Tadris Al-'Arabiyyah: Jurnal Pendidikan Bahasa Arab dan Kebahasaaraban 5 (2): 171-183 (2026)
DOI: https://doi.org/10.15575/ta.v5i2.56254

Tadris Al-'Arabiyyah
Jurnal Pendidikan Bahasa Arab dan Kebahasaaraban
E-ISSN: 2963-6876 // Vol. 5 No. 2 | 171-183
https://journal.uinsgd.ac.id/index.php/ta/index

Received: Juni, 2026. Accepted: Oktober, 2026. Published: Oktober, 2026.

COGNITIVE LOAD AND LEARNING DISORIENTATION IN ARABIC: A PHENOMENOLOGICAL STUDY OF MADRASAH TSANAWIYAH STUDENTS

Zilvi Shobrina[1], Chilma Asma Munaya[2], Naila Qurrotul Aini[3], Sema Thanitia Nurul Hijja[4]
[1,2,3] Universitas Islam Negeri Sunan Kalijaga Yogyakarta, Indonesia
[4] Al-Azhar University Cairo, Egypt
Corresponding E-mail: sabrinazilvi6@gmail.com

ABSTRACT

The complexity of language structures, the abundance of new vocabulary, and the density of instructional materials may increase the demands of learning Arabic. This study aims to describe students' experiences of learning difficulties from the perspective of Cognitive Load Theory (CLT). The study used a qualitative phenomenological approach following Moustakas's procedures, with modifications from the Stevick–Colaizzi–Keen method. Data were collected through in-depth interviews with 11 students aged 12–15 years, classroom observations, and documentation. The findings revealed five patterns of experience: difficulties in understanding learning materials; difficulties in remembering vocabulary (mufradāt) and previously learned material; learning disorientation when students did not understand the material; emotional responses, including stress, anxiety, tension, and boredom; and efforts to overcome learning difficulties through material review and by seeking assistance from teachers or peers. From a CLT perspective, these findings suggest that students perceive demands associated with information processing. However, cognitive load was not measured directly, and causal relationships were not tested. Material segmentation, step-by-step examples, visual support, and guided assistance may serve as pedagogical implications that warrant further investigation in future research.

Keywords: Cognitive load, Learning Disorientation, Arabic Language Learning, Phenomenological Study

ABSTRAK

Kompleksitas struktur bahasa, banyaknya kosakata baru, dan padatnya materi dapat meningkatkan tuntutan belajar bahasa Arab. Penelitian ini bertujuan mendeskripsikan pengalaman siswa dalam menghadapi kesulitan belajar melalui perspektif Cognitive Load Theory (CLT). Penelitian menggunakan pendekatan kualitatif fenomenologis dengan prosedur Moustakas melalui modifikasi Stevick–Colaizzi–Keen. Data dikumpulkan melalui wawancara mendalam terhadap 11 siswa berusia 12–15 tahun, observasi kelas, dan dokumentasi. Hasil menunjukkan lima pola pengalaman: kesulitan memahami materi, kesulitan mengingat kosakata (mufradāt) dan materi sebelumnya, disorientasi siswa dalam belajar ketika tidak memahami materi, respons emosional berupa stres, kecemasan, ketegangan, dan kejenuhan, serta upaya mengatasi kesulitan melalui pengulangan materi dan meminta bantuan guru atau teman. Dalam perspektif CLT, temuan ini mengindikasikan adanya tuntutan pemrosesan informasi yang dirasakan siswa, tetapi beban kognitif tidak diukur secara langsung dan hubungan sebab-akibat tidak diuji. Segmentasi materi, contoh bertahap, dukungan visual, dan pendampingan dapat menjadi implikasi pedagogis yang perlu diuji dalam penelitian selanjutnya.

Kata Kunci: Beban Kognitif, Disorientasi Belajar, Pembelajaran Bahasa Arab, Studi Fenomenologis

Copyright: © 2026 by the author(s).
This open-access article is distributed under the terms and conditions of the Creative Commons Attribution-ShareAlike (CC BY-SA) license (https://creativecommons.org/licenses/by-sa/4.0/).

INTRODUCTION

Arabic language learning requires students to study various linguistic aspects, including vocabulary, morphology, syntax, phonology, and writing systems, each of which presents distinct challenges for non-native learners (Syagif, 2024; Mufidha, et al, 2026). During the learning process, students are required to understand grammatical rules, memorize new vocabulary, and apply their knowledge in exercises (Rifai & Fathul `Maujud, 2026). These demands may increase the information-processing demands of learning. Therefore, students' difficulties in understanding and remembering Arabic learning materials are relevant to examine through the lens of Cognitive Load Theory (CLT) to better understand the cognitive demands of the learning process.

Cognitive Load Theory explains that information processing during learning is related to the limited capacity of working memory and the ability of long-term memory to store and organize knowledge (Sweller et al., 2011). Within this framework, cognitive load may be associated with the complexity of the learning material (intrinsic load) and the way information is presented or learning activities are designed (extraneous load). CLT literature also discusses germane load in relation to constructing knowledge schemas. When information-processing demands exceed available capacity, students may have difficulty understanding the material. This framework can be used to interpret experiences of difficulty in Arabic language learning; however, such difficulties do not, in themselves, demonstrate the occurrence of cognitive overload (Sweller et al., 2011).

In the context of Madrasah Tsanawiyah (MTs), cognitive overload may arise from the complexity of instructional materials, particularly in Arabic language learning, which requires students to acquire vocabulary, grammatical structures (nahwu–sharaf), and reading and text comprehension skills simultaneously (Herliyanti & Widyastuti, 2025). These demands warrant investigation when students struggle to understand explanations, remember vocabulary, or apply grammatical rules in exercises. Previous studies have also examined various aspects of Arabic language learning, including teaching methods, instructional media, and learning management (Adawiyah, 2021; Rahmawati et al., 2024). However, to understand students' learning difficulties, consider their direct experiences rather than assuming they result solely from the complexity of the material or instructional design.

The concept of cognitive overload has been widely applied in science, mathematics, and foreign language learning, including English language learning (Baxter et al., 2025). In Arabic language learning, research applying Cognitive Load Theory remains relatively limited (Syagif, 2024) . Syagif (2024) discussed the implications of cognitive load theory, while Fahrezi et al. (examined the complexity of nahwu–sharaf in reading instruction. (Mufidha, et al., 2026) measured three types of cognitive load among 36 students at MAN Sumenep and found that the students' cognitive load fell within the moderate category. Other studies on Arabic language learning have focused more extensively on the effectiveness of teaching methods and instructional media (Afriza et al., 2025). Based on the literature reviewed, further research is needed to explore how students experience and make sense of information-processing demands, particularly when difficulties understanding the material develop into unresolved confusion and an inability to identify which aspects they do not understand.

In addition to processing difficulties, students' experiences also need to be examined in terms of learning disorientation, defined as confusion about learning materials accompanied by difficulty identifying what remains unclear or determining what questions to ask. This experience warrants investigation because learning difficulties do not necessarily end with a lack of

understanding of the material; they may also be associated with students' difficulties in determining how to address their confusion.

To address this research gap, the present study adopts a phenomenological approach to explore students' experiences of cognitive demands during Arabic language learning. This approach enables the researcher to understand how students make sense of difficulties in understanding learning materials, remembering *mufradāt* (vocabulary), identifying aspects they do not yet understand, and responding to these difficulties through their behavior and learning engagement. This study explores students' experiences of cognitive load and learning disorientation at Madrasah Tsanawiyah Yayasan Qurana Qorina through the CLT perspective, with particular attention to affective responses, learning engagement, and the strategies students use to cope with difficulties. The Madrasah Tsanawiyah context was selected because Arabic language learning at this educational level involves demands related to vocabulary acquisition, grammatical rules, and text comprehension, making students' direct experiences particularly relevant to investigation (Herliyanti & Widyastuti, 2025).

METHOD

This study employed a qualitative research method with a phenomenological approach, which seeks to understand events as experienced by individuals or groups in particular situations (Nasir et al., 2023). The study drew on the tradition of transcendental (descriptive) phenomenology (Moustakas, 2009), which places the meaning of participants' experiences at the center of analysis and requires researchers to suspend their own assumptions throughout the research process (Neubauer. This approach aligned with the study's aim: to explore students' experiences of cognitive overload in Arabic language learning at Madrasah Tsanawiyah. The investigation focused on students' learning experiences, ranging from difficulties in understanding learning materials and perceived cognitive overload to their interactions with instructional methods and media (Creswell, 2013).

Participants were selected using purposive sampling, in which participants are chosen based on considerations relevant to the research objectives (Sugiyono, 2022). The inclusion criteria were students enrolled at Madrasah Tsanawiyah who regularly attended Arabic language classes, had diverse learning experiences, and were willing to provide information openly after receiving an explanation of the research objectives (Nandang et al., 2026). Students who did not attend classes regularly or were unwilling to be interviewed were excluded from the study. To capture a range of experiences, the study involved 11 participants aged 12–15 years from different grade levels and with varying levels of Arabic language proficiency. The number of participants was not determined through systematic monitoring of data saturation but was based on the adequacy of the information obtained during the interviews (Suryanti et al., 2025). This consideration was informed by similarities in the responses and experiences reported by several participants in relation to the research focus. Accordingly, information adequacy was understood in terms of the relevance and similarity of the collected data, rather than as a claim that formal data saturation had been achieved.

Data were collected through in-depth interviews with 11 students at Madrasah Tsanawiyah Yayasan Qurana Qorina, classroom observations, and document analysis. The interviews explored students' subjective experiences, particularly what they experienced and felt when learning Arabic became overwhelming. Classroom observations were conducted during two sessions in the same class to examine students' behavior during instruction and assess the consistency of observed patterns. The documents included lesson plans (Rencana Pelaksanaan

Pembelajaran, RPP) and teaching modules, which were examined to understand the learning materials, activities, and instructional demands students encountered. These three data sources complemented one another to provide a more comprehensive understanding of students' learning experiences (Creswell, 2013).

Data analysis followed the phenomenological procedures outlined by (Moustakas, 2009), using a modified version of the *Stevick–Colaizzi–Keen* method. First, the researcher practiced epoche by identifying, reflecting on, and suspending personal assumptions about difficulties in Arabic language learning through researcher reflexivity. This process was intended to prevent initial assumptions from being used directly as the basis for interpreting participants' experiences. Second, all interview data were transcribed and read repeatedly to develop an overall understanding of the participants' experiences. Third, we conducted horizontalization by identifying statements relevant to experiences of cognitive overload and treating them as equally significant during the initial stage of analysis. Repetitive statements and those unrelated to the research focus were excluded. Fourth, statements with similar meanings were grouped into meaning units and themes known as invariant constituents. Fifth, these themes were used to construct textural descriptions, which described what the students experienced, and structural descriptions, which explained how and under what conditions those experiences occurred through imaginative variation. Observation notes and instructional documents provided contextual information to support the interpretation of participants' experiences. Sixth, the researcher synthesized the textural and structural descriptions to formulate the essence of participants' experiences in dealing with cognitive demands during Arabic language learning.

Data trustworthiness was addressed to establish the credibility, dependability, and confirmability of the findings (Rukajat, 2018). The researcher compared interview data from individual participants with observational data and documentation to assess information consistency and develop a coherent understanding of students' experiences of cognitive overload (Wiyanda Vera Nurfajriani, 2024). In addition, member checking was conducted to better understand the participants' perspectives. Rather than serving merely as a formal procedure, member checking was intended to assess the alignment between the researcher's interpretations and the experiences reported by the participants (Candela, 2019).

RESULTS AND DISCUSSION

Results

The interview findings revealed five main themes that formed the focus of the analysis: (1) difficulties in understanding Arabic learning materials; (2) difficulties in remembering vocabulary and previously learned material; (3) learning disorientation when facing difficulties in understanding the material; (4) emotional and behavioral responses to learning difficulties; and (5) students' strategies for coping with cognitive demands and learning disorientation.

Table 1. Summary of the Main Themes and Supporting Evidence

No	Theme	Interview Evidence	Supporting Observational and Documentary Evidence
1	Difficulties in Understanding Arabic Learning Materials	S2 reported difficulties understanding the material because it covered many different types of content, while S4 identified nahwu (Arabic	Classroom observations recorded indicators of confusion and difficulties completing tasks. The documents showed that the instructional materials were dense and varied across sessions.

		syntax) as a particularly difficult area.	
2	Difficulties in Remembering Vocabulary and Learning Materials	S5 described difficulties remembering vocabulary after a period of time, while S8 reported forgetting previously learned material when asked about it again.	Observations provided context regarding learning behavior but did not directly measure memory retention. The documents provided contextual information about the learning materials.
3	Learning Disorientation When Facing Comprehension Difficulties	S7 experienced difficulty determining what to ask, while S9 reported remaining confused even after asking a question.	Observations recorded indicators of confusion and repeated questioning. The documents provided context regarding the instructional materials.
4	Emotional and Behavioral Responses to Learning Difficulties	S4 described feeling stressed when unable to understand the material, while S3 reported feeling nervous when asked to construct an example.	Observations recorded indicators such as passivity, boredom, fatigue, drowsiness, and appearing distressed. These indicators did not, in themselves, establish particular emotional states.
5	Students' Strategies for Coping with Cognitive Demands and Learning Disorientation	S1 reported asking the teacher for help, S5 mentioned reviewing the material, and S4 described asking classmates for assistance.	Observations provided context regarding variations in participation and repeated questioning. The documents did not establish that students used these strategies independently.

Difficulties in Understanding Arabic Learning Materials

Students reported difficulties understanding Arabic learning materials, particularly nahwu (Arabic syntax), although some also identified sharaf (Arabic morphology) as a difficult area. S2 stated, "*ga paham materinya karena banyak macemnya*" (I do not understand the material because there are so many different types). At the same time, S4 identified nahwu as the most difficult area because "*macamnya banyak banget*" (there are so many different types). These statements indicate that students experienced difficulties with different aspects of the material and attributed some of these difficulties to the variety of topics or grammatical rules they were expected to understand.

The teaching module documentation showed that instruction included introducing new vocabulary, explaining nahwu rules, providing examples, and assigning written exercises, with different grammatical rules covered in each session. Meanwhile, the observation notes recorded indicators that students appeared confused and had difficulty completing tasks. These two sources provided context regarding the learning materials and classroom situations accompanying students' experiences. However, the data were insufficient to establish that the materials' presentation directly caused students' comprehension difficulties.

Difficulties in Remembering Vocabulary and Learning Materials

Students described difficulties remembering new vocabulary and previously learned material. S5 stated, "*kalau ditanya pas kelas minggu depannya suka lupa lupa inget*" (when asked about

it in the following week's class, I often have trouble remembering). At the same time, S8 reported, "*mufrodat yang sebelumnya sudah hafal suka lupa kalo ditanya lagi*" (I often forget vocabulary that I had previously memorized when asked about it again). These statements illustrate students' experiences of not always being able to recall previously learned information easily. The reported difficulties involved remembering vocabulary and learning materials, particularly when students were asked to retrieve the information after the lesson. Thus, their experiences involved not only learning new vocabulary but also retaining and recalling it on subsequent occasions.

The teaching module documentation indicated that students learned approximately 7–15 new vocabulary items in each session, alongside reviews of previous material and spontaneous questions intended to prompt recall of vocabulary or previously learned content. During classroom observations, some students appeared to confuse vocabulary items when answering questions. These findings illustrate situations in which students were asked to retrieve previously learned information but do not directly establish the causes or severity of the recall difficulties individual students experienced. Furthermore, the observations did not directly measure students' memory retention.

Learning Disorientation When Facing Comprehension Difficulties

Students felt confused when confronted with material they did not understand, both when deciding what to ask and after requesting further explanations. S7 explained that they usually did not ask questions because "*saking bingungnya sama apa yang mau ditanyain jadi mending aku diem ga nanya*" (I am so confused about what to ask that I would rather stay quiet and not ask anything). At the same time, S9 stated, "*setelah nanya aku juga masih bingung*" (I am still confused even after asking). These two experiences illustrate different forms of learning disorientation: difficulty identifying what needs clarification and continued confusion after asking a question. In this study, learning disorientation refers to students' experiences of difficulty determining what needs clarification or feeling that they have not achieved adequate understanding when encountering learning difficulties.

The teaching module documentation showed that instruction included explanations of the material, examples, written exercises, and several *mufradāt* items for each topic. Although these activities gave students opportunities to respond to instruction, classroom observations indicated that some students tended to remain passive and required repeated explanations. These findings suggest that some students experienced difficulties translating their confusion into specific questions. Accordingly, learning disorientation was not equated with every instance of difficulty understanding the material; rather, it referred to confusion when students tried to determine or obtain clarification about the material being learned.

Emotional and Behavioral Responses to Learning Difficulties

Students described various emotional responses when they had difficulty understanding the material or faced demands to provide answers. S4 stated, "*pernah stress karena gapaham pembelajarannya*" (I have felt stressed because I did not understand the lesson). At the same time, S3 reported, "*aku deg degan kalo disuruh buat contoh tanpa liat buku*" (I feel nervous when asked to create an example without looking at the book). Other students also described feeling afraid or tense when asked to construct examples. Beyond these emotional responses, some students linked particular classroom situations to boredom, drowsiness, or loss of focus. These accounts indicate that students responded to learning difficulties in different ways, both emotionally and through behaviors they described.

The teaching module documentation provided context regarding the instructional materials but did not directly explain students' emotional responses. During classroom observations, some students appeared hesitant when called upon, spoke in low voices, and avoided eye contact, while others appeared passive, yawned, lowered their heads, or talked with classmates. These observations illustrate variations in classroom behavior during situations that required students to respond and participate. However, observed behaviors did not necessarily indicate anxiety; their meanings needed to be interpreted alongside interview accounts and the contexts in which the behaviors occurred. Therefore, observed behaviors were not treated as definitive evidence of particular psychological states. Interview accounts served as the primary basis for describing experiences of stress, nervousness, fear, or boredom that students explicitly reported. At the same time, observations provided additional context regarding behaviors displayed in the classroom.

Students' Strategies for Coping with Cognitive Demands and Learning Disorientation

Students described several ways they addressed material they did not understand. S1 stated, "*kalo aku ga paham mending bertanya ke ustadzah*" (when I do not understand, I prefer to ask the teacher). At the same time, S5 explained, "*materinya harus di ulang-ulang biar aku paham*" (the material needs to be reviewed repeatedly so that I can understand it). S4 also mentioned asking classmates for help. However, not all students found it easy to use questioning as a strategy. S7 explained that they did not ask questions because they had difficulty determining what to ask. These accounts show variation in how students addressed learning difficulties, from seeking help from teachers or classmates and reviewing the material to struggling to formulate questions.

The lesson plan documentation indicated that instruction included reviewing previous material, providing examples, assigning written exercises, and giving students opportunities to ask questions at the end of the lesson. The review activities described in the lesson plans were consistent with the strategy reported by S5. However, the documents did not establish that repeated review was always effective in resolving students' difficulties. The observation notes provided context regarding variations in student participation, including repeated questioning and passive behavior during instruction. Some students remained passive and required further explanations. These findings indicate that students' strategies were not uniform: some actively sought assistance and reviewed the material, while others struggled to initiate clarification.

Overall, students' experiences of Arabic language learning revealed varied difficulties in understanding instructional materials, recalling vocabulary and information, and deciding what to do when they encountered comprehension difficulties. These experiences also involved emotional and behavioral responses and varied ways students addressed their difficulties. Within the documented instructional context, students encountered Arabic grammatical materials, while classroom observations revealed variations in behavior and engagement during lessons. This synthesis portrays learning as a non-uniform process in which students faced not only difficulties understanding the material but also confusion about seeking clarification and determining appropriate actions to continue learning.

Discussion

The learning experiences examined in this study can be understood as reflecting a tension between the demands of processing various linguistic elements and students' ability to integrate them into meaningful understanding. Students encountered not only new vocabulary but also the need to understand interrelated sentence structures and grammatical rules. From the perspective of Cognitive Load Theory (CLT), task complexity is influenced by the interactivity of the

information elements that must be processed simultaneously and by the knowledge learners already possess. (Sweller et al., 2011) explain that limited processing capacity during task performance may hinder schema construction when cognitive resources are devoted primarily to completing tasks rather than developing understanding. This explanation helps interpret students' difficulties with nahwu and sharaf not merely as consequences of the amount of material but as experiences of dealing with linguistic elements that must be understood and connected. Accordingly, the interpretation focuses on the relationship between material complexity and students' readiness to process information rather than assuming that Arabic is inherently too difficult to learn (Sweller et al., 2011).

Difficulties in understanding the material, however, do not automatically indicate cognitive overload. These experiences may also relate to prior knowledge, levels of conceptual mastery, and how the material is presented. (Sweller et al., 2011) identify the limited capacity of working memory and the construction of schemas in long-term memory as fundamental to understanding the learning process, (Paas & van Merriënboer, 2020) further explain how these principles of cognitive architecture can be applied to instructional design. In relation to the present study, these perspectives highlight the alignment between the demands of the material and the instructional support available to students. Explanations of grammatical rules, worked examples, and exercises may facilitate learning, but their effectiveness depends on how students organize and understand these elements. Because this study did not directly measure cognitive load or compare instructional designs, the relationship between material presentation and students' difficulties should be understood as a theoretical interpretation rather than evidence of a causal relationship (Sweller et al., 2011, 2019).

Difficulties in remembering vocabulary and learning materials indicate that learning does not end when students receive an explanation or recognize information during a lesson. Previously learned information may not always be readily retrieved when it is needed in a subsequent session. In research on second language learning, (Kim, & Webb, 2022) conducted a meta-analysis of 48 experiments involving 3,411 participants and found that spaced practice, in which practice is distributed across multiple learning sessions, benefits second language learning. Meanwhile, Cepeda et al. (2006), through a quantitative synthesis of distributed-practice research, showed that the intervals between learning sessions and the delay before retention testing relate to successful information recall. These studies provide a broader perspective for interpreting the experiences reported by students in the present study. Difficulties remembering vocabulary need not be interpreted as an inability to memorize; rather, they may be understood as a matter of retention that should be considered alongside opportunities to revisit previously learned information. However, because this study did not examine practice schedules or repetition intervals, these sources serve as theoretical and empirical points of comparison rather than evidence that insufficient spaced practice caused students to forget vocabulary (Cepeda et al., 2006; Kim.

Beyond scheduling learning activities, how students practice retrieving information also matters for understanding their experiences of forgetting. (Roediger, 2008) demonstrated that retrieval practice can support better retention than simply restudying material under the experimental conditions examined. This finding suggests that vocabulary mastery should not be evaluated solely by whether students have previously read or reviewed a word, but also by whether they can recall and use it after the learning activity has ended. In relation to students' reports of forgetting previously learned vocabulary, learning can therefore be understood as developing the ability to retrieve knowledge rather than merely receiving new information. Accordingly, vocabulary recall exercises, using words in sentence contexts, and reviewing material on different

occasions may be considered pedagogical implications. Nevertheless, the present study did not test the effectiveness of retrieval practice among the participating students. These strategies should therefore be regarded as possible directions for future practice based on previous research, rather than interventions whose effectiveness has been demonstrated in this study (Karpicke, & Roediger., 2008).

Learning disorientation reveals a dimension of students' experiences in which they not only struggle to understand the material but also do not know what steps to take to gain clarity. Not knowing what to ask or remaining confused after asking a question indicates a gap between recognizing a lack of understanding and determining how to address it. From a metacognitive perspective, (Flavell, 1976) emphasizes the importance of monitoring one's own cognitive processes. Students need to recognize what they have understood, what remains unclear, and whether the strategies they use have helped them achieve their learning goals. This perspective is relevant to interpreting disorientation as an experience in which monitoring and deciding on the next learning steps have not yet produced the clarity students need. However, the present study did not independently measure metacognitive ability. Therefore, learning disorientation cannot be used to conclude that students generally have low metacognitive ability. The term is more appropriately used to describe the difficulty of directing learning-related actions when the material remains insufficiently understood (Flavell, 1976).

The relationship between task demands, cognitive resources, and the ability to regulate learning is also illustrated by (Seufert et al., 2024) Their study found an inverted U-shaped relationship between task difficulty and the use of cognitive strategies: beyond a certain level of difficulty, increasing demands may be accompanied by a decline in the use of cognitive strategies. This finding helps explain why students experiencing difficulties may not always be able to determine appropriate strategies to address them. In the present study, not knowing what to ask can be interpreted as difficulty initiating clarification when understanding has not yet been established. However, learning disorientation is not a separate category of cognitive load within CLT, and Seufert et al.'s findings do not show that the same mechanism necessarily occurred among the students in this study. A more cautious interpretation is that learning difficulties should be considered alongside students' ability to identify problems and determine next steps, rather than understood solely in terms of the material's difficulty (Seufert et al., 2024).

Students' emotional and behavioral responses indicate that Arabic language learning involves more than information processing alone. Tension when asked to construct example sentences, stress when unable to understand the material, and a tendency to remain silent suggest that learning difficulties may also be experienced emotionally and may affect classroom participation. (Teimouri, et al., 2019), in a meta-analysis of second language anxiety and learning outcomes, found a negative relationship between second language anxiety and learning achievement. Their findings underscore the relevance of emotional factors in understanding language-learning experiences. However, these findings do not establish that anxiety caused comprehension difficulties among the participants in the present study. The interview data support interpretations of the stress or tension students reported, but they do not establish clinical levels of anxiety or determine causal relationships. Emotional responses should therefore be understood as part of the experiences accompanying students' learning difficulties, while maintaining a distinction between emotions reported by students and behaviors observed by the researcher (Teimouri, et al., 2019).

Evans et al. (2024) also discussed the relationship between cognitive demands, motivation, and engagement through the perspectives of CLT and self-determination theory. Their analysis

indicates that instructional strategies that support cognitive load management, along with teaching styles that provide structure and support learner autonomy, are associated with student motivation and engagement. This perspective broadens the interpretation of the present findings because silence or hesitation when answering questions cannot be understood solely as evidence of cognitive overload. Such behaviors may have different meanings and need to be interpreted alongside students' explanations of their experiences. Accordingly, learning difficulties can be examined in relation to material demands, emotional experiences, and classroom interaction. This implication does not mean that the present study has demonstrated the effects of teaching styles on student motivation; rather, it highlights the importance of considering cognitive support and the classroom learning environment when interpreting students' experiences (Evans et al., 2024).

Students' strategies for addressing learning difficulties can be understood as attempts to maintain or regain control over the learning process. When students ask teachers questions, seek help from classmates, or request repeated explanations, they demonstrate responses to their lack of understanding. (Zimmerman, 2002) describes self-regulated learning as a process in which learners actively regulate cognitive, motivational, and behavioral aspects of their learning to achieve their goals. This perspective helps explain that learning strategies are not merely observable actions but are also linked to how students recognize their needs, select appropriate actions, and evaluate outcomes. In the present study, differences in students' strategies indicate variation in how they cope with difficulties. Still, they are insufficient to conclude that some students regulate their learning more effectively than others. Such an assessment would require further data on students' goals, strategy-selection processes, and the effectiveness of their actions (Zimmerman, 2002).

These findings have implications not only for the strategies students use but also for the instructional support that enables them to implement them. (Paas & van Merriënboer, 2020) explain that CLT can inform the design of instructional conditions that help manage working memory demands when students learn complex tasks. In Arabic language learning, these principles may be applied through examples before more complex tasks, the gradual organization of instructional materials, and feedback when students experience difficulties. (Evans et al., 2024) also demonstrate the relevance of cognitive load management strategies and motivational support in learning. Together, these studies support the view that responsibility for overcoming learning difficulties should not be placed on students alone. Teachers can help students identify aspects of the material they do not understand, formulate questions, and reassess their understanding after receiving explanations. However, because the present study did not test specific instructional interventions, these measures should be regarded as implications worth considering rather than strategies whose effectiveness this study established (Evans et al., 2024; Paas & van Merriënboer, 2020).

Overall, the students' experiences in this study encompassed more than difficulties understanding the material. They also included recalling information, staying on track in learning, responding emotionally to difficulties, and deciding how to continue learning. CLT provides a theoretical basis for interpreting information-processing demands and working memory limitations. At the same time, research on metacognition and self-regulation helps explain how students recognize and respond to gaps in understanding. (Sweller et al., 2019) emphasize the relevance of cognitive architecture to instructional design, while (Seufert et al., 2024) illustrate the relationship between task difficulty, learner resources, and the use of self-regulatory strategies. These perspectives can be integrated to interpret students' experiences holistically without treating forgetting, disorientation, emotional responses, and cognitive load as equivalent constructs. Thus, this study broadens the understanding of Arabic language learning experiences

by examining the relationship between cognitive demands, knowledge construction, learning orientation, and students' responses to difficulties (Seufert et al., 2024; Sweller et al., 2019).

The essence of experience identified in this study lies in students' experiences of facing the demands of understanding Arabic while encountering perceived limitations in their understanding, difficulties retaining information, and uncertainty about how to obtain clarification. These experiences may occur alongside emotional tension, hesitation to participate, or attempts to seek assistance. CLT helps explain information-processing demands, while metacognitive and self-regulatory perspectives help interpret how students try to direct their learning processes. (Flavell, 1976) emphasizes the importance of cognitive monitoring, while (Zimmerman, 2002) conceptualizes the regulation of cognition, motivation, and behavior as components of self-regulated learning. Together, these perspectives clarify that students' experiences concern not only material they have yet to master but also how they recognize, interpret, and attempt to overcome learning difficulties. Therefore, the phenomenological contribution of this study is not to demonstrate that all students experience cognitive overload, but to show how the demands of Arabic language learning are experienced as a process of attempting to understand, remember, seek clarification, respond to difficulties, and find ways to continue learning (Flavell, 1976; Zimmerman, 2002).

CONCLUSION

This study shows that students' experiences in Arabic language learning involve not only difficulties in understanding instructional materials but also difficulties in recalling information, learning disorientation when determining how to address comprehension difficulties, emotional responses, and efforts to seek assistance. The central phenomenon identified is students' difficulty managing learning demands when understanding has not yet been established, while the steps needed to achieve clarity are not always apparent. Cognitive Load Theory (CLT) helps interpret these experiences through information-processing limitations and the importance of prior knowledge. In contrast, self-regulation helps explain students' efforts to cope with learning difficulties. However, these findings do not establish that all of these experiences are caused by cognitive overload. Essentially, this study shows that difficulties in Arabic language learning relate not only to material that has not yet been mastered but also to students' experiences of understanding, remembering, and finding ways to continue learning.

This study has several limitations. It was conducted at a single school; therefore, the findings reflect the learning context and participants' experiences within that particular environment and cannot be widely generalized. Furthermore, the study focused on students' experiences and did not directly measure cognitive load or test the effectiveness of specific instructional strategies. Future research is recommended to involve multiple schools with diverse student characteristics and learning conditions to broaden the understanding of this phenomenon. Further studies could also examine instructional designs based on content segmentation, accompanied by step-by-step examples, vocabulary retrieval practice, and targeted feedback. Such trials could assess changes in comprehension, vocabulary retention, and students' ability to identify and address learning difficulties. Cognitive load should also be measured directly to enable a more robust analysis of the relationship between instructional design and students' learning experiences.

AUTHOR CONTRIBUTIONS STATEMENT

ZS (first author) was responsible for conceptualizing the study, developing the research methodology, collecting data through interviews, observations, and documentation, analyzing data using a phenomenological approach, and preparing the original draft. CAM (second author) contributed to research supervision, validation of the analytical findings, critical review of the manuscript, and refinement of the theoretical framework. NQA (third author) contributed to the literature search, development of theoretical references, and review and editing of the manuscript. STNH (fourth author) contributed to reviewing the manuscript's substantive content, refining the presentation of the research findings, and conducting the final manuscript review. All authors read and approved the final version of the manuscript.

ACKNOWLEDGMENT

The authors thank Madrasah Tsanawiyah Yayasan Qurana Qorina for granting permission and providing the opportunity to conduct this study. Sincere appreciation is also extended to the students who willingly participated as informants and openly shared their learning experiences. Furthermore, the authors would like to thank their parents, academic supervisors, and all those who provided support, feedback, and encouragement throughout the research process and the preparation of this manuscript.

REFERENCES

Adawiyah, F. (2021). Variasi Metode Mengajar Guru dalam Mengatasi Kejenuhan Siswa di Sekolah Menengah Pertama. *Jurnal Paris Langkis*, *2*(1), 68–82. https://doi.org/10.37304/paris.v2i1.3316

Afriza, Abdullah, N., Kasmiati, K., Halomoan, & Maali, A. (2025). The Influence of Learning Methods and Media on the Teaching Effectiveness of Arabic Language Teachers. *Izdihar : Journal of Arabic Language Teaching, Linguistics, and Literature*, *8*(1), 1–14. (education; Arabic; foreign language). https://doi.org/10.22219/jiz.v8i1.33129

Baxter, K. A., Sachdeva, N., & Baker, S. (2025). The Application of Cognitive Load Theory to the Design of Health and Behavior Change Programs: Principles and Recommendations. *Health Education & Behavior*, *52*(4), 469–477. https://doi.org/10.1177/10901981251327185

Candela, A. (2019). Exploring the Function of Member Checking. *The Qualitative Report*. https://doi.org/10.46743/2160-3715/2019.3726

Cepeda, NJ, Pashler, H., Vul, E., Wixted, JT, & Rohrer, D. (2006). *Distributed practice in verbal recall tasks: A review and quantitative synthesis.* https://doi.org/10.1037/0033-2909.132.3.354

Creswell, J. W. (2013). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (3rd Edition). SAGE Publications.

Evans, P., Vansteenkiste, M., Parker, P., Kingsford-Smith, A., & Zhou, S. (2024). Cognitive Load Theory and Its Relationships with Motivation: A Self-Determination Theory Perspective. *Educational Psychology Review*, *36*(1), 7. https://doi.org/10.1007/s10648-023-09841-2

Fahrezi, F., Athoillah, M. I., Hakim, R., & Firdaus, M. R. (2026). *Arabic Qira'ah Learning Strategies Based on Cognitive Load Theory: Analysis and Pedagogical Implications.* https://doi.org/10.18860/abj.v11i3.44949

Flavell, J. H. (1976). *Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry.* https://doi.org/10.1037/0003-066X.34.10.906

Herliyanti, D. I., & Widyastuti. (2025). Hubungan Antara Efikasi Diri dengan Beban Kognitif Siswa SMP Muhammadiyah 1 Sidoarjo: Correlation Between Self Efficacy and Cognitive Load In Junior High School Muhammadiyah 1 Sidoarjo. *Academia Open*, *10*(2), 10.21070/acopen.10.2025.9574-10.21070/acopen.10.2025.9574. https://doi.org/10.21070/acopen.10.2025.9574

Karpicke, J. D., & Roediger, H. L., III. (2008). *The critical importance of retrieval for learning*. https://doi.org/10.1126/science.1152408

Kim, S. K., & Webb, S. (2022). *The effects of spaced practice on second language learning: A meta-analysis*. https://doi.org/10.1111/lang.12479

Moustakas, C. E. (2009). *Phenomenological research methods* (Nachdr.). Sage.

Nandang, A., Azhar, R. S., & Fadhlullah, M. F. (2026). Reciprocal Teaching Strategy for Improving Modern Arabic Text Reading Skills. *Tadris Al-'Arabiyyah: Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban*, *5*(1), 54–64. https://doi.org/10.15575/ta.v5i1.54841

Nasir, A., Nurjana, N., Shah, K., Sirodj, R. A., & Afgani, M. W. (2023). Pendekatan Fenomenologi Dalam Penelitian Kualitatif. *Innovative: Journal Of Social Science Research*, *3*(5), 4445–4451.

Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). *How phenomenology can help us learn from the experiences of others*. https://doi.org/10.1007/s40037-019-0509-2

Paas, F., & van Merriënboer, J. J. G. (2020). *Cognitive-Load Theory: Methods to Manage Working Memory Load in the Learning of Complex Tasks*. https://doi.org/10.1177/0963721420922183

Rahmawati, A. D., Ardianzah, F., & Novitasari, P. (2024). Penerapan Teori Beban Kognitif dalam Pengajaran Matematika Dalam Mengurangi Beban Kognitif Tak Esensial. *JURNAL JENDELA PENDIDIKAN*, *4*(04), 463–472. https://doi.org/10.57008/jjp.v4i04.1112

Rifai, A., & Fathul `Maujud. (2026). Sistem Pembelajaran Bahasa Arab Konsep dan Metodologi dalam Pendidikan Bahasa Asing. *Ta'limi | Journal of Arabic Education and Arabic Studies*, *5*(1), 1–20. https://doi.org/10.53038/tlmi.v5i1.345

Rukajat, A. (2018). *Pendekatan Penelitian Kualitatif (Qualitative Research Approach)*. Deepublish.

Seufert, T., Hamm, V., Vogt, A., & Riemer, V. (2024). The Interplay of Cognitive Load, Learners' Resources and Self-regulation. *Educational Psychology Review*, *36*(2), 50. https://doi.org/10.1007/s10648-024-09890-1

Sugiyono. (2022). *Metode Penelitian Kualitatif*. Alfabeta.

Suryanti, E., Fauzia, E. L., & Hermawan, A. (2025). Using the RADEC Learning Model to Promote Higher Order Thinking Skills (HOTS) in Arabic Language Learning among Grade 8 Students at As-Salam Middle School for Quran Memorization Bogor. *Tadris Al-'Arabiyyah: Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban*, *4*(2), 251–271. https://doi.org/10.15575/ta.v4i2.51103

Sweller, J., Ayres, P., & Kalyuga, S. (2011). *Cognitive Load Theory*. Springer New York. https://doi.org/10.1007/978-1-4419-8126-4

Sweller, J., van Merriënboer, J. J. G., & Paas, F. (2019). Cognitive Architecture and Instructional Design: 20 Years Later. *Educational Psychology Review*, *31*(2), 261–292. https://doi.org/10.1007/s10648-019-09465-5

Syagif, A. (2024). Teori Beban Kognitif John Sweller dan Implikasinya dalam Pembelajaran Bahasa Arab Pada Jenjang Pendidikan Dasar. *FASHLUNA*, *5*(2), 93–105. https://doi.org/10.47625/fashluna.v5i2.883

Teimouri, Y., Goetze, J., & Plonsky, L. (2019). *Second language anxiety and achievement: A meta-analysis*. https://doi.org/10.1017/S0272263118000311

Ulfatul Mufidha, Ahmad Mubaligh, dan Muhammad Faisol. (2026). Intrinsic, Extraneous, and Germane Cognitive Load in Arabic Learning: A Descriptive Study Based on John Sweller's Theory. *Jurnal: ELOQUENCE: Journal of Foreign Language*. https://doi.org/10.58194/eloquence.v5i2.3582

Wiyanda Vera Nurfajriani, M. W. I. (2024). *Triangulasi Data Dalam Analisis Data Kualitatif*. https://doi.org/10.5281/ZENODO.13929272

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *H. Theory Into Practice, 41*(2), 64–70. https://doi.org/10.1207/S15430421TIP4102_2