

# Exploring Utility and Intrinsic Value among UAE Arabic Teachers in Integrating M-Learning

Dina Tareq Ismail, Alexandria A. Proff

**Abstract**—The United Arab Emirates (UAE) is a nation seeking to advance in all fields, particularly education. One area of focus for UAE 2021 agenda is to restructure UAE schools and universities by equipping them with highly developed technology. The agenda also advises educational institutions to prepare students with applicable and transferrable Information and Communication Technology (ICT) skills. Despite the emphasis on ICT and computer literacy skills, there exists limited empirical data on the use of M-Learning in the literature. This qualitative study explores the motivation of higher primary Arabic teachers in private schools toward implementing and integrating M-Learning apps in their classrooms. This research employs a phenomenological approach through the use of semi-structured interviews with nine purposefully selected Arabic teachers. The data were analyzed using a content analysis via multiple stages of coding: open, axial, and thematic. Findings reveal three primary themes: (1) Arabic teachers with high levels of procedural knowledge in ICT are more motivated to implement M-Learning; (2) Arabic teachers' perceptions of self-efficacy influence their motivation toward implementation of M-Learning; (3) Arabic teachers implement M-Learning when they possess high utility and/or intrinsic value in these applications. These findings indicate a strong need for further training, equipping, and creating buy-in among Arabic teachers to enhance their ICT skills in implementing M-Learning. Further, given the limited availability of M-Learning apps designed for use in the Arabic language on the market, it is imperative that developers consider designing M-Learning tools that Arabic teachers, and Arabic-speaking students, can use and access more readily. This study contributes to closing the knowledge gap on teacher-motivation for implementing M-Learning in their classrooms in the UAE.

**Keywords**—ICT Skills, M-Learning, self-efficacy, teacher-motivation.

## I. INTRODUCTION

THE UAE is considered one of the developing countries seeking to advance in all fields, particularly education. The UAE leaders believe that the reason behind the flourishing of any country is the development of its education system [31]. Vice-President of the UAE and Ruler of Dubai, Sheikh Mohammed Bin Rashid Al Maktoum declared that, "Our priority is education, then education, then education." [4]. As a result, the UAE National Agenda for 2021 was launched in 2010. The agenda's main focus was education. The agenda focused on the highest pyramid of Bloom's model, which concentrates on invention and innovation in

creating and evaluating the learning work and process.

### A. UAE National Agenda 2021

The UAE agenda also indicates that to successfully achieve the restructuring of the schools and instruction, all UAE schools and universities should be equipped with the most developed technology. The agenda also advises educational institutions to focus on preparing students to use essential 21st-century skills, especially those related to ICT skills. Students need these skills to succeed in the digital education [31], [33], [52].

Most recently, many schools and universities across the UAE have started to integrate tablets, computers, and smart boards in their classes. As such, teachers have started to focus on learning and applying the latest technology in their teaching environment [31]. One of the most updated teaching tools which spread widely is mobile learning apps.

### B. Blooms Taxonomy and M-Learning

In 1956 Benjamin Bloom addressed a highly influential taxonomy that remains a common facet of classroom instruction around the world. Anderson & Krathwohl [5] revised the original taxonomy to delineate learning into two dimensions: the cognitive process dimension that defines the process to learn and the knowledge dimension that designates the kind of knowledge to be learned. Taken together these two facets represent the learning process. The cognitive process dimension contains six levels of learning: remembering, understanding, applying, analyzing, evaluating, and creating. The knowledge dimension in the revised Bloom's taxonomy has four levels: factual knowledge, conceptual knowledge, procedural knowledge, and metacognitive knowledge [5]. This understanding of learning, grounded in the revised Bloom's taxonomy has informed a variety of tools for learning.

In their study, Pegrum et al. [44] define mobile learning (m-learning) as an internet network using personal mobile devices, such as tablets and smartphones to obtain learning materials through mobile apps, social interactions, and online educational systems. These tools provide a way for educational institutions to deliver information and educational content to students on any platform, at any place, and at any time. These tools facilitate a means by which students can use their mobile devices to complete and upload assignments, download course instructions, and work in online social groups to complete tasks [46].

### C. Types of M-Learning Applications

There are many m-learning apps currently in circulation and under development in education. For the purposes of this

Dina Tareq Ismail is a Graduate Student pursuing her Master of Education Degree at the American University of Ras Al Khaimah, United Arab Emirates (phone: 055-715-1606; e-mail: dina.ismail@aurak.ac.ae).

Alexandria A. Proff is an Assistant Professor of Education in the Department of Humanities and Social Sciences at the American University of Ras Al Khaimah, United Arab Emirates (phone: 050-661-9424; e-mail: alexandria.proff@aurak.ac.ae).

study, three widespread apps will be specifically discussed: Kahoot, Quizlet, and Nearpod.

Kahoot is an m-learning application that gives the teachers the ability to create different pre-made or impromptu quizzes, discussions, and surveys to engage students [16], [22], [38], [25]. Thomas (2014) added that the educators can gather data from Kahoot games and use these as formative or diagnostic assessments or for research projects and presentations. Teachers can use Kahoot to create fun and competitive environments that simultaneously promote learning [23], [38], [26], [37].

Quizlet is a digital flashcard application that provides learners and students with an attractive and easy-to-use interface that can enhance the experience of paper flashcards [6]. Quizlet gives teachers the ability to create a variety of study and game modes using pictures and audio. In addition, Quizlet depends on the students' ability; it automatically rearranges flashcards to avoid serial learning or memorization of the order [11], [41].

Nearpod is a learning app that transfers students into a secure educational sharing environment by using tablets during class time [50]. Nearpod allows teachers to create interactive presentations. Teachers can embed the presentation with poll questions, videos, slides, and quizzes. It also allows them to foster discussions, share content, and encourage engagement among students [24], [46].

#### *D.M-Learning in Today's Classrooms*

As part of the UAE 2021 Agenda and the emphasis on using technology in education, several case studies were conducted to identify the implementation and effectiveness of these technological learning tools in 25s and schools around the country.

Johnson and Radhakrishnan [36] studied the educational use of smartphones among undergraduate business students at private universities in Dubai. These researchers asked students to complete a survey with structured questionnaires. The result of 195 completed surveys demonstrated that there is a statistically significant difference at the p level (having positive perspectives towards the academic use of smartphones) among male and female students aged 18 to 25. Overall, the surveys indicated a positive impact of using smartphones in classes. Students communicated that some of the advantages of using smartphones are saving time, increasing productivity, as well as improving searching for information and academic performance. Some students suggested that using smartphones motivated them to attend classes and participate in lectures. They reported that smartphones helped advance their learning skills and assist them in submitting assignments on time. Smartphones also, they suggested, spread positive feelings among classmates as a group.

Ishtaiwa-Dweikat and Aburezeq [35] conducted a mixed-methods study to examine pre-service teachers' proficiency in using, and perceptions of, the benefits and barriers to integrating Google Apps to support their teaching and learning practices. The study covered 311 pre-service teachers practicing teaching in 38 schools in Al Ain. Questionnaires

were distributed and interviews were conducted during the three visits for each school in the sample. Researchers' findings revealed that about 63% of participants were advanced or expert users of Google Apps; approximately 24% reported that they had intermediate experience; and 13% reported possessing poor experience.

The study demonstrated that participants used Google Apps primarily for communication purposes, storing and sharing data, and accessing teaching materials. Moreover, the research's findings revealed that teachers perceived Google Apps as a valued tool to improve teaching and learning skills. However, participants' did face some challenges in effectively utilizing Google Apps. For example, participants reported that unreliable internet connections interfered with consistent access and integration; availability of these apps actually increased their workload while simultaneously limiting collaboration between students, and fostered an easier environment for cheating and plagiarism.

Another study conducted by Ling et al. [39] aimed at understanding whether the use of mobile applications using tablets and other devices had an impact on students' learning in the United States. This experimental study examined male and female college students between 20-27 years old. A control group (n = 12) was compared against a group that used a statistical mobile app (n = 13) during a simulated statistics lecture on the topic of normal distribution. Students attended the same lecture. Then the students practiced the activities, one group, by paper and pencils and the other by using technology. Later, both groups completed a quiz on the material. The overall quizzes' results showed that the group using the app outperformed the control group. Students in the experimental group reported feeling more confident in learning the new material and suggested it had motivated them to learn.

Al-Awidi [2] inquired how instructors' self-efficacy beliefs may relate to integrating technology in their instruction. The research surveyed 73 teachers from UAE University, and interviewed 16 teachers. These findings revealed that the more successful instructors had been at integrating technology, the stronger their efficacious their beliefs became. As a result, those instructors integrated technology more often in their teaching practices. Conversely, low efficacious beliefs resulted in less frequent integration of technology in their instruction.

The UAE's National Agenda 2021 influences the strategies schools and teachers use to achieve identified performance goals; as such, there has been an increase in Smart Schools that focus on the use of technology in academic activities and assessments [3]. These schools focus also on preparing teachers through extensive training in using technology, including computers, tablets, and smartboards [51].

#### *E. Self-Efficacy and Motivation*

Clearly, the research above indicates a need for teachers and learners to enhance knowledge of, and skills in, utilizing technology in the teaching and learning process. Critical to understanding the motivation behind integrating m-learning in

classrooms, is recognizing the role of self-efficacy in the process. Bandura [8] defines a person's self-efficacy as the personal belief that a person possesses toward the achieving a certain goal or accomplishing a particular task. As such, teachers' self-efficacy in their ICT skills may play a significant role in the degree to which they apply technology in their classes [17], [9]. Also important in addressing motivation is Eccles [29], Expectancy-Value Theory. Eccles and her colleagues presented a framework oriented around two primary facets: ability and desire. If an individual perceives a task as unachievable, motivation for completing the task will not be present. However, if an individual perceives herself or himself of possessing the requisite skills for accomplishing a particular task, desire for the completing the task may be present. To understand the facets of motivation, Eccles delineated four value-dimensions: intrinsic, utility, attainment, and perceived cost. Intrinsic value is concerned about the degree of inherent enjoyment or interest a person has toward the task. Attainment value focuses on the degree to which a person values a task as it relates to their identity or sense of self. Utility value refers to a person's perception of the current, or future, usefulness of the task or goal. Lastly, perceived cost explains the loss of engaging in valued alternatives or creating negative emotion or experience between the task and the person [28], [34], [43].

Both perceptions of self-efficacy and expectancy for success in a given task are important factors that influence whether individuals choose to engage in pursuing certain tasks or working toward achieving identified goals. This is important to bear in mind, as the 21st century was marked by the rapid progression and development of technology. This advanced technology is now influencing the way teachers design lessons and the way students learn. M-learning is now a common facet of classrooms across the country, and the UAE's 2021 Agenda confirms that it will continue to influence the way educators approach teaching and the way students learn for the foreseeable future. As such, understanding why some childhood educators are more successful than others is an important step in creating effective and successful learning environments for students. The studies discussed above demonstrate the positive impact of using mobile apps in education. Most of these studies, however, focus on adult learners.

There is limited research concerning how children and childhood teachers interact with m-learning applications in their learning processes. As such, this exploratory study seeks to address this gap in the research and glean insight into the current use of m-learning apps in Cycle One classrooms, the degree to which teachers find these technological tools successful, and understand why some teachers may find greater success than others.

## II. METHODOLOGY

### A. Research Questions

This study employed a qualitative method approach to examine the motivation of higher primary Arabic teachers

regarding utilizing m-learning apps in their teaching and learning strategies. The research focuses on exploring the teachers' usage of specific applications: Kahoot, Quizlet, and Nearpod. A thorough review of the existing literature resulted in the formulation of the following three questions that guided this inquiry.

1. What are the perspectives of higher primary Arabic-language private school teachers about implementing m-learning applications in their classrooms?
2. How does the procedural knowledge of ICT influence self-efficacy in using learning applications among higher primary Arabic-language private school teachers?
3. In what ways do utility value and intrinsic value influence higher primary Arabic-language private school teachers to use learning applications in their classes?

### B. Research Approach and Design

Given the exploratory nature of this study and the limited research available, this study employed a qualitative design. Qualitative studies are commonly used in educational research, as these methods provide a means by which the researcher examines the nature of the topic through analyzing the concepts and phenomena related to the research questions. Qualitative methods focus on generating descriptive data concerning various social phenomena and are frequently employed in the development of theories and pertinent conceptual frameworks [18]-[21], [23], [15], [13]. A qualitative design provides the best approach for the researcher to explore the motivation toward implementing and integrating mobile learning applications in teaching. Specifically, this study implemented a phenomenological approach, in which nine teachers were purposefully sampled to volunteer their perspectives and lived experiences concerning the integration of M-Learning in Arabic language classrooms among UAE private schools.

### C. Sampling and Criteria

The participants of this study were higher primary Arabic teachers in grades four, five, and six in private schools in the UAE. Participants were purposefully selected according to the four criteria below. Purposeful sampling was used to select specific characteristics of a sample population to ascertain perspectives on a specific social phenomenon under study; in this case the motivation behind teachers' usage of m-learning apps. These selection criteria were dependent upon the scope and delimitations of the study [1].

Criterion One, Full-Time Employment: Participants in this study were a full-time higher primary school teachers. As this study seeks to understand the current implementation of m-learning, full-time teachers are best suited to address these facets of the study.

Criterion Two, Language Teaching: Participants in this study were either male or female Arabic teachers. In delimiting the scope of this exploratory research, the researcher chose to narrow the focus of m-learning applications to language teaching.

Criterion Three, M-Learning Application: Participants in

this study were Arabic language teachers who have already integrated, to varying degrees, m-Learning applications in their classrooms. As this study seeks to understand the motivation behind integrating m-Learning into classrooms, participants needed to possess some knowledge of how to integrate m-Learning into their lessons.

Criterion Four, No Evaluative Role: The researcher did not hold any supervisory or evaluative role over the participants to ensure they are free of coercion. This is important as the study seeks to glean insight into the lived experiences of the participants [50], [13], [48].

The total population eligible for participation in this study was 20 (n = 20). While the researcher anticipated conducting between seven to eleven semi-structured interviews, data collection continued until a point of saturation was attained and the research questions are fully answered. The total number of semi-structured interviews was nine.

#### D. Data Collection and Analysis

The researcher conducted nine 40–60 minute, semi-structured interviews with a purposeful subset of a total population (n = 20) who integrated m-learning applications in their classes. This method was the best choice to provide the researchers a means by which they could collect in-depth data about the participants' ideas, lived experiences, and viewpoints [27], [47], [46], [25], [32]. Also, Bernard [48] mentioned that the semi-structured interview allows the researcher to collect reliable, comparable qualitative data especially if the researcher only interviewed the participant for one time.

The interview consisted of open-ended questions related to the participants' experiences and beliefs [7], [14]. The semi-structured interview questions were written according to the research questions. These questions were oriented toward exploring the participants' (1) utility value and intrinsic value for using Kahoot, Quizlet, and Nearpod in their classrooms; (2) procedural knowledge of ICT; and (3) the participants' self-efficacy in using learning applications.

The researchers continued data collection until such point that saturation was reached; in this instance, at nine participants. The researchers began data analysis during the data collection process as Birks & Mills [12] and Creswell [19] explain that data analysis started after conducting the first interview. The researchers transcribed the interviews verbatim and checked the transcript to ensure the validity. Then, the researcher started to document any idea, thoughts, concerns, and preliminary conclusions about the data especially the data that have a strong relation to the study's conceptual framework and research questions.

Data were analyzed by a content analysis, in which multiple stages of coding were employed. This process began with open coding. These emergent codes are used to document the repeated important information from the participants' speech as related to the research questions. Second, the researcher grouped together open codes by shared attributes into axial codes. Given that data collection was conducted in Arabic, these first two stages of coding had been conducted in Arabic.

Once axial codes had been identified, the researcher translated these codes in English and cross-checked the translated meaning of the axial codes with at least two fluent English-Arabic experts in the field. Van Nes and his colleagues [51] stressed that if two or more people had comparable interpretations, the reliability of the interpretation can be improved.

Finally, the researcher organized the axial codes by similar attributes into selective codes that had been used to compose a narrative of these findings and address all three research questions. The findings derived from this analysis are described below.

### III. FINDINGS

The findings of this study have been presented in three themes, addressing the research questions guiding this study. A summary of participant background information has been provided in Table I. Each participant was assigned a pseudonym and information was provided in ranges to safeguard their anonymity and maintain confidentiality. The findings below use these pseudonyms in reference to the participants.

TABLE I  
 PARTICIPANT BACKGROUND INFORMATION

Pseudonym	Employment Status	Education Level
Basemaa	Teaching 11-16 years in multiple grades	Master's Degree
Manar	Teaching 6-10 years in multiple grades	Bachelor's Degree
Wala'a	Teaching 6-10 years in multiple grades	Bachelor's Degree
Reem	Teaching 6-10 years in multiple grades	Bachelor's Degree
Tasneem	Teaching 6-10 years in grade four	Bachelor's Degree
Asmahan	Teaching 16+ years in multiple grades	Master's Degree
Rawdha	Teaching less than 5 years in grade four	Bachelor's Degree
Ahmed	Teaching 6-10 years in multiple grades	Master's Degree
Reham	Teaching 6-10 years in multiple grades	Bachelor's Degree

#### A. Theme One: Arabic Teachers with High Levels of Procedural Knowledge in ICT Are More Motivated to Implement M-Learning

Theme one explores how the procedural knowledge of ICT increases the percentage of using m-learning applications among higher primary Arabic-language private school teachers. As mentioned in the literature review, technology plays a fundamental and effective role in society. In addition to being an integral part of modern life, technological integration has also gained significant in the education sectors. With increasing opportunities for smart learning, technological integration in education holds the potential to open new horizons for students [33]-[35]. However, some factors can prevent teachers from integrating m-learning apps in their teaching. Limited amounts of procedural knowledge in ICT and a lack of confidence in the school's ability to provide this technology are examples of such factors cited by teachers concerning obstacles to integrating M-Learning in their instruction. Six of the nine participants in this phenomenological study suggested that these two primary factors hinder meaningful implementation of M-Learning. Asmahan, Manar, Basemaa, Reem, Reeham, and Tasneem all

suggested the main reason behind the failure of teachers to use m-learning apps is that teachers are not familiar with how to use them as well as their inability to use information technology and communication.

Rawda stated that “some teachers are not provided with computers, while others are not qualified to use such applications. Education programs at the universities, unfortunately, do not teach courses that support teachers and help them in using such applications. University professors do not use such applications in their lectures and do not direct their students’ attention to their importance.” However, in the literature review, the study discussed how the UAE agenda emphasizes and encourages schools, universities, and teachers to develop their skills and knowledge in ICT [33]. While this may certainly be the goal, there seems to be a perception among practitioners that teachers need additional training.

Walaa clarified that “teachers will not use the applications if they do not know how to use them, or if the schools do not provide the necessary devices and requirements (Internet – I pad).” Basema agreed with this sentiment, “most schools do not have enough computers for all their students and some parents cannot provide computers for their kids. Because of this, many students do not have access to the recommended apps.”

Rawdha further explained that effectively utilizing M-Learning applications depends on teachers’ mastery experience and procedural knowledge, “Teachers who use these applications are the ones who have extensive experience in the world of technology... they have the ability to design games and assessments easily and professionally.” Basema, Asmahan, Ahmad, Manar, Reem, Tasneem, and Rawdha expressed similar views. Manar explained that “for each Arabic skill there are specific types of applications and games that can be used to improve the students’ motivation for learning and the teachers must be aware of how to use them properly.” Walaa opined that teachers ought to work and develop their procedural knowledge in ICT skills by “taking courses and sharing the ICT knowledge with their friends, so they will be able to integrate these learning apps in their classes”.

Participants specified different sources from where they developed their knowledge and skills in integrating M-Learning. Rawdha, Mannar, Asmahan, Reem, Basema, and Reeham were introduced to M-Learning applications, and started using them to teach Arabic, through school’s training, along with colleagues and friends. Asmahan explained that her experience as a teacher in the Ministry of Education helped her develop her ICT skills, “I had access to many educational applications used to teach Arabic. Such applications help develop students’ skills in Arabic and their fluency in speaking.” Other participants, however, learned about M-Learning from friends. Rehham, for example, stated “I have always felt with my ICT skills... my experience in m-learning applications was started by my friends working in different schools in the UAE. I usually meet them to share ideas about using different types of applications to teach Arabic. Together we also talk about new apps to help us improve our students’

academic levels in Arabic.”

A consistent finding among this sample of participants is that higher levels of procedural knowledge in ICT motivate teachers to learn more about effective integration of M-Learning in these lessons. In fact, these high levels of procedural knowledge helped teachers in developing positive perceptions of self-efficacy that, like procedural knowledge, motivate teachers to improve their implementation of M-Learning in their instructions.

#### *B. Theme Two: Arabic Teachers' Perceptions of Self-Efficacy Influence Their Motivation toward Implementation of M-Learning*

The findings of this study suggest that Arabic teachers’ perceptions of self-efficacy motivate them to make better use of M-Learning apps. Bandura [8] explained self-efficacy as the personal belief that a person possesses toward achieving a certain goal or accomplishing a particular task. He indicated that an individual’s self-efficacy may increase when those individuals develop meaningful and positive mastery experience in a given task. Conversely, negative mastery experience may prevent an individual from accomplishing a task or achieving a goal due to a lack of self-efficacy [2], [7], [9], [10]. This study’s participants emphasized their positive experience in integrating M-Learning apps. This positive mastery experience increased their individual self-efficacy, and also motivated them to encourage other teachers to integrate these apps, as well.

Tasneem was first introduced to ICT knowledge and M-Learning apps through colleagues and friends. She was proactive in liaising with her school to develop her “skills with different types of technology and learning applications.” She quickly developed positive mastery experience that motivated her continued use of such apps. Likewise, Walaa stated that she “love[s] technology”, emphasizing that she is “always searching for the most recent developments with these apps” to benefit her students.

Asmahan stated “I use Teams, Kahoot, Quizlet, and Nearpod a lot in teaching my students and to prepare for my classes. I succeed in using these apps and I realized[d] the benefits of applying them.” Walaa concurred, “I find m-learning apps easy to use and beneficial for students in practicing the language as these [apps] present different educational content in interesting ways.” Ahmad further explained that “such apps, especially Kahoot, Quizlet, and Nearpod, provide an exciting and interesting educational environment for learning, as well as assessment. Some M-Learning apps even show performance statistics. I can use these really easily”. This was confirmed by Radhwa, who stated that “the reports issued by such apps are easy to get and beneficial in assessing the progress of students learning.”

Each of the participants above speaks of their use of M-Learning apps also in terms of their ability to integrate these apps into their lessons with ease. That is, this group of participants feels especially efficacious in utilizing these apps to help teach their students Arabic. While many teachers report perceptions of high levels of efficacy, others suggested

expressed some concern with integrating these for Arabic-language learning purposes.

Reeham and Wala discussed that language apps designed for English-language consumption cannot always be easily integrated for Arabic. "If M-Learning applications depend entirely on translation, they will not be useful in learning Arabic." However, several other teachers reported they could easily modify such applications for educational purposes. The integration of M-Learning apps may find teachers are both sides: those who possess strong efficacy in implementing these apps and others who may lack such efficacy and not possess strong utility value for utilizing such apps.

Asmahan spoke to this point, "teachers are divided into two groups: one group believes strongly in using the apps to improve students' desire to learn Arabic and developing their abilities and creativity. They think this because they have been successful in using M-Learning apps. The other group, however, is not satisfied with their usage and considers them as a workload on top of their teaching duties. They do not want to learn how to use them." Manar, likewise, suggested that "when teachers feel confident to use M-learning apps in their classes, they will find more student success and achievement." While Tasneem agreed, she also pointed out that these apps "should be used in line with the interests of the students and their academic development".

As a result of the positive mastery experience, the participants in this study collectively articulated that teachers should be encouraged to use M-Learning applications. They strongly believe in their impact on the teaching of Arabic. Each of the nine participants suggested that they perceive students as more engaged in learning Arabic when using M-Learning apps like Nearpod, Quizlet, and Kahoot. Several even stated that students respond happily for their final assessments, when these are run through an M-Learning app. This positive student engagement promotes utility value for teachers, who then feel more motivated to continue to integrate M-Learning apps into their instruction.

### *C. Theme Three: Arabic Teachers Implementing M-Learning When They Possess High Utility and/or Intrinsic Value in These Applications*

Theme three reflects the ways in which utility value and intrinsic value influence higher primary Arabic-language private school teachers to use learning applications in their classes. Eccles and Wigfield [30] explored the importance of utility and/or intrinsic value in motivating an individual toward pursuing and persisting through a particular task or working toward a specific goal, finding that strong utility value and intrinsic value may improve motivation toward achievement [47], [30]. As discussed previously, utility value refers to a perception of usefulness toward a particular task. Eccles explained that when the individuals perceive a task as useful, they are likely to feel more motivated toward accomplishing that task [29], [34], [47], [42]. The findings of this study also find that this sample of teachers felt a strong sense of both utility value and intrinsic value in integrating M-Learning.

Riham discussed the role of utility value in her decision to integrate M-Learning apps, "...the academic development, success, and progress of my students is the main reason I use these apps." Rawdha added "after using the applications, I noticed outstanding progress in the level of my students in Arabic, and a rise in their motivation to learn." Several teachers described a key component of their motivation to use these applications was the idea that they could push students to engage in higher order thinking. Wala specified this point, "My students can be creative and think in new and different ways. They are engaged in learning, not just the book. This improvement and engagement reinforces the benefit of M-Learning apps."

A second, and important, value expressed by participants in this study is intrinsic value. This relates to the level of personal enjoyment or interest an individual may feel toward a task or goal. That is, the amount of satisfaction and interest that an individual may feel when performing a task is likely to motivate them to completing the task [42]. Participants in this study generally expressed significant intrinsic value for integrating M-Learning, in that teachers intrinsically want to provide students with a meaningful learning experience in which they are engaged and learning.

Wala expressed that she is "always trying to develop and improve my teaching skills and educational strategies. I want to be an excellent and outstanding teacher in my school, so I am very interested in using modern tools." Ahmad also expressed an intrinsic value for M-Learning, "I want to teach in a way that improves students' progress and their eagerness to learn. The positive impact of these apps helps me do that." Basema concurred, "I want to use teaching strategies that improve my student's enthusiasm and make them happy. When I use these apps, my students engage more, and this makes me feel happy and successful." Asmahan emphasized that she feels like a better teacher when her students enjoy her lessons: "It is important to me that the students learn and have fun. My students enjoy using apps in class. This makes me feel like I am doing a good job." Finally, Rawdha elaborated, "When I see the happiness of my students in using technology and their enthusiasm for learning, it makes me feel like a successful teacher and that I was able to positively impact my students and provide them with the tools that help them learn."

The teachers sampled in this study report significant utility and intrinsic value for integrating M-Learning in their classroom instruction. This innate desire to provide quality learning experiences for their students, coupled with the tangible benefit for students, increases their motivation for effective implementation of M-Learning apps as a part of their instruction. Utility and intrinsic value, when taken collectively with advanced procedural knowledge and positive self-efficacy, provide an optimal scenario for teachers to feel motivated and integrate modern technologies in their classrooms.

## IV. DISCUSSION

The participants in this study report a strong value for integrating M-Learning into their instruction. This

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purposefully sampled population tends to possess high levels of procedural knowledge in effectively implementing M-Learning Applications during their instruction, which allows for the development of positive and meaningful mastery experience. This mastery experience, in turn, increases both their utility and intrinsic value for greater integration. Taken collectively, these factors have a significant impact on teacher's motivation for continued and sustained integration of M-Learning applications in their classrooms.

The research's findings indicate a need for further, more specialized, training for teachers, not only in terms of ICT skills, but in M-Learning, more specifically. Given the ways in which both procedural knowledge and self-efficacy influence teachers' motivation to implement M-Learning, and subsequently enhance their knowledge and skills, it is important that institutions, and school leaders, provide opportunities for teacher growth and development of such skills. These findings provide additional knowledge concerning the integration of M-Learning in classroom instruction. Notably, this study found that teachers were much more likely to utilize M-Learning when they possessed a strong intrinsic and utility value. That is, when teachers perceive M-Learning as useful and important, they are more likely to use it; likewise, when teachers possess a genuine interest in M-Learning, they are more likely to use it. The optimal scenario is when teachers possess both utility and intrinsic value toward M-Learning. While educational institutions and school leaders may not be able to foster intrinsic value for M-Learning, efforts could be made to improve utility value. Schools, and school leaders, would benefit both teachers and student learning by providing opportunities for teachers to develop a greater understanding of the impact of M-Learning in education. That is, if educational institutions seek to increase the amount of M-Learning in their schools, purposeful effort should be made to create teacher buy-in. Only through engaging teachers in training to develop procedural knowledge, self-efficacy, and utility value, will teachers more fully recognize the potential impact of M-Learning on their students' performance outcomes. In challenging and atypical times, like what educators are currently experiencing with the global pandemic, M-Learning could likely contribute positively and meaningfully to student growth.

## V. LIMITATIONS

This qualitative study aimed at exploring the motivation behind implementing m-learning in Arabic-language instruction in private schools in the UAE. However, given the delimitations of a limited, purposeful sample of participants, findings from this study are limited to this specific population, and cannot be generalized [40]. Moreover, the data collection and analysis was limited to the three research questions within the context of Arabic language instruction in the UAE. Other relatable concepts are beyond the scope of this study [40].

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