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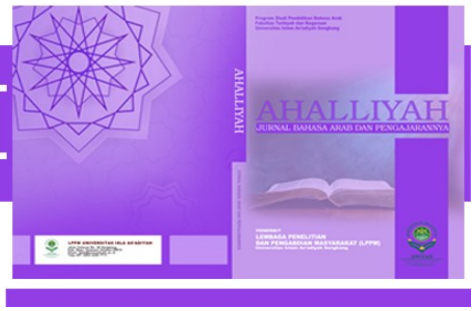

Student Perceptions of Interactive Media Use in Mahārah al-Kalām Learning A Study at Ma'had Aly As'adiyah Sengkang

Persepsi Mahasiswa terhadap Penggunaan Media Interaktif dalam Pembelajaran Mahārah al-Kalām: Studi di Ma'had Aly As'adiyah Sengkang

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ABSTRACT

This study investigates student perceptions regarding the use of interactive media in Mahārah al-Kalām (Arabic speaking skills) instruction at Ma'had Aly As'adiyah Sengkang, South Sulawesi. Employing a mixed-methods approach, data were collected from 85 students through questionnaires, focus group discussions, and individual interviews. Findings reveal overwhelmingly positive student perceptions, with 89% of participants viewing interactive media as beneficial for developing speaking proficiency. Students particularly valued interactive applications providing immediate pronunciation feedback, video-based learning materials featuring native speakers, and collaborative digital platforms enabling peer interaction. Key perceived benefits include increased motivation and confidence, enhanced pronunciation accuracy, exposure to authentic Arabic discourse, and opportunities for autonomous practice beyond classroom hours. However, students also identified challenges including technical difficulties, initial learning curves for new applications, and concerns about overreliance on technology reducing face-to-face interaction. The study demonstrates that when thoughtfully integrated, interactive media significantly enhances student engagement and perceived learning effectiveness in Arabic speaking instruction, offering implications for curriculum design and pedagogical innovation in Islamic higher education institutions.

Keywords: student perceptions, interactive media, Mahārah al-Kalām, Arabic speaking skills, Islamic education, educational technology

ABSTRAK

Penelitian ini menyelidiki persepsi mahasiswa terhadap penggunaan media interaktif dalam pembelajaran Mahārah al-Kalām (keterampilan berbicara bahasa Arab) di Ma'had Aly As'adiyah Sengkang, Sulawesi Selatan. Menggunakan pendekatan metode campuran, data dikumpulkan dari 85 mahasiswa melalui kuesioner, diskusi kelompok terfokus, dan wawancara individual. Temuan menunjukkan persepsi mahasiswa yang sangat positif, dengan 89% responden memandang media interaktif bermanfaat untuk mengembangkan kemahiran berbicara. Mahasiswa secara khusus menghargai aplikasi interaktif yang memberikan

umpan balik pelafalan langsung, materi pembelajaran berbasis video menampilkan penutur asli, dan platform digital kolaboratif yang memungkinkan interaksi sebaya. Manfaat utama yang dipersepsikan meliputi peningkatan motivasi dan kepercayaan diri, akurasi pelafalan yang lebih baik, paparan terhadap wacana Arab otentik, dan kesempatan untuk latihan otonom di luar jam kelas. Namun, mahasiswa juga mengidentifikasi tantangan termasuk kesulitan teknis, kurva pembelajaran awal untuk aplikasi baru, dan kekhawatiran tentang ketergantungan berlebihan pada teknologi mengurangi interaksi tatap muka.
Kata Kunci: *persepsi mahasiswa, media interaktif, Mahārah al-Kalām, keterampilan berbicara Arab, pendidikan Islam, teknologi pendidikan*

A. INTRODUCTION

The development of speaking proficiency in foreign language learning represents one of the most challenging yet essential competencies that learners must acquire, requiring not only linguistic knowledge but also pragmatic awareness, cultural sensitivity, and the confidence to engage in real-time communication despite the risk of making errors. In Arabic language education within Indonesian Islamic institutions, Mahārah al-Kalām (speaking skills) holds particular significance as it enables students to engage directly with Islamic scholarship, participate in academic discourse with Arabic-speaking scholars, and fulfill religious obligations requiring oral Arabic competence. Traditional approaches to teaching Arabic speaking skills in Indonesian pesantren and ma'had contexts have typically emphasized memorization of dialogues, teacher-led drill patterns, and limited opportunities for authentic communicative practice, methodologies that often fail to develop functional speaking abilities needed for real-world Arabic communication.

The emergence of interactive media technologies offers transformative possibilities for Arabic speaking instruction by providing learners with access to authentic speech models, opportunities for individualized practice with immediate feedback, and platforms for communicative interaction extending beyond traditional classroom constraints. Interactive media, encompassing applications with speech recognition capabilities, video-based learning platforms, virtual conversation partners, and collaborative digital environments, addresses several persistent challenges in speaking instruction including limited class time for oral practice, student anxiety about public speaking, difficulty accessing native speaker models, and the need for repeated practice opportunities. According to Chapelle (2009) and (Muhsyanur, 2024), computer-assisted language learning technologies prove particularly valuable for developing oral proficiency as they enable individualized pacing, provide non-judgmental feedback environments, and offer unlimited opportunities for rehearsal and repetition without the social pressures of face-to-face interaction.

Ma'had Aly As'adiyah Sengkang, a prestigious Islamic higher education institution in South Sulawesi with a long tradition of Arabic language instruction, recently integrated various interactive media technologies into its Mahārah al-Kalām curriculum, creating an opportunity to investigate student experiences with and perceptions of these pedagogical innovations. Understanding student perceptions proves crucial for effective technology integration, as learner attitudes significantly influence engagement with educational technologies, persistence through learning challenges, and ultimately, learning outcomes. Blake (2009) emphasizes that successful implementation of technology in language learning depends not merely on the affordances of technologies themselves but on how learners perceive, interpret, and engage with these tools within their specific cultural and educational contexts.

Research on student perceptions of technology in language learning has produced varied findings depending on technological types, implementation approaches, learner characteristics, and cultural contexts. While some studies document enthusiastic embrace of digital learning tools, others reveal student resistance, preference for traditional methodologies, and concerns about technology replacing human interaction. Hubbard (2013) argues that learner training and gradual socialization into technology-enhanced learning environments

significantly shape student perceptions and engagement, suggesting that initial reactions may not reflect mature perspectives developed through extended experience. In Indonesian Islamic educational contexts, additional factors including varying levels of prior technology exposure, cultural values regarding teacher-student relationships, and beliefs about effective learning influence how students perceive and respond to interactive media integration.

The specific context of Mahārah al-Kalām instruction adds further complexity to understanding student perceptions of interactive media, as speaking skills development involves affective dimensions including anxiety, self-confidence, and willingness to communicate that may interact with technology use in complex ways. Some students may find technology-mediated speaking practice less threatening than face-to-face interaction, while others may feel frustrated by limitations of current speech recognition technologies or miss the social connection of human interaction. Young (1990) discusses foreign language anxiety as a significant impediment to speaking skill development, noting that anxious learners often avoid speaking opportunities or experience performance decrements even when possessing adequate linguistic knowledge. Understanding whether and how interactive media influences speaking anxiety and willingness to engage in oral practice constitutes an important dimension of investigating student perceptions.

The characteristics of the student population at Ma'had Aly As'adiyah Sengkang further contextualize this investigation, as learners bring diverse backgrounds, motivations, and prior experiences that shape their responses to pedagogical innovations. Students at this institution include both recent secondary school graduates and older learners returning to formal education, individuals from various socioeconomic backgrounds with different levels of technology access and digital literacy, and learners with varying prior Arabic study ranging from basic Quranic recitation to advanced literary analysis. This diversity suggests that perceptions of interactive media may vary significantly across different student subgroups, necessitating nuanced investigation that captures this heterogeneity rather than assuming uniform responses.

Current research on interactive media in Arabic language learning remains limited compared to extensive scholarship on technology integration in English language teaching, with particularly little investigation of student perspectives in Indonesian Islamic educational contexts. While technical studies demonstrate capabilities of various speech recognition and language learning technologies, fewer studies investigate how learners in specific cultural and institutional contexts experience, interpret, and benefit from these technologies. This study addresses these research gaps by investigating student perceptions of interactive media use in Mahārah al-Kalām instruction at Ma'had Aly As'adiyah Sengkang, examining what students view as beneficial or problematic about interactive media, how these technologies influence their learning experiences and outcomes, and what factors shape their engagement with and attitudes toward technology-enhanced Arabic speaking instruction.

B. LITERATURE REVIEW

Interactive media in language education encompasses a broad range of digital technologies characterized by their capacity to respond to learner input, provide individualized feedback, adapt to learner needs, and facilitate interaction with content, peers, or virtual interlocutors. Levy (2009) defines interactive media as technologies that support two-way information exchange between learners and systems, enabling dynamic rather than static engagement with learning materials and creating opportunities for individualized learning paths based on learner performance and preferences. In speaking skills development specifically, interactive media includes speech recognition applications that analyze pronunciation and provide corrective feedback, video-based platforms enabling learners to observe and emulate native speaker models, virtual reality environments simulating authentic communicative contexts, and collaborative platforms supporting synchronous or asynchronous oral interaction among learners or between learners and instructors.

Theoretical frameworks for understanding interactive media's role in language learning draw heavily from sociocultural perspectives emphasizing interaction as the primary mechanism driving language development, alongside cognitive approaches highlighting the importance of comprehensible input, output opportunities, and corrective feedback. Chapelle (2007) proposes an interactionist framework for computer-assisted language learning that integrates these theoretical perspectives, arguing that effective technology-enhanced language instruction should provide learners with comprehensible input at appropriate challenge levels, create opportunities for modified output and negotiation of meaning, offer corrective feedback on learner performance, and support learners' development of metacognitive awareness about their learning processes. This framework suggests that interactive media's effectiveness depends not on the technology itself but on how implementation addresses these fundamental language learning processes.

Research on learner perceptions of educational technology has identified multiple dimensions that shape student attitudes and engagement, including perceived usefulness for achieving learning goals, perceived ease of use, enjoyment and intrinsic interest in using the technology, alignment with preferred learning styles, and influence on affective variables such as anxiety and motivation. Davis (1989) introduced the Technology Acceptance Model, proposing that perceived usefulness and perceived ease of use constitute primary determinants of technology adoption and continued use. While originally developed for workplace contexts, this model has been widely applied in educational technology research, with studies demonstrating that students more readily adopt and persist with technologies they perceive as genuinely beneficial for learning and not excessively difficult to use. In language learning contexts, Stockwell (2012) extends this framework by considering additional factors including mobility, availability, and the relationship between technology use and social connection with peers and instructors.

Specific research on technology-enhanced speaking instruction has produced encouraging findings regarding both learning outcomes and student perceptions, though with important caveats about implementation quality and cultural context. Studies by Golonka et al. (2014) synthesizing research on technology and language learning found consistent evidence that speech recognition technologies can improve pronunciation when integrated into systematic instruction, that video-based learning enhances listening comprehension and cultural awareness, and that computer-mediated communication increases opportunities for authentic language use. However, effectiveness varies significantly based on pedagogical design, instructor support, and alignment with curricular goals rather than representing inherent properties of technologies themselves. Student perception studies generally reveal positive attitudes toward technology-enhanced speaking instruction, particularly among younger learners and those with higher digital literacy, though some research identifies concerns about technical difficulties, preference for human interaction, and questions about whether technology can adequately replace face-to-face communication practice.

The Arabic language context presents unique considerations for interactive media integration due to linguistic characteristics including morphological complexity, diglossia between Modern Standard Arabic and colloquial varieties, and the challenges of the Arabic script and sound system for non-native learners. Wahba et al. (2014) discuss how Arabic's rich morphology and flexible word order create particular challenges for speech recognition technologies that may struggle with the extensive inflectional variation in spoken Arabic. Additionally, the question of which Arabic variety to teach and practice represents a persistent challenge, as most formal instruction focuses on Modern Standard Arabic while authentic communicative contexts often require dialectal competence. Interactive media can potentially address these challenges by providing extensive practice opportunities and exposure to diverse Arabic varieties, though technology developers must carefully consider linguistic features and learner needs in designing applications for Arabic learners.

C. METHOD

This research employs a mixed-methods approach combining quantitative survey data with qualitative insights from focus groups and individual interviews to comprehensively investigate student perceptions of interactive media use in Mahārah al-Kalām instruction at Ma'had Aly As'adiyah Sengkang. The mixed-methods design proves particularly appropriate for this investigation as it enables both measurement of perception patterns across a substantial student sample and in-depth exploration of the meanings, experiences, and contextual factors underlying these perceptions. According to Creswell and Plano Clark (2018), mixed-methods research provides more complete understanding of complex phenomena than either quantitative or qualitative approaches alone by integrating different types of data and leveraging the strengths of multiple methodological traditions. The study employed a convergent parallel design wherein quantitative and qualitative data were collected simultaneously, analyzed independently, then merged for integrated interpretation.

Participants included 85 students enrolled in Mahārah al-Kalām courses at Ma'had Aly As'adiyah Sengkang during the 2024 academic year, representing approximately 75% of eligible students and ensuring robust representation across different year levels, gender, and prior Arabic proficiency levels. All participants had experienced at least one semester of instruction incorporating interactive media including speech recognition applications, video-based learning platforms, and collaborative discussion tools, providing sufficient exposure to form meaningful perceptions. Data collection occurred over four months from August through November 2024, involving multiple instruments and methods. The primary quantitative instrument was a validated questionnaire adapted from previous technology acceptance studies and modified for the Arabic learning context, containing 35 Likert-scale items addressing perceived usefulness, ease of use, influence on motivation and confidence, learning effectiveness, and challenges encountered. Questionnaire items were piloted with a small student group and refined based on feedback before full administration.

Qualitative data collection involved six focus group discussions with 5-7 students each, stratified by year level to encourage open discussion among peers at similar educational stages, and 12 individual semi-structured interviews with participants selected to represent diverse perspectives based on their questionnaire responses and demographic characteristics. Focus groups explored themes including experiences with different interactive media types, perceived benefits and limitations, comparisons between technology-enhanced and traditional instruction, and suggestions for improving implementation. Individual interviews enabled deeper exploration of personal experiences, learning strategies, and affective responses that students might hesitate to share in group settings. According to Krueger and Casey (2015), focus groups excel at capturing social dimensions of perceptions and group-level meaning-making, while individual interviews provide access to personal experiences and perspectives that might be suppressed in group contexts. All qualitative sessions were audio-recorded, transcribed verbatim, and analyzed using thematic analysis procedures. Braun and Clarke (2006) describe thematic analysis as a flexible method for identifying, analyzing, and reporting patterns within qualitative data, involving familiarization with data, generating initial codes, searching for themes, reviewing and refining themes, and producing final analysis. Quantitative data were analyzed using descriptive statistics, correlation analysis, and comparative tests to identify perception patterns and relationships, while qualitative findings were integrated to explain and elaborate quantitative results.

D. RESULT AND DISCUSSION

Overall Perceptions and Attitudes Toward Interactive Media

Quantitative survey results reveal predominantly positive student perceptions of interactive media use in Mahārah al-Kalām instruction, with 89% of participants agreeing or strongly agreeing that interactive media enhances their Arabic speaking development. The

mean score on the perceived usefulness subscale was 4.23 out of 5 (SD = 0.67), indicating strong consensus regarding interactive media's value for learning. Students particularly endorsed items stating that interactive media helps them practice pronunciation (M = 4.45, SD = 0.61), provides immediate feedback on their speaking (M = 4.38, SD = 0.69), and increases their opportunities to practice Arabic beyond class time (M = 4.41, SD = 0.64). These findings align with research by Stockwell and Tanaka-Ellis (2012) demonstrating that language learners particularly value technologies offering flexibility, individualization, and immediate performance feedback that traditional instruction cannot easily provide.

Qualitative data elaborates these positive perceptions by revealing specific ways students experience interactive media as beneficial for their learning. Multiple focus group participants described how speech recognition applications reduced their anxiety about practicing Arabic speaking, as they could rehearse privately without fear of peer judgment or embarrassment. One student explained, "With the app, I can practice the same phrase many times until I get it right, nobody is judging me or getting impatient, I can take my time and build my confidence before speaking in class." This comment illustrates how interactive media creates what Zhao (2003) describes as low-anxiety practice environments that may be particularly valuable for learners who experience high speaking anxiety. Several students contrasted the patience of technology-mediated practice with the pressure they feel during face-to-face speaking activities, suggesting that interactive media serves complementary rather than replacement functions by providing preparation that makes students more ready for human interaction.

Video-based learning materials featuring native Arabic speakers emerged as particularly valued interactive media components, with students describing how these resources enhanced their understanding of pronunciation, intonation patterns, and cultural contexts of language use. Students appreciated being able to replay videos repeatedly, control playback speed, and observe facial expressions and gestures accompanying speech. One participant noted, "Watching the videos, I can see exactly how native speakers move their mouths for difficult sounds, I can slow it down and practice along, this is impossible with just audio or written explanation." This observation supports research by Jones and Cuthrell (2011) demonstrating that video-based instruction offers unique affordances for language learning by providing multimodal input combining auditory and visual information that learners can process at their own pace.

Despite overall positive perceptions, survey results also revealed meaningful variation across student subgroups, with year level, prior technology experience, and self-rated Arabic proficiency influencing perception patterns. First-year students reported significantly higher enthusiasm for interactive media (M = 4.51, SD = 0.53) compared to senior students (M = 3.98, SD = 0.74, $t(83) = 3.24$, $p < .01$), possibly reflecting greater familiarity with digital technologies among younger students or increased comfort with traditional methodologies among advanced learners. Students self-rating their Arabic proficiency as intermediate or advanced expressed more nuanced perspectives, appreciating interactive media for specific purposes while noting limitations compared to human interaction for developing sophisticated conversational abilities. This finding aligns with research by Levy and Stockwell (2006) suggesting that technology benefits may be perceived differently at various proficiency levels, with beginners particularly valuing structured practice and feedback while advanced learners seek more complex, open-ended interaction opportunities.

Pronunciation, intonation patterns, and cultural contexts of language use. Students appreciated being able to replay videos repeatedly, control playback speed, and observe facial expressions and gestures accompanying speech. One participant noted, "Watching the videos, I can see exactly how native speakers move their mouths for difficult sounds, I can slow it down and practice along, this is impossible with just audio or written explanation." This observation supports research by Jones and Cuthrell (2011) demonstrating that video-

based instruction offers unique affordances for language learning by providing multimodal input combining auditory and

Perceived Benefits of Interactive Media for Speaking Development

Table 1. Student-Perceived Benefits of Interactive Media for Mahārah al-Kalām Development

Benefit Category	Specific Benefits	Agreement Level (%)	Mean Score (1-5)
Pronunciation Improvement	Immediate feedback on pronunciation accuracy	92%	4.45
	Models from native Arabic speakers	88%	4.32
	Ability to practice difficult sounds repeatedly	91%	4.41
Confidence Building	Reduced anxiety practicing privately	85%	4.18
	Gradual progression building confidence	83%	4.11
	Safe environment for making errors	87%	4.23
Vocabulary Acquisition	Contextual vocabulary presentation	81%	4.02
	Visual and audio reinforcement	86%	4.15
	Spaced repetition systems	79%	3.94
Accessibility	Practice anytime, anywhere	90%	4.38
	Self-paced learning	89%	4.35
	Review materials unlimited times	93%	4.48
Cultural Understanding	Exposure to authentic Arabic contexts	84%	4.09
	Understanding cultural communication norms	78%	3.89
	Diverse Arabic dialects and accents	76%	3.81
Motivation	Engaging, game-like features	72%	3.71
	Visible progress tracking	86%	4.16
	Variety in learning activities	88%	4.28

Students identified pronunciation improvement as the most significant benefit of interactive media, with speech recognition applications providing immediate feedback that helps learners identify and correct pronunciation errors. Multiple interview participants described frustration with traditional pronunciation instruction where they struggled to hear differences between their production and teacher models, whereas interactive applications visually displayed pronunciation accuracy and highlighted specific errors requiring attention. This immediate, specific feedback enabled more efficient practice and faster improvement than general teacher comments. The value of automated pronunciation feedback aligns with research by Neri et al. (2002) demonstrating that computer-assisted pronunciation training

significantly improves learner pronunciation when combining speech recognition feedback with opportunities for repeated practice and comparison to native speaker models.

Confidence building emerged as another crucial perceived benefit, with students describing how private practice with interactive media reduced speaking anxiety and built confidence before engaging in face-to-face interaction. The non-judgmental nature of technology-mediated practice proved particularly valuable, as students could make errors, receive feedback, and retry without social consequences or time pressure. Several students specifically mentioned that practicing with applications before class discussions made them more willing to participate actively in classroom speaking activities, suggesting that interactive media serves as a confidence-building scaffold supporting transition to more challenging live interaction. This finding resonates with research by Arnold (2007) on technology and language learning anxiety, showing that well-designed computer-assisted activities can create affectively supportive learning environments that reduce anxiety and build willingness to communicate.

The accessibility and flexibility of interactive media constituted another highly valued benefit, with students appreciating the ability to practice Arabic speaking skills anytime and anywhere rather than being constrained to classroom hours and physical locations. Mobile applications enabled students to utilize previously wasted time during commutes or breaks for productive language practice, and the self-paced nature of interactive media allowed students to spend more time on challenging content while moving quickly through material they had mastered. One student noted, "I can practice for just 10 minutes while waiting for class or for an hour at night, the application remembers my progress and picks up where I left off, this flexibility makes it easy to practice consistently (Mulyana et al., 2021)." This flexibility addresses what Dörnyei (2009) identifies as a persistent challenge in language learning: maintaining regular practice over extended periods necessary for skill development.

Cultural learning and exposure to authentic Arabic language use represented an additional perceived benefit, as interactive media provided access to diverse Arabic-speaking contexts, dialects, and cultural situations that students would otherwise rarely encounter. Video-based materials showing real Arabic conversations, news broadcasts, cultural events, and everyday interactions exposed students to language as actually used rather than the simplified, pedagogically modified language typical of textbooks. Several students mentioned developing better understanding of cultural communication norms including appropriate greetings, levels of formality, and non-verbal communication through observing authentic video content. These benefits align with research by Furstenberg et al. (2001) on cultura projects demonstrating that technology-mediated exposure to authentic cultural materials and interaction with native speakers significantly enhances learners' cultural understanding and intercultural communicative competence.

Challenges and Limitations in Interactive Media Use

Despite predominantly positive perceptions, students identified multiple challenges and limitations in their experiences with interactive media for Mahārah al-Kalām development, revealing important considerations for effective implementation. Technical difficulties emerged as the most frequently mentioned challenge, with 68% of survey respondents reporting experiencing problems including application crashes, speech recognition failures, connectivity issues, and compatibility problems across different devices. These technical frustrations sometimes undermined learning experiences and reduced student motivation to persist with interactive media. One focus group participant described, "Sometimes I am practicing and the app crashes, I lose my progress and have to start over, or the microphone doesn't work properly and it keeps saying my pronunciation is wrong even when I think it's correct." Such experiences highlight what Hubbard (2013) identifies as the im-

portance of technical reliability and adequate technical support for successful educational technology implementation.

The accuracy and limitations of speech recognition technology constituted another significant concern, with students noting that current applications sometimes incorrectly evaluate pronunciation, fail to recognize accents or speaking styles, or provide inconsistent feedback. Several advanced students expressed frustration that speech recognition systems struggled with more complex or creative language use, effectively limiting practice to simple, predictable utterances. One student explained, "The app works well for basic phrases we practiced in class, but when I try to make my own sentences or say something more creative, it often doesn't understand or gives incorrect feedback." This limitation reflects current technical constraints of speech recognition systems that perform best with constrained vocabularies and expected utterances, as discussed by Liakin et al. (2015) in their review of automated speech recognition technologies for language learning.

Students also identified concerns about interactive media potentially reducing face-to-face interaction with teachers and peers, which many valued as essential for developing authentic communicative competence and building relationships within the learning community. While appreciating the practice opportunities interactive media provides, several students worried about overreliance on technology at the expense of human interaction and cultural learning that occurs through personal relationships. One participant expressed, "Technology is good for practice, but I learn so much from talking with my teachers and classmates, understanding their reactions, having real conversations, I worry if we do too much with apps we miss these important experiences." This concern aligns with research by Warschauer and Kern (2000) cautioning against technological determinism and emphasizing that effective technology integration maintains balance between technology-mediated and human interaction rather than substituting one for the other (Muhsyanur and Mustapha, 2023).

The initial learning curve for new interactive media applications presented challenges for some students, particularly those with limited prior technology experience or low digital literacy. Several students described feeling overwhelmed when first encountering complex applications with multiple features and navigation requirements, requiring time and support to become comfortable with the technology before being able to focus on language learning. This implementation challenge was particularly evident among older students and those from rural backgrounds with less technology exposure. One student noted, "At first I spent so much time trying to figure out how to use the app that I wasn't really practicing Arabic, it was frustrating because I felt others were learning while I was still struggling with the technology." These experiences underscore the importance of what Hubbard and Levy (2006) describe as learner training, wherein students receive explicit instruction and support for using educational technologies effectively rather than assuming intuitive adoption.

Factors Influencing Student Perceptions and Engagement

Multiple interrelated factors emerged as influential in shaping student perceptions of and engagement with interactive media, including individual characteristics, prior experiences, pedagogical implementation approaches, and institutional support structures. Students' self-efficacy beliefs regarding both technology use and Arabic language learning significantly predicted perception positivity and engagement levels, with students who felt confident in their ability to learn new technologies and succeed in Arabic study reporting more positive experiences and greater persistence through challenges. This finding aligns with Bandura's (1997) social cognitive theory emphasizing self-efficacy as a crucial determinant of motivation, effort, and persistence in learning endeavors (Muhsyanur et al., 2021).

The quality of pedagogical integration rather than merely technology availability proved crucial in shaping student perceptions, with participants consistently emphasizing the im-

portance of teacher guidance, systematic integration with classroom instruction, and clear learning objectives. Students valued when instructors explicitly demonstrated interactive media applications, provided training in effective use, assigned structured practice activities with specific learning goals, and integrated technology-mediated practice with classroom assessment and discussion. In contrast, students expressed confusion and frustration when teachers simply recommended applications without guidance or when technology use seemed disconnected from course objectives. One student contrasted two different courses, explaining, "In one class the teacher showed us exactly how to use the app, gave us specific assignments, and discussed what we learned, in another class the teacher just said 'you should practice with this app' but never checked or talked about it, so I stopped using it." This observation supports research by Zhao and Frank (2003) demonstrating that effective technology integration requires systematic planning, instructor involvement, and alignment between technology activities and broader instructional goals.

Peer influence and social comparison also shaped student perceptions and engagement, with students discussing interactive media experiences with classmates, sharing strategies for effective use, and sometimes competing on progress metrics or achievement levels within gamified applications. This social dimension of technology use created both positive influences through peer encouragement and support, and negative influences when students felt pressured by comparisons or excluded from peer conversations about technology they didn't use. Focus group discussions revealed that students valued opportunities to discuss their interactive media experiences, share challenges and solutions, and collaboratively explore application features. These findings resonate with research by Warschauer (1997) on computer-mediated collaborative language learning, suggesting that even seemingly individualized technology use occurs within social contexts that significantly influence perceptions and practices.

Institutional factors including technical infrastructure, availability of devices and internet connectivity, technical support services, and institutional messaging about technology priorities all influenced student engagement with interactive media. Students at institutions with robust WiFi, available computer laboratories, and responsive technical support reported fewer frustrations and more positive experiences than those facing connectivity challenges or lacking support when problems arose. Additionally, when institutional leadership communicated clear commitment to technology-enhanced learning through resource allocation and recognition, students perceived interactive media as legitimate and valuable learning tools rather than peripheral supplements. One student noted, "When our teachers and administrators talk about how important these technologies are for our learning and actually provide the support to use them well, it makes us take them seriously and invest effort in learning to use them effectively." This observation aligns with research by Ertmer (1999) on first-order and second-order barriers to technology integration, emphasizing that sustainable implementation requires addressing both material resources and cultural factors shaping perceptions of technology's role and value.

E. CONCLUSION

This investigation of student perceptions regarding interactive media use in Mahārah al-Kalām instruction at Ma'had Aly As'adiyah Sengkang reveals predominantly positive attitudes grounded in perceived benefits for pronunciation improvement, confidence building, accessible practice opportunities, and cultural learning, while simultaneously identifying important challenges including technical difficulties, speech recognition limitations, concerns about reduced human interaction, and the importance of pedagogical integration quality. Findings demonstrate that student perceptions are shaped not merely by technology characteristics but by complex interactions among individual factors including self-efficacy and prior experience, pedagogical factors including instructor guidance and systematic integra-

tion, and institutional factors including infrastructure and support systems. These insights suggest that maximizing benefits of interactive media for Arabic speaking instruction requires comprehensive approaches addressing technology selection, pedagogical design, learner training, instructor professional development, and institutional support systems rather than simply adopting technologies based on their technical capabilities. The study contributes to understanding technology-enhanced language learning in Islamic educational contexts and offers practical implications for curriculum designers, instructors, and administrators seeking to leverage interactive media to enhance Arabic speaking instruction while maintaining the human interaction and cultural dimensions essential for communicative competence development.

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