

**DESIGN AND DEVELOPMENT OF *ALWADIFA*
ALNAHWIA MOBILE APP TO IMPROVE
INTERMEDIATE STUDENTS' ACHIEVEMENT
AND MOTIVATION TOWARDS LEARNING
ARABIC GRAMMAR**

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ARABIC GRAMMAR**

by

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LIST OF ABBREVIATIONS

DV	Dependent Variables
EFL	English as a Foreign Language
IV	Independent Variable
KSA	Kingdom of Saudi Arabia
S.D	Standard Devision
SDK	Software Development Kit
SPSS	Statistical Package for the Social Sciences
UI	User Interface

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**REKABENTUK DAN PEMBANGUNAN APLIKASI MUDAH ALIH
ALWADIFA ALNAHWIA UNTUK MENINGKATKAN PENCAPAIAN DAN
MOTIVASI PELAJAR PERTENGAHAN TERHADAP PEMBELAJARAN
TATABAHASA ARAB**

ABSTRAK

Kajian ini mengkaji kesan aplikasi pembelajaran mudah alih terhadap pencapaian dan motivasi dalam pembelajaran tatabahasa Arab dalam kalangan pelajar sekolah pertengahan di Arab Saudi. Aplikasi mudah alih telah dibangunkan oleh penyelidik dengan modul dan aktiviti pembelajaran untuk disampaikan melalui telefon pintar pelajar. Modul aplikasi dibangunkan berdasarkan teori pembelajaran konstruktivisme. Selain itu, model reka bentuk pengajaran ADDIE telah digunakan dalam reka bentuk aplikasi. Kajian ini menggunakan kaedah campuran, iaitu reka bentuk campuran serentak. Perbandingan telah dibuat di antara kumpulan kawalan (pelajar-pelajar yang telah belajar melalui PowerPoint interaktif) dan kumpulan eksperimen (pelajar-pelajar yang telah belajar menerusi aplikasi mudah alih Alwadifah Alnahwiah) untuk menentukan kesan penggunaan aplikasi mudah alih Alwadifah Alnahwiah terhadap pencapaian dan motivasi pelajar. Kajian ini melibatkan 50 orang pelajar, dengan 25 orang pelajar dalam setiap satu kelas (daripada dua kelas), dan 5 pelajar telah ditemu bual. Instrumen kajian yang digunakan termasuk ujian pra dan ujian pasca, soal selidik motivasi pelajar serta temu bual. Dapatan menunjukkan bahawa aplikasi mudah alih boleh meningkatkan pencapaian dan motivasi pelajar terhadap pembelajaran tatabahasa Arab. Perbincangan daripada keputusan yang diperolehi menekankan keperluan untuk membangunkan sumber pembelajaran mudah

alih yang lebih interaktif untuk meningkatkan pembelajaran dan motivasi pelajar dalam kemahiran-kemahiran berbahasa Arab.

**DESIGN AND DEVELOPMENT OF *ALWADIFA ALNAHWIA* MOBILE APP
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ABSTRACT

This research investigates the effect of mobile learning applications on the achievement and motivation in learning Arabic grammar among Saudi intermediate school students. A mobile app was developed by the researcher with learning modules and activities to be delivered through students' smartphones. The app modules were developed based on the constructivist learning theory. Moreover, the ADDIE instructional design model was used in the app design. The research employed a mixed method, which is the concurrent embedded design. A comparison has been made between the control group (students who have learned by interactive PowerPoint) and the experimental group (students who have learned through the *Alwadifah Alnahwiah* mobile app) to determine the effect of using the *Alwadifah Alnahwiah* mobile app on students' achievement and motivation. The research included 50 students, with 25 in each of the two classes, and 5 students were interviewed. The instruments of the research include a pre-test and post-test, a questionnaire for students' motivation as well as an interview. The findings show that the mobile app could improve the achievement and students' motivation towards learning Arabic grammar. The discussions of the results highlighted the need for more interactive mobile learning resources to improve students' learning and motivation in Arabic skills.

CHAPTER 1

INTRODUCTION

1.1 Introduction

The current era is characterised by rapid advancements and constant change in various facets of life. This includes the explosion of knowledge as a result of successive modern discoveries and advanced technology.

This development has affected various activities, particularly the educational process. Scientific progress and technological development have introduced the world to the so-called ‘mobile age’. In the new and revolutionary age, gigantic information is transmitted among individuals by using portable technologies and devices. Mobile phones and tablets are at the forefront of this means of rapid expansion and development, to the extent that the number of mobile phones in some countries has become greater than their total population number. In the educational field, no other technological tools like mobile learning have enjoyed such a rapid spread among learners (Al-Dahshan, 2013).

In recent years, mobile phones have become an integral part of teenagers’ social, cultural, and academic lifestyles. Teenagers are exceptionally at the forefront of introducing new communication technologies (Lenhart, 2015). Remarkably, digital media, especially mobile phones, contribute to facilitating access to various forms of information and play a positive role in teenagers’ academic achievement, motivation, and success (Boyd, 2014; Buckingham & Jensen, 2012; Vickery, 2017).

Mobile learning is not just about converting study materials into electronic forms that are available on mobile phones; it also helps generate students who can

solve problems, adapt to current technological advancements, benefit from it in education, and access training and self-learning effectively (Al-Tamimi, 2017).

The wide spread of knowledge and technology has exerted a considerable effect on the educational process, which is supported by various educational techniques, including smart device technologies and applications. Therefore, it is necessary to employ modern teaching methods to achieve the objectives of education and raise students' educational attainment. This is consistent with what educational specialists have emphasised that education can be enhanced by digital learning techniques and that a rich educational environment by using different techniques can boost students' motivation, academic achievement, effective learning, and positive attitudes toward the course (Al-Obeikan, 2016).

Several educational studies in the literature have established that using mobile learning technology in the educational process leads to many positive results, such as enjoying learning, taking individual differences into account, developing motivation for learning, and achieving a higher level of educational attainment. It also contributes to the development of educational curricula, offered to students in the form of compact designs, which are easy to access online, according to Abu Laban (2017), Altaf (2019), Al-Jadeeda (2019), Bin Mubayrik (2017) dan Waly (2020). The mobile learning approach has generally proved to be successful in the classroom, particularly in language learning. Previous studies have revealed that integrating mobile learning into the classroom contributes to boosting students' achievement and learning motivation (Abdul Ghani et al., 2022; Huang et al., 2016; Huang, 2017; Khodi, 2015; Lai et al., 2020; Miranda et al., 2021; Muhammad, 2021; Rahimi & Oveisi, 2020; Shuib et al., 2015; Wu & Kuimova et al., 2018; Wijaya et al., 2019; Yahaya et al., 2019).

Considering the findings of previous studies on the effectiveness of mobile learning in language acquisition, it becomes increasingly imperative to confront the current challenges faced by the Arabic language, which is experiencing one of the most critical phases in its extensive history. Presently, users of Arabic encounter significant difficulties in accurately reproducing even its most fundamental structures. This linguistic decline is evidenced by students' inadequate speaking and writing abilities, which are characterized by numerous grammatical errors (Al-Ahwal, 2018).

Research has consistently highlighted a low level of academic achievement and motivation related to Arabic grammar among students in Saudi Arabia, particularly those within intermediate school settings. Numerous studies have documented this trend (Al-Ahwal, 2018; Al-Sulami, 2018; Al-Otaibi, 2020; Abdou, 2020; Al-Zahrani, 2020). The challenges in mastering Arabic grammar not only hinder students' language development but also contribute to a broader cultural and educational crisis, underscoring the necessity for innovative solutions to enhance instructional methodologies and student engagement in learning Arabic.

1.2 Background of the Study

The Arabic language – as with all languages – has a specific system, which is subject to certain rules that control its use and support the survival, sustainability, and preservation of its purity over decades.

These rules apply to phonetics, grammar, semantics, and vocabulary. Learning the grammatical rules is the backbone of learning the Arabic language. Because all the arts of the language can be mastered and understood through its system of grammatical rules; these rules prevent speakers from making errors in speaking and writing.

Students can, therefore, develop their linguistic treasure and refine their language skills and tastes. When the grammatical rules of a language are not observed, the language becomes a multitude of unconnected words and phrases that have no authentic existence (Al-Mahi, 2015).

Mastering a language requires an understanding of its grammatical rules for both spoken and written communication. Adhering to these rules helps convey precise meanings and ensures that expressions are clear and coherent. Following grammatical guidelines prevents errors in speech and writing, which can lead to misunderstandings or misinterpretations. It's essential for effective communication and literacy (Abdul Karim, 2011).

Aser (2005) stated that the goal of teaching grammar is to enhance the students' reading, writing, and speaking skills, enable them to understand the texts they read, augment their linguistic wealth, provide them with training in sound thinking, and develop their fluency and expression. This can only be achieved when grammatical rules are integrated with the four language skills: reading, writing, listening, and speaking.

Among linguistic sciences, grammar has received special attention due to its link to regulating expression and correcting speech, and its ability to connect parts of speech. Grammar is a major language tool. The importance of grammatical rules extends to the language user's communication skills, which are represented in listening, speaking, reading, and writing, in the sense that understanding and using the language correctly is determined by adhering to the rules of the language (Al-Otaibi, 2020).

Currently, the Arabic language is facing one of the most difficult periods throughout its long history. The Arabic language users have become unable to reproduce even its simplest forms correctly, and it seems that there is no stronger evidence of this linguistic degradation than students' poor speaking and writing skills as sentences are loaded with numerous grammatical mistakes (Al-Ahwal, 2018).

Studies emphasized the weakness of Arabic language use among learners in Saudi Arabia, especially among intermediate school students between the ages of twelve and fifteen with noticeable deficiencies in terms of grammatical skills. A study by Al-Sulami (2018) indicated that intermediate school students in Saudi Arabia have weaknesses in grammatical skills. These weaknesses can be reflected in many grammatical errors, both in the spoken and written language, in a way that their ability to understand meanings and make them understandable to others is impaired. Students have also shown lower levels of learning motivation. Five intermediate teachers were interviewed by the researcher, who observed their students' reluctance to participate in educational activities at the time of teaching grammar. Students have shown a noticeable lack of motivation in learning, in addition to poor academic achievement. This can be justified by the lack of using effective teaching methods, which are appropriate for teaching Arabic grammar.

The results of a survey conducted by Al-Otaibi (2020) among intermediate school students in the Kingdom of Saudi Arabia concluded that students' grammatical skills are weak. An exploratory study conducted by the researcher to measure the level of students' mastery of grammatical skills has also revealed that the students' skills reached a level of 37%, which established noticeable weaknesses among students; this percentage is below the acceptable level of mastery of grammatical skills. Students'

poor mastery level in grammatical skills, therefore, calls for the development of teaching methods in the light of modern teaching strategies.

Abdou (2020) also found a severe weakness in the understanding of Arabic grammatical rules and terms of academic achievement in this discipline, particularly among intermediate students in the Kingdom of Saudi Arabia. The results of his study showed that success rates in this subject are low. Therefore, more effective teaching methods are essentially required; such methods and techniques can greatly benefit from the interaction of modern technology and basic principles of learning.

A study conducted by Al-Zahrani (2020) in Saudi Arabia revealed that the mastery of grammatical skills among students has declined noticeably. The researcher explained that the reason for this is the use of traditional teaching methods, making students reluctant to learn grammatical concepts. The researcher has conducted personal interviews with students and teachers and visited some Arabic classes and found that students' achievement is unsatisfactory. Students showed difficulties related to understanding some grammatical concepts. The researcher stated that the use of traditional teaching methods made students unwilling and demotivated to learn grammatical concepts. The researcher proposed using modern teaching methods, which can help students generate new ideas to be easily absorbed, understood, and integrated into the existing concepts.

In a study conducted among intermediate school students in the Kingdom of Saudi Arabia, Al-Ahwal (2018) highlighted the students' poor levels of achievement and motivation in the Arabic language field, especially in grammar learning. The author emphasized the inability of learners to use correct grammar rules, along with many grammatical mistakes in speaking and writing. In addition, learners have

complained about the difficulty of Arabic grammar. The study concluded that the main reason can be attributed to the use of traditional teaching methods as teachers usually rely on these methods that are unable to communicate grammar in an attractive way for learners.

In Saudi Arabia, the teaching of the Arabic grammar curriculum predominantly relies on traditional pedagogical methods that emphasize rote learning and textual analysis. These instructional approaches typically involve the use of standard textbooks, which provide comprehensive explanations of Arabic grammar rules, structural components, and the functional meanings of different grammatical constructs.

The curriculum often includes detailed sections on syntax, morphology, and semantics, wherein students are expected to memorize rules. Instruction is largely teacher-centered, with educators delivering content through direct instruction, often prioritizing the correct application of grammatical structures in isolation rather than in more dynamic communicative contexts.

Additionally, assessments frequently focus on students' ability to reproduce learned material, such as identifying grammatical elements and correcting sentences, rather than fostering deeper understanding or practical application in everyday language use. Consequently, while this traditional methodology provides a foundational knowledge of grammar, it may not adequately equip students with the skills necessary for proficient language use in real-world situations.

The reliance on such methods can contribute to a lack of engagement and motivation among students, who may find the learning experience monotonous and disconnected from practical language application. This highlights the need for more

innovative, interactive, and communicative approaches to teaching Arabic grammar that can enhance student understanding and foster greater enthusiasm for the language.

To develop the teaching of Arabic grammar, it is, therefore, necessary to diversify the teaching methods, adapt them to the subject being taught, and use effective strategies that make the student an efficient and active receiver rather than a passive one so that the student is at the centre of the delivered educational process (Al-Ahwal, 2018).

In reviewing the literature and learning strategies, the mobile learning method has particularly proven effectiveness in learning. Several educational studies confirmed that using mobile learning technology in the educational process leads to many positive results, such as enjoying learning, developing motivation for learning, and leading to a higher level of academic achievement (Abu Laban, 2017; Altaf, 2019; Al-Jadeeda, 2019; Bin Mubayrik, 2017; Waly, 2020).

The mobile learning approach has generally been shown to be successful in the classroom, particularly when teaching language skills. Previous studies revealed that integrating mobile learning into the classroom contributes to boosting students' achievement and learning motivation (Abdul Ghani et al., 2022; Huang et al., 2016; Khodi, 2015; Kuimova et al., 2018; Lai et al., 2020; Miranda et al., 2021; Muhammad, 2021; Rahimi & Oveisi, 2020; Shuib et al., 2015; Wu & Huang, 2017; Wijaya et al., 2019; Yahaya et al., 2019).

1.3 Problem Statement

To substantiate the existing problem of students' poor grammatical skills among Saudi intermediate school students, the researcher conducted an exploratory test. The test aims to measure the level of Arabic grammar for third-intermediate school students. The test, which is prepared by the researcher, is formulated based on the students' Arabic textbook and consists of (30) questions with a final score of (30). The test has been verified by Arabic experts and Arabic teachers as they provided their valuable recommendations and modifications. The test is administered to a random sample of third intermediate students in the Kingdom of Saudi Arabia consisting of 90 students from three different schools. The results of the conducted exploratory test are illustrated in Table 1.1 and shown in Figure 1.1:

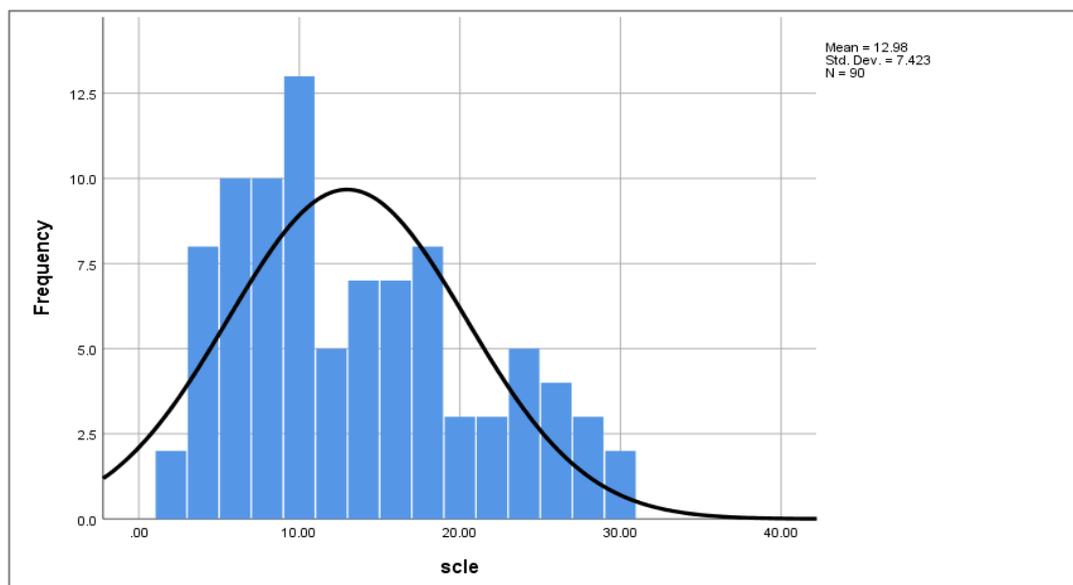
Table 1.1

Descriptive Statistics

Measures of central	Statistics
Mean	12.9778
Median	11.0000
Mode	9
Measures of dispersion	Statistics
Variance	55.101
Standard Deviation	7.42298
Range	28.00
Minimum	2.00
Maximum	30.00
Standard error of the mean (Std. Error)	0.78245

Figure 1.1

The histogram with a normal curve



The overall results showed a weak level of intermediate school students' grammatical skills. This is reflected in the weak ability to distinguish between grammatical components or to derive the grammatical rule and express words correctly. The researcher has also conducted semi-structured interviews with (9) students from the same three intermediate schools. Students stated that the subject of Arabic grammar is quite difficult and that they are often bored with learning grammar. The students' attitudes are accompanied by emotional manifestations of an increase in anxiety and tension and a decrease in motivation due to the traditional teaching methods used in grammar classes.

The current educational landscape for teaching Arabic grammar in Saudi Arabia predominantly relies on traditional pedagogical methods, which are characterized by emphasis on memorization and textbook-based instruction. These approaches primarily focus on explaining grammatical rules, often neglecting the practical application of these concepts in contexts. This deficiency is particularly

evident among intermediate-level Arabic learners, who require engaging and contextually relevant learning experiences to develop their language skills effectively.

Traditional methods fail to address the diverse needs of intermediate learners, leading to a lack of motivation and engagement in the learning process. Students are often confronted with dry instructional materials that do not resonate with their experiential backgrounds or real-life language use, resulting in a disconnect between theoretical knowledge and practical application. Consequently, learners may struggle to transfer their understanding of grammatical rules into coherent spoken or written communication, which is essential for achieving proficiency in Arabic.

This situation underscores a significant pedagogical gap, indicating a pressing need for alternative or more modern teaching strategies that leverage technology and interactive methodologies. Such strategies could enhance students' engagement and motivation, thereby facilitating a deeper comprehension of Arabic grammar. The integration of mobile learning applications, for instance, presents an opportunity to create dynamic and personalized learning experiences that align with the needs of intermediate learners.

Therefore, this study aims to investigate the potential impact of mobile learning applications on student achievement and motivation in Arabic grammar learning. By addressing this gap, the research seeks to contribute to the development of more effective pedagogical frameworks that better support the language acquisition processes for intermediate-level Arabic learners in Saudi Arabia.

1.4 Research Objectives

This study aims to achieve the following objectives:

1. To investigate the students' needs for the mobile learning modules, the learning materials, and the approach for the learning modules.
2. To investigate the design and development of *Alwadifah Alnahwiah* mobile app.
3. To investigate the difference between the control group students' achievement in the pre-test and the post-test.
4. To investigate the difference between the experimental group students' achievement in the pre-test and the post-test.
5. To investigate the difference between the students' achievement in the experimental group and the control group in the post-test.
6. To investigate the difference between the control group students' motivation in the pre-questionnaire and the post-questionnaire.
7. To investigate the difference between the experimental group students' motivation in the pre-questionnaire and the post-questionnaire.
8. To investigate the difference in students' motivation between the experimental group and the control group in the post-questionnaire.
9. To explore the students' experience of using *Alwadifah Alnahwiah* mobile app to improve achievement and motivation in learning Arabic grammar.

1.5 Research Questions

This study aims to address the main question as follows:

What is the effect of the mobile learning application on improving Arabic grammar achievement and motivation of intermediate school students?

This question is further addressed through the following sub-questions:

1. What are the students' needs for the mobile learning modules, the learning materials, and the approach for the learning modules?
2. What are the design and development of Alwadifah Alnahwiah mobile app?
3. What is the difference between the control group students' achievement in the pre-test and the post-test?
4. What is the difference between the experimental group students' achievement in the pre-test and the post-test?
5. What is the difference between the students' achievement in the experimental group and the control group in the post-test?
6. What is the difference between the control group student's motivation in the pre-questionnaire and the post-questionnaire?
7. What is the difference between the experimental group student's motivation in the pre-questionnaire and the post-questionnaire?
8. What is the difference in students' motivation between the experimental group and the control group in the post- questionnaire?

9. What is the students' experience of using *Alwadifah Alnahwia* mobile app to improve achievement and motivation in learning Arabic grammar?

1.6 Research Hypotheses

This study aims to verify the following hypotheses:

1. There are statistically significant differences between the mean scores of the control group achievement in the pre-test and the post-test.
2. There are statistically significant differences between the mean scores of the experimental group achievement in the pre-test and the post-test.
3. There are statistically significant differences between the mean scores of the experimental group and the control group achievement in favour of the experimental group.
4. There is a statistically significant difference in the level of motivation between the control group's pre-questionnaire and post-questionnaire results.
5. There is a statistically significant difference in the level of motivation between the experimental group's pre-questionnaire and post-questionnaire results.
6. There are statistically significant differences in the level of motivation between the experimental group and the control group in favour of the experimental group.

1.7 Significance of the Study

This study aims to assess the effects of introducing and implementing mobile learning applications for the instruction of Arabic grammar in intermediate schools in Saudi Arabia. It presents a new model for the design and development of mobile learning applications that researchers and practitioners in the field can utilize. By doing so, the study seeks to clarify how mobile learning applications and modules can be effectively structured to foster personalized interaction and support diverse learning experiences. It primarily proposes an innovative framework for mobile learning within the context of Arabic language acquisition, outlining the types of activities and resources that can be integrated into similar educational initiatives.

Furthermore, this research is significant as it addresses the educational challenges that students encounter when learning Arabic grammar, thereby facilitating a more effective and engaging learning experience. To the best of the researcher's knowledge, this is the first study to investigate the impact of a mobile learning environment on students' achievement and motivation specifically related to Arabic grammar instruction.

The findings of this research are expected to benefit various stakeholders within the educational ecosystem. Students will gain access to a more engaging and effective method for mastering Arabic grammar, which could lead to improved academic performance and increased motivation. Educators will receive valuable insights into contemporary instructional methodologies and mobile learning strategies, enabling them to enhance their teaching practices and better support their students' diverse learning needs.

Additionally, curriculum developers will find evidence to help create relevant and modern educational resources that align with students' preferences. Educational institutions can leverage the outcomes of this study to enrich their language programs, implementing innovative learning resources that elevate the overall quality of education. Moreover, developers in the field of educational technology will benefit from insights into effective design principles and user requirements necessary for crafting impactful mobile learning applications.

In conclusion, this study aspires not only to enhance the learning experience for students but also to serve as a resource for educators, curriculum developers, educational institutions, and technology developers, all aimed at advancing Arabic language instruction through mobile learning solutions.

1.8 Limitations of the Study

Limitations are often inevitable within the realm of educational research. Due to the nature of the context, in which, this study is conducted, several challenges and limitations can be identified. The first identified limitation of this study is that the research is conducted in one city and is limited to two schools that participated in the experiment with 50 intermediate school students within the identified city. Therefore, the researcher was not able to apply the experiment to a larger number of groups due to certain administrative authorities and permissions. The second limitation is that the field of study is the content of the Arabic grammar book used for the Arabic curriculum. The third limitation is that the study did not consider the amount of teacher training or the number of years of teaching experience. Finally, the time constraint prevented more practice time from being available for this experiment, the duration of treatment was approximately eight weeks and may not be sufficient to show significant

learning progress after the given treatment. Despite these limitations, the study has been conducted ethically and judiciously.

1.9 Operational Definitions of Key Terms

Mobile learning can be defined as follows: “The ability of learners to access information independent of time and space through mobile devices and to manage their own learning processes based on their individual differences and needs” (Akin, 2014).

In the context of this research, mobile learning is “an educational method for the Arabic grammar course that depends on the delivery of information to the students using electronic smart mobile devices, where students use the materials produced for the study purposes”.

The mobile application is defined as a mini-program that can be installed on mobile devices and smartphones through the application store and can be free or paid (Al-Ruwaili, 2014).

In the context of this research, the electronic application is “an educational program based on mobile learning for the Arabic grammar course that can be installed on mobile devices with Apple or Android systems and downloaded through the application stores designated for the system”.

Grammar involves “the rules that organise a sentence or the locations of the words in it and their functions in terms of meaning, and rules that relate to the structure and formulation of words” (Dhafer & Hammadi, 1984).

In the context of this research, Arabic grammar is “a basis of grammatical knowledge that helps Arabic language students to acquire the language and use it fluently to achieve proper language performance in speaking and writing”.

Achievement is “the degree of knowledge acquired by an individual, or the level of success attained by them within an educational subject or field” (Allam, 2000).

In the context of this research, academic achievement is defined as “the grammatical skills that a student acquires during their study of the Arabic grammar curriculum, which is measured by the achievement test prepared by the researcher”.

Motivation refers to the individual’s need to overcome obstacles in order to overcome difficult challenges, and it is also the tendency to set high levels of achievement for oneself, to strive for them, and to work with great perseverance and continuous persistence (Khalefa, 2002).

In the context of this research, achievement motivation is “the various factors determining student energy and desire to learn Arabic grammar, and continued interest in and commitment to learning through using mobile learning”.

Intermediate education is defined as the middle stage of the educational ladder. It precedes primary education follows secondary education and extends for twelve to fifteen years (Al-Sunbul, 1998).

In the context of this research, intermediate education is defined as the stage that follows the elementary education phase in the public education system in the Kingdom of Saudi Arabia, with a duration of three years. Students are enrolled in intermediate school at the beginning of their thirteenth year and end at the age of

fifteen, a stage with certain characteristics that should be taken into consideration while planning the educational curricula.

1.10 Chapter Summary

This chapter introduces this study and elaborates on the effect of the mobile learning application on academic achievement and motivation in learning Arabic grammar among Saudi intermediate school students. The chapter discusses the key role that grammar plays in learning the Arabic language and the effective methods to teach grammar and enhance the students' motivation and achievement by using the mobile learning application approach. The chapter presents the problem statement and provides the research objectives and questions. The research hypotheses, the significance of the study, and its limitations are presented in this chapter. The operational definitions of key terms conclude the chapter.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The overall aim of the research was to develop a mobile learning app to teach Arabic grammar to intermediate school students in Saudi Arabia. Mobile learning was used to help students improve their grammar skills. This chapter discusses the important relevant concepts and theories of mobile learning as well as theories that define how students learn and achieve their language learning goals. Therefore, the following points are covered in this chapter:

The first section introduces the educational background of the research, namely intermediate education in Saudi Arabia. The second section relates to grammar, such as its definition, meaning, and importance. The third section concerns points related to mobile learning in general and mobile learning in language learning in particular. The fourth section deals with points related to achievement and motivation and its relation to mobile learning. The fifth section discusses the theoretical framework and finally explanation of the previous studies.

2.2 Intermediate Education in Saudi Arabia

It is defined as the middle stage of the educational ladder. It is preceded by primary education, followed by secondary education, and covers a period of twelve to fifteen years (Al-Sunbul, 1993).

2.2.1 The Objectives of Intermediate Education in the Educational Policy Document of the Kingdom of Saudi Arabia

Intermediate education is a general cultural stage whose aim is to educate the young person with comprehensive Islamic education for his creed, mind, body, and manners, taking into account his growth, the characteristics of the stage he is passing through, and participation with others in achieving the general aims of education. The main objectives of secondary education are to strengthen the Islamic faith in the student, to make it the guide for his behavior and actions, and to develop love, piety, and fear of God in his heart. This can be achieved by providing him with age-appropriate experiences and knowledge so that he is familiar with general principles and the basic principles of culture and science. This should stimulate the search for knowledge and habituation to meditation and scientific follow-up and develop the mental faculties and various skills of the student and entrust him with guidance and discipline. He should be educated in Islamic social life where brotherhood and cooperation prevail and value responsibility and bear accountability, in addition to how to serve his community and country and develop the spirit of advice and sincerity towards his guardians. Student determination is encouraged to restore the glory of his Muslim nation to which he belongs and to continue on the path of glory and honor. Another important goal is to accustom him to spend his time in useful reading, invest his leisure time in useful works, and arrange his activities in such a way that his Islamic personality will flourish and become strong. Student's awareness is strengthened so that he knows - according to his age - how to counter misleading rumors, destructive teachings, and alien principles. All of which aid the student in preparation for what follows this stage of life (Al-Aiban, 2013).

2.2.2 Characteristics of Mental and Linguistic Development for Intermediate Students

Zahran (2005, pp. 15-16) defines the stage of adolescence as “physical, physiological, cognitive, behavioral, emotional, and social changes that the individual undergoes at various stages of development”.

Intermediate school students are characterized by hormonal and physiological changes during adolescence, as well as the spatial changes that occur for students when they move from their first primary school, and the different teaching methods, in addition to the change in their subjects from the simplest to the most complex and abstract (Jassim & Al-Rikabi, 2014).

This stage, as Zahran (2005) explains, is marked as a period of differentiation and maturity of abilities and mental development. The growth of intelligence increases and becomes more distinct. Mental abilities become more accurate in expression, such as verbal skills. The speed of performance and skills increase. The ability to learn and acquire skills and information grows, attention increases and the young person becomes capable of solving problems and memory grows based on understanding and deducing connections, the ability to remember and recognize grows, the portfolio is strengthened, the ability to abstract imagination based on words increases, and the ability to deduce, infer and analyze.

In a study conducted by Jassim and Al-Rikabi (2014) to find out what problems intermediate school students face; they made a list of recommendations. Firstly, the use of modern pedagogical tools makes the student's role in learning more effective and creative. Secondly, teachers should use teaching methods that make lessons interesting and enjoyable for students and inspire them to learn and succeed with

excellence. Lastly, modern teaching methods that encourage students to understand and be creative instead of just memorizing should be followed (Jassim & Al-Rikabi, 2014).

Perhaps the foregoing indicates that the students at this stage is at an advanced stage of their mental and linguistic development. This development could be used to help their benefit from scientific information and guide them to better learning. All opportunities should be facilitated to ensure that a process takes place whereby the student learns under the best conditions, learns about sources of knowledge, uses them constructively for the benefit of their own intellectual development, encourages to achieve academically, and provides educational experiences that enable the growth of thinking and the transition of students from the world of regular learning to the world of electronic learning in proportion to their level of intellectual development and cognitive maturity.

2.2.3 The Importance of Intermediate Education

The intermediate stage has specific goals that differ from those of the preceding and following stages. It is in the middle and has general aims common to the types of world education, and includes some important aspects. Students continue the work of the previous stage and increase their levels of growth in terms of physical, mental, social, spiritual, and emotional aspects. They are prepared for a successful life and provided with appropriate opportunities to enable those with different abilities and preparations to continue education in the later stages, each according to their inclinations and desires. Al-Hugail (2011) states that this is the time for students to know their roles in serving the school and society.

Intermediate school is considered the mediator of the contract in the different stages of education, so it is a transitional stage in the lives of students because of its position on the educational ladder.

A number of factors contribute to this stage. Firstly, the intermediate stage is the place where what has been achieved in the basic stage is consolidated and extended in terms of the development of basic skills and knowledge. It is also the stage where an intermediate generation is prepared in its sufficiency, qualification, and skills, which can help it to carry out its responsibilities and make its way in practical life. It is the stage that determines the student's future life, for it coincides with the end of childhood and the beginning of adolescence and the psychological, physical, mental, and moral changes that follow this age, and it strives to meet the needs of students according to the characteristics of puberty (Al-Sunbul, 1998). In addition to this, Al-Hugail (2011) mentions that it pays close attention to identifying the inclinations, desires, preparations, and abilities of the students and directing these inclinations and abilities for the benefit of the students and society.

As we explore the broader global context of intermediate education and its significance in shaping linguistic skills, it is essential to examine how these concepts resonate within the specific cultural and educational landscape of Saudi Arabia. With Arabic grammar serving as the backbone of language proficiency, the unique challenges and opportunities present in the Saudi educational system not only reflect global trends but also highlight the importance of contextualizing language instruction to meet the needs of learners in this region. This connection underscores the relevance of understanding Arabic grammar in the framework of intermediate education, paving the way for a more focused discussion in the following section.