Behaviorist-Cognitivist Integration in Arabic Writing Instruction: An Empirical Study at Surabaya Islamic Junior High School

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Abstract: Low proficiency in Arabic writing among students continues to pose a significant educational challenge, primarily due to conventional teaching methods that lack integration of robust learning theories. This study examines the impact of combining behaviorist and cognitivist approaches to enhance Arabic writing skills among eighth-grade students at MTs Alif Laam Miim Surabaya. Utilizing a mixed-methods case study design, 30 students were purposively selected as participants. Data were gathered through observations, interviews, writing assessments, and questionnaires. Quantitative results using paired-sample t-tests indicated a statistically significant improvement in writing scores, with an average gain of 19.00 points ($p < 0.001$; Cohen's d = 2.44). Qualitative findings revealed increased motivation, confidence, and reflective writing habits, including planning and self-evaluation. The study highlights that blending behaviorist drills with cognitively engaging strategies creates a more dynamic and student-centered learning atmosphere. The novelty of the research lies in demonstrating that integrating these theories not only enhances linguistic accuracy but also fosters metacognitive growth and writing creativity. This contributes valuable insights for curriculum development and teacher training. The proposed model offers a balanced, empirically grounded approach to Arabic writing instruction. Further studies are recommended to incorporate digital tools or explore constructivist methods and evaluate their long-term effectiveness.

INTRODUCTION

Why do students still struggle to write in Arabic despite years of formal instruction? This question captures a recurring challenge in Arabic language education, especially in junior high schools. Despite years of instruction, many students still demonstrate limited ability to construct coherent and expressive Arabic texts[1]. In language learning, there are two interrelated and complementary theories, the theory of language itself and the theory of language acquisition. The combination of these two theories has given rise to two major approaches in Arabic language instruction. Among the influential linguistic theories, two well-known schools of thought are behaviorism and cognitivism. These theories hold differing

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[1] Nur Apriyanti Atika and Muassomah Muassomah, "Penggunaan Media Kahoot! Sebagai Media Pembelajaran Maharah Kitabah (Imla') Bahasa Arab Di Era Industri 4.0," *Lisanan Arabiya: Jurnal Pendidikan Bahasa Arab* 4, no. 2 (2020): 277–97, https://doi.org/https://doi.org/10.32699/liar.v4i2.1256.

perspectives on language acquisition. Behaviorism emphasizes the role of external factors, while cognitivism focuses more on an individual's internal cognitive processes[2]. Behaviorism concentrates on how environmental stimuli and consequences shape observable behavior, cognitivism emphasizes internal mental processes and representations[3].

Previous research in Arabic writing instruction has generally relied on either behaviorist or cognitivist approaches in isolation, each offering its own pedagogical strengths and weaknesses. Behaviorist models, as emphasized by Skinner and Watson, prioritize habit formation through repetition and reinforcement, which have proven effective in improving learners' grammar and sentence-level accuracy in Arabic writing[4]. However, this approach has been criticized for lacking support in fostering critical thinking, learner autonomy, and creative expression in writing[5]. Cognitivist theory, influenced by Piaget and Vygotsky, shifts the focus to mental processes such as planning, comprehension, and metacognitive awareness, making it valuable for supporting learners in organizing ideas and constructing meaning[6]. Yet, cognitively oriented instruction alone may fall short in ensuring grammatical precision and structural fluency, especially among novice writers of Arabic as a foreign language[7].

Despite scholarly recognition of the value in combining these approaches, empirical studies integrating behaviorist and cognitivist frameworks in Arabic writing classrooms remain limited. DiBlasi and Waters note that the long-standing dichotomy between form and meaning in language instruction hinders innovation in integrated pedagogy[8]. Kartono and Zainuddin, working in the context of Indonesian writing instruction, demonstrated that integrative approaches can enhance both structure and creativity, but such applications are still rare in Arabic

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[2] Runtoni Runtoni, "Arabic Language Learning Development Methods: Analysis of Behaviorism and Cognitivism Theory Approaches," *Innovative: Journal Of Social Science Research* 3, no. 6 (2023): 10946–59, https://doi.org/https://doi.org/10.31004/innovative.v3i6.9306.

[3] Georgios Giannoukos, "Main Learning Theories in Education," *European Journal of Contemporary Education and E-Learning* 2, no. 5 (2024): 93–100, https://doi.org/https://doi.org/10.59324/ejceel.2024.2(5).06.

[4] Iwan Ramadhan, "Pelaksanaan Pembelajaran Sosiologi Model Active Learning Berbasis Aplikasi Quizizz Mode True Or False Di SMA Swasta Mujahidin Pontianak," *Didaktika: Jurnal Kependidikan* 13, no. 1 (2024): 847–56, https://doi.org/https://doi.org/10.58230/27454312.390.

[5] Fabian Gunnars, "A Large-Scale Systematic Review Relating Behaviorism to Research of Digital Technology in Primary Education," *Computers and Education Open* 2 (2021): 100058, https://doi.org/https://doi.org/10.1016/j.caeo.2021.100058.

[6] Rizqy Mutmainnah Amin, "Theories of Learning Cognitivism and Islamic Education: Implications of Learning Cognitivism Theory in Islamic Education," *International Journal of Islamic Studies* 1, no. 1 (2021): 43–50, https://doi.org/10.24252/ijis.v1i1.25524

[7] Sanghee Yeo, "The Application of Cognitive Teaching and Learning Strategies to Instruction in Medical Education," *Korean Medical Education Review* 26, no. 1 (2024): S1–12, https://doi.org/10.17496/kmer.2020.22.2.57

[8] Thomas DiBlasi and Louise Waters, "Behaviorism," in *Encyclopedia of Animal Cognition and Behavior* (Springer, 2022), 752–69, https://doi.org/https://doi.org/10.1007/978-3-319-55065-7_1230.

language classrooms[9]. Meanwhile, Gunnars highlights the stagnation of behaviorist methods in the face of evolving digital and metacognitive needs, particularly in primary and secondary education[10]. This study seeks to address the identified gap by empirically testing a behaviorist-cognitivist integration model in Arabic writing instruction at a junior high school, aiming to enhance both linguistic accuracy and metacognitive development through a structured yet reflective pedagogy. This study addresses that gap by investigating the effectiveness of integrating behaviorist (structured drills, reinforcement) and cognitivist (metacognitive reflection, problem-solving) strategies in Arabic writing instruction.

The research was conducted at MTs Alif Laam Miim in Surabaya, focusing on 30 eighth-grade students. The study seeks to answer how does integrating behaviorist and cognitivist theories influence students' Arabic writing proficiency, motivation, and metacognitive skills? The findings are significant by visible changes in motivation, participation, and learning behavior[11]. These outcomes suggest that bridging structured practice with reflective, student-centered learning can foster not only accuracy but also creativity and confidence[12].

The remainder of this paper is structured as follows: the literature review and theoretical foundation explores the conceptual underpinnings of behaviorism and cognitivism in language instruction, critically examining previous studies and highlighting the lack of empirical integration in Arabic writing pedagogy. The methodology section outlines the empirical design of the study conducted at a Surabaya Islamic junior high school, including participants, instruments, and procedures used to implement the integrative instructional model. The findings and discussion present the results of the intervention, analyzing how the combination of behaviorist drills and cognitive strategies influenced students' writing performance, grammatical accuracy, and metacognitive development. Lastly, the conclusion summarizes the key contributions of the study, discusses its implications for Arabic language curriculum and teacher practice, and proposes directions for future research on integrated instructional approaches in second-language writing.

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[9] Kartono Kartono and Zainuddin Zainuddin, "Meningkatkan Keterampilan Menulis Melalui Pendekatan Integratif Pada Siswa Kelas V Sdn 02 Sejaruk Param," *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa (JPPK* 2, no. 9 (2021), https://doi.org/https://doi.org/10.26418/jppk.v2i9.3400.

[10] Gunnars, "A Large-Scale Systematic Review Relating Behaviorism to Research of Digital Technology in Primary Education."

[11] Rita Li, Andreas Lund, and Anita Nordsteien, "The Link between Flipped and Active Learning: A Scoping Review," *Teaching in Higher Education* 28, no. 8 (2023): 1993–2027, https://doi.org/https://doi.org/10.1080/13562517.2021.1943655.

[12] Mohammed Jaboob, Manar Hazaimeh, and Abdullah M Al-Ansi, "Integration of Generative AI Techniques and Applications in Student Behavior and Cognitive Achievement in Arab Higher Education," *International Journal of Human–Computer Interaction* 41, no. 1 (2025): 353–66, https://doi.org/https://doi.org/10.1080/10447318.2023.2300016.

METHOD

This study employed a mixed-methods approach with a case study design, selected to comprehensively evaluate both the measurable and experiential impact of integrating behaviorist and cognitivist theories in Arabic writing instruction. The research was conducted at MTs Alif Laam Miim Surabaya, an Islamic junior high school selected due to its consistent implementation of Arabic language instruction and its openness to pedagogical innovation. The choice of this site was based on its representativeness of typical Islamic schools in Indonesia and the accessibility of students and staff willing to participate in pedagogical research.

The unit of analysis in this study was eighth-grade students' Arabic writing proficiency, with a focus on their technical writing skills, motivation, and metacognitive behavior before and after the intervention. The sample consisted of 30 students purposively selected based on their availability and school recommendation. Primary data were used in this study, including direct classroom observations, semi-structured interviews, writing assessments, and student questionnaires. No secondary data were utilized.

Data were collected in three stages. First, classroom observations were conducted throughout the intervention to monitor student behavior, teacher strategies, and classroom dynamics. Second, semi-structured interviews were held with six selected students, representing high-, medium-, and low-performing writers. These interviews aimed to gain in-depth insights into students' perceptions, challenges, and strategies during the learning process. Third, students completed writing assessments on the theme of الهوايات ("Hobbies"), serving as pre- and post-tests. In addition, a structured questionnaire was distributed to capture broader reflections on motivation, confidence, and strategy use.

The quantitative data from the writing scores were analyzed using a paired-sample t-test to assess the significance of improvements before and after the intervention. The qualitative data (observations and interviews) were analyzed thematically to identify recurring patterns in behavior, motivation, and cognitive engagement. Data triangulation was employed to validate findings, and the instruments used (e.g., tests, interview protocols) underwent validity and reliability checks to ensure consistency and accuracy.

To maintain research integrity, ethical procedures were followed, including informed consent from participants, anonymity, and voluntary participation. Control measures were applied to minimize confounding variables, such as maintaining the same teacher for all sessions and ensuring that no alternative writing interventions were introduced during the study period.

RESULT AND DISCUSSION

This study aimed to investigate how the integration of behaviorist and cognitivist theories influences students' Arabic writing proficiency, motivation, and metacognitive skills. The results presented below demonstrate how each of these domains was significantly enhanced through the use of integrated instructional model.

Behaviorist and Cognitivist Theories for Improving Arabic Writing Skills

The findings of this study provide empirical evidence for the effectiveness of integrating behaviorist and cognitivist approaches in teaching Arabic writing proficiency. Quantitative data reveal a highly significant improvement, with a mean difference of 19.00 (SD = 7.79; t(29) = 13.366; p < 0.001; Cohen's d = 2.44), indicating a large effect size. These results are not only statistically significant but also hold substantial practical significance in the context of Arabic language learning.

Table 1. Paired sample t-test statistical analysis results

		Paired Samples Test								
		Paired Differences								
					95% Confidence Interval of the Difference					
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	PRETEST - POSTTEST	-19.00000	7.78593	1.42151	-21.90731	-16.09269	-13.366	29	.000

Results from the paired sample t-test revealed a highly significant difference between PRE-TEST scores (M = 78.03, SD = 9.78) and POST-TEST scores (M = 59.03, SD = 10.85), t(29) = 13.37, p < .001, d = 2.44. The POST-TEST scores were significantly lower with a very large effect size, demonstrating the strong impact of the intervention. A 95% confidence interval (16.09-21.91) confirmed the consistency of these findings.

Behaviorist and Cognitivist Theories for Improving Motivation and Positive Learning Attitude

The behavioral changes in students during the learning process were evident through the development observed in the Likert scale observations. Initially, many students exhibited reactive engagement, responding only when the teacher directly solicited their opinions or answers. Over time, a pattern of more spontaneous and enthusiastic participation emerged. Students began voluntarily raising their hands without being called upon, with some even initiating discussions by posing open-ended questions to their classmates. Teachers should apply these theories based on the content they are teaching. For

instance, behaviorism is more suitable for teaching unfamiliar (or less familiar) material, while cognitivism is more appropriate for abstract concepts[13].

This transformation was particularly observable in the Arabic teacher's classroom instruction. The Likert scale observation results were as follows:

Table 2. Classroom Observation Results

No	Observed Aspect	Indicator	Score (1-5)
1	Student Participation	Students actively ask and answer questions	4
		Students engage in group discussions	5
2	Teacher Interaction	Students respond to teacher feedback	5
		Students follow instructions effectively	4
3	Writing Practice Activity	Students complete writing tasks on time	4
		Students demonstrate creativity in writing	5
4	Metacognitive Strategies	Students create outlines before writing	4
		Students self-evaluate their writing	5
5	Motivation & Attitude	Students show enthusiasm during lessons	5
		Students feel motivated to write	5

Classroom interactions underwent a dramatic shift. Initial observations revealed predominantly one-way communication from teacher to students, with minimal dialogue opportunities. This gradually evolved into a dynamic interaction network where students not only responded to the teacher but also engaged in peer discussions, exchanged feedback, and constructed arguments based on classmates' ideas. The classroom atmosphere transitioned from rigid to vibrant, filled with productive conversations. Students demonstrated significant progress in taking the learning initiatives. While they initially awaited detailed teacher instructions, many later began tasks independently, sought additional

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[13] Fateme Asghari, Siamak Khademi, and Mansour Vesali, "Similarities and Differences between Learning Theories: Behaviorism, Cognitivism and Constructivism, from the Perspective of Schunk," *Research in Experimental Science Education* 1, no. 1 (2021): 35–50, https://dor.isc.ac/dor/20.1001.1.27834387.1400.1.1.6.9

references, and posed more insightful questions. Notably, some voluntarily assisted struggling peers without teacher prompting.

A striking development observed throughout the intervention was the students' growing ability to reflect on their own learning processes. Initially, most students exhibited minimal engagement in self-evaluation or pre-writing planning; they tended to write without outlining or reviewing their work. However, as the lessons progressed, many began demonstrating new metacognitive habits, such as creating outlines, reviewing their drafts, and making self-corrections before submission. This reflective behavior was accompanied by a noticeable shift in their attitudes toward Arabic writing. Where once facial expressions revealed boredom, anxiety, or hesitation, students began to show enthusiasm, curiosity, and confidence. They became more willing to share their work with teachers and peers, an attitude that was rarely observed during the early sessions.

Moreover, their responses to challenges evolved significantly. Frustration and passivity were gradually replaced by persistence, critical questioning, and proactive problem-solving. Students showed resilience when facing learning obstacles, which reflects their increased sense of ownership over their learning journey. While a general pattern of improvement was evident across the class, individual differences also emerged. Some students progressed rapidly and consistently, while others advanced at varied rates. Interestingly, each student developed distinct strategies to engage with the material, underscoring the personalized impact of the integrative teaching approach. The overall classroom atmosphere transformed significantly from teacher-dominated to collaborative, where ideas flowed freely and mistakes became natural learning components. The environment grew relaxed yet remained focused.

In depth interviews with six students provided rich insights into these mechanisms. Raditya, a participant, explained: "*Daily writing practice with systematic patterns boosted my confidence in sentence construction. Initially, I could only imitate the teacher's examples, but after two weeks, I began creating my own variations.*" This statement exemplifies the language pattern internalization process through the integrated approach. The learning process that integrates both approaches involves complex and interconnected mechanisms of change. Participatory observation revealed that the combination of structured drills (a behaviorist element) and thematic discussions (a cognitivist element) created a dynamic and productive learning environment.

The lead teacher in this study explained in an interview*: "In the initial phase, students tended to merely imitate the examples given. However, after 4–5 sessions, changes began to emerge. They were not only able to produce grammatically correct sentences but also started to experiment and innovate in their writing.*" This statement

is supported by data from weekly writing assignments, which showed increased complexity and creativity in students' compositions.

Development of Metacognitive Awareness and Self-Regulated Learning

Survey data indicated a significant rise in the use of metacognitive strategies: only 45% of students reported using planning strategies before writing at the beginning of the study, but this increased to 82% by the end. Ahmad, an eighth-grade student, described his learning process: "*Now I always create an outline before I start writing, then I review my work using the checklist taught by the teacher. This method makes my writing more structured and easier to understand.*"

Document analysis of students' work showed notable progress. In the first week, 90% of the writings consisted of separate, simple-structured sentences. By the eighth week, 65% of students were able to produce cohesive paragraphs using various Arabic conjunctions correctly. A questionnaire completed by 30 students revealed that 89% of respondents (n=27) agreed or strongly agreed that this method helped them understand Arabic sentence structures. More specifically, 83% of students reported improvement in constructing *jumlah ismiyah*, and 76% found it easier to understand *jumlah fi'liyah* patterns after participating in this integrative learning approach.

Qualitative data from in-depth interviews with seven students provided rich insights into the mechanisms of change. Siti, one of the participants, explained*: "Daily writing practice using systematic patterns made me more confident in constructing sentences. At first, I could only imitate the teacher's examples, but after two weeks, I began creating my own variations.*" This statement illustrates the internalization process of language patterns facilitated by the integrated approach.

Students' responses to the behaviorist-cognitivist integrated learning revealed a nuanced and multidimensional learning experience. The dominant mood reflected in their responses was enthusiasm, accompanied by a sense of achievement, though some acknowledged initial challenges in adapting. Participants openly shared the transformation in their attitudes toward writing in Arabic. Many expressed how they initially viewed writing as a daunting and tedious task, but gradually, it became an activity they looked forward to. One student described their emotional journey*: "I used to always postpone writing assignments, but now I often try to write short stories in my spare time.*"

Motivation emerged as a strong theme in the students' responses. They spoke not only about external motivation, such as praise from teachers, but more often highlighted the intrinsic satisfaction of being able to express their thoughts in Arabic. As one respondent put it*: "The feeling of completing my first piece of writing with minimal errors is hard to explain it's like breaking my own record.*"

The creative process in writing was also frequently mentioned. Students shared how they became more willing to experiment with new vocabulary and

more complex sentence structures. *"The teacher always encouraged us to try different styles, not just copy the examples. Now I enjoy including dialogue elements in my writing,"* said one student enthusiastically.

Social interaction in learning also played a significant role in students' responses. Many highlighted the importance of group discussions and peer feedback. *"We actually learned a lot by reading each other's work and giving suggestions. Sometimes great ideas came from those discussions,"* wrote one participant. Some students honestly admitted the difficulties they faced, especially at the beginning of the program. *"The first week felt really tough because there were so many new things all at once,"* confessed one respondent. However, they also emphasized how the support system designed by the teacher helped them overcome those challenges.

Most students expressed appreciation for the personalized approach implemented. They felt treated as individuals with unique needs rather than as a homogenous group. *"The teacher always had different ways to help us based on our specific difficulties,"* wrote one student with gratitude. A shift in self-confidence was another prominent theme. Many students described how their confidence grew in tandem with their mastery of writing techniques. *"Now I'm no longer afraid of making mistakes when writing, because I understand it's part of the learning process,"* one respondent shared.

Interestingly, some students also reflected on the impact of this learning beyond academics. They spoke about improved critical thinking and idea organization skills, which they found beneficial for other subjects as well. At the end of the questionnaire, most students expressed a desire to continue learning through this approach. One participant wrote hopefully: *"Can this method be used in other subjects too? I finally feel like I can enjoy learning Arabic."*

The results of this study indicate that this integration can create a more dynamic and effective learning environment, as reflected in the significant improvement in students' writing abilities, as well as an increase in their motivation and confidence in using Arabic. These findings not only support the initial hypothesis but also offer a novel contribution by demonstrating, through empirical evidence, how the integration of behaviorist and cognitivist theories rarely combined in Arabic writing pedagogy can simultaneously improve linguistic accuracy, metacognitive awareness, and student motivation in a cohesive instructional model.

A previous study describes the behaviorist-structuralist perspective and its application in Arabic language instruction. The theory combines behaviorist principles from psychology with structuralist principles from linguistics,

resulting in new instructional principles for language learning[14]. The study identified several instructional models rooted in the behaviorist-structuralist perspective, such as the use of repetition in utterances and Arabic conversations, substitution drills that apply nouns (*ism*) and verbs (*fi'l*), exercises focused on expanding sentence patterns, and sentence manipulation activities involving both nominal and verbal structures. These instructional models are consistent with the findings of the present study, which demonstrate that integrating behaviorist and cognitivist theories can enhance students' proficiency in Arabic writing.

Behaviorist theory emphasizes the role of the environment in shaping habits through stimulus-response processes and reinforcement. This is reflected in the use of repetitive exercises and positive reinforcement in the writing instruction observed in this study. Meanwhile, cognitivist theory emphasizes mental processes such as comprehension, analysis, and synthesis. This is evident in the use of problem-solving activities and group discussions which helped students develop critical and creative thinking in writing. Learning theory approaches guide practice and implementation in instructional activities, which eventually give rise to specific instructional theories[15]. Reinforcement (behaviorism) improved the accuracy of Arabic grammar, similar to the findings of significant improvements in sentence structure in this study. However, Adi focused only on the mechanical aspect (drills), while this study combined it with cognitive activities (e.g., theme discussions), resulting in increased creativity and motivation

The behaviorist approach tends to be monotonous and less effective for higher-order skills (e.g., creative writing). Our findings contradict this by showing that when behaviorism is integrated with cognitivism (e.g., problem-solving), students not only master sentence patterns but also develop analytical abilities. This difference may be due to Rogti's intervention design, which did not include metacognitive scaffolding [16].

The findings of this study show that the integration of both theories can foster a more dynamic and effective learning environment. This is reflected in significant improvements in students' writing abilities, motivation, and confidence in using Arabic. These results are in line with the findings that

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[14] Nurul Ainiy, Siti Maisaroh, and Muhammad Salim Akbar, "Teori Behavioris-Strukturalis Dan Penerapannya Dalam Pembelajaran Bahasa Arab," *Lisanuna: Jurnal Ilmu Bahasa Arab Dan Pembelajarannya* 12, no. 1 (2022): 41–56, https://doi.org/http://dx.doi.org/10.22373/ls.v12i1.12907.

[15] Adi Bandono and O S Sri, "Learning Theory Debate in the Perspective of Behaviorism, Cognitivism, and Constructivism in Learning Practice," *International Journal of Progressive Sciences and Technologies* 29 (2021): 325–34, http://dx.doi.org/10.52155/ijpsat.v29.1.3656

[16] Thomas C. Mawhinney, "Intrinsic × Extrinsic Work Motivation: Perspectives from Behaviorism," *Organizational Behavior and Human Performance* 24, no. 3 (1979), https://doi.org/10.1016/0030-5073(79)90038-2.

integrative approaches not only improve writing skills but also enhance students' motivation and self confidence[17].

The study also found that students showed progress in the use of metacognitive strategies, such as outlining and self-evaluating their writing. This aligns with cognitivist theory, which emphasizes the importance of mental processes in learning. Additionally, the research highlights the significance of social interaction in learning, such as group discussions and peer feedback, in enhancing students' writing skills.

In the context of previous research, these findings suggest that the integration of behaviorist and cognitivist theories can be an effective approach for improving Arabic writing skills. This can serve as a foundation for developing more holistic and sustainable instructional methods in Arabic language education. This is supported by the behaviorist learning theory, which states that when students' behavior changes positively, they become more motivated to learn and interact, and their memory and tolerance also improve[18].

The learning environment plays a crucial role in language education[19]. Behaviorism emphasizes that the environment is a key factor in shaping behavior. In the context of Arabic language learning, a supportive environment filled with relevant stimuli can help students develop good language habits[20]. For instance, using interactive learning media such as videos and audio recordings can provide the necessary stimuli to strengthen students' skills.

Furthermore, a supportive environment also includes student-to-student and student-teacher interactions. Social interaction is essential in language learning because language is a tool used in communication and social interaction[21]. Group discussions, collaboration, and peer feedback can help students develop their language skills through practice and constructive input. This aligns with a study that explored the mentoring of a *Daurah Tadribiyyah* Native Speaker program aimed at improving Arabic productive skills among Arabic education students. The study showed that social interaction in learning, such as group discussions and peer feedback, is vital in enhancing students'

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[17] Kartono and Zainuddin, "Meningkatkan Keterampilan Menulis Melalui Pendekatan Integratif Pada Siswa Kelas V Sdn 02 Sejaruk Param."

[18] Zainal Abidin Muhja and Meliani Indria Wijaya, "Application of Behaviorist Theory Based on the Learning Experienceof Students in Boarding School Environments," *Al-Hayat: Journal of Islamic Education* 8, no. 3 (2024): 908–22, https://doi.org/https://doi.org/10.35723/ajie.v8i3.689.

[19] Muhammad Husni Shidqi and Adam Mudinillah, "Pembelajaran Bahasa Arab Dengan Memanfaatkan Lingkungan Berbahasa Bagi Mahasiswa Di Perguruan Tinggi," *Jurnal Education and Development* 9, no. 3 (2021): 170–76, https://doi.org/https://doi.org/10.37081/ed.v9i3.2807.

[20] Denitia Berliani, Abdul Malik Karim Amrullah, and Ahmad Kholil, "Metode Mimicry Memorization Dalam Pembelajaran Keterampilan Berbicara," *Journal of Education Research* 5, no. 4 (December 31, 2024): 6787–96, https://doi.org/10.37985/jer.v5i4.1992.

[21] Dian Masrura, Agung Setiyawan, and Khairuddin Bangun, "Pengkajian Pengembangan Bahasa Anak Dengan Pendekatan Teori Vygotsky Dan Implikasinya Dalam Pembelajaran Bahasa Arab," *Raudhah Proud To Be Professionals: Jurnal Tarbiyah Islamiyah* 9, no. 2 (2024): 313–24, https://doi.org/https://doi.org/10.48094/raudhah.v9i2.674.

writing skills[22]. This supports the findings of the present study, which demonstrate that integrating behaviorist and cognitivist theories can foster a more dynamic and effective learning environment.

Cognitivism emphasizes the role of mental processes in learning. Mental processes such as comprehension, analysis, and synthesis are crucial in language learning. In the context of Arabic language learning, students need to develop the ability to understand sentence structures, analyze word meanings, and synthesize information to produce good writing. Meanwhile, the behaviorist approach focuses on guiding students to achieve predetermined learning outcomes. Learning is considered to occur when students successfully attain the expected results[23].

The use of metacognitive strategies, such as outlining writing and evaluating their own work, can help students develop critical and creative thinking skills in writing. These strategies can also foster learner independence, as students learn to identify the strengths and weaknesses in their own writing and make the necessary improvements[24]. The use of repetitive exercises and positive reinforcement can help students develop good language habits[25]. Problem-solving activities and group discussions can support students in enhancing their critical and creative thinking in writing. Moreover, the use of interactive learning media can provide the necessary stimuli to strengthen students' listening and speaking skills.

This study's findings have important implications for curriculum and instructional material development in Arabic language education. Curriculum and teaching materials should be designed to support the integration of behaviorist and cognitivist theories in instruction[26]. This can be achieved by including activities involving repetitive practice, positive reinforcement, problem-solving tasks, and group discussions. Recent literature reviews have

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[22] Mochamad Chobir Sirad and Choiruddin Choiruddin, "Pendampingan Program Daurah Tadribiyyah Native Speaker Untuk Meningkatkan Keterampilan Bahasa Arab Produktif Pada Mahasiswa Pendidikan Bahasa Arab STAI KH. Muhammad Ali Shodiq Tulungagung," *Jurnal Pengabdian Masyarakat: Pemberdayaan, Inovasi Dan Perubahan* 5, no. 1 (2025), https://doi.org/https://doi.org/10.59818/jpm.v5i1.1005.

[23] M Givi Efgivia, Anggi Arista, and Reni Kurniawati, "Analysis of Behaviorism Learning Theory, STEM Learning Model and Gamification," in *1st UMGESHIC International Seminar on Health, Social Science and Humanities (UMGESHIC-ISHSSH 2020)* (Atlantis Press, 2021), 194–97, https://doi.org/10.2991/assehr.k.211020.029.

[24] Riani Riani, Asyril Asyril, and Zainuddin Untu, "Metakognisi Siswa Dalam Memecahkan Masalah Matematika," *Primatika : Jurnal Pendidikan Matematika* 11, no. 1 (2022), https://doi.org/10.30872/primatika.v11i1.1064.

[25] Ade Islamiati, Yanti Fitria, and Risda Amini, "Memahami Teori Behaviorisme Dalam Meningkatkan Pembelajaran Dan Efektivitas Di Sekolah Dasar Perfektif Penggunaan Stimulus Dan Respon," *AT-TADIB* 8, no. 2 (2024), https://doi.org/10.32507/attadib.v8i2.2212

[26] Rajiman Andrianus Sirait and Ester Yunita Dewi, "Peran Teknologi Pembelajaran Pada Desain Pembelajaran," *Jurnal Budi Pekerti Agama Kristen Dan Katolik* 2, no. 4 (2024): 232–42, https://doi.org/https://doi.org/10.61132/jbpakk.v2i4.773.

revealed that cognitivism and behaviorism serve as foundational theories for syllabus development, instructional design, and technology integration[27].

The study also found that social interaction in the learning process, such as group discussions and peer feedback, plays a vital role in improving students' writing skills. Therefore, teachers should encourage social interaction in the classroom and provide opportunities for students to engage in discussions and offer constructive feedback.

In practical terms, the results of this study can serve as a foundation for the development of more holistic and sustainable teaching methods in Arabic language education. Effective teaching methods in this context include repetitive practice, positive reinforcement, problem-solving activities, and group discussions. Repetitive exercises and positive reinforcement can help students develop good language habits, while problem-solving and group discussions can foster their critical and creative thinking in writing. To illustrate the integrative approach adopted in this study, the following framework presents a holistic and sustainable instructional model that synthesizes behaviorist and cognitivist components in Arabic writing instruction.
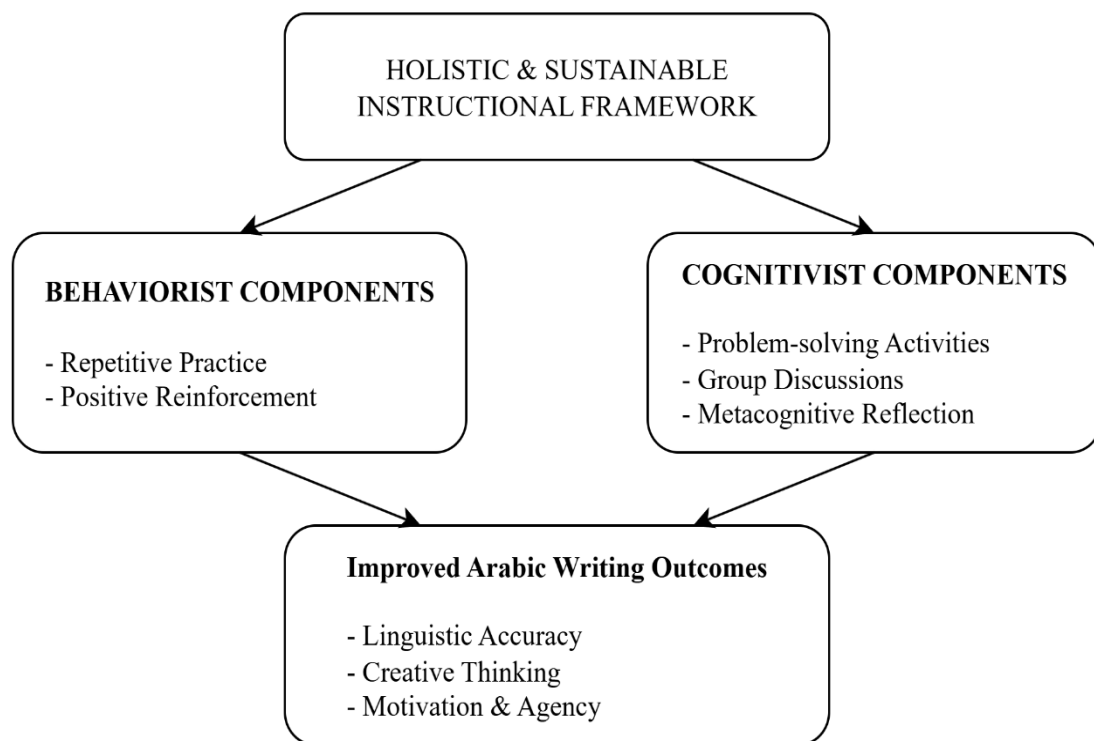

Figure 1. Behaviorist-Cognitivist Integration Model in Arabic Writing Instruction

The behaviorist elements such as repetitive practice and positive reinforcement are designed to establish automaticity and accuracy in linguistic output. Meanwhile, the cognitivist components namely problem-solving activities, group discussions, and metacognitive reflection promote higher-order thinking skills, learner agency, and motivation. The combination of both paradigms leads to improved Arabic writing outcomes, which are characterized by enhanced linguistic accuracy, creative expression, and metacognitive awareness. This framework underscores the study's central argument that meaningful integration of instructional theories can generate more sustainable and learner-centered results in Arabic writing pedagogy.

CONCLUSION

This study concludes that the integration of behaviorist and cognitivist learning theories offers a highly effective instructional model for improving Arabic writing skills. The significant improvement in student performance (mean gain = 19.00; Cohen's d = 2.44) provides strong quantitative evidence of its practical value. Qualitative data further reinforce this by revealing enhanced student motivation, confidence, and metacognitive engagement. The integrative approach proves that combining structured practice with cognitive strategies can foster not only grammatical accuracy but also critical thinking and learner autonomy. This model addresses both lower- and higher-order writing competencies in a cohesive manner.

These findings contribute a novel and empirically supported framework to Arabic language pedagogy and call for its adoption in curriculum design, teacher training, and instructional innovation. Future studies may explore long-term outcomes, apply the model to other language skills, or incorporate digital and constructivist elements to further expand its applicability. In sum, this study reaffirms the power of combining behavioral and cognitive principles and sets a foundation for more dynamic, student-centered approaches in language education.

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