

Student's Perceptions Towards Learning Arabic Language Through Digital Game

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Abstract

In the current age of widespread digitisation, technology has become an essential aspect of our everyday existence, significantly transforming how we gain knowledge and interact with our environment. This study aims to explore students' viewpoints on acquiring the Arabic language by employing digital games. This study utilised a qualitative methodology and performed semi-structured interviews with a purposively selected group of 30 college students. These students were exposed to a digital game for five weeks as part of their Arabic language programme. The findings revealed that students responded well to learning Arabic using digital games, consistently expressing their experiences in an educational environment that was unique and engaging. The post-implementation semi-structured interviews indicated that students recognised the integration of digital games as a valuable and advantageous approach, providing a distinct and captivating aspect to conventional learning methods. Hence, the results indicate that incorporating digital games into language teaching not only improves the learning process but also offers benefits for both teachers and students in many courses that adopt this creative method.

Keywords: Arabic language, digital game, perception, qualitative, teaching and learning

INTRODUCTION

In the present era of digitalisation, technology has become an integral part of our lives, revolutionising our methods of acquiring knowledge and engaging with our surroundings. Consequently, the field of education has undergone a significant change as novel technologies and methods have transformed conventional classroom experiences. One of the transforming features is the use of digital games as a captivating and immersive method of acquiring knowledge. Contemporary culture is filled with digital games that are widespread and available in various settings. These games provide enjoyment, challenges, and chances for learning (M.t.a & W.a.a.w, 2023)W (Abdul Ghani dkk., 2022) (Sappaile dkk., 2024) (Nur'aeni & Hasanudin, 2023). These comprise a wide range of interactive experiences that involve participants in the process of solving problems, making decisions, and developing skills (Khan dkk., 2017) (Cardenas-Moncada dkk., 2020) (Said, 2023) (Falani & Nurhidayati, 2021). Due to the widespread availability of smartphones, tablets, and laptops, digital games have become increasingly accessible. As a result, they have become a vital tool for educators who are looking for creative methods to engage and inspire their students.

The Arabic language, renowned for its extensive historical background, cultural importance, and widespread international usage, offers an enticing prospect for individuals seeking to broaden their linguistic knowledge. Arabic language, being the

fifth most widely spoken language globally, occupies a significant position in international discussions, diplomacy, commerce, and cultural interchange (Ritonga dkk., 2023) (Umbar dkk., 2024) (Versteegh, 2015). However, the intricate nature of the Arabic alphabet, grammar, and pronunciation might pose difficulties for those who are enthusiastic about delving into this captivating language. The increasing need for Arabic language training that is both successful and engaging has sparked a search for creative teaching approaches, one of which involves incorporating digital games into the learning process (Abdul Ghani dkk., 2022) (Sahid & Mamat, 2020).

Therefore, this article seeks to elucidate the incorporation of digital games into the process of learning the Arabic language. It provides a comprehensive examination of the possible advantages of this approach and presents the perspectives of students who have undertaken this unorthodox language learning endeavour. Through analysing the interaction between digital gaming and Arabic language education, our aim is to motivate both educators and learners to enthusiastically embrace the promising opportunities that arise at the intersection of technology and language learning.

In the current age of digitalisation, technology has become an essential component of our lives, fundamentally transforming our approaches to gaining knowledge and interacting with our environment (Gamage dkk., 2022) (Haleem dkk., 2022). One of the transformative aspects is the utilisation of digital games as an engaging and immersive approach to gaining knowledge (Tanouri dkk., 2022). Modern society is abundant with digital games that are widely accessible and available in many environments. These games offer pleasure, difficulties, and opportunities for acquiring knowledge. These encompass a diverse array of interactive experiences that engage users in problem-solving, decision-making, and skill development (Khan dkk., 2017) (Cardenas-Moncada dkk., 2020). Owing to the pervasive presence of smartphones, tablets, and computers, digital games have experienced a notable surge in accessibility. Consequently, they have become an essential instrument for instructors seeking innovative approaches to captivate and motivate their students.

The Arabic language, known for its rich historical background, cultural significance, and global prevalence, presents an appealing opportunity for those looking to expand their linguistic expertise (Sahid & Mamat, 2020) (D.S. dkk., 2023). Arabic, as the fifth most prevalent language worldwide, holds a prominent role in global conversations, diplomacy, trade, and cultural exchange (Keshav et al., 2022; (Antwi-Boateng & Alhashmi, 2022) (PORTO, 2020). Nevertheless, the complex intricacies of the Arabic alphabet, syntax, and pronunciation may present challenges for anyone eager to explore this engaging language. The growing demand for effective and captivating Arabic language instruction has prompted a quest for innovative pedagogical methods, such as integrating digital games into the educational experience (Bakhsh dkk., 2022) The insufficient incorporation of digital games in the process of learning Arabic is a multifaceted problem that arises from various obstacles (Mohamed, 2024) (Ritonga dkk., 2022). Primarily, a significant obstacle is the limited availability of Arabic-language instructional games of superior quality (Kerras and Essayahi, 2022). Arabic language materials have been somewhat scarce compared to languages like English or Spanish, which have a stronger presence in the digital game business. The limited availability of digital games has impeded educators' capacity to fully utilise them as a valuable supplemental resource for teaching Arabic (Mohamed, 2024).

Furthermore, the incorporation of digital games into Arabic language classes has been impeded by technological obstacles (Mohamed, 2024) (Abdul Ghani dkk., 2022). Several places where Arabic is extensively taught encounter constraints regarding technological accessibility, such as laptops, tablets, and internet connectivity. These limitations have a greater impact on disadvantaged communities and result in unequal access to educational opportunities, hence restricting the use of digital games as a teaching tool.

Furthermore, instructors generally lack awareness and training on the educational advantages of digital gaming. Numerous educators are uninformed about the proper methods of incorporating digital games into their instructional approaches, and they may be deficient in the necessary training and resources to utilise these tools to their fullest potential (Kundu, 2020) (Kerras and Essayahi, 2022). This problem emphasises the need for educational programmes and training opportunities to provide educators with the necessary knowledge and abilities to use digital games for improved Arabic language learning effectively.

To tackle these obstacles and facilitate the incorporation of digital games into Arabic language education, it is imperative for educators, researchers, and developers to join forces and produce culturally appropriate, top-notch Arabic language educational games. Moreover, it will be essential to ensure access to essential technology resources and provide training opportunities for educators in order to close the divide between the unexplored potential of digital games and their efficient utilisation in the Arabic language classroom. Conquering these obstacles can result in a more captivating, efficient, and culturally attuned method of learning the Arabic language, thereby benefiting both students and educators.

This article aims to clarify the integration of digital games in the Arabic language learning process. This study offers a thorough analysis of the potential benefits of this method and includes the viewpoints of students who have engaged in this unconventional language learning attempt. By examining the correlation between digital gaming and Arabic language instruction, our objective is to inspire educators and learners to wholeheartedly embrace the potential opportunities that emerge when technology and language learning converge.

METHOD

This study employed a qualitative approach and utilised semi-structured interviews to gather data from a sample of 30 tertiary-level students. These students were exposed to a digital game for a duration of five weeks. The students were selected purposefully, taking into account many criteria, including gender, language background, first language, and current year of study. Therefore, this study used a sample of 30 students, consisting of an equal number of males and females, with 15 students of each gender. 50% of them possess Arabic language proficiency, while the other 50% do not have any Arabic language background. All of them are non-native Arabic students who enrolled in an elementary Arabic/Arabic level 1 course at higher education institutions in Peninsular Malaysia.

The digital game was created in conjunction with the introduction of the ADDIE instructional design approach. The digital game offers Arabic vocabulary at three different levels: beginner, intermediate, and advanced. The basic level focuses on introducing vocabulary through various methods, while the intermediate level explores synonyms and antonyms. The advanced level emphasises using vocabulary to form

sentences. The textbook used by students serves as the principal source of content for instructional digital games. Moreover, the educational digital game contents extend beyond textbooks to include other valuable and dependable resources, such as multilingual dictionaries, reference books, websites, and more. Supplementary materials aid educators in differentiating the curriculum and engaging pupils who require further enrichment beyond the fundamental material in the classroom. Subsequently, the instructors underwent training to familiarise themselves with the instructional digital game before incorporating it into the Arabic class. Following a five-week period of implementing a digital game learning strategy in an Arabic language class, a purposeful selection process was used to choose 30 students to participate in a semi-structured interview.

Data collection refers to the process of gathering and recording information or data from various sources. The semi-structured interview was administered in the Malay language using a focus group. The duration of this interview session ranged from approximately 45 to 60 minutes. The semi-structured interviews adhered to a set of fundamental questions, and as the interviews unfolded, several additional questions arose. Detailed observations were made, and audio recordings were captured during every interview session.

Data analysis is the process of inspecting, cleaning, transforming, and modelling data in order to discover useful information, draw conclusions, and support decision-making. The purpose of the semi-structured interview session was to gather students' perspectives and expectations surrounding the use of digital games in the Arabic language classroom. The data was qualitatively evaluated using Atlas.ti8 software to generate open codes from the interviews. During the initial coding phase, a total of 10 codes were identified. Following the completion of the open coding procedure, the second cycle coding process involved the categorisation of codes into three primary categories. Thematic analysis was subsequently employed to develop the topics. The results and findings section examined the themes that arose during the coding process.

Each participant was provided with an individual interview consent form. Once the participants gave their agreement, the interview schedule was established. For the purpose of maintaining anonymity, only limited demographic information is disclosed. To ensure the accuracy and validity of the findings, the analysis of the study was shared with the participants to confirm that the interview data supported the results.

RESULTS AND DISCUSSION

The Integration Of Digital Games In The Arabic Language Learning Process

The results derived from the semi-structured interviews can be classified into three main themes, each providing insight into different parts of the research. The main themes encompassed in this study are: language acquisition, motivation, student's attitude and game concept. Upon delving deeper into these topics, a thorough investigation uncovered a grand total of 18 sub-themes that provide a more extensive comprehension of the viewpoints expressed by the participants. Within the language acquisition theme, participants' observations converged on four primary sub-themes: diverse engagement, tangible vocabulary expansion, contextual comprehension, and enhanced language proficiency. The sub-themes highlight the diverse variety of instructional considerations within the study's environment.

On the other hand, within the theme of motivation, three prominent sub-themes were identified: inherent competitiveness, enduring motivation and motivation across diverse backgrounds. These sub-themes offer vital insights into how the mindset and disposition of individual learners play a role in the research context. Next, within the theme of student attitude, five prominent sub-themes were found: positive reception, continued implementation desire, cross-linguistic relevance, assessment integration motivation, and individual adaptability. These elements provide a vivid depiction of the students' increasingly favourable attitudes towards incorporating digital games into their educational experiences.

Finally, the theme of the game concept includes three enlightening sub-themes: enhance strategic performance, enhance and engagement pleasure, anxiety reduction, motivation and sustained engagement, efficient language acquisition, and equal opportunity among users. The sub-themes explore the complex design and functionality of the instructional games that were the main focus of the study. Through the process of categorisation, the research provides a well-organised and thorough analysis of the participants' experiences and viewpoints, allowing for a deeper understanding of the complex nature of their encounters. This methodology enables a more intricate examination of the data, facilitating a more profound investigation of the interconnections and associations among these themes and sub-themes in the next sections of the article.

The View Points Of Students Engaged In Language Learning Using Digital Game

The results of our study demonstrate a range of experiences and viewpoints among students, highlighting the diverse effects of the educational digital game on their acquisition of the Arabic language. The many perspectives of students provide a nuanced comprehension of the game's effectiveness:

1. **Diverse Engagement:** Student feedback highlights a wide range of levels of involvement. Several pupils regarded the instructional digital game as an extremely engaging instrument for learning, highlighting that "Through this game, learning becomes more interesting and can expand Arabic vocabulary (1:79)." This exemplifies how the game effectively converted the process of learning into a captivating and interactive experience. In contrast, a small number of students admitted that although the game improved their learning, they would have preferred additional difficulty and diversity to sustain their interest.
2. **Tangible Vocabulary Expansion:** Most students observed a significant augmentation in their Arabic lexicon. A student, echoing the thoughts of other individuals, stated, "...there is an increase in my knowledge of Arabic vocabulary (1:3)." The game's efficacy in promoting vocabulary growth was apparent, as students reported an improved capacity to understand and employ a wider array of Arabic terms.
3. **Contextual Comprehension:** Numerous students conveyed their recently acquired expertise in comprehending the meanings of words within the framework of uncomplicated sentences. The game's participatory element played a crucial role in facilitating their understanding of the subtleties of word usage. According to one student, "...this game has interactive features and helps us understand the meaning of words and use them in sentences (1:16)." An essential aspect of acquiring language is the ability to comprehend it within its context.
4. **Enhanced Language Proficiency:** Alongside the expansion of their vocabulary, numerous students demonstrated an increased level of confidence in producing

coherent sentences utilising the newly acquired terms. They explained that the game not only introduced them to new terminology but also motivated them to apply it in real contexts, thereby enhancing their language proficiency.

The findings highlight that the game effectively exposes students to a wide range of Arabic vocabulary, which enhances their overall language competency. Students emphasised that the game exposed them to unfamiliar words and phrases that they may not have come across through conventional means, enhancing their vocabulary in a comprehensive way. To summarise, the diverse viewpoints presented in these data collectively emphasise the efficacy of instructional digital games in facilitating the acquisition of Arabic vocabulary. The wide array of experiences, including active participation, expansion of vocabulary, understanding of context, formation of sentences, and comprehensive development of vocabulary, offers a nuanced perspective on how the game improves students' language learning experiences. These data confirm that the game has the ability to meet the diverse demands and preferences of a wide range of learners.

The results of our study revealed the significant impact of using digital games on student motivation in the Arabic language classroom. A wide variety of student perspectives unanimously agreed that the utilisation of digital games fostered an increased level of excitement and drive among students, fundamentally altering the dynamics of the educational experience.

1. **Inherent Competition and Motivation:** The students expressed that the use of digital games encouraged a natural sense of competition, motivating them to strive for perfect scores and outperform their classmates in every gaming session. The competition functioned as a potent incentive, propelling students to thrive in their Arabic language studies. They conveyed their enthusiasm, with one student affirming, "...more energised and motivated to learn Arabic (1:67)," emphasising the stimulating impact of the game-based learning method.
2. **Enduring Motivation:** Significantly, most students have shown a robust inclination to persist in using digital games in their Arabic language classes. They had the belief that this strategy has the ability to maintain their drive throughout their journey of language acquisition. As one student remarked, "...the concept of this game provides motivation to continue playing until the final level (1:28)." This discovery highlights the game's lasting influence on motivation and its ability to generate a prolonged, ongoing fascination with the Arabic language.
3. **Motivation Across Diverse Backgrounds:** It is worth mentioning that both the game score and individual accomplishments in the digital game significantly enhanced motivation among students, regardless of their previous familiarity with the Arabic language. Students with different levels of skill had equal motivation to actively participate in the language actively, surpassing conventional obstacles.

The educational digital game not only motivated pupils but also stimulated their interest in the Arabic language. They expressed how the interactive and game-based approach brought a stimulating and novel viewpoint to the class, cultivating a more profound engagement with the subject matter. To summarise, the digital game had a significant and diverse impact on student motivation in the Arabic language lesson. The results highlighted the combined impact of competitiveness, sustainable motivation, the gamified approach's ability to overcome language barriers, and the stimulation of interest in creating a lively and captivating learning environment. The utilisation of digital games

has proven to be an effective method for inspiring students to engage in Arabic language learning, excel in their studies, and maintain a strong enthusiasm for the process. The results highlight the educational significance of using digital games as motivational instruments in language instruction.

The results of our interviews indicated a highly favourable attitude among the students regarding the use of a digital game-based learning method in their Arabic language classroom. A considerable majority of students demonstrated a distinct preference for this novel pedagogical approach, highlighting the substantial enhancement in their motivation to participate in the language learning process as a result of the digital game.

1. **Positive Reception:** The students' feedback overwhelmingly demonstrated their enthusiasm for the digital game-based approach. Several students expressed their affinity for this approach, with one student affirming, "I like and am positive about the utilisation of this game in the Arabic language class (1:32)." Their positivity not only indicates their willingness to embrace new and creative methods but also reflects their confidence in the game's ability to improve their learning experience.
2. **Continued Implementation Desire:** A significant agreement among students was their wish for the ongoing incorporation of digital games in the classroom. They unequivocally favoured this method of learning, as evidenced by one student's statement, "I preferred the class that used this kind of approach(1:22)." This strong inclination indicates a prolonged fascination with this strategy and an acknowledgement of its advantages.
3. **Cross-Linguistic Relevance:** The instructional digital game's material was found to be very adaptive to the various Arabic language backgrounds of the pupils. They valued the game's material for its ability to cater to their different levels of skill; as one student noted, "It is possible to change books because the content is approximately the same (1:135)." This alignment enhanced their belief in the game's relevance to their educational requirements.
4. **Assessment Integration:** The students proposed incorporating gaming scores into their quiz or assessment grades. They acknowledged the potential of the digital game to not only augment learning but also help their academic advancement, as seen by the comment, "Games like this should be used in the classroom, and scores can be used as a grade for one of the quizzes (1:44)."
5. **Individual Adaptability:** The results showed that certain students were more comfortable and adaptive to using digital games in the Arabic class, while others may have had different tastes or personalities. This highlights the importance of being flexible in teaching approaches to accommodate the varying needs and preferences of students.

The Correlation Between Digital Gaming And Arabic Language Instruction

The students in the Arabic language classroom had a predominant feeling of optimism and openness towards the use of digital game-based learning. Their combined enthusiasm, ongoing commitment to implementation, acknowledgement of subject relevance, and incorporation into assessments all highlight the pedagogical capacity of digital games as a motivating and efficient tool in language instruction. These findings emphasise the need to take student preferences into account and integrate novel methods to improve language learning results. The instructional digital game incorporated a robust

repetition technique into the Arabic language classroom, centred on the drill and practice notion. This technique provided students with a distinct chance to increase their learning experience while simultaneously raising their scores in a dynamic, fun, and tranquil classroom setting.

1. **Enhanced Strategic Performance:** The implementation of drill and practice techniques in the educational digital game enabled students to develop effective strategies and strive for perfect scores. This gamified strategy cultivated a sense of competition among pupils; as one student commented, "The game concept allowed me to strategise in order to achieve a perfect score (1:30)." Their ambition to outperform and engage in competition with their peers motivated them to engage and pursue superior results actively.
2. **Enhanced Engagement and Pleasure:** The implementation of digital gaming revolutionised the educational setting, fostering increased student involvement in their own learning process. The students derived pleasure from the act of playing and studying at the same time, resulting in a lively and captivating classroom environment. According to one student, they were more enthusiastic about achieving a full score in order to compete with their friends (1:51). The competitive aspect of the game heightened their passion for acquiring Arabic language skills.
3. **Anxiety Reduction:** The utilisation of game-based methods played a crucial role in mitigating anxiety, especially among students who had no previous experience with the Arabic language. Students expressed how the game's design allowed them to revisit and practice stages they found difficult, as one student remarked, "The game's concept enabled me to replay game levels that I struggled with (1:43)." This element served as a catalyst for building confidence among students, guaranteeing that no one was left behind, and fostering a nurturing and inclusive learning atmosphere.
4. **Motivation and Sustained Engagement:** The drill and practice technique effectively encouraged students to participate and maintain their engagement throughout the class. It established an uninterrupted stimulus for acquiring knowledge in Arabic and guaranteed that pupils stayed completely engaged in the educational journey.
5. **Efficient word acquisition:** Besides boosting motivation, the technique effectively facilitated students' memorisation of word meanings and their practical application in an enjoyable and dynamic environment. This method promoted the active retention and practical application of recently acquired knowledge.
6. **Equal Opportunities:** The game-based method ensured that all students had the same chances to participate, enhance their confidence levels, attain satisfaction with their results, and make substantial learning progress. The promotion of inclusivity fostered a perception of impartiality and the equitable availability of educational resources.

To summarise, the incorporation of the drill and practice concept into the educational digital game successfully revolutionised the teaching and learning sessions, enhancing their engagement, dynamism, and effectiveness. It enhanced motivation, decreased fear, and promoted a feeling of inclusiveness, guaranteeing that all students could actively engage and succeed in the Arabic language classroom. These findings emphasise the capacity of game-based learning to transform the language education field, enhancing both its appeal and effectiveness.

The students unanimously affirmed the instructional digital game's capacity to alleviate anxiety, especially among those who are unfamiliar with the Arabic language. As inexperienced learners, many first struggled with emotions of complexity and lack of

desire. Nevertheless, the implementation of the game-based method revolutionised their perspective, cultivating a feeling of ease and drive. This shift aligns with prior research on the impact of students' linguistic backgrounds, corroborated by authors such as (Gebauer dkk., 2013) (Abdul Ghani dkk., 2022). Furthermore, the digital game incorporated other essential elements to facilitate the educational process. The inclusion of the audio pronunciation tool significantly aided students in achieving proficiency in pronouncing Arabic words, while the transliteration option facilitated their familiarity with the script. The emphasis on reading and vocabulary development rather than grammar proved to be highly beneficial for inexperienced learners. It aligned with (Aladdin, 2016) (Vu & Peters, 2022) and (Kerras & Essayahi, 2022) proposal that prioritising reading and vocabulary acquisition can be more advantageous for beginners.

Furthermore, in the context of semi-structured interviews, students consistently expressed their experience of being exposed to a unique and captivating educational setting. This modification rendered them more engaged participants in the lesson, aligning with prior research on the subject. The instructional digital game introduced an element of enjoyment and difficulty into the process of learning, diverging from conventional environments. This change motivated pupils to be more active, competitive, and involved, thereby decreasing feelings of boredom and lethargy (Behnamnia dkk., 2020) (Pan dkk., 2021) (Abdul Ghani dkk., 2022) (Kerras & Essayahi, 2022).

Moreover, students wholeheartedly supported the instructional digital game as a highly effective and helpful learning approach, especially for those who are new to the subject. This viewpoint is consistent with several researches who have acknowledged the effectiveness of using game-based methods to learn Arabic (Behnamnia dkk., 2020) (Pan dkk., 2021) (Abdul Ghani dkk., 2022) (Kerras & Essayahi, 2022). The digital game inherently stimulated pupils, fostering a competitive mindset and improving a variety of crucial skills, such as strategic planning, decision-making, critical thinking, and language ability. The results emphasise the capacity of digital game-based learning to generate stimulating, captivating, and skill-improving experiences for students, especially in the field of language instruction (Altomari dkk., 2023) (Vu & Peters, 2022) (Abdul Ghani dkk., 2022) (Kerras & Essayahi, 2022) (Tang dkk., 2020).

CONCLUSION

To summarise, the results of the interviews with students in the Arabic language classroom emphasise the significant and positive effect of the educational digital game. An impressive outcome is its capacity to successfully reduce anxiety, especially among pupils with limited prior exposure to Arabic language acquisition. The game functions as a catalyst for building confidence and motivation, redirecting students away from their early hesitations and towards a more favourable and active learning encounter.

Moreover, the inclusion of distinct game attributes, such as auditory articulation and transliteration, plays a crucial role in the effectiveness of this strategy. These characteristics enhance the process of learning Arabic vocabulary and pronunciation, offering essential assistance, especially for novice learners. The digital game prioritises vocabulary acquisition rather than difficult grammar, making it suitable for students with various language backgrounds. This approach has proven to be highly effective in encouraging learning. In addition, the digital game revolutionises the classroom atmosphere by creating a dynamic and captivating setting, hence rethinking conventional educational methods. The introduction of this method instils a feeling of energy and

enthusiasm, motivating pupils to engage, compete, and enjoy the process of learning the Arabic language. This shift not only eliminates feelings of boredom and lethargy but also enhances excitement, transforming the process of learning Arabic into an exciting and invigorating experience. The highly favourable results emphasise the transformative capacity of digital game-based learning as a motivating and efficient instrument in language instruction. The influence of the digital game goes beyond the acquisition of language, creating a stimulating and dynamic learning environment that has a favourable effect on students' attitudes and overall experience in the Arabic language classroom. This offers evidence of the efficacy of new methods in language instruction, as they enhance student engagement, enjoyment, and effectiveness across a wide range of linguistic backgrounds.

ACKNOWLEDGEMENT

The authors would like to express their sincere appreciation to Universiti Malaysia Kelantan for the invaluable support provided through Teaching and Learning Research Innovation and Commercialisation (UMK-TeLRIC) 2022 [R/TELRIC/A0400/01659A/004/2022/01148]. This financial assistance significantly contributed to the successful completion of the project. The commitment of Universiti Malaysia Kelantan (UMK) to advancing research and innovation is acknowledged with gratitude.

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