



ANXIETY IN STUDENTS' PHONOLOGICAL AND GRAMMATICAL ARABIC LEARNING AT MTS NU 19 PROTOMULYO

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Abstract

This study examines the forms, causes, and impacts of student anxiety in learning Arabic phonology and grammar at MTs NU 19 Protomulyo. Employing a descriptive qualitative approach with limited quantitative support, the research utilizes classroom observations, semi-structured interviews, document analysis, and an adapted Foreign Language Classroom Anxiety Scale (FLCAS). Participants were selected purposively, focusing on students exhibiting linguistic anxiety, with the Arabic teacher as a key informant. Findings indicate that students experience communication apprehension, test anxiety, and fear of negative evaluation, particularly in pronunciation and grammatical usage (nahwu-şaraf). These anxieties stem from low self-confidence, assessment pressure, and classroom social dynamics, leading to reduced participation and comprehension. The study underscores the need for affectively supportive teaching strategies to improve Arabic language learning.

Keywords: Foreign Language Anxiety; Arabic Phonology; Arabic Grammar Learning

تجزيد

تناول هذه الدراسة على مظاهر القلق وأسبابه وآثاره لدى التلاميذ في تعليم الصوتيات وقواعد اللغة العربية بمدرسة خصبة العلماء المتوسطة رقم ١٩ بروتوموليyo. وتعتمد على المنهج الوصفي النوعي مدعوماً ببيانات كمية محددة، باللحظة الصافية، والمقابلات شبه المنظمة، وتحليل الوثائق، إضافة إلى نسخة معدلة من مقياس القلق في فصول تعلم اللغة الأجنبية. وقد اختير المشاركون اختياراً قصدياً، مع التركيز على التلاميذ الذين يعانون من القلق اللغوي، ومعلم اللغة العربية كمحير رئيسي. وتبين النتائج وجود قلق التواصل، وقلق الاختبارات، والخوف من التقييم السلبي، خاصة في النطق وتطبيق القواعد النحوية والصرفية. ويرتبط ذلك بضعف الثقة بالنفس وضغط التقييم والتفاعل الصافي، مما يؤدي إلى انخفاض المشاركة والفهم اللغوي. وتأكد الدراسة أهمية تبني استراتيجيات تدريس داعمة للجوانب الوجدانية لتحسين تعلم اللغة العربية

الكلمات المفتوحة: القلق من تعلم اللغة الأجنبية؛ صوتيات اللغة العربية؛ تعلم النحو العربي



INTRODUCTION

Arabic language learning in Islamic educational institutions, especially at the madrasah level, continues to face significant challenges. The complexity of Arabic phonology and grammar (nahwu-sharaf) makes the language difficult for students whose native language is not a Semitic language, such as Indonesian.¹ Many Madrasah Tsanawiyah students, particularly in Kendal, have difficulty understanding and mastering Arabic pronunciation (phonology) and grammar. Recent studies, such as those by Shao et al. and E. Botes et al., show that these linguistic difficulties are closely intertwined with psychological factors among students, particularly anxiety about learning a foreign language (Foreign Language Anxiety).²

In second language acquisition studies, anxiety is understood as an affective factor that has the potential to hinder the language acquisition process, reduce participation, and lower the quality of language production and comprehension.³ Although the Foreign Language Anxiety framework proposed by Horwitz, Horwitz, and Cope (1986) remains the primary reference in many studies, this approach has often been criticized for treating anxiety as a general construct detached from the specific linguistic characteristics of a language.⁴ In fact, Arabic has phonological and grammatical characteristics that may elicit anxiety distinct from that associated with other foreign languages, such as English or Mandarin.

Several contemporary studies confirm that anxiety in language learning is domain-specific, meaning that it can arise differently in phonology, grammar, vocabulary, and communicative skills.⁵ However, research examining students' anxiety about difficulties in Arabic phonology and grammar remains relatively limited, particularly in the context

¹ Wahyu Dwi Taryanto, "Problematika Fonologi Pada Pembelajaran Bahasa Arab Kelas IX Madrasah Tsanawiyah (Studi Kasus Terhadap BukuAjar)," *MAHIRA: Journal of Arabic Studies & Teaching* 1, no. 2 (2023): 158–68, <https://doi.org/10.14421/mahira.2023.12.05>.

² Kaiqi Shao et al., "Emotions and Instructed Language Learning: Proposing a Second Language Emotions and Positive Psychology Model," *Hypotesis and Theory* 11, no. 1 (2020): 1–13, <https://doi.org/10.3389/fpsyg.2020.02142>; E. Botes, Jean-Marc Dewaele, and S. Greiff, "The Foreign Language Classroom Anxiety Scale and Academic Achievement: An Overview of the Prevailing Literature and a Meta-Analysis.," *Journal for the Psychology of Language Learning* 2, no. 2 (2020): 26–56, <https://doi.org/10.1007/s10936-020-09693-5>; Elaine K. Horwitz et al., "Foreign Language Classroom Anxiety" 70, no. 2 (2009): 125–32.

³ Peter D. MacIntyre, "An Overview of Language Anxiety Research and Trends in Its Development.," *Research and Educational Implications* 21, no. 1 (2017): 11–30, <https://doi.org/10.21832/9781783097722-003>; Ibrahim Oteir and Abdullah Nijr Al-Otaibi, "Foreign Language Anxiety: A Systematic Review," *Arab World English Journal* 10, no. 3 (2019): 309–3171, <https://doi.org/10.24093/awej/vol10no3.21>.

⁴ Jean-Marc Dewaele and Chengchen Li, "Emotions in Second Language Acquisition: A Critical Review and Research Agenda," *BIROn: Birbeck Institutional Research Online* 196, no. 1 (2020): 1004-5112, <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>.

⁵ T. Gregersen and E. K. Horwitz, "No Title," *The Routledge Handbook of Second Language Acquisition and Pedagogy* 5, no. 2 (2020): 131–45, <https://doi.org/10.33545/26649799.2024.v6.i2b.95>; L. J. Zhang, "Second Language Anxiety Revisited: New Theoretical Perspectives and Pedagogical Implications.," *Language Teaching Research* 27, no. 2 (2023): 256–74, <https://doi.org/10.1177/13621688211030254>.

of secondary Islamic education in Indonesia. Most previous studies have emphasized anxiety in general or focused on speaking skills, thus failing to provide an in-depth picture of how difficulties in pronouncing Arabic sounds and understanding *nahwu-sharaf* rules trigger student learning anxiety.⁶

From a psychopedagogical perspective, Krashen (1982) argues that anxiety, which is not addressed correctly, contributes to the formation of an *affective filter*. This emotional barrier prevents linguistic input from being effectively processed within students' cognitive systems.⁷ As a result, even when students possess adequate intellectual abilities, they may still struggle to internalize the phonological and grammatical rules being taught.⁸ In the long term, such anxiety can diminish self-confidence, hinder the Development of communicative competence, and foster negative attitudes toward Arabic language learning as a whole.⁹ Therefore, a profound understanding of the forms, causes, and effects of student anxiety related to phonological and grammatical difficulties is essential to formulate more empathetic and contextually responsive pedagogical approaches in Arabic language instruction at the madrasah level.

Students at MTs NU 19 Protomulyo often experience anxiety in learning Arabic phonology and grammar due to the complexity of pronunciation and the intricacy of *nahwu* and *ṣaraf* rules. This anxiety manifests in nervousness, fear of making mistakes, and low participation, consistent with Horwitz and Cope's (1986) concept of foreign language anxiety, which can hinder communication and reduce motivation.¹⁰ From the perspective of Islamic education, as Imam al-Zarnūjī states in *Ta‘līm al-Muta‘allim*, excessive anxiety may impede the acquisition of knowledge because effective learning requires inner tranquility.¹¹ therefore, understanding and addressing students' anxiety is essential to create a more effective, meaningful, and humanistic Arabic language learning

⁶ Muh Khulaifil Abror and Wulan Indah Fatimatul Djamilah, "Hambatan Psikolinguistik Dalam Pembelajaran Bahasa Arab," *Lisanuna : Jurnal Ilmu Bahasa Arab dan Pembelajarannya* 14, no. 2 (2024): 185–99, <https://doi.org/https://doi.org/10.22373/ls.v14i2.26563>; Hanis Najwa Shaharuddin et al., "The Level of Student Anxiety in Arabic Speaking Skills," *IJRRISS* 1, no. 1 (2024), <https://doi.org/https://dx.doi.org/10.47772/IJRRISS.2024.8080195>; Mirza Mahfud et al., "Anxiety dan Difficulties Dalam Belajar Bahasa Arab Yang Dihadapi Oleh Mahasiswa Latar Belakang Sekolah Umum," *Al-Ittijah : Jurnal Keilmuan dan Kependidikan Bahasa Arab* 16, no. 2 (2024): 75–93, <https://doi.org/10.32678/alittijah.v16i2.10026>.

⁷ Shan Liu, "The Implication of Krashen's Affective Filter Hypothesis on College Students' Listening Learning," *PiscoMed Publishing* 10, no. 8 (2021), <https://doi.org/https://doi.org/10.18282/l-e.v10i8.3105>.

⁸ Imamah and Deria Suryani, "AI-Assisted Language Learning for Preschoolers: Krashen's Second Language Acquisition Theory," *Journal of Educational Management and Instruction* 5, no. 2 (2025): 422–36, <https://doi.org/https://doi.org/10.22515/jemin.v5i2.11958>.

⁹ Hümset Seçkin and Osman Özdemir, "Open Exploring Foreign Language Anxiety in Higher Education: Multifaceted Insights into Causes, Impacts, and Coping Strategies," *Social Sciences & Humanities Open* 11, no. 1 (2025): 1–18, <https://doi.org/10.1016/j.ssaho.2025.101364>.

¹⁰ Horwitz et al., "Foreign Language Classroom Anxiety."

¹¹ Suherman et al., "Implementation of Islamic Education Principles in The Modern Madrasa Curriculum : A Study of Ta ' Lim Al-Muta ' Allim," *IJORER : International Journal of Recent Educational Research* 5, no. 6 (2024): 425–39, <https://doi.org/https://doi.org/10.46245/ijorer.v6i2.790>.



environment.¹² This phenomenon underscores the need for an in-depth analysis of the forms, causes, and impacts of anxiety on difficulties in learning phonology and grammar, as a foundation for developing more humanistic, communicative, and Islamic psychopedagogical instructional strategies.

Previous studies on anxiety in Arabic language learning have generally focused on broad aspects of foreign language anxiety without specifically examining its relationship to particular linguistic difficulties, such as phonology and grammar. Classical research by Horwitz & Cope (1986) and Aida (1994) emphasized general sources of anxiety, including fear of negative evaluation, speaking anxiety, and test anxiety.¹³ Studies in the Indonesian context by Asnawi (2018) and Kurniawati (2021) primarily addressed its impact on speaking ability and motivation.¹⁴ The dominant quantitative research approach often results in mapping anxiety levels without exploring students' subjective experiences in depth. In fact, understanding anxiety in learning Arabic requires contextual exploration that takes into account classroom dynamics, social relations, teacher correction practices, and students' perceptions of themselves as language learners. Therefore, a qualitative approach is needed that can capture the complexity of students' emotional experiences, while still being supported by descriptive quantitative data to reinforce the interpretation.

In contrast, this study adopts a more targeted and context-specific approach by examining student anxiety related to challenges in Arabic phonology and grammar. It aims to deepen the understanding of how anxiety influences Arabic language learning at the madrasah level. The research introduces novelty through its qualitative methodology, focusing on students' experiences and perceptions regarding Arabic phonology and grammar learning at Madrasah Tsanawiyah. It emphasizes the connection between emotional factors and linguistic difficulties, such as pronunciation issues and the application of nahwu-şaraf rules. Consequently, this work enriches Arabic language education research through an affective and contextual lens and offers pedagogical insights that better address students' emotional needs.

This study aims to examine the forms and levels of student anxiety in learning Arabic, particularly with respect to difficulties in phonology and grammar. It also identifies internal and external factors contributing to anxiety, including low self-confidence, classroom experiences, teaching methods, and the learning environment.

¹² Sakinah Naza et al., "Kecemaan Berbicara Bahasa Arab Mahasiswa Pendidikan Bahasa Arab," *Paedagoria: Jurnal Kajian, Penelitian dan Pengembangan Kependidikan* 14, no. 2 (2023): 166–72, <https://journal.ummat.ac.id/index.php/paedagoria>.

¹³ Horwitz et al., "Foreign Language Classroom Anxiety"; Yukie Aida, "Examination of Horwitz, Horwitz, and Cope's Construct of Foreign Language Anxiety: The Case of Students of Japanese," *The Modern Language Journal* 78, no. 2 (1944): 155–68, <https://doi.org/https://doi.org/10.1111/j.1540-4781.1994.tb02026.x>.

¹⁴ M Asnawi, "Foreign Language Anxiety dan Pengaruhnya Terhadap Kemampuan Berbicara Bahasa Arab Siswa Madrasah," *Jurnal Pendidikan Bahasa Arab* 5, no. 2 (2018): 123–35; S Kurniawati, "Hubungan Kecemasan Berbahasa Asing Dengan Motivasi Belajar Bahasa Arab di Madrasah Tsanawiyah," *Jurnal Lingua Arabica* 8, no. 1 (2021): 45–58.

Furthermore, the study analyzes the relationship between anxiety and linguistic difficulties in both pronunciation and grammatical mastery. It proposes practical, empathetic, and contextual pedagogical approaches to reduce anxiety and improve Arabic language learning.

RESEARCH METHOD

This study adopts a descriptive qualitative research design to systematically examine the forms, underlying causes, and pedagogical impacts of student anxiety related to difficulties in Arabic phonological and grammatical acquisition. The primary focus of the analysis is qualitative; however, limited quantitative data from a modified Foreign Language Classroom Anxiety Scale (FLCAS) are incorporated to reinforce, clarify, and substantiate the qualitative findings. The inclusion of numerical data serves a supportive function, providing additional evidence for emerging patterns without altering the study's interpretive orientation. The inclusion of numerical data serves a supportive function, providing additional evidence for emerging patterns without altering the study's interpretive orientation. This methodological approach aligns with the views of Creswell (2017) and Maxwell (2013), who emphasize that quantitative elements may be integrated within qualitative inquiry to enhance analytical rigor, strengthen credibility, and validate interpretations while maintaining a fundamentally qualitative research paradigm.¹⁵

The research participants were students from MTs NU 19 Protomulyo who exhibited observable indicators of linguistic anxiety in Arabic language learning. There were 66 participants, comprising 14 students from grade VII, 23 from grade VIII, and 29 from grade IX. Participants are selected through purposive sampling, as articulated by Miles and Huberman (1994), to ensure the inclusion of information-rich cases relevant to the research focus.¹⁶ In addition to student participants, an Arabic language teacher is engaged as a key informant to provide pedagogical insights, contribute to contextual understanding, and support the triangulation of data sources.

Data were collected through classroom observations, in-depth interviews, documentation, and a modified Foreign Language Classroom Anxiety Scale (FLCAS) questionnaire. In this study, the FLCAS questionnaire was used in a limited adaptation as a supplementary quantitative measure to support the qualitative analysis. The adaptation involved adjusting the context of Arabic language learning, particularly with respect to phonology and grammar, without altering the core construct of foreign language anxiety as proposed by Horwitz, Horwitz, and Cope (1986). The questionnaire indicators covered three main dimensions: communication apprehension, related to anxiety about speaking

¹⁵ John W. Creswell and J. David Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed. (California: SAGE Publications, Inc, 2017); Joseph A. Maxwell, *Qualitative Research Design: an Interactive Approach: An Interactive Approach*, 3rd ed. (California: SAGE Publications, Inc, 2013).

¹⁶ Matthew B. Miles, A. Michael Huberman, and Johnny Saldaña, *Qualitative Data Analysis: A Methods Sourcebook*, 3rd ed. (California: SAGE Publication, Inc, 2014).



and pronouncing Arabic; test anxiety, associated with the pressure of evaluation and Arabic tests; and fear of negative evaluation, reflecting students' fear of negative assessment from teachers and peers. The data were analyzed descriptively to identify general patterns of student anxiety related to phonology and grammar.¹⁷ Observations captured behaviors indicative of anxiety. At the same time, semi-structured interviews provided insight into students' lived experiences and teachers' perspectives on their underlying causes and impacts. Data analysis followed the model of Miles, Huberman, and Saldaña (2014), comprising data reduction, data display, and drawing conclusions based on in-depth qualitative interpretation.¹⁸ The study's trustworthiness was enhanced through triangulation of sources and methods, member checking, and an audit trail, in line with Lincoln and Guba's (1985) criteria for credibility, dependability, and confirmability.¹⁹

RESULTS AND DISCUSSION

Manifestations of Students' Anxiety in Arabic Language Learning

The findings of this study indicate that students' anxiety in Arabic language learning at MTs NU 19 Protomulyo is expressed through complex affective and behavioral responses, particularly when students face phonological and grammatical demands. This anxiety does not arise incidentally; instead, it appears in structured, recurring learning situations, such as oral reading, the pronunciation of challenging Arabic sounds, and responses to questions on nahwu and sharaf. These findings suggest that language anxiety functions as an affective mechanism that shapes how students engage with linguistic input and classroom demands.

Communication apprehension was evident when students became intensely nervous about reading Arabic texts aloud or pronouncing specific words in front of the class. Test anxiety manifested as fear of oral assessments and grammar-based tasks, often leaving students blank despite prior preparation. In addition, fear of negative evaluation emerged through students' concerns about peer comments and direct teacher corrections, leading them to remain silent or avoid participation. One student stated: "When I am suddenly asked to read a text or answer a question, I immediately feel nervous... I am afraid of making mistakes and being laughed at" (Student interview). This statement reflects the co-occurrence of communication apprehension and fear of negative evaluation, supporting Horwitz and Cope's view that foreign language anxiety is influenced not only by linguistic limitations but also by psychological and social factors

¹⁷ Elaine Horwitz, "Language Anxiety and Achievement," *Annual Review of Applied Linguistics* 21, no. 1 (2001): 112–26, <https://doi.org/10.1017/S0267190501000071>.

¹⁸ Miles, Huberman, and Saldaña, *Qualitative Data Analysis: A Methods Sourcebook*.

¹⁹ Ivonna S. Lincoln and Egon G. Guba, *Naturalistic Inquiry*, 1st ed. (California: SAGE Publication, Inc, 1985).

*associated with the learning process.*²⁰ This condition indicates that the success of Arabic language learning is determined not only by students' abilities in phonology and grammar, but also by their emotional states. When anxiety increases, students' capacity to receive, process, and produce Arabic becomes inhibited, resulting in less effective learning outcomes.²¹

Based on these findings, it can be concluded that the manifestation of student anxiety in Arabic language learning is multidimensional and contextual. Anxiety not only directly affects linguistic performance but also shapes patterns of participation, learning strategies, and students' relationships with the learning environment. Therefore, language anxiety should be understood as an affective factor that interacts dynamically with phonological and grammatical difficulties, rather than as a stand-alone psychological variable.

Students' Anxiety in Arabic Phonological Aspects

Findings indicate that students' anxiety in Arabic phonological learning is not merely a reaction to pronunciation errors, but constitutes a complex affective response shaped by the interaction between linguistic difficulty and social classroom dynamics. Students experience heightened anxiety, particularly when required to pronounce Arabic phonemes that do not exist in their first language, such as emphatic consonants and guttural sounds. This anxiety manifests as hesitation, vocal tension, and avoidance behaviors, suggesting that phonological difficulty functions as an affective trigger rather than a purely technical challenge.²²

For many students, the inability to pronounce these letters correctly leads to fear of making mistakes, fear of criticism, and fear of embarrassment, which ultimately reduces their participation and encourages avoidance of speaking tasks. One student stated, *"The letters 'ayn and ghayn are very difficult. When I am asked to read, I am afraid of making mistakes and feeling embarrassed"* (Student Interview). Classroom observations further revealed anxiety-related behaviors, including avoiding eye contact, pretending to look for something in a bag, and repetitive fidgeting, such as tapping a pen or desk. These avoidance patterns indicate that phonological anxiety has become a significant barrier to the Development of pronunciation and to active engagement in Arabic learning.²³

²⁰ Anindyastuti Wardhani, "Exploring Fear of Negative Evaluation in Foreign Language Anxiety: Photovoice of Undergraduates in Speaking Class," *JSSH (Jurnal Sains Sosial dan Humaniora)* 3, no. 1 (2019): 1–10, <https://doi.org/10.30595/jssh.v3i1.3843>.

²¹ Teimouri Y, Goetze J, and Plonsky L, "Second Languge Anxiety and Achievement," *Studies in Second Language Acquisition* 41, no. 2 (2019): 363–87, <https://doi.org/10.1017/S0272263118000311>.

²² Horwitz et al., "Foreign Language Classroom Anxiety."

²³ Nurhayani Nurhayani, Fatma Indriani, and Ali Hasyimi, "The Foreign Language Learning Anxiety : The Descriptive of Communication Aprehension, Test Anxiety, and Fear of Negative Evaluation," *UICELL Conference Proceedings 2023 (in Progress)* 1, no. 7 (2023): 430–44.



From an analytical perspective, these findings extend Horwitz and Cope's framework by demonstrating that *communication apprehension* in Arabic learning is closely tied to phonological complexity. Unlike languages with simpler sound systems, Arabic requires precise articulation, making phonological performance highly salient and emotionally charged. Thus, phonological anxiety in this context should be understood as domain-specific anxiety that operates at the intersection of linguistic structure and affective experience. In sum, students' anxiety in Arabic phonology is not solely a byproduct of limited proficiency but is shaped by evaluative pressure, peer observation, and perceived difficulty in producing Arabic sounds. This suggests that pedagogical interventions must address not only pronunciation accuracy but also the emotional safety of oral practice, emphasizing gradual phonological scaffolding and non-threatening feedback to reduce anxiety and promote active participation.

Students' Anxiety in Grammatical Aspects (Nahwu and Sharaf)

Findings indicate that students' anxiety in learning Arabic grammar extends beyond cognitive difficulty and is deeply rooted in affective and evaluative dimensions. Students do not merely struggle with understanding *nahwu* and *sharaf* rules; instead, they experience grammar as a high-risk domain in which errors are obvious and socially sanctioned. This condition positions grammatical learning as a primary trigger of anxiety within the classroom. Interview data reveal that grammatical anxiety emerges when students perceive Arabic grammar as rigid, rule-bound, and unforgiving of mistakes. One student explained, "*When the teacher asks about *i'rāb*, I feel pressured because one mistake means everything is wrong*" (Student Interview). This statement suggests that students conceptualize grammar not as a flexible meaning-making system, but as a binary structure of right and wrong. Such perceptions intensify anxiety by framing grammatical performance as a test of intellectual competence rather than a developmental learning process. This aligns with Horwitz and Cope's (1986) notion of *test anxiety*, in which learners experience excessive worry about failure in evaluative situations.

The Arabic teacher's perspective further reinforces this finding. The teacher reported that some students exhibit physical and emotional reactions when *nahwu*-*ṣarf* material is discussed, such as becoming silent, avoiding eye contact, or being reluctant to come to the front of the class. The teacher explained, "*Students are usually tense when they are asked to determine the grammatical position of a word. They are afraid of making mistakes and being evaluated directly*" (Arabic Teacher Interview). The teacher also noted that some students who understand the rules well still experience anxiety when explaining them orally, including fear of correction or peer judgment. Consequently, this anxiety directly affects academic performance, as students often misidentify *i'rāb*, hesitate to apply *ṣarf* patterns, or suddenly lose focus. Thus, grammatical anxiety is not merely a linguistic issue but the result of high academic demands combined with

psychological pressure, indicating the need for a more supportive, gradual, and error-tolerant pedagogical approach.²⁴

This indicates that grammatical anxiety contributes to the formation of a stable anxiety disposition rather than a situational reaction. In this sense, grammar learning becomes a source of long-term emotional tension that affects students' overall engagement with Arabic. This observation extends Horwitz and Cope's framework by demonstrating that grammatical anxiety in Arabic learning operates not only as test anxiety but also as a form of *self-evaluative anxiety* shaped by repeated classroom experiences. Taken together, these findings argue that students' difficulties in Arabic grammar cannot be adequately explained by linguistic complexity alone. Instead, grammatical anxiety emerges from the interaction between rule-intensive language structures, evaluative classroom practices, and students' affective responses. Consequently, addressing grammatical anxiety requires pedagogical strategies that reduce evaluative pressure, emphasize formative feedback, and reconceptualize grammatical errors as a natural component of language Development.

Factors Contributing to Anxiety in Learning Phonology and Grammar

Thematic analysis indicates that students' anxiety in learning Arabic phonology and grammar is shaped by interrelated internal and external factors that generate emotional tension during the learning process. Internally, anxiety is triggered mainly by low self-confidence, negative self-perceptions, and previous experiences of failure in Arabic classes. Many students enter lessons believing they are "incapable" or "unsuited" to learning Arabic, particularly when faced with difficult letter pronunciations or required to explain the rules of *nahwu* and *sharf*. Repeated experiences of mispronunciation or difficulty grasping grammatical patterns further reinforce their perception that Arabic is a frightening subject. Feelings of embarrassment when speaking in front of the class intensify this condition, as students fear that even minor mistakes will attract negative attention from their peers.²⁵ One student expressed this clearly: "*I have always felt that I cannot learn Arabic... that is why I feel anxious in every lesson*" (Student Interview). This finding indicates that anxiety is not solely related to linguistic ability but is deeply connected to students' psychological states and self-beliefs.

External factors play a significant role in intensifying students' anxiety in learning Arabic phonology and grammar. Demands for oral performance, such as reading aloud and producing accurate *makhraj*, place intense pressure on students with limited phonological competence. At the same time, direct teacher correction is often perceived

²⁴ Mahfud et al., "Anxiety dan Difficulties Dalam Belajar Bahasa Arab Yang Dihadapi Oleh Mahasiswa Latar Belakang Sekolah Umum."

²⁵ Farid Soleh Nurdin, Agus Abdul Rahman, and Fatimah Az Zahro, "Kecemasan Belajar Mata Kuliah Bahasa Arab Ditinjau Berdasarkan Self Efficacy Dengan Academic Help Seeking Sebagai Variabel Moderasi," *Jurnal Perspektif* 6, no. 2 (2022): 106–20, <https://doi.org/http://dx.doi.org/10.15575/jp.v6i2.173>.



as a negative evaluation in a competitive classroom environment. Insufficient gradual practice and limited emotional support further exacerbate this condition.²⁶ Peer comments also heighten students' nervousness, as one student remarked, *"Sometimes my classmates comment when someone mispronounces a word, and that makes me even more nervous"* (Student Interview). This phenomenon was confirmed by the Arabic teacher, who stated, *"Some students are very sensitive when asked to come forward. They are afraid of mispronouncing words and worried about being judged by their friends... Students who feel left behind are usually the most anxious because they think they cannot catch up with others"* (Arabic Teacher Interview). These findings support Horwitz and Cope's (1986) concept of *Foreign Language Anxiety*, showing that students' anxiety at MTs NU 19 Protomulyo emerges from the interaction of social pressure, evaluative fear, and situational classroom dynamics that reinforce internal psychological insecurity.

Strategies Employed by Teachers and Students to Overcome Anxiety in Learning Arabic

Efforts to reduce anxiety in Arabic language learning among students at MTs NU 19 Protomulyo are implemented through a dual approach that includes pedagogical strategies applied by teachers and personal strategies developed by students. Teachers create a more emotionally secure learning environment by using a gradual sequence of learning activities: pair practice, small-group activities, and culminating in individual performance. This approach reflects Vygotsky's Scaffolding theory and helps students remain within their Zone of Proximal Development (ZPD) without experiencing excessive emotional pressure.²⁷ In phonology instruction, teachers avoid sudden evaluation by allowing preparation time before students perform, which aligns with Cognitive Load Theory and helps minimize both cognitive and emotional overload.²⁸

At the same time, students develop adaptive coping strategies, such as practicing pronunciation independently at home, using voice recordings, and accessing online videos for phonological practice. These activities reflect self-regulated learning, enabling students to take control of their learning process and reduce anxiety.²⁹ Some students also seek additional guidance from the teacher outside regular class hours, as they feel more comfortable practicing in a one-on-one setting. This environment supports Rogers'

²⁶ Elinda Umisara, Abdurrachman Faridi, and Henrikus Joko Yulianto, "An Evaluation of the Psychological Factors Influencing the Students' Anxiety in Speaking English," *English Education Journal* 11, no. 159 (2021): 496–505, <https://doi.org/http://journal.unnes.ac.id/sju/index.php/eej>.

²⁷ Lusi Oktavia and Maemonah, "Penerapan Teori Belajar Behavioristik B . F Skinner Dalam Memotivasi Siswa Pada Pembelajaran PAI di Sekolah Dasar," *Instructional Development Journal (IDJ)* 5, no. 1 (2022): 53–61, <https://doi.org/http://ejournal.uin-suska.ac.id/index.php/IDJ>; Horwitz et al., "Foreign Language Classroom Anxiety."

²⁸ Ahmad Syagif, "Teori Beban Kognitif John Sweller dan Implikasinya Pada Pembelajaran Bahasa Arab Pada Jenjang Pendidikan Dasar," *Fashluna : Jurnal Pendidikan Dasar dan Keguruan* 5, no. 2 (2024): 93–105, <https://doi.org/https://doi.org/10.47625/fashluna.v5i2.883>.

²⁹ Aisah Apridayani, Wei Han, and Budi Waluyo, "Understanding Students' Self-Regulated Learning and Anxiety in Online English Courses in Higher Education," *Heliyon* 9, no. 6 (2023), <https://doi.org/https://doi.org/10.1016/j.heliyon.2023.e17469>.

Humanistic Learning theory, which emphasizes emotional safety as a key condition for effective learning.³⁰ Overall, the combination of supportive pedagogy and self-directed strategies reduces students' affective filter (Krashen), thereby increasing their confidence, participation, and receptiveness to linguistic input in both phonological and grammatical aspects of Arabic.³¹

Table 1.1 Strategies Used by Teachers and Students to Overcome Learning Anxiety and Its Impacts

Party	Implemented Strategy	Educational Psychology Basis	Impact on Students
Teacher	Gradual learning activities (pair → group → individual)	Scaffolding (Vygotsky) ³²	Students feel more secure and are not immediately exposed to performance pressure.
Teacher	Positive feedback and appreciation	Positive Reinforcement (Skinner) ³³	Increases motivation and reduces fear of making mistakes
Teacher	Reducing oral evaluation pressure and allowing preparation time	Cognitive Load Theory ³⁴	Students are more mentally and linguistically prepared
Teacher	Individual guidance outside regular class hours	Humanistic Learning (Carl Rogers) ³⁵	Students feel valued and become more confident
Students	Independent practice at home (pronunciation and reading)	Self-Regulated Learning ³⁶	Increases self-confidence and readiness to perform
Students	Watching phonology tutorial videos	Modern Educational Media ³⁷	Improves pronunciation without social pressure
Students	Participating in additional	Humanistic-Pedagogical	Reduces anxiety and

³⁰ Rosid Ibnu Rianto, Claragista Intan Asriani, and Suparmi, "Prinsip Humanistik Carl Rogers Dalam Konteks Pembelajaran Yang Berpusat Pada Siswa," *JIMU: Jurnal Ilmiah Multidisipliner* 03, no. 03 (2025): 1412–17.

³¹ Liu, "The Implication of Krashenâ€™s Affective Filter Hypothesis on College Studentsâ€™ Listening Learning."

³² Etnawati, "Teori Vygotsky Tentang Perkembangan Bahasa Anak Usia Dini."

³³ Oktavia and Maemonah, "Penerapan Teori Belajar Behavioristik B . F Skinner Dalam Memotivasi Siswa Pada Pembelajaran PAI di Sekolah Dasar."

³⁴ Syagif, "Teori Beban Kognitif John Sweller dan Implikasinya Pada Pembelajaran Bahasa Arab Pada Jenjang Pendidikan Dasar."

³⁵ Rianto, Asriani, and Suparmi, "Prinsip Humanistik Carl Rogers Dalam Konteks Pembelajaran Yang Berpusat Pada Siswa."

³⁶ Apridayani, Han, and Waluyo, "Understanding Students' Self-Regulated Learning and Anxiety in Online English Courses in Higher Education."

³⁷ Puji Rahayu, Sri Marmoah, and Tri Budiharto, "Analisis Penerapan Prinsip Mayer Pada Multimedia Digital Dalam Pembelajaran Matematika di Kelas Iv Sekolah Dasar," *Didaktika Dwija Indria* 12, no. 5 (2024): 353–61, <https://doi.org/https://doi.org/10.20961/ddi.v12i5.90998>.



tutoring

Support³⁸

enhances comprehension

Descriptive Indicators Supporting Qualitative Findings

To strengthen the interpretation of the qualitative data, this study incorporates limited numerical indicators derived from a modified version of the Foreign Language Classroom Anxiety Scale (FLCAS). These indicators are not treated as statistical measurements or inferential evidence, but rather as descriptive references that help illustrate and contextualize the patterns emerging from classroom observations and interview data. The primary analytical emphasis remains qualitative, with numerical information serving a supportive and clarifying role.

Descriptive indicators derived from the questionnaire suggest that students frequently experience anxiety related to phonological aspects of Arabic learning, particularly regarding letter pronunciation. This tendency is reflected in the numerical descriptors, which show that a substantial proportion of students reported discomfort during pronunciation activities. Similar patterns were observed in grammatical learning, in which students often associated the application of *nahwu-sharaf* rules with feelings of tension and uncertainty. These tendencies align with qualitative findings indicating that grammatical tasks are commonly perceived as evaluative and demanding. In addition, indicators related to communication and evaluative situations suggest that many students feel hesitant to speak spontaneously and express concern about making mistakes in front of others. Anxiety associated with assessment situations was also evident, reinforcing interview data that examinations and formal evaluations are commonly perceived as stressful experiences in Arabic language learning. Importantly, these numerical indicators are used solely to support the qualitative interpretations and do not represent statistical comparisons or causal claims.

Table 1.2 Descriptive Indicators of Students' Affective Responses in Arabic Learning

Anxiety Category	Learning Context	Descriptive Indicators of Student Responses
Phonological Anxiety	Pronunciation of Arabic letters	Students frequently show discomfort during pronunciation activities, characterized by hesitation, reduced voice volume, and avoidance of turns when articulating unfamiliar sounds.
Grammatical Anxiety	Application of <i>nahwu-sharaf</i> rules	Students often associate grammatical tasks with tension and uncertainty, particularly when required to apply rules accurately in exercises perceived as demanding.
Communication Anxiety	Oral participation and spontaneous speaking	Many students appear reluctant to speak spontaneously, providing brief or delayed responses and showing dependence on teacher

³⁸ Dudung Hamdum and Nurul Islam, "Humanistic Approaches in Learning Arabic to Increase Motivation of Students' Learning Pendekatan Humanistik Dalam Pembelajaran Bahasa Arab Upaya Meningkatkan Motivasi Belajar Siswa," *Edulab: Majalah Ilmiah Laboratorium Pendidikan* 8, no. 2 (2023): 177–93, [https://doi.org/https://doi.org/10.14421/edulab.2023.82.05](https://doi.org/10.14421/edulab.2023.82.05).

Fear of Negative Evaluation	Classroom interaction and peer presence	Students express concern about making mistakes in front of others, which leads to limited participation and cautious language use.
Test Anxiety	Examinations and formal assessments	Assessment situations are commonly perceived as stressful, with students displaying nervousness, rushed responses, and decreased confidence during tests.

Overall, these quantitative data provide numerical evidence that reinforces the qualitative findings, indicating that the highest level of anxiety occurs in the phonological aspect, followed by grammatical and communication anxiety. This pattern demonstrates a strong coherence between students' perceptions, observed classroom behaviors, and the FLA framework proposed by Horwitz and Cope.³⁹ Thus, the quantitative results serve as evidence for triangulation, strengthening and enriching the accuracy of the qualitative interpretation.⁴⁰

CONCLUSION

This study concludes that students' anxiety in Arabic language learning at MTs NU 19 Protomulyo is a multidimensional phenomenon encompassing communication apprehension, test anxiety, and fear of negative evaluation, as described by Horwitz and Cope (1986). The most prevalent forms of anxiety are associated with phonological and grammatical aspects, triggered by difficulties with pronouncing certain letters and with comprehending nahwu-şaraf rules. Internal factors, such as low self-confidence and negative self-perception, along with external factors, including corrective pressure and classroom social dynamics, further intensify students' anxiety. The impacts are reflected in low participation, recurring errors, and a diminished ability to comprehend and produce the language accurately. Quantitative data from the FLCAS support the qualitative findings, indicating that the majority of students experience moderate to high levels of anxiety.

These findings have important implications for Arabic language instruction, highlighting the need for pedagogical approaches that are more sensitive to students' affective dimensions. Teachers should foster a safe learning environment, gradually introduce phonological practice, present grammar in a context-based manner, and reduce evaluative pressure to enhance students' confidence. Strengthening social support through group work and positive feedback is also essential for reducing anxiety and increasing learning engagement. Thus, the success of Arabic language instruction

³⁹ Horwitz, "Language Anxiety and Achievement."

⁴⁰ Creswell and Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*; Maxwell, *Qualitative Research Design: An Interactive Approach: An Interactive Approach*.



requires a balanced integration of the Development of linguistic competence and emotional regulation.

Future studies are encouraged to involve a broader range of participants, employ longitudinal designs, or implement specific interventions to reduce learning anxiety. Further research may also explore other psychological factors, such as motivation and self-efficacy, as well as examine the role of teachers' instructional strategies in influencing students' anxiety levels. With more in-depth investigation, a more comprehensive and applicable understanding of anxiety dynamics in Arabic language learning can be achieved.

BIBLIOGRAPHY

Abror, Muh Khulaifil, and Wulan Indah Fatimatul Djamilah. "Hambatan Psikolinguistik Dalam Pembelajaran Bahasa Arab." *Lisanuna: Jurnal Ilmu Bahasa Arab dan Pembelajarannya* 14, no. 2 (2024): 185–99. <https://doi.org/10.22373/ls.v14i2.26563>.

Aida, Yukie. "Examination of Horwitz, Horwitz, and Cope's Construct of Foreign Language Anxiety: The Case of Students of Japanese." *The Modern Language Journal* 78, no. 2 (1994): 155–68. <https://doi.org/10.1111/j.1540-4781.1994.tb02026.x>.

Apridayani, Aisah, Wei Han, and Budi Waluyo. "Understanding Students' Self-Regulated Learning and Anxiety in Online English Courses in Higher Education." *Helijon* 9, no. 6 (2023). <https://doi.org/10.1016/j.helijon.2023.e17469>.

Asnawi, M. "Foreign Language Anxiety dan Pengaruhnya Terhadap Kemampuan Berbicara Bahasa Arab Siswa Madrasah." *Jurnal Pendidikan Bahasa Arab* 5, no. 2 (2018): 123–35. <https://doi.org/10.15575/ta.v2i2.28839>.

Botes, E., Jean-Marc Dewaele, and S. Greiff. "The Foreign Language Classroom Anxiety Scale and Academic Achievement: An Overview of the Prevailing Literature and a Meta-Analysis." *Journal for the Psychology of Language Learning* 2, no. 2 (2020): 26–56. <https://doi.org/10.52598/jpll/2/1/3>.

Creswell, John W., and J. David Creswell. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 5th ed. California: SAGE Publications, Inc., 2017. <https://doi.org/10.7748/nr.12.1.82.s2>.

Dewaele, Jean-Marc, and Chengchen Li. "Emotions in Second Language Acquisition: A Critical Review and Research Agenda." *BIROn: Birbeck Institutional Research Online* 196, no. 1 (2020): 1004–5112. <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>.

Etnawati, Susanti. "Teori Vygotsky Tentang Perkembangan Bahasa Anak Usia Dini." *Jurnal Pendidikan* 22, no. 2 (2022): 130–38. <https://doi.org/10.52850/jpn.v22i2.3824>.

Gregersen, T., and E. K. Horwitz. "No Title." *The Routledge Handbook of Second Language Acquisition and Pedagogy* 5, no. 2 (2020): 131–45. <https://doi.org/10.33545/26649799.2024.v6.i2b.95>.

Hamdum, Dudung, and Nurul Islam. "Humanistic Approaches in Learning Arabic to Increase Motivation of Students ' Learning Pendekatan Humanistik Dalam Pembelajaran Bahasa Arab Upaya Meningkatkan Motivasi Belajar Siswa." *Edulab: Majalah Ilmiah Laboratorium Pendidikan* 8, no. 2 (2023): 177–93. <https://doi.org/10.14421/edulab.2023.82.05>.

Horwitz, Elaine K., Michael B. Horwitz, and Joann Cope. "Foreign Language Classroom Anxiety." *The Modern Language Journal* 70, no. 2 (2009): 125–32. <https://doi.org/10.2307/327317>.

Horwitz, Elaine. "Language Anxiety and Achievement." *Annual Review of Applied Linguistics* 21, no. 1 (2001): 112–26. <https://doi.org/10.1017/S0267190501000071>.

Imamah, and Deria Suryani. "AI-Assisted Language Learning for Preschoolers: Krashen's Second Language Acquisition Theory." *Journal of Educational Management and Instruction* 5, no. 2 (2025): 422–36. <https://doi.org/10.22515/jemin.v5i2.11958>.

Kurniawati, S. "Hubungan Kecemasan Berbahasa Asing Dengan Motivasi Belajar Bahasa Arab di Madrasah Tsanawiyah." *Jurnal Lingua Arabica* 8, no. 1 (2021): 45–58. <https://doi.org/10.32832/tek.pend.v6i1.502>.

Lincoln, Ivonna S., and Egon G. Guba. *Naturalistic Inquiry*. 1st ed. California: SAGE Publications, Inc., 1985.

Liu, Shan. "The Implication of Krashen's Affective Filter Hypothesis on College Students' Listening Learning." *PiscoMed Publishing* 10, no. 8 (2021): <https://doi.org/10.18282/l-e.v10i8.3105>.

MacIntyre, Peter D. "An Overview of Language Anxiety Research and Trends in Its Development." *Research and Educational Implications* 21, no. 1 (2017): 11–30. <https://doi.org/10.21832/9781783097722-003>.

Mahfud, Mirza, Nurul Wahdah, Rahmadi Nirwanto, and Farid Permana. "Anxiety dan Difficulties Dalam Belajar Bahasa Arab Yang Dihadapi Oleh Mahasiswa Latar Belakang Sekolah Umum." *Al-Ittijah: Jurnal Keilmuan dan Kependidikan Bahasa Arab* 16, no. 2 (2024): 75–93. <https://doi.org/10.32678/alittijah.v16i2.10026>.

Maxwell, Joseph A. *Qualitative Research Design: An Interactive Approach*. 3rd ed. California: SAGE Publications, Inc., 2013.

Miles, Matthew B., A. Michael Huberman, and Johnny Saldaña. *Qualitative Data Analysis: A Methods Sourcebook*. 3rd ed. California: SAGE Publications, Inc., 2014. <https://doi.org/10.1080/10572252.2015.975966>.

Naziha, Sakinah, Muhammad Fajrul Falah, M. Aulia Wildanihza, and Wildana Wargadinata. "Kecemaan Berbicara Bahasa Arab Mahasiswa Pendidikan Bahasa Arab." *Paedagoria: Jurnal Kajian, Penelitian dan Pengembangan Kependidikan* 14, no. 2 (2023): 166–72. <https://doi.org/10.31764/paedagoria.v13i2.9834>.

Nurdin, Farid Soleh, Agus Abdul Rahman, and Fatimah Az Zahro. "Kecemasan Belajar Mata Kuliah Bahasa Arab Ditinjau Berdasarkan Self Efficacy Dengan Academic Help Seeking Sebagai Variabel Moderasi." *Jurnal Perspektif* 6, no. 2 (2022): 106–20. <https://doi.org/10.15575/jp.v6i2.173>.



Nurhayani, Nurhayani, Fatma Indriani, and Ali Hasyimi. "The Foreign Language Learning Anxiety: The Descriptive of Communication Apprehension, Test Anxiety, and Fear of Negative Evaluation." *UICELL Conference Proceedings 2023 (in Progress)* 1, no. 7 (2023): 430–44.

Oktavia, Lusi, and Maemonah. "Penerapan Teori Belajar Behavioristik B. F. Skinner Dalam Memotivasi Siswa Pada Pembelajaran PAI di Sekolah Dasar." *Instructional Development Journal (IDJ)* 5, no. 1 (2022): 53–61. <https://doi.org/10.24014/ijd.v5i1.19285>.

Oteir, Ibrahim, and Abdullah Nijr Al-Otaibi. "Foreign Language Anxiety: A Systematic Review." *Arab World English Journal* 10, no. 3 (2019): 309–3171. <https://doi.org/10.24093/awej/vol10no3.21>.

Rahayu, Puji, Sri Marmoah, and Tri Budiharto. "Analisis Penerapan Prinsip Mayer Pada Multimedia Digital Dalam Pembelajaran Matematika di Kelas IV Sekolah Dasar." *Didaktika Dwija Indria* 12, no. 5 (2024): 353–61. <https://doi.org/10.20961/ddi.v12i5.90998>.

Rianto, Rosid Ibnu, Claragista Intan Asriani, and Suparmi. "Prinsip Humanistik Carl Rogers Dalam Konteks Pembelajaran Yang Berpusat Pada Siswa." *JIMU: Jurnal Ilmiah Multidisipliner* 3, no. 3 (2025): 1412–17. <https://doi.org/10.70294/jimu.v3i03.1208>.

Seçkin, Hümset, and Osman Özdemir. "Open Exploring Foreign Language Anxiety in Higher Education: Multifaceted Insights into Causes, Impacts, and Coping Strategies." *Social Sciences & Humanities Open* 11, no. 1 (2025): 1–18. <https://doi.org/10.1016/j.ssho.2025.101364>.

Shaharuddin, Hanis Najwa, Hazrati Yahaya, Ibrahim Youssef Abdelhamid, Muhammad Hatta Shafri, and Nurul Najwa. "The Level of Student Anxiety in Arabic Speaking Skills." *IJRRISS* 1, no. 1 (2024). <https://doi.org/10.47772/IJRRISS.2024.8080195>.

Shao, Kaiqi, Laura J. Nicholson, Gulsah Kutuk, and Fei Lei. "Emotions and Instructed Language Learning: Proposing a Second Language Emotions and Positive Psychology Model." *Hypothesis and Theory* 11, no. 1 (2020): 1–13. <https://doi.org/10.3389/fpsyg.2020.02142>.

Suherman, Abdul Ghofur, Muhamad Priyatna, and Isrofil Mirajul Arsyadi. "Implementation of Islamic Education Principles in The Modern Madrasa Curriculum: A Study of Ta'lim Al-Muta'Allim." *IJORER: International Journal of Recent Educational Research* 5, no. 6 (2024): 425–39. <https://doi.org/10.46245/ijorer.v6i2.790>.

Syagif, Ahmad. "Teori Beban Kognitif John Sweller dan Implikasinya Pada Pembelajaran Bahasa Arab Pada Jenjang Pendidikan Dasar." *Fashluna: Jurnal Pendidikan Dasar dan Keguruan* 5, no. 2 (2024): 93–105. <https://doi.org/10.47625/fashluna.v5i2.883>.

Taryanto, Wahyu Dwi. "Problematika Fonologi Pada Pembelajaran Bahasa Arab Kelas IX Madrasah Tsanawiyah (Studi Kasus Terhadap Buku Ajar)." *MAHIRA: Journal of Arabic Studies & Teaching* 1, no. 2 (2023): 158–68. <https://doi.org/10.14421/mahira.2023.12.05>.

Umisara, Elinda, Abdurrachman Faridi, and Henrikus Joko Yulianto. "An Evaluation of the Psychological Factors Influencing the Students' Anxiety in Speaking English." *English Education Journal* 11, no. 159 (2021): 496–505. <https://doi.org/10.15294/eej.v11i1.47800>.

Wardhani, Anindyastuti. "Exploring Fear of Negative Evaluation in Foreign Language Anxiety: Photovoice of Undergraduates in Speaking Class." *JSSH (Jurnal Sains Sosial dan Humaniora)* 3, no. 1 (2019): 1–10. <https://doi.org/10.30595/jssh.v3i1.3843>.

Y, Teimouri, Goetze J., and Plonsky L. "Second Language Anxiety and Achievement." *Studies in Second Language Acquisition* 41, no. 2 (2019): 363–87. <https://doi.org/10.1017/S0272263118000311>.

Zhang, L. J. "Second Language Anxiety Revisited: New Theoretical Perspectives and Pedagogical Implications." *Language Teaching Research* 27, no. 2 (2023): 256–74. <https://doi.org/10.1177/13621688211030254>.