EFFECT OF DIGITAL QUR'ANIC TAJWEED PACKAGES ON QUR'ANIC RECITATION AMONG STUDENTS OF COLLEGES OF ARABIC AND ISLAMIC STUDIES IN KATSINA STATE

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Abstract

This study examined the Effect of Digital Qur'anic Tajweed Package on Qur'anic Recitation among Students of Colleges of Arabic and Islamic Studies in Katsina State. The study adopted quasi-experimental design. The target population of the study consists of three hundred and forty (340) Senior Qur'anic School two (SQS2) students in all Government Colleges of Arabic and Islamic studies. The sample size of the study comprises seventy-two (72) students from two schools; Purposive sampling technique was used. The instrument used for the study was Qur'anic Recitation Achievement Test (QRAT) which was validated by three experts with reliability index of 0.83. Descriptive and inferential statistics were used to analyze the data collected. Mean and standard deviation were used to provide answers to the research questions while Analysis of covariance (ANCOVA) and t-test independent sample were used to test the hypotheses formulated for the study at 0.05 level of significance. The finding of the study indicated that, there is a significant differential effect of digital Qur'anic Tajweed package on Qur'anic Recitation between control group and experimental groups of students in Colleges of Arabic and Islamic studies in Katsina state and there is no significant differential effect of digital Qur'anic Tajweed package on Quranic Recitation among male and female students of Colleges of Arabic and Islamic studies in Katsina state. Based on the findings it is recommended that Colleges of Arabic and Islamic Studies should integrate digital learning tools into their Qur'anic education curriculum, teachers and instructors should receive specialized training on the effective use of digital Qur'anic learning resources and educators should design and implement gender-inclusive digital learning strategies that cater to the needs of both male and female students.

Keywords: Digital, Qur'anic Tajweed Package, Qur'anic Recitation, Arabic Studies, Islamic Studies

Introduction

Teaching in Colleges of Arabic and Islamic Studies faces various challenges that hinder students' academic achievement. These include the selection of appropriate teaching materials, effective instructional methods, and the need for strategies that foster a motivating learning environment for both teachers and students. In the 21st century, advancements in educational technology have introduced innovative teaching techniques, making learning more interactive and collaborative through activity-based lessons.

Among these advancements, digital media has significantly enhanced the learning process by engaging

multiple senses particularly sight and hearing. This multisensory approach increases students' stimulus, allowing them to absorb and retain more information. When more senses are activated, learners receive a greater quantity of incoming data, leading to improved focus and motivation. One notable application of digital media in Islamic education is the Digital Qur'anic Package an electronic version of the Holy Qur'an accessible on various platforms (Hakak, Kamsin, Tayan, Idris, Gani, & Zerdoumi, 2017). This innovation has revolutionized how Muslims interact with the Qur'an, offering unprecedented accessibility, convenience, and interactive features that facilitate easier recitation and memorization.

Al Ghazali's framework of the curriculum clearly represents his ideals of placing religion in the process of teaching and learning. He preached that children should start attending school upon reaching the age of 6 years. At this stage, their education should concentrate on Quranic studies such as reading, memorizing the Quran and Hadiths as well as developing their literary skills. (Fuady, & Mutalib, 2018). Traditionally, Qur'an is memorized using a book called mushaf. The duration of study depends on the academic ability of the student, what is important is the memorization of the Quran which is in three stages, these are learning the Quran by heart (Tilawa), memorising (Hafizi) and perfecting the ability to write the whole Quran with no error either on a slate or in a paper (Darasi) (Taiwo, 2014). Learning is done manually as the students have to sit face to face and the learner recites and the experts points out and corrects the mistakes (Muhammad & Qayyum, 2012). Memorizing the verses of the Quran requires patience and discipline to achieve the target number of verses to be memorized at one time. Hafiz must prepare itself to face any kind of trouble when it started to memorize and review onwards in memorizing which was obtained. Indeed, the Quran memorization is too easy to disappear from the huffaz retention except for those who really ensure the preservation (Abdullah, et al., 2019).

However, with the creation of Information Technology, a large number of software and mobile application have been developed to make this learning process continually easier and faster than before. With the improvement of smart phones technology and the availability of Internet, many applications for Quran are being designed for mobile devices (Affandi, Rahmat, & Supriadi, 2021).). Although many application systems developed can help learn the Quran and recitation improvements such as Quran Audio Recitation (QAR) (Muhammad, et al,. 2012), by detecting the mistakes made by user. With the availability of the tools for digitization (Ikhwanuddin, 2013), Hashim, (2017) opined that Tahfiz learning methods have a strong relationship with student achievement Therefore, elements tahfiz learning needs to give a special consideration by all parties in the design of teaching and learning curriculum tahfiz (Fakhruddin, et al., 2023).

Among these advancements, digital media has significantly enhanced the learning process by engaging multiple senses particularly sight and hearing. This multisensory approach increases students' stimulus, allowing them to absorb and retain more information. When more senses are activated, learners receive a greater quantity of incoming data, leading to improved focus and motivation. One notable application of digital media in Islamic education is the Digital Qur'anic Package an electronic version of the Holy Qur'an accessible on various platforms (Hakak, at al., 2017). This innovation has revolutionized how Muslims interact with the Qur'an, offering unprecedented accessibility, convenience, and interactive features that facilitate easier recitation and memorization.

Several factors influence students' academic achievement, including teaching strategies, student engagement, and infrastructural support (Felder, 2022). In Qur'anic education, recitation is not merely an academic exercise but a spiritual practice that strengthens one's connection with Allah, purifies the heart

and leads to divine rewards. Recognizing the need for innovation, digital Qur'anic packages have emerged as a promising tool to enhance learning outcomes. By integrating audio-visual elements such as images, videos, and animations these packages stimulate learners' senses, increase engagement and facilitate deeper comprehension. Given these developments, this study seeks to explore whether incorporating Digital Qur'anic Tajweed Packages can improve students' recitation skills, of the Holy Qur'an

Objectives of the Study

The following objectives were set to guide the study:

1. To examine the difference in the Qur'anic Recitation of students taught using Digital Qur'anic Tajweed Packages and those taught using the Traditional method in Colleges of Arabic and Islamic studies in Katsina state.
2. To determine the extent to which digital Qur'anic tajweed package will have differential effect on Qur'anic Recitation among male and female students of Colleges of Arabic and Islamic studies in Katsina state.

Research Questions

1. What is the difference in the Qur'anic Recitation of students taught using Digital Qur'anic Tajweed Packages and those taught using the Traditional method in Colleges of Arabic and Islamic studies in Katsina state?
2. What the difference in the Qur'anic Recitation between male and female students of Colleges of Arabic and Islamic studies in Katsina state when taught using digital Qur'anic tajweed package?

Hypotheses

$H_{O1:}$ There is no significant difference in the Qur'anic Recitation of students taught using Digital Qur'anic Tajweed Packages and those taught using the Traditional method in Colleges of Arabic and Islamic studies in Katsina state.

$H_{O2:}$ There is no significant differential effect of digital Qur'anic tajweed package on Quranic Recitation among male and female students of Colleges of Arabic and Islamic studies in Katsina state.

Methodology

The study adopted a quasi-experimental research design, specifically utilizing a pre-test, post-test, and post-post-test non-equivalent control group design. The population of the study comprises three hundred and forty (340) Senior Qur'anic School two (SQS2) students in all Government Colleges of Arabic and Islamic studies in Katsina State. There are four (4) public colleges of Arabic and Islamic Studies School operating Qur'anic Studies in Katsina state. Purposive sampling technique was used to select three co-educational schools because one school out of four (4) schools is does not have female students out of which two schools were randomly selected one of which randomly assigned as experimental while the other one was randomly assigned as control groups respectively. Intact class was used for each of schools the sample size of the study was seventy-two (72)

The instruments used for data collection was Qur'anic Recitation Achievement Test (QRAT) which was developed by the researcher. The research instrument (QRAT) was validated by four experts, one from Arabic department, another one from Islamic Studies department and the other two from Measurement and Evaluation and Educational Psychology and Counseling. All from Federal University Dutsinma Test-

retest method of reliability was used to determine the reliability of the instruments, the researcher pilot test the instrument with twenty (20) students from Rabia College of Arabic and Islamic studies Gusau, which is not part of the sample for the study but share the same characteristics. The Pearson Product Moment Correlation Coefficient value of 0.83 was obtained.

Descriptive and inferential statistics were used to analyze the data collected. Mean and standard deviation were used to provide answers to the research questions while Analysis of covariance (ANCOVA) and t-test independent sample were used to test the hypotheses formulated for the study at 0.05 level of significance.

Results

Research Question one: What is the difference in the Qur'anic Recitation of students taught using Digital Qur'anic Tajweed Packages and those taught using the Traditional method in Colleges of Arabic and Islamic studies in Katsina state?

Table 1:

Means and Standard Deviations Scores for QRRAT in the Groups

	Group	N	Mean	Std. Deviation	Std. Error Mean	Mean Difference
Post-test	Experimental	39	87.95	3.448	.552	
						32.37
	Control	33	55.58	12.605	2.194	

Table 1 revealed that the Qur'anic recitation for Experimental Group (students using digital Tajweed package): Mean Recitation Score = 87.95, Standard Deviation = 3.448 and Standard Error Mean = 0.552. While that of Control Group (students not using the digital package): Mean Recitation Score = 55.58, Standard Deviation = 12.605 and Standard Error Mean = 2.194. The Mean Difference in Recitation Scores = 32.37. The digital Qur'anic Tajweed package had a strong positive effect on Qur'anic recitation.

H0₁: There is no significant difference in the Qur'anic Recitation of students taught using Digital Qur'anic Tajweed Packages and those taught using the Traditional method in Colleges of Arabic and Islamic studies in Katsina state.

Table 2

ANCOVA Analysis of the Post-Test Mean Scores for QRRAT of the Groups

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	18733.555[a]	2	9366.778	116.756	.000
Intercept	41216.792	1	41216.792	513.762	.000
Pretest	.402	1	.402	.005	.944
Group	17912.519	1	17912.519	223.277	.000
Error	5535.556	69	80.225		
Total	**409126.000**	**72**			
Corrected Total	**24269.111**	**71**			

Table 2 revealed F-value of 223.27 with a p-value of 0.000. Since p < 0.05, the null hypothesis (H02) was rejected and concluded that there is a significant differential effect of the digital Qur'anic tajweed package on Qur'anic recitation. The pre-test Qur'anic recitation score (Pretest) has an F-value of 0.005 and p =

0.944, indicating that it is not a significant predictor of post-test performance. This suggests that initial recitation abilities did not significantly impact the results, and the digital Tajweed package played a major role in the observed improvements. The digital Qur'anic Tajweed package significantly improved students' Qur'anic recitation skills, as evidenced by the high F-value (223.277) and significant p-value (0.000).

Research Question two: What the difference in the Qur'anic Recitation between male and female students of Colleges of Arabic and Islamic studies in Katsina state when taught using digital Qur'anic tajweed package?

Table 3

Post-test Means and Standard Deviations Scores for QRRAT in the Groups on Gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean	Mean Difference
	Male	15	87.47	3.962	1.023	
Post test						0.783
	Female	24	88.25	3.138	.641	

Table 3 indicated that that the **scores of** Male Students: Mean Qur'anic Recitation Score = 87.47, Standard Deviation = 3.962 and Standard Error Mean = **1**.023. While that of Female Students: Mean Qur'anic Recitation Score = 88.25, Standard Deviation = 3.138 and Standard Error Mean = 0.641 the mean difference = .783 this indicate that there is a slight difference between male and female with female having higher mean score than male.

H0$_2$: There is no significant differential effect of digital Qur'anic tajweed package on Quranic Recitation among male and female students of Colleges of Arabic and Islamic studies in Katsina state.

Table 4.

t-test analysis of the Post-Test Mean Scores for QRRAT on Gender

Gender	N	Mean	SD	df	t-value	P-value	Decision
Male	15	87.47	3.962				
				37	0.685	0.497	Not sig
Female	24	88.25	3.138				

Table 4 revealed that the t-value = 0.685, p-value = 0.497. Since p > 0.05, the difference in Qur'anic recitation scores between male and female students is not statistically significant. Hence, the p-value is greater than 0.05, the null hypothesis (H06) was retained. This means that the digital Qur'anic Tajweed package had a similar effect on Qur'anic recitation for both male and female students, with no significant gender-based differences. However, the findings suggest that the digital Qur'anic Tajweed package is equally effective in improving Qur'anic recitation for both male and female students.

Discussion of Findings

The findings of this study indicate there is a significant differential effect of the digital Qur'anic tajweed package on Qur'anic recitation. The rejection of the null hypothesis confirms that students in the experimental group outperformed those in the control group, demonstrating the effectiveness of the digital

learning approach in enhancing Qur'anic recitation proficiency. The finding agreed with that of Awadin, and Rusmana, (2023 conducted a study on Model Al-Qur'an and Tafsir Models: Internalization of the Development of Digital Media. The results show that the era of digitization has a lot of impact on the existence of the Qur'an and tafsir. Digital Media is becoming new way to disseminate understanding of the Qur'an and tafsir. The result was also in line with that of Azhar, Nursikin and Ahmad, (2024) conucted a study on Digital Quran Applications on Smart Phones and Tablets: A Study of the Foundation Programme of Students. This study aimed to investigate the students' interest level and tendency towards reciting Quran using smart phones and tablets. His indicated that the students' interest of reciting Quran was at a good level

Furthermore, the findings of this study indicate that the digital Qur'anic Tajweed package has no significant differential effect on Qur'anic recitation between male and female students in Colleges of Arabic and Islamic Studies in Katsina State. The results suggest that both male and female students benefit equally from the digital Tajweed package, supporting the idea that technology-enhanced learning provides an inclusive and balanced approach to education. The result agreed with that Mustafa, et al., (2019) conducted research on the Design of Quran Memorization Tool Using Low-Fidelity Prototype. The finding shows that both male and female students performed significantly similar in Quran memorization when exposed to Low-Fidelity Prototype

Conclusion

Based on the findings of this research, it can be concluded that, Digital Qur'anic Tajweed package has a significant positive effect on students' Qur'anic recitation skills in Colleges of Arabic and Islamic Studies in Katsina State.

The digital Qur'anic Tajweed package enhances Qur'anic recitation skills in a gender-neutral manner, benefiting both male and female students equally.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Colleges of Arabic and Islamic Studies should integrate digital learning tools into their Qur'anic education curriculum.

2. Teachers and instructors should receive specialized training on the effective use of digital Qur'anic learning resources. Workshops, seminars, and professional development programs should be organized by Ducational administrators to equip educators with the necessary technical skills and pedagogical strategies to enhance students' Qur'anic recitation using digital platforms

3. Educators should design and implement gender-inclusive digital learning strategies that cater to the needs of both male and female students. This can include interactive learning activities, personalized feedback, and flexible learning options, ensuring that students of all backgrounds remain motivated and engaged in Qur'anic recitation.

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