood education.

b. Cognitive Development

Active learning constitutes a fundamental mechanism through which early vocabulary acquisition is enhanced in playful learning environments. Playful learning experiences position children as active participants in meaning-making processes, rather than passive recipients of linguistic input. Through movement, dialogue, role-playing, and peer interaction, children repeatedly encounter and use new vocabulary in socially meaningful contexts. This active engagement strengthens semantic associations and promotes deeper cognitive processing, as children are required to interpret, negotiate, and apply language in real time. Research has demonstrated that vocabulary learning embedded in active, playful, and socially interactive settings yields more durable outcomes than learning based on repetition alone, as it integrates cognitive, emotional, and social dimensions of development (Masters et al., 2023). In early Arabic learning, such environments enable children to experiment with words and sounds in ways that are both cognitively stimulating and developmentally appropriate.

The effectiveness of active learning is further amplified through scaffolding, particularly within guided play frameworks. Scaffolding involves intentional adult support that responds to children's immediate learning needs while gradually transferring responsibility to the learner. In guided play, educators strategically model language use, pose open-ended questions, and provide feedback that helps children refine their understanding and expand their vocabulary. This approach aligns with sociocultural theories of learning, which emphasize the role of social mediation in cognitive development. Empirical evidence suggests that vocabulary acquisition supported through guided play and adult scaffolding produces stronger learning outcomes than traditional, teacher-centered instruction, as it balances autonomy with instructional guidance (Weisberg et al., 2016). Consequently, scaffolding within playful learning contexts not only accelerates vocabulary growth but also cultivates children's confidence, communicative competence, and readiness for more advanced language learning.

c. Benefits of Multisensory Learning

Multisensory instruction plays a critical role in enhancing attention and retention in early language learning by engaging multiple perceptual channels simultaneously. When children encounter new vocabulary through coordinated visual, auditory, and kinesthetic inputs, their attentional focus increases, leading to faster responses and more accurate recall. This heightened attentional engagement supports deeper encoding of linguistic information, as sensory

convergence strengthens neural activation patterns associated with memory formation. Empirical evidence indicates that multisensory learning environments outperform unisensory approaches in facilitating vocabulary retention, particularly among young learners whose cognitive processing relies heavily on sensory integration (Pishghadam et al., 2024). In the context of early Arabic language learning, multisensory techniques—such as combining spoken words with gestures, images, and rhythmic movement—enable children to anchor abstract linguistic forms to tangible experiences, thereby improving retention and recall.

Beyond immediate attentional benefits, multisensory instruction contributes to the creation of rich learning environments that support early language acquisition from infancy through early childhood. Studies involving infants and toddlers demonstrate that children exposed to words through varied sensory experiences—such as seeing objects, hearing labels, and physically interacting with materials—acquire vocabulary more efficiently than those exposed through limited sensory channels (Seidl et al., 2024). These findings underscore the importance of environmental richness in early learning contexts, where language is embedded in meaningful, embodied experiences. In Islamic early childhood education, such environments can be cultivated through storytelling with visual props, dramatized routines, and tactile learning materials that contextualize Arabic vocabulary within children’s everyday religious and social experiences. This sensory-rich exposure fosters not only vocabulary growth but also sustained engagement and curiosity, which are essential for long-term learning.

At a broader cognitive level, multisensory learning processes are closely linked to the development of higher-order cognitive functions. Research in cognitive neuroscience suggests that sensory integration enhances recognition memory and supports executive functions, including working memory and fluid intelligence (Seidl et al., 2024). By engaging multiple sensory systems, multisensory instruction strengthens neural connectivity and promotes cognitive flexibility, enabling children to manipulate and retrieve information more efficiently. These cognitive gains extend beyond language learning, contributing to general intellectual development and learning readiness. Therefore, multisensory approaches in early Arabic language instruction should be viewed not merely as instructional enhancements, but as foundational strategies for supporting comprehensive cognitive development during a critical period of neural and intellectual growth.

d. Instructional Design Considerations

Effective language learning in early childhood must be grounded in a nuanced understanding of developmental characteristics, particularly the

interplay between cognitive maturation, sensory integration, and learning preferences. Children do not process linguistic input as abstract symbols detached from experience; rather, language acquisition unfolds in tandem with perceptual, attentional, and socio-emotional development. Strategies that align with these developmental stages—such as age-appropriate scaffolding, rhythm, repetition, and contextualized input—optimize cognitive stimulation by working with the child’s neurological readiness rather than against it. As Eördegh et al. (2022) demonstrate, pedagogical approaches that respect developmental constraints foster deeper engagement and more durable learning outcomes. In this sense, effective language instruction is not merely a matter of content delivery, but of timing, modality, and cognitive resonance with the learner’s evolving capacities (Eördegh et al., 2022).

Complementing this developmental alignment, embodied learning underscores the inseparability of cognition and bodily experience in language acquisition. Physical movement—such as gesture, coordinated action, and rhythmic participation—functions as a cognitive anchor that reinforces memory encoding and semantic understanding. Kosmas et al. (2019) argue that embodied practices enhance neural connectivity by integrating motor, sensory, and linguistic systems, resulting in more robust and retrievable language representations. This holistic orientation challenges reductionist models of learning that privilege mental processes in isolation, instead affirming that language is learned through lived experience. By embedding linguistic input within physical activity, educators cultivate an enriched learning ecology where memory, meaning, and movement converge, ultimately strengthening both language competence and broader cognitive development (Kosmas et al., 2019).

3. Social Interaction and the Socio-Cultural Dimension of Arabic Learning

From a socio-cultural perspective, Arabic language learning in early childhood is not an individual cognitive process but a socially mediated activity. Vygotsky’s theory underscores the importance of interaction and guided participation in cognitive development, particularly within the Zone of Proximal Development. In Islamic early childhood settings, teacher–child interaction and peer collaboration provide essential scaffolding that supports language internalization. Through guided repetition, modeling, and responsive feedback, children gradually internalize Arabic expressions and use them meaningfully within social contexts.

The cognitive impact of Arabic learning is significantly enhanced when instructional content aligns with children’s socio-cultural environments. This cultural relevance fosters motivation and engagement, allowing children to view Arabic as an integral part of their lives rather than an abstract language. Consequently, cognitive processes such as comprehension and recall are improved. The following sections elaborate on key aspects of this phenomenon.

a. Cultural Alignment in Language Learning

Instruction that is grounded in familiar religious practices and communal values operates not merely as a motivational tool, but as a powerful cognitive bridge between language and lived experience. When Arabic instruction resonates with children's everyday religious routines—such as Qur'anic recitation, collective prayer, or shared devotional expressions—the language ceases to appear as an abstract or foreign system. Instead, it becomes an extension of meaningful social practices already embedded in the child's lifeworld. This resonance amplifies intrinsic motivation by aligning linguistic input with identity, belonging, and affective attachment (Zakarneh & Mahmoud, 2025). Motivation, in this context, is not externally imposed but internally sustained, fostering sustained attention and lowering affective barriers that often hinder early language acquisition.

Beyond motivation, culturally relevant content deepens cognitive engagement by enabling learners to process language through familiar semantic and symbolic frameworks. Exposure to texts, expressions, and narratives that reflect communal values allows children to activate prior knowledge, facilitating inferential reasoning and conceptual mapping in Arabic. That such relevance enhances not only comprehension but also metalinguistic awareness, as learners begin to recognize patterns and meanings within culturally meaningful discourse (Mohamed, 2023). This process cultivates a more profound appreciation of Arabic as a living language intertwined with cultural and religious significance, rather than a purely instructional subject. Consequently, culturally embedded pedagogy strengthens both linguistic competence and cognitive depth, positioning Arabic learning as an integrative process that unites language, culture, and thought.

b. Socio-Cultural Identity and Language

The Arabic language functions as a central medium through which socio-cultural identity is preserved and transmitted across generations, especially within contexts such as the UAE where language, religion, and social life are tightly interwoven. Arabic operates not only as a communicative tool but also as a carrier of collective memory, moral values, and familial norms (Zakarneh & Mahmoud, 2025). Through daily interactions in the home and community, children encounter Arabic as the language of kinship, respect, and social obligation, reinforcing patterns of social cohesion from an early age. This embeddedness strengthens intergenerational bonds and positions Arabic as a symbolic anchor that stabilizes identity in the midst of rapid modernization and globalization.

Importantly, learning Arabic within culturally rich environments has measurable implications for children's cognitive development. That heritage-

based language exposure enhances cognitive flexibility, narrative competence, and meaning-making abilities, as children process language through familiar cultural schemas. Such contexts enable learners to integrate linguistic input with social knowledge, promoting deeper semantic processing and reflective thinking (Ballarín-Rosell & Vicente, 2025). Rather than constraining cognitive growth, heritage-oriented language learning expands it by situating cognition within culturally meaningful frameworks. In this way, Arabic education that foregrounds cultural richness contributes simultaneously to identity formation and cognitive advancement, affirming language as a foundational axis of both intellectual and socio-cultural development.

c. Implications of Neglecting Cultural Context

Neglecting the socio-cultural dimension in Arabic instruction risks reducing the cognitive impact of otherwise well-designed pedagogical approaches. Developmentally appropriate methods alone are insufficient when language learning is detached from the cultural meanings that give linguistic forms their functional and symbolic value. Without socio-cultural grounding, Arabic instruction may be reduced to mechanical repetition and surface-level memorization, limiting opportunities for deeper cognitive processing such as inferencing, contextual reasoning, and conceptual integration (Zakarneh & Mahmoud, 2025). In this sense, the absence of cultural embeddedness weakens the language–thought relationship, constraining the potential of Arabic learning to stimulate higher-order cognitive development.

Moreover, the lack of cultural relevance can directly affect learner engagement and motivation. That when learners fail to perceive the practical and social significance of a language, their participation becomes passive and instrumental rather than meaningful. For children, particularly, language that is disconnected from everyday practices, communal rituals, or familiar narratives appears abstract and distant, leading to disengagement and reduced attention (Zhang & Yang, 2025). This disengagement not only undermines affective involvement but also impairs cognitive outcomes, as sustained attention and emotional investment are critical for memory consolidation and language acquisition. Therefore, integrating socio-cultural relevance into Arabic instruction is not a peripheral concern but a pedagogical necessity for ensuring both cognitive effectiveness and learner commitment.

4. Reframing Arabic Instruction; From Ritual Exposure to Cognitive Practice

A critical implication of this study is the need to reconceptualize Arabic language learning in Islamic early childhood education. The literature reveals a persistent tendency to frame Arabic instruction as ritual exposure or memorization-based practice, often detached from cognitive development goals. Such approaches limit children’s active engagement and underutilize the cognitive potential of early

language learning. In contrast, developmentally informed and interaction-oriented instruction positions Arabic as a cognitive practice that supports early thinking skills. The study highlights the necessity of reconceptualizing Arabic language learning within Islamic early childhood education, moving away from traditional memorization and ritualistic practices. Current approaches often prioritize form over meaning, limiting cognitive engagement and the development of critical thinking skills. In contrast, a developmentally informed and interaction-oriented framework can enhance children's cognitive abilities through active language use.

a. Traditional Approaches to Arabic Learning

Many Arabic learning practices continue to privilege rote memorization and ritualized exposure, often prioritizing phonetic accuracy and textual reproduction over semantic understanding. Rosowsky, in his study of British Muslim children learning Qur'anic Arabic, demonstrates how instructional emphasis on correct pronunciation and formal recitation can marginalize meaning-making processes (Rosowsky, 2023). While such practices may succeed in preserving ritual competence, they frequently fail to support functional language awareness or cognitive engagement. As a result, learners may internalize Arabic as a sacred but opaque code, limiting their ability to connect linguistic forms with concepts, contexts, and communicative intent.

Similar concerns emerge in the experiences of non-Arab Muslim learners in Australian Islamic schools, where repetitive instructional routines have been reported to impede both engagement and comprehension. Selim notes that monotonous lesson structures, heavily reliant on drilling and repetition, often generate learner fatigue and dissatisfaction, ultimately leading to disillusionment with Arabic learning (Selim, 2023). This pedagogical rigidity not only constrains motivation but also undermines deeper cognitive processes such as inference, retention, and transfer of knowledge. Together, these findings suggest that when Arabic instruction remains confined to ritualistic repetition, it risks alienating learners and diminishing the educational value of the language, underscoring the need for more meaning-oriented and cognitively responsive pedagogical frameworks.

b. Developmentally Informed Instruction

Research increasingly demonstrates that collaborative learning environments play a decisive role in enhancing vocabulary acquisition during early childhood, particularly by activating social-cognitive mechanisms. Rabie-Ahmed and Mohamed (2022) show that peer interaction, joint problem-solving, and dialogic exchanges create opportunities for children to negotiate meaning, repeat lexical items in meaningful contexts, and receive immediate feedback. Such interaction not only strengthens lexical retention but also stimulates higher-order cognitive processes, including attention regulation, perspective-taking, and

conceptual mapping (Rabie-Ahmed & Mohamed, 2022). In the context of early Arabic language learning, collaborative activities—such as group storytelling or shared word games—transform vocabulary from isolated linguistic units into socially embedded knowledge, thereby deepening cognitive engagement and facilitating more durable learning outcomes.

Complementing this social dimension, research on early reading instruction underscores the importance of developmentally appropriate linguistic scaffolding. Ahmad and Share (2024) demonstrate that the use of syllabic units in early reading instruction significantly improves reading accuracy and speed, reflecting more efficient cognitive processing of linguistic input. By aligning instructional methods with children’s emerging phonological awareness, such approaches reduce cognitive load and enable learners to recognize meaningful sound patterns more effectively (Abu Ahmad & Share, 2025). When applied to Arabic, whose morphological and phonological structures are highly systematic, syllable-based instruction can support both decoding skills and broader cognitive growth. Together, these findings highlight that cognitively responsive Arabic pedagogy must integrate social interaction with age-appropriate literacy strategies to optimize language development in early childhood.

CONCLUSION

This study affirms that Arabic language learning in Islamic early childhood education holds substantial cognitive value when it is designed in accordance with children’s developmental stages. The findings demonstrate that introducing basic Arabic vocabulary, sounds, and symbols through developmentally appropriate and interactive strategies transforms Arabic from a purely ritualistic medium into a meaningful cognitive resource. Such an approach stimulates key cognitive processes—particularly symbolic representation, memory retention, categorization, and early linguistic awareness—which are essential for children in the preoperational stage. By aligning Arabic instruction with principles of developmental psychology, early language exposure contributes not only to religious literacy but also to broader cognitive readiness that underpins future academic learning.

Furthermore, the study highlights a critical pedagogical gap in prevailing Arabic instruction, which often prioritizes rote memorization and repetitive exposure while marginalizing meaning-making and learner engagement. The findings indicate that cognitively grounded, multisensory, and socio-culturally embedded learning environments significantly enhance motivation and cognitive involvement, especially when Arabic is integrated into familiar religious practices and communal values. This research therefore reframes Arabic learning in early Islamic education as a pedagogical domain that must balance religious authenticity

with cognitive responsiveness. By positioning Arabic as both a cultural-religious language and a developmental stimulus, the study offers a theoretically informed and practically relevant framework for advancing child-centered Arabic pedagogy in Islamic early childhood education.

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