ISSN: 1992-8645

www.jatit.org



THE EFFECTIVENESS OF USING MOBILE SOCIAL MEDIA IN LEARNING AND TEACHING ENVIRONMENTAL SCIENTIFIC CONCEPTS IN THE HOLY QUR'AN

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Abstract

This research paper pinpoints the effectiveness of using mobile social media in learning and teaching environmental scientific concepts in the Holy Qur'an from Al-Zaytoonah University of Jordan students' perspective and their attitudes toward it. The quasi-experimental research method is utilized to achieve the research objectives. The research sample consists of 34 male and female students purposefully selected from the Classroom Teacher Department at the Faculty of Arts at Al-Zaytoonah University of Jordan. The research sample members are randomly distributed as follows: An experimental group with (17) female students, and a control group with (17) male students. The research instrument consists of a measure of students' attitudes toward using the mobile social media method in learning and teaching scientific environmental concepts in the Holy Qur'an. The findings indicate statistically significant differences between the mean of the scores of the experimental group and the scores of the control group in favor of the experimental group, as the F-value is (193.891), which is a statistically significant value at the level of (0.000).

Keywords: Concepts, Environment, Learning, Mobile, Social Networking

1. INTRODUCTION

Technology, the tools, and techniques associated with it represent a pyramid of developments that address all related aspects of contemporary life [1]. Technology and its instruments are now an essential pillar in health, business, and education, as the learning-teaching process has become technologybased, leading to the emergence of e-learning, distance learning, and blended education [2]. Though these types of learning differ in their details, they are presented within a common framework based on technology [3], [4].

Plenty of applications now allow the exchange of information and knowledge within learning and teaching contexts, thus reducing the spatial and temporal space, to present education-focused content in a way that differs from the traditional face-to-face method. Of these applications are social networking sites (SNS) that support a range of services, as they allow the creation of private networks that bring together common interests among groups of individuals, thus enriching their cultural, social, and scientific aspects [5]. Moreover, social networking applications (SNA) help them form relationships with positive patterns through video clips or publications, as all of this has increased the significance of social networking sites and their acceptance in various societal circles [6], [7].

In this context, [8] points out that the qualitative shift because of internet-based technological progress has turned the world into a small spot that is easy to communicate between its parties using the most important tools of this progress, which are smart mobiles or laptops. Interaction between individuals has created a different pattern of human relations, while this qualitative shift like communication helps to satisfy needs through a process based on transforming available information into a cognitive structure that includes emotional and cultural aspects, making the process of personal and social engagement faster [9].

The significance of social media is reflected in the newly added qualitative shift that has brought about a cultural pattern different from the traditional one, especially in the social aspect. It includes new features making social scientists move towards calling it a new term "Internet culture". Internet culture is rapidly expanding, its content is diverse, and it can be used at the simplest cognitive levels of

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ISSN: 1992-8645	www.jatit.org	E-ISSN: 1817-31

individuals, leading to significant changes in political, social, aspects of economic. psychological, and other aspects of life. Internet culture has almost achieved progress over other cultural forms, as the standards of human communication have been modified, assisting in bringing about rapid change [10], [11]. The educational aspect in human societies is among the first places that receive attention, especially after the adoption of technology-based education, as this has contributed to creating qualitative and multiple trends in the reception of educational content by individuals [12], [13].

A global trend is now on the rise towards the widespread adoption of distance learning and elearning, as this trend has extended to varying degrees of adoption by educational institutions within the context of emergency changes or the availability of technological infrastructure. Educational philosophy can achieve its goals within a flexible structure with educational structures and contexts that keep pace with everything new [14], [15].

Social networking represents the most widely used part of the Internet because of its characteristics that attract the largest number of users and followers. Social media networks are linked to various aspects of human activity, as they have helped adopt patterns of positive communication and interaction that are not devoid of negatives [16], [17]. However, the nature of use determines the quality of the products and outputs, as the special capabilities of the Internet have rapidly increased the use of mobile mobiles for all aspects of life, including the educational aspect, demonstrating that technology techniques and tools have been invested in the concept of mobile learning systems [18].

In its recent conference, UNESCO affirmed the right to education with mobile devices "mobile education" using information and communications technology in the educational aspect within a framework of methods and approaches compatible with the philosophy, vision, and goals of educational institutions [19], [20]. UNESCO has also organized a partnership with the Special System for Mobile Communications (GSMA) to discuss an education-based action plan utilizing mobile devices, to provide opportunities for everyone to gain learning that may be prevented from obtaining it in person [21]. This type of learning initiative is implemented in rural Pakistan to eradicate illiteracy under the name "UNESCO project for learning to read and write using mobile devices," as this contributes to increasing the percentage of girls who completed the course to 60% [22].

Environmental education (EE) is an important requirement for working to eliminate the gap between education based on scientific and cognitive aspects, and the directions of those in charge of the educational process to build appropriate responses and develop qualitative behaviors [23], [24]. Environmental education is a process that addresses all educational levels, whether kindergartens, schools, or universities, and includes social aspects such as the family, the media, and various institutions [25].

From an Islamic perspective, Islam has given special attention to science by focusing on the basic building block, which is the individual [26]. Our'anic verses and Prophetic hadiths have been mentioned that pertain to learning and teaching, and accordingly, the educational environment in the Holy Qur'an is based on the principle of succession in the land. The leadership of human society requires the rehabilitation of the individual and society within a scientific process, and this means more research and investigation based on scientific aspects that work to achieve an environment in which all aspects that enrich the understanding of the Holy Quran are organized [27]. Learning and teaching in the Holy Qur'an are based on the practical educational method, where the role of the learner is actively activated to participate interactively and positively in the educational situation to achieve cognitive educational outcomes. The remainder of the paper is structured as follows: Section two provides an overview of the literature review. Section three presents the research problem, while section four shows the conceptual framework. Section five presents the research significance, while section six shows research terms and definitions. Section seven offers research limitations, and a review of the methodology adopted is given in section eight. Section nine provides results and discussion. Subsequently, section ten makes concluding remarks, while section eleven provides recommendations.

2. LITERATURE REVIEW

Research has documented the role of social networking sites in the multifaceted learning and teaching process. [28] demonstrate a high degree of

Journal of Theoret	ical and Applied	I Information Technology	
	15 th May 2025, Vol.10	03. No.9	

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challenges facing the educational process through social media represented in the elements of the educational process, the academic environment, and school administration. Accordingly, the study recommends developing school curricula in a manner commensurate with the interactive nature of technology.

From a new lens, [29] show that most environmental concepts are taught in seventh-grade science in Indonesia using some necessary references. The results indicate that difficulties facing the process of teaching concepts can be overcome by understanding the basic competencies associated with environmental concepts, discussing with colleagues, and reading specialized scientific books and journals.

Using a different study instrument, [30], [31] indicates a high level of danger of students using social media in the educational process, identifying the most important of these sites arranged as follows: Twitter, WhatsApp, and Facebook. However, [32] shows that social media networks have a medium role in shaping Islamic values, as psychological risks are the highest and in favor of the male group. Likewise, [33] emphasizes the qualitative role of mobile learning in developing the cognitive needs and electronic communication skills of basic-stage students.

In a different context, [34] focuses on mobile learning between negative and positive sides through global experiences. The Japanese mobile learning project "Pocket Eijior" confirms lower dropout rates compared to e-learning, while the British project "Go 2 Learning" indicates that the educational performance of students via mobile learning is better, making it their preferred option. In the same vein, [35] concludes that personal factors have a role in young people's use of social media and have no effect on young people's adoption of values and principles related to Islamic upbringing. The findings show that trust in social networking sites is of a low level and therefore has no effect on the moral value context of young people.

With the use of a different sample, [36] finds no statistically significant differences in the use of social media between seventh and tenth-grade students according to the variable of gender and academic level. On the other hand, [37] confirm the effectiveness of a training program in increasing the level of environmental culture and developing

positive attitudes toward the environment among a sample of female students at the Faculty of Educational Sciences and Arts, where statistical differences are in favor of the experimental group.

In a Gulf study conducted in Bahrain, [38] provides a list of environmental education concepts in primary Islamic education textbooks in Bahrain, as most of these concepts are in the field of environmental ethics in the content of the questionnaire items. The results indicate that it is most available in the fourth-grade textbook, and least available in the first-grade textbook. Against this, the current research has taken advantage of previous studies in several areas, as it provides a suitable basis for constructing the theoretical framework used in the current research, designing the current research instrument, and attaining recommendations utilized to conduct related future studies.

3. RESEARCH PROBLEM

Social networking sites represent an important aspect of modern life and have a huge number of users. These sites have recently created various social, cultural, economic, political, and educational interactions aiming to transform the extended spatial space into a time calendar across the screen in which education-based content is arranged and organized. Plenty of studies have of late indicated the role of social communication in the educational process, such as [5] demonstrating the effect of a program based on the social network "Facebook" in improving the cognitive beliefs of female university students.

Likewise, [6] asserts that the reality of students' use of social networking sites in the educational process is of a high degree. However, [7] is yet another confirmation of the effectiveness of the mobile learning environment in developing cognitive needs and electronic communication skills. Given its results, the study recommends developing a mobile learning environment designed for use in teaching students. The technology-based educational process requires more sound planning in selecting modern teaching methods that increase students' motivation toward the education-based material.

Switching from face-to-face learning to distance learning is reflected in taking advantage of all technology tools. Of these tools is the mobile, which contributes to transforming the educationbased material into a dialogue situation based on

Journal of Theoretical and Applied Information Technology

<u>15th May 2025. Vol.103. No.9</u> © Little Lion Scientific

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ISSN: 1992-8645	www.jatit.org	E-ISSN: 1817-3195		

building knowledge between the pillars of the educational process "the student, the teacher, and the educational content". The Holy Qur'an represents a special religious importance that requires those in charge of the educational process to work on developing the methods of teaching it in a manner commensurate with its embedded scientific concepts. Those in charge of the educational process shall also work to stimulate students' attitudes towards acquiring these concepts in a method consistent with the nature of the educational content of the Holy Qur'an and simultaneously ensure the independence of the student's learning using new educational means.

The researcher has noticed, through his educational experience, that there is great interaction on social networking sites for various aspects and issues, and that students spend a lot of time on them, which has made the mobile a means of communication that can serve the educational context and enrich educational outcomes. The educational experience of the researchers also demonstrates great interaction on social networking sites for various aspects and issues, and that students spend a lot of time on them, making the mobile a means of communication that can serve the educational context and enrich educational outcomes.

Accordingly, the research problem is reflected in testing the following hypothesis: There are no statistically significant differences at the significance level ($\alpha \le 0.05$) between the means of scores of the pre-and post-applications regarding the use of mobile social media in learning and teaching environmental scientific concepts in the Holy Qur'an from Al-Zaytoonah University of Jordan students' perspective due to the teaching method of "use of mobile applications and the traditional method".

4. CONCEPTUAL FRAMEWORK

The nature of the research problem, objectives, and hypotheses necessitates addressing social networking sites and scientific environmental concepts. The significance of social media comes as a motivation for users to increase their use and adoption in all aspects of their lives, as it extends to the furthest place and transcends the restrictions preventing the transfer of information and knowledge. It is also based on the principle of interactivity through the user, who is a reader, writer, receiver, and sender. There is a space of collective interactive participation that includes a diversity of knowledge that suits choices and tastes, under a mechanism of easy and flexible use far from complexity, in which the individual can practice his various activities within a space giving privacy for free [39].

Notably, a group of psychological, social, and cultural motives is formed that leads to more use of social media sites and means, with curiosity being the main motive. The virtual world created by these sites contributed to increasing attraction as a response to the individual's instinct of curiosity. Free time also acts as an important motivation when the time factor and its role in achievement decreases for many individuals. Applications include endless content followed without paying attention to the time consumed during it. After that, the social needs of getting to know each other and forming friendships are ranked second, even though most of them are virtual electronic relationships.

Family problems also play a major factor in the motivation to use social networking sites, as the family environment has negative interactions that lead the individual to search for an alternative on social networking sites [40]. The most influential social networking sites in the world can be discussed in terms of number, interaction, and spread, and the most prominent of them can be summarized in the Facebook application. Designed in 2004, Facebook is at the top of the list of the most popular and influential social networking sites in 2020. Launched in 2010, the Instagram application specializes in publishing photos and videos, and this has contributed to increasing its use. The TikTok application has also many users and can produce and exchange video recordings. However, WhatsApp, an instant messaging application (IM), serves instant messaging and its users exceed (1,500) billion users.

Despite all the positives provided by social networking sites, they still have a negative impact, which is restricting creative talents, especially among children, and limiting their reading and intellectual skills. Social networking sites may also circulate inaccurate data and information that contain fallacies in their content, opening the way for the development of organized crime through fraud, and displaying material that is unsuitable for children and is inconsistent with the moral system adopted by societies. Furthermore, addiction to media materials and videos has helped to waste the time factor through which achievement and progress can be attained in the cognitive, personal, and professional aspects [40].

Journal of Theoretical and Applied Information Technology
15th M 2025 X/ 1102 NL 0

ISSN:	1992-8645
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All at once, the relationship between science and technology is because science is founded on knowledge and technology is the practical and applied field of this knowledge. Science intersects with technology in all social applications, whose role comes as part of the solution to the negative aspects resulting from technology in society [41]. The relationship between science and technology is based on solutions to any challenge facing the process of human adaptation to the surrounding environment through gradual steps with dimensions and strategies. The roles in science and technology must overlap to create a scientific educational environment based on theoretical and practical aspects, as science is the scientific knowledge outcome of human experience, while technology represents the scientific applications of that knowledge and science [35].

Environmental education aims to control human behavior to suit the related environment within a framework of advanced awareness and understanding and achieve qualitative behaviors to ensure positive participation, increasing practices of desirable dimensions. Environmental education also contributes to increasing the outcome of awareness based on cognitive aspects of the learner, especially in general environmental concepts and the risks that can affect the scientific environment and threaten human life or their standard of living. Environmental education helps in forming attitudes towards the environment in terms of a comprehensive vision of future problems, taking special steps to address and solve these problems, improving environmental conditions for the better, and deepening environmental values concerned with solving environmental problems and the dangers that threaten them through delving deeper into the real causes in individuals' lifestyle.

Importantly, environmental education contributes to activating learners and raising their awareness to commit to responsible attitudes towards the environment and its preservation [11]. The goals of environmental education are achieved when the student receives knowledge and understanding from within the environment so that he can influence it and understand the mechanism of dealing with it. The goals of environmental education are also achieved when the student understands the environment, and how to be a positive element in dealing with its elements, as well as developing the student's environmental understanding by employing it as a learning laboratory and researching and investigating the environment during field visits to the environment and extracurricular activities. This aspect also strives to develop the learner's interest in preserving the environment, as it contributes to developing the attitudes, inclinations, and values of the learners to ensure their care for the environment and avoid causing any disturbance that harms it.

5. RESEARCH SIGNIFICANCE

The research significance is shown in the theoretical and practical aspects. The theoretical significance is reflected in providing qualitative scientific material related to the role of technology in the educational learning process linked to scientific environmental concepts in the Holy Qur'an and supporting modern trends based on social learning environments, which allows students to create an educational environment characterized by activity, vitality, and student engagement in the educational context. The theoretical significance is also reflected in opening new research horizons for researchers due to the lack of studies that have addressed the use of mobile applications in learning and teaching the scientific environmental concepts mentioned in the Holy Our'an.

On the other hand, the practical significance lies in drawing the attention of Islamic education curriculum planners and developers to the need to pay attention to the use of technology in learning and teaching scientific environmental concepts in Islamic education, especially in the Holy Quran and developing teachers' educational practices in classrooms by employing technology in learning and teaching scientific environmental concepts in Islamic education. This research is significant as it draws the attention of educational supervisors to the need to conduct workshops and training programs to train teachers to employ modern technology represented by mobile mobiles and computers to integrate them into the educational process in a method that develops the basic pillars of the educational curricula.

6. RESEARCH TERMS AND DEFINITIONS

In this research, the following terms are mentioned, and their procedural definitions are as follows: **Mobile:** It is "a means of communication that relies

on wireless communication and can be carried and moved around within a specific area covered by the wireless broadcast network" (Mahmoud, 2016, p. 100). Procedurally, it is an interactive means that

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ISSN: 1992-8645	www.jatit.org	E-ISSN: 1817-3195		

aims to learn and teach the scientific environmental concepts mentioned in the surahs of the Holy Qur'an.

Social Media Sites: They are interactive social networks that allow visual and audio communication and image exchange to their users, anywhere in the world. The most prominent social networks used are Facebook, Snapchat, Instagram, and TikTok [25]. Procedurally, they are interactive educational spaces on the Internet based on designing files and links to teach and learn the scientific environmental concepts mentioned in the Holy Qur'an.

Scientific Environmental Concepts: It is an abstract mental concept in the form of a symbol, word, or sentence used to indicate a specific scientific thing, topic, or phenomenon. The concept is formed because of linking scientific facts together and establishing existing relationships between them [28]. Procedurally, they are the efforts to provide students of the Faculty of Arts at Al-Zaytoonah University of Jordan with educational learning experiences and direct them towards better environmental behavior within the framework of the provisions of the surahs of the Holy Qur'an.

7. RESEARCH LIMITATIONS

The findings of this study can be generalized considering the following limitations:

Human Limitations: This research is limited to male and female students from the Classroom Teacher Department at the Faculty of Arts at Al-Zaytoonah University of Jordan.

Spatial Limitations: This research is conducted in the Classroom Teacher Department at the Faculty of Arts at Al-Zaytoonah University of Jordan.

Temporal Limitations: This research is conducted in the first semester of the academic year 2022/2023.

Objective Limitations: This research is limited to identifying the effectiveness of using mobile social media in learning and teaching environmental scientific concepts in the Holy Qur'an from Al-Zaytoonah University of Jordan students' perspective and their attitudes toward it

8. METHOD

Research Approach

The quasi-experimental research method is utilized to achieve the research objectives, as it is the most appropriate for such studies.

Research Population and Sample

The research population consists of all students of the Faculty of Arts at Al-Zaytoonah University of Jordan for the academic year (2022-2023). The research sample consists of 34 male and female students purposefully selected from the Classroom Teacher Department at the Faculty of Arts at Al-Zaytoonah University of Jordan. The research sample members are randomly distributed as follows: An experimental group with (17) female students, and a control group with (17) male students. The Holy Qur'an course is taught to the experimental group using the mobile social media method, while the same course is taught using the face-to-face traditional method.

Research Instrument

The research instrument consists of a measure of students' attitudes toward using the mobile social media method in learning and teaching scientific environmental concepts in the Holy Qur'an. An analysis of several education-based literature and standards designed in this regard vields to design of a 30-item scale utilized in this research to measure students' attitudes toward using the mobile. The research instrument validity is checked by reviewing it by ten validators to ensure the face validity of the research instrument. An exploratory sample of the research instrument is applied to a 27student random exploratory sample representative of the research population outside the research sample. Simultaneously, the students are given time to answer to ensure the clarity of the instructions, the precision of the scale's vocabulary, the linguistic formulation of the scale's items, and the appropriate time to answer the scale's items. Cronbach's alpha coefficient is calculated, and the scale is corrected, so that the maximum end of the scale is 150 degrees.

To apply the experiment among the research sample participants, preliminary procedures for implementing the experiment shall be done such as setting some variables that may affect the results, providing a communication device so that students can record and send audio clips on WhatsApp and answer the items of the attitudes' scale to identify them before the application, meeting with students and introducing them to the nature of research paper, objectives, and significance, and creating an account on Facebook and Twitter that includes Qur'anic verses containing scientific environmental concepts. Other procedures relating to conducting the research paper after implementing the experiment are that data are collected, reviewed, transcribed, and statistically analyzed using the Statistical Packages for the Social Sciences (SPSS),

ISSN: 1992-8645	www.jatit.org	E-ISSN: 1817-3195

and the results are presented, construed, and discussed.

9. RESULTS AND DISCUSSION

There are no statistically significant differences at the significance level ($\alpha \le 0.05$) between the means of scores of the pre-and post-applications regarding the use of mobile social media in learning and teaching environmental scientific concepts in the Holy Qur'an from Al-Zaytoonah University of Jordan students' perspective due to the teaching method of "use of mobile applications and the traditional method" To answer the research hypothesis, the means, standard deviations, adjusted means, and standard errors for the responses of the students of the Al-Zaytoonah University of Jordan to the scale of their attitudes to the use of mobile social media in learning and teaching environmental scientific concepts in the Holy Qur'an for both groups "experimental and control" and for the pre-and post-applications are calculated. Table (3) illustrates those results. Table 3

Means, Standard Deviations, and Adjusted Means for the Scores of Members of the Two Groups in the Pre- and Post-Applications on the Scale of Attitudes Towards Using the Mobile Social Media in Learning and Teaching Environmental Scientific Concepts in the Holy Qur'an

Dependent Variable	Group	N.	Pre		Post		Adjusted	Standard
			AM	SD	AM	SD	Means	Errors
Overall Score of the Scale	Control	17	2.43	0.47	2.38	0.54	2.415	.097
	Experiment	17	2.62	0.40	4.38	0.25	4.346	.097

As shown in Table (3), apparent differences are found between the values of the means of the scores of the members of the two groups "experimental and control)" in both the pre-and post-applications on the overall score of the scale of attitudes toward using the mobile social media in learning and teaching environmental scientific concepts in the Holy Qur'an. To demonstrate the statistical significance of the differences between the means, the Analysis of covariance (ANCOVA) test is used depending on the difference in the teaching method. Table (4) illustrates those results. Table 4

Results of the Analysis of covariance (ANCOVA) for the Differences between the Means of the Performance of the Two Groups on a Scale of Attitudes towards Using Mobile Social Media in Learning and Teaching Environmental Scientific Concepts in the Holy Qur'an According to the Difference in Teaching Method

Journal of Theoretical and Applied Information Technology

		<u>15th May 2025. Vol.103. No.9</u> © Little Lion Scientific				JATIT		
ISSN: 1992-8645	<u>www.jatit.org</u>					E-ISSN: 1817-3195		
Dependent Variable	Source of Variance	Sum Squares	of DF	Mean Squared	F-Value	Sig. Level	Effect Size (Partial Eta Square)	
	Pre-Application	.220	1	.220	1.419	.232	.004	
Post- Application for the Entire Test	Teaching Method	30.106	1	30.106	193.891	.000	.762	
	Error	4.813	31	.155				
	Total	428.116	34					
	Adjusted Total	39.136	33					

As indicated in Table (4), statistically significant differences at the significance level ($\alpha \le 0.05$) between the means of responses of members of the two groups "experimental and control" to the post-application of the scale of attitudes towards using the mobile social media in learning and teaching environmental scientific concepts in the Holy Qur'an due to the difference in the teaching method. The statistical value of the (F) test on the total score is (193.891) at the significance level of (0.000) and this value is considered statistically significant at the level of ($\alpha \le 0.05$).

Moreover, the value of the Eta square is $(\eta 2=0.762)$, which is the effect size of the teaching method using the mobile social media applications, meaning that (76.2%) of the variance in learning and teaching the scientific environmental concepts in the Holy Qur'an is due to the use of mobile social media applications. Also, the adjusted means shown in Table (3) demonstrate that the value of the adjusted means for the scores of the members of the experimental group is (4.346), compared to the value of the adjusted means for the control group (2.415), meaning that the performance of the experimental group is better than the control group. The result is attributed to the nature of the design of the education-based program using mobile social media applications, which present the scientific environmental concepts in the Holy Qur'an in a distinctive way and far from the traditional stereotype, which relies on direct memorization.

To put it simply, it is transformed from the written text into an entertaining and enjoyable form in a method that directs students to stimulate their thinking and their sense of integration into the learning-teaching process. In addition, it addresses the different senses of students in a simplified way, which enables the students to engage in learning educational concepts with pleasure and increases their motivation and motivation towards mastering these concepts in a way that is commensurate with the nature of using the mobile and social networking sites in their lives.

Additionally, the result may be attributed to the fact that the use of mobile social media applications employs images, sound, text, and video, which gives the educational program real dimensions that mimic reality, making it easy for students to understand and assimilate the scientific environmental concepts in the Holy Qur'an in an appropriate manner. There is a mental presence of the Holy Qur'an among students, especially since it represents the word of God, which requires them to adhere to the components of the educational program that include Our'anic verses. This result can be attributed to the student's use of mobile social media applications to learn and teach the environmental concepts in the Holy Qur'an, as it helps them to memorize and improve recitation and reading.

More importantly, this result is in line with [13] on mobile learning between positive and negative through global experiences, where the British project "Go 2 Learning" indicates that the educational performance of students via mobile learning is better and that it is their preferred option. Moreover, this result is consistent with the study of [12] on the effectiveness of a training program in increasing the level of environmental culture and developing positive attitudes towards the environment among a sample of female students at the Faculty of Educational Sciences and Arts, where the statistical differences are in favor of the experimental group.

10. CONCLUSION

In a nutshell, this article pinpoints the effectiveness of using mobile social media in learning and teaching environmental scientific concepts in the Holy Qur'an from Al-Zaytoonah University of Jordan students' perspective and their attitudes toward it. The findings indicate statistically significant differences between the mean of the scores of the experimental group and the scores of the control group in favor of the experimental group, as the F-value is (193.891), which is a statistically significant value at the level of (0.000). ISSN: 1992-8645

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11. RECOMMENDATIONS

Given the said results and discussion, the research recommends holding training courses for faculty members in Jordanian universities to train them on using mobile on social networking sites in learning and teaching the scientific environmental concepts in the Holy Qur'an, designing a guide on how to use the mobile on social media sites to guide faculty members on how to use it in learning and teaching the scientific environmental concepts in the Holy Qur'an, and continuing the use of the mobile on social media sites on an ongoing basis and employing it in learning and teaching the scientific environmental concepts in the Holy Qur'an at all levels of university education in Jordan to take advantage of its positive aspects.

Besides, the key recommendations are designing research on environmental culture and how to activate it within the university curricula., constructing experimental and descriptive studies on the use of the mobile on social networking sites in learning and teaching the scientific environmental concepts in the Holv Our'an at all various stages of education, and preparing research and studies on the obstacles to the use of mobile applications on social networking sites by students and faculty members in Jordanian universities in learning and teaching the scientific environmental concepts mentioned in the Holy Qur'an.

REFERENCES

- Abduljawad, M., Ahmad, A., Jaber, K.M., Thunaibat, A.A., Maria, E.A., Khasawneh, A., Hijazi, H. (2020). Evaluating and adopting e-learning systems at Al-Zaytoonah University of Jordan. International Journal of Advances in Soft Computing and its Applications, 12(3), pp. 82-100.
- [2] Abdullatif, O. (2012). A proposed enrichment strategy based on social constructivism through social networking sites to develop motivation for achievement and attitude toward science among middle school students. Journal of Scientific Education, 15(4), 1-45.
- [3] Abdulkarim, M. (2019). Learning and Teaching in the Holy Qur'an. Journal of the Faculty of Sharia at Suleyman Demirel University, 1(42), 187-198.
- [4] Abu Athrah, A. (2016). Social skills and positive thinking and their relationship to social media addiction among students at Al-

Azhar University in Gaza. [Unpublished Master's Thesis]. Al-Azhar University, Palestine.

- [5] Abushihab, I. (2020). The effect of critical rhetoric in teaching English as a foreign language. Theory and Practice in Language Studies, 10(7), 744–748. http://dx.doi.org/10.17507/tpls.1007.04
- [6] Al-Adili, A. (2010). The level of environmental awareness among student teachers at Zarqa Private University and its relationship to some variables. Mu'ta Journal for Research and Studies/Humanities and Social Sciences Series, 25(2), 185-214.
- [7] Al-Adili, A & Al-Harahsheh, K. (2013). The impact of studying a course in environmental education on the attitudes of students at Al Al-Bayt University towards some issues related to environmental safety. Al-Manara Journal, 19(2), 23-40.
- [8] Al-Asmi, A. (2015). Environmental Awareness. Doha Journal, 91(5), 3-20.
- [9] Alassaf, H. (2025). Computerized exams use in enhancing the credibility of the education system. International Journal of Innovative Research and Scientific Studies, 8(1), 394– 406. https://doi.org/10.53894/ijirss.v8i1.4172
- [10] Alawamreh, A. R., Obeidat, A. M., Alsalti, M. J. A., Ramadneh, N. M., Al-Majali, A., Al fares, A. R. A., & Nasseif, G. (2023). The Effectiveness of Online Flipped Learning Using the UTAUT Model for Outstanding Students in Jordan. Studies in Computational Intelligence, 1113, pp. 405-416.
- [11] Al-Bayoumi, R. (2019). Confronting the spread of rumors through social media networks in Islamic jurisprudence and positive law, the Sixth Scientific Conference of the Faculty of Law, Tanta University (Law and Rumors), held in the period from April 22-22. Educational Journal, Faculty of Education, Kuwait University, (79), 2057-2104.
- [12] Al-Dhafiri, L. (2018). The reality of students of the Public Authority for Applied Education and Training in the State of Kuwait using social networking sites in the educational process. [Unpublished Master's Thesis]. Al Al-Bayt University, Jordan.
- [13] Al-Ghammaz, S., Al-Ghalith, A., Alzghoul, M., Alassaf, H., AbuJreiban, T., & Abu Rass, F. (2024). Description as a fiction-writing mode between Charles Dickens's David Copperfield and Naguib Mahfouz's Midaq Alley: A comparative study. Theory and

ISSN: 1992-8645

www.iatit.org

Practice in Language Studies, 14(10)3155-3163, 2024

https://doi.org/10.17507/tpls.1410.18

- [14] Al-Ghammaz, S., Alassaf, H., Alsalti, M., Almomani, H., & Hleiban, T. (2025). The role of e-learning in enhancing digital thinking skills among university students. International Journal of Innovative Research and Scientific Studies, 8(1), 451–457. https://doi.org/10.53894/ijirss.v8i1.4178
- [15] Al-Harbi, N. (2019). The effect of an educational program based on the social networking site "Facebook" in developing cognitive beliefs among female university students. Educational Journal, 1(66), 350-388.
- [16] Al-Hasnawi, M & Al-Mayahi, I. (2020). An evaluation study on the efficiency of elearning platforms in terms of advantages, disadvantages, and obstacles from the student's point of view. American International Journal of Humanities and Social Sciences 1(2), 239-260
- [17] Al-Rashidat, J. (2017). The impact of the Internet on adolescents in Jordan: A survey study. [Unpublished Master's Thesis]. Middle East University, Amman, Jordan.
- [18] Al-Sammadi, H. (2018). The impact of designing a mobile learning environment on developing the cognitive needs and electronic communication skills of basic-stage students in the Hashemite Kingdom of Jordan. [Published Master's Thesis]. Mansoura University, Egypt.
- [19] Al-Sarhan, S., Mshaqba, A., Salama, M., & Daradkeh, M. (2016). The role of social networking sites in shaping political awareness: An applied study on students at Al Al-Bayt University. Al-Manara Journal, 22(4), 1-22.
- [20] Al-Sawafi, A. (2015). The use of social media among students of the second cycle of basic education in the North Al Sharqiyah Governorate in the Sultanate of Oman and its relationship to some variables. [Unpublished Master's Thesis]. University of Nizwa, Nizwa, Oman.
- [21] Alshahrani, A. (2021). Readiness of higher education institutions for e-learning: A case study of Saudi universities during the COVID-19 Pandemic. International Journal of Advances in Soft Computing and its Applications, 13(1), 149-161.
- [22] Al-Shahwan, R. (2024). The attitudes of students at the translation department at Al-

Zaytoonah University of Jordan towards using translation from English language into Arabic language by the instructors as a medium of instruction in translation courses. Al-Zaytoonah University of Jordan Journal for Human and Social Studies, 5(1), 176-190. http://doi.org/10.15849/ZJJHSS.240330.09

- [23] Altarawneh, M & Hassan, M. (2022). Readiness of higher education institutions for e-learning case of Jordanian universities. International Journal of Advances in Soft Computing and its Applications, 14(3), pp. 174–188
- [24] Ahmed, I. (2018). The effectiveness of the cartoon concepts strategy in developing some environmental education concepts and their impact on environmental behavior among preschool children, the First International Conference: Building a Child for a Better Society considering Contemporary Changes, Assiut University.
- [25] Barakat, A. (2004). Basic grade teachers' perceptions of appropriate teaching planning for developing environmental awareness among students at Umm Al-Qura University. Journal of Educational, Social, and Human Sciences, 16(2), 1-20.
- [26] Ghazal, S. (2020). Family conflict and its relationship to the use of social media among adolescents in Ma'an Governorate. [Unpublished Master's Thesis]. Al-Hussein Bin Talal University.
- [27] Harrab, L. (2014). The role of social media networks in developing the spirit of citizenship among Algerian youth: A field study on a sample of Facebook users in Oum El Bouaghi. [Unpublished Master's Thesis]. Faculty of Humanities and Social Sciences, Larbi Ben M'hidi University Oum El Bouaghi.
- [28] Ismail, R & Issawi, M. (2015). Environmental Education. Laboratory Notebooks Journal, 10(2) 163-174.
- [29] Khader, A. (2020). The difference between the terms "social" and "community", research on the Alukah network, retrieved on October 5, 2021, from https://www.alukah.net/web/khedr/10862/55 38
- [30] Mustafa, M. (2014). The importance of scientific concepts in teaching science and the difficulties of learning it. Journal of Social Studies and Research, 2(5), 88-108.
- [31] Mahmoud, K. (2016). Uses of mobile learning in university learning considering some

ISSN: 1992-8645

www.jatit.org



contemporary global experiences. Journal of Distance and Open Education, 4(6), 79-124.

- [32] Muala, I.A., Obeidat, A.M., Alawamreh, A.R., Alhatmi, B., Eisheh, A.A., Alrhaba, Z.H.F.(2024). Unraveling The Influence of Artificial Intelligence, Organizational, And Environmental Factors in Strategic Planning: Implications and Practical Insights. Journal of Theoretical and Applied Information Technology, 102(4), 1433–1441.
- [33] Nomar, M. (2012). The use of social networking sites and its impact on social relationships, a study of a sample of Facebook users in Algeria. [Unpublished Master's Thesis]. University of Batna.
- [34] Qaddoura, S. (2018). The use of social media and its relationship to mental health and some personality traits among students at the University of Gezira, Sudan. [Unpublished Doctoral Thesis]. Khartoum, Sudan.
- [35] Obeidat, A. M. (2022). The impact of business intelligence in crisis management: the strategic vigilance as an intermediary variable in Jordanian insurance companies. International Journal of Business Information Systems, 41(3), 342-359.
- [36] Obeidat, A. M., Al-Omari, K. A., Aljawarneh, N. M., & Alkhlouf, I. I. (2022). The effect of career path planning on organisational performance. International Journal of Business Innovation and Research, 27(4), 508-525.
- [37] Otair, M., Abualoush, S., Obeidat, A., & Bataineh, K. (2022). Improving Firm's Innovation Performance Through Transformation Leadership and Knowledge Sharing: The Moderating Role of absorptive Capacity. Case Study Jordan. *Information Sciences Letters*, 11(5), 1693–1709.
- [38] Safar, A. (2020). The components of teaching and distance learning in public education in the State of Kuwait during the outbreak of the new COVID-19 pandemic from the point of view of faculty members at Kuwait University: An analytical exploratory study. American International Journal of Humanities and Social Sciences 12(21), 222-244
- [39] Saud, A. (2018). Social networking sites and their impact on Arab youth, both negatively and positively. Kul Al-Watan Saudi Journal, 1(1), 2-22.

- [40] Tapilouw, M., Firman, H., Redjeki, S., & Chandra, D. T. (2018). Science teacher's idea about environmental concepts in science learning as the first step of science teacher training, Conference Series, 4th International Seminar of Mathematics, Science and Computer Science Education. Journal of Physics, 1(1), 1-16. http://doi:10.1088/1742-6596/1013/1/012077
- [41] Younis, B. (2016). Social media addiction and its relationship to psychological disorders among university students in Gaza Governorate. [Unpublished Master's Thesis]. College of Education, Al-Azhar University, Gaza, Palestine.