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**ENGLISH LANGUAGE TEACHERS' PERCEPTIONS OF
IMPLEMENTING DIGITAL GAME-BASED LEARNING IN
THE UAE MIDDLE SCHOOLS**

Israa Mohammed Abbas



February 2022

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UAE MIDDLE SCHOOLS

Israa Mohammed Abbas

This thesis is submitted in partial fulfillment of the requirements for the degree of
Master of Education (Curriculum and Instruction)

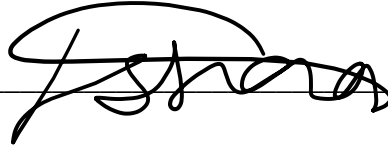
Under the Supervision of Dr. Badreyya AlKhanbooli

February 2022

Declaration of Original Work

I, Israa Mohammed Abbas, the undersigned, a graduate student at the United Arab Emirates University (UAEU) and the author of this dissertation entitled “*English Language Teachers’ Perceptions of Implementing Digital Game-Based Learning in the UAE Middle Schools*”, hereby, solemnly declare that this thesis is my own original research work that has been done and prepared by me under the supervision of Dr. Badreyya AlKhanbooli, in the College of Education at UAEU. This work has not previously formed the basis for the award of any academic degree, diploma, or a similar title at this or any other university. Any materials borrowed from other sources (whether published or unpublished) and relied upon or included in my thesis have been properly cited and acknowledged in accordance with appropriate academic conventions. I further declare that there is no potential conflict of interest with respect to the research, data collection, authorship, presentation, and/or publication of this dissertation.

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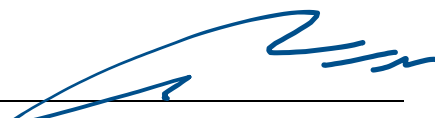
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Abstract

This study investigates how English teachers perceive the use and implementation of DGBL in middle schools in the United Arab Emirates. Digital game-based learning is a relatively new method that is being integrated into the classroom. This method requires ICT skills in line with pedagogy to be practiced in a meaningful way. The main objective of this study is to highlight the positive aspects and the obstacles that teachers may face when using DGBL in the classroom. The study used a mix of methods to answer the research questions. The first phase used the quantitative method through a questionnaire distributed to English language teachers (n=70). In the second phase, the qualitative approach was used in a semi-structured interview with English teachers (n=10) selected from the quantitative data population of this study. This study shows that English teachers like to use and employ digital games in the classroom because they motivate students and contribute to class management, which helps students to process the subject matter better. The findings of this study pave the way for further research on the use of digital games in the classroom from the teachers' perspective to overcome the negative aspects of integrating DGBL in school. Furthermore, the quantitative and qualitative data results show the consistencies and inconsistencies of the findings. However, most teachers agreed that DGBL is a source of motivation. It, therefore, facilitates the learning process and suggests that the biggest stumbling block in using DGBL is technical problems such as internet connection and lack of time

Keywords: Middle Schools, English Teachers Perspectives, Digital Game-based Learning, Motivation, Engagement, ICT Implementation., The United Arab Emirates.

Title and Abstract (in Arabic)

إدراك معلمي اللغة الإنجليزية للتطبيق الإلكتروني للتعلم القائم على أساس اللعب للفصول المتوسطة في دولة الإمارات العربية المتحدة

الملخص

إن الغرض من هذه الدراسة هو التحقيق في كيفية إدراك معلمي اللغة الإنجليزية لاستخدام وتنفيذ التطبيق الإلكتروني للتعلم القائم على أساس اللعب في المدارس المتوسطة في دولة الإمارات العربية المتحدة. التعلم القائم على الألعاب الرقمية هو طريقة جديدة نسبياً يتم دمجها في الفصل الدراسي. وتتطلب هذه الطريقة مهارات تكنولوجيا المعلومات والاتصالات بما يتماشى مع علم أصول التدريس ليتم ممارستها بشكل هادف. الهدف الرئيسي من هذه الدراسة هو إلقاء الضوء على الجوانب الإيجابية والعقبات التي قد يواجهها المعلمون عند استخدام التطبيق الإلكتروني للتعلم القائم على أساس اللعب في الفصول الدراسية. وللتعمق أكثر للإجابة على أسئلة البحث، فقد استخدمت الدراسة المنهج المختلط. ففي المرحلة الأولى، تم استخدام الطريقة الكمية من خلال استبيان موجه لمعلمي اللغة الإنجليزية (العدد = 70). وفي المرحلة الثانية، فقد تم استخدام النهج النوعي في مقابلة شبه منظمة مع مدرسي اللغة الإنجليزية (العدد = 10) تم اختيارهم من مجتمع البيانات الكمية لهذه الدراسة. وقد أظهرت نتائج هذه الدراسة أن مدرسي اللغة الإنجليزية يحبون استخدام الألعاب الرقمية واستخدامها في الفصل الدراسي لأنها تحفز الطلاب وتساهم في إدارة الفصل، مما يساعد الطلاب على معالجة الموضوع بشكل أفضل. وتمهد نتائج هذه الدراسة الطريق لمزيد من البحث حول استخدام الألعاب الرقمية في الفصل الدراسي من وجهة نظر المعلمين للتغلب على الجوانب السلبية لدمج التطبيق الإلكتروني للتعلم القائم على أساس اللعب في الفصل الدراسي. علاوة على ذلك، تظهر نتائج البيانات الكمية والنوعية التناقض والتضاربات في النتائج. وقد اتفق معظم المعلمين على أن التطبيق الإلكتروني للتعلم القائم على أساس اللعب هي مصدر تحفيز وبالتالي، فإنه يسهل عملية التعلم وقد أشاروا إلى أن العائق الأكبر في استخدام التطبيق الإلكتروني للتعلم القائم على أساس اللعب هي المشاكل التقنية مثل الاتصال بالإنترنت وضيق الوقت.

كلمات البحث الرئيسية: التطبيق الإلكتروني للتعلم القائم على أساس اللعب، تحفيز، المنهج المختلط، تكنولوجيا المعلومات والاتصالات، النهج النوعي.

Author Profile

Israa Abbas is an English teacher at a private school in Al Ain city in the United Arab Emirates. She has over seven years of experience teaching middle school students learning the American Curriculum. She believes that teaching is a noble task that should be conveyed to the new generation with love and patience. Israa has received several awards from the school's administration as a hardworking teacher who teaches the subject matter fun and easy way.

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I am genuinely grateful to my husband, family, and friends, who did not hesitate to help and support me in completing this postgraduate work.

Dedication

To my beloved husband and family

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Chapter 1: Introduction

1.1 Overview

With the advent of novel mobile technologies in the last couple of years, the experience of learning has changed extraordinarily, and one of the technologies where the experience has changed drastically is Digital Game-Based Learning (DGBL). Digital Game-based Learning (DGBL) is a teaching method that integrates educational content or learning principles into video games to engage students (Coffey, 2009). In Computer Assisted Language Learning, digital game-based learning DGBL has become the primary and significant component. DGBL is an instructional method that incorporates educational content or language learning principles into video games to engage learners. The applications of DGBL are based on the constructivist theory of education (All, Castellar, and Looy, 2016). This chapter addresses the purpose, significance, limitation, and research questions of this study.

The theory of DGBL is based on the following principles: safe practice, experiential learning, and interaction. One of the exciting aspects of DGBL is that students are provided with an opportunity to experiment and then see how their experiment went. Because of these features, DGBL is becoming more and more popular nowadays (Anastasiadis, Lampropoulos, and Siakas, 2018). DGBL began as an instructional approach that could be personalized through computer-based applications. However, through the progression of learning technologies over the years, DGBL can now be considered a stand-alone education setting capable of addressing numerous learning needs.

According to Coller and Scott (2009), any approach that encompasses both teaching and learning utilizes DGBL environments or digital games to create an environment where the learner is intrigued, engaged, challenged, and entertained. In such an environment, achieving learning goals becomes faster because it is easy to track progress and ensure that the learner stays on the path of learning (Spires, 2015). In addition, web and mobile versions of DGBL of stand-alone games are being developed, and some of them are being integrated into the foreign language learning process. According to Smith and Abrams (2019), one of the exciting features of digital games is that they promote collaboration and problem solving, and this combination of features that learning is enhanced.

In other respects, Rieber, Smith, and Noah (1998) have repeatedly and consistently shown that digital games improve the motivation and engagement of the learner. One of the reasons for this is that because digital games are visual and interactive, they attract users and capture their attention. This is another reason why digital games can enhance learning. According to Abrams and Walsh (2014), the immediate feedback and the sense of connectedness that users gain lead to a successful digital game for vocabulary acquisition. In addition, the digital game platform has an inherent advantage due to immediate feedback. It has been shown that learning is not as effective when users do not receive immediate feedback as it is with platforms that provide immediate feedback. This is especially true for language learning, as learning a new language is difficult. Therefore, when users receive immediate feedback, it not only enhances learning and makes learning more enjoyable.

Additionally, a DGBL environment effectively helps users work incrementally toward a goal, thereby improving the users' overall learning experience. Although

users of these environments occasionally make mistakes, the risk-free nature of these platforms allows perceived failures to become challenges that can be overcome. When learners fail, they revise their actions until they find the right course of action. This makes the learning activity much more interesting and fulfilling (Anastasiadis et al., 2018).

Another interesting aspect of DGBL is that, according to various studies, play is a primary and fundamental mechanism for learning and socialization. This is true for all cultures in the world and since DGBL is based on these principles, it is more effective than traditional learning methods (Anastasiadis et al., 2018). However, while there are numerous studies regarding the effectiveness of DGBL in learning languages, only a few studies have investigated the perception and attitudes of teachers toward implementing DGBL (Chen, Shih, and Law, 2020).

The conclusions of previous studies are pretty contradictory, as positive, uncertain, and adverse outlooks were testified in different studies. Chen and Law (2016) reported that "Putting students together allows them to co-construct knowledge and negotiate meaning in the GBL environment, but the collaboration experience can hinder their motivation." (p.1210). NFER (2009) found that the studies revealed a discrepancy between teachers' perceptions of DGBL integration and the actual use of this method. For instance, in a study that looked at integrating DGBL into classroom practice, 60% of participants showed positive attitudes toward implementing DGBL is still less than half of the participants integrated DGBL into the classroom. However, the widely held opinion is that teachers do not always have an optimistic attitude and are not as eager as learners to use digital games in the classroom due to the generation gap.

Interestingly, even in situations where teachers have expressed a positive attitude, it has been observed that teachers generally have limited knowledge of how to use digital games. This is especially true for older generations (Chang and Hwang, 2019). In situations where teachers were ambiguous or unsure about the use of digital games, they were interested but concerned due to their lack of digital literacy. However, it has been shown that teachers are very eager. Various researches have shown that there is an urgent need to establish teacher training so that teachers can be supported in terms of DGBL (Huizenga, Ten Dam, Voogt, and Admiraal, 2017).

Another essential aspect to consider is that if teachers are uncomfortable with DGBL platforms, then teachers' exposure to DGBL platforms may lead to various learning hurdles. In addition, it is also possible to create other knowledge gaps between students and teachers. Moreover, it is also essential to assess teachers' perceptions of the value of DGBL, as it has been shown that teachers in elementary schools are more likely to use DGBL platforms than teachers in secondary schools (NFER, 2009). Therefore, to understand the gap, it is necessary to know teachers' perceptions and the hurdles they face in using DGBL methods.

According to Hamari and Nousiainen (2015), the meaningful implementation of GBL can be seen as an example of such innovative ICT-enhanced teaching. It can be assumed that specific characteristics and circumstances are required for it. These include the willingness to explore unfamiliar territory, confidence in one pedagogical and technological competencies and skills, openness to new solutions, and an environment that supports and encourages innovative efforts. In addition, it is also essential to know teachers' perceptions because teachers may think they could be replaced by DGBL platforms and therefore do not want to use these methods. If the

teachers are competent in DGBL, this will lead to even better learning as the knowledge gaps between students and teachers will narrow. If this is the case, then it is very likely that DGBL will help not only the students but also the teachers (Watson and Yang, 2016).

1.2 Statement of Research Problem

Middle school teachers in the UAE are generally not fully aware of the use of DGBL in the English classroom, and the literature suggests that they are generally not aware of its benefits either. Therefore, this study aims to identify the reasons why middle school teachers in the UAE do not pay attention to DGBL and how it can be used to benefit students.

1.3 Study Purpose

This study explores teachers' perceptions of the use of digital games in conjunction with learning materials, how this contributes to students' motivation, and what barriers they see to the implementation of digital game activities. It is important to know the teachers' perspective because the resistance among teachers has been described in the literature. If the resistance is known, it will be easier to implement DGBL in schools.

1.4 Significance of Study

The study is significant because much research has been done on the effects of DGBL from the students' point of view, while there is little research from the teachers' point of view and their problems. As far as the author of this study is aware, no study looks at teachers' perceptions of digital learning in the context of the UAE school

system. Therefore, the findings of the study could contribute to our knowledge, research, and teaching practice.

1.5 Limitations of Study

One of the study's major limitations is the availability of the sample. Due to the Covid 19 pandemic, schools were closed, and classes were held through online channels. Accordingly, the researcher could not complete the current study in the planned time. Therefore, it was difficult for the researcher to collect the necessary qualitative data through semi-structured interviews. In addition, most schools were reluctant to accept people from outside the school to apply the caution protocols. This situation hindered interview data collection and limited access to the data. In addition, the study was based on a relatively small sample conducted in Al Ain. Therefore, the data could be biased by the selection of the sample.

1.6 Research Questions

This study aims to find out the views of English teachers about the implementation of DGBL in the UAE. The target of this study is to answer the following research questions.

- (a) What do English teachers in the UAE report about the use of DGBL?
- (b) How do English teachers view the use of DGBL in the English classroom?
- (c) Are there any variations between teachers' self-reports and their views on using DGBL?

1.7 Organization of Study

The current study emphasizes teachers' perception of DGBL implementation in the classroom and how it motivates students to achieve better results. There were four main topics addressed in chapter one: the problem of the statement, the purpose of the study, the significance of the study, the limitations of the study, and the research question. chapter two will review insight into a literature review on DGBL related to the influence of DGBL on students' motivation, enrichment, and reinforcement of English teaching from English teachers' perspectives. This chapter also links to DGBL theories, such as Henry Murray's theory of achievement motivation.

Chapter Three highlights the study's methodology in terms of the mixed-method method design, the type of sample, sampling procedure, and demographic information of the participants. Chapter four presents the results and findings of teachers' opinions and understanding of digital game-based instructions using the questionnaire and the interview outcomes. Chapter five covers the discussion on the findings, conclusion of the study, limitations, and recommendations of the entire study.

Chapter 2: Literature Review

2.1 Introduction

This chapter looks at DGBL in terms of improving language skills, which are seen as the main feature of improving student learning. The focus of the whole study is on the perceptions of teachers who use DGBL in the UAE school environment. Information on this aspect will be collected to increase knowledge on how DGBL motivates students in the learning process when it is used in the classroom. The theory of achievement motivation is also applied in relation to the social construction of DGBL to enhance the communicative, personal, and social skills within the developmental structure based on the learning factors.

This research addresses the perceptions of teachers in the UAE regarding the use of digital media and devices to create a gamified environment in the classroom to enhance student learning. In other words, this study will provide teachers who use DGBL in school with a discussion that will improve student engagement, leading to better understanding and improved cognitive learning.

2.2 Digital Game-Based Learning (DGBL)

Nowadays, the development and advancement of technology have affected every aspect of life and hence the learning process related to the classroom. The impact of digital technology on GBL is considered as a learning process based on games. DGBL as a learning tool is designed to balance learning with the application of the participant's ability to retain knowledge. According to Chiu, Kao, and Reynolds (2012), DGBL facilitates a meaningful and engaging context for language learning in

which the learner has the opportunity to actually apply the language rather than merely practice and rehearse it.

The element of practical application also takes into account the digital medium to enhance learning with GBL. DGBL also provides learners with very engaging behaviors to practice and gain experience. They can also interact with others in an environment that provides simulation in a real-world context. Alshaiji (2015) stated that the use of digital devices by language teachers, especially in English classes, improved the learning experience related to the use of different types and races of games. Achieving positive outcomes in GBL, such as points, badges, and a high rank facilitates acting as a motivator as well as enhancing the social and cultural relationships for learning new languages.

2.2.1 Types of DGBL

The current approach of DGBL is not limited to colors on the number but refers to their use in learning content with the great advantage of improving learning ability. The development of the DGBL approach also takes into account various factors such as the budget, the culture of the institute, and the students as the primary audience for whom the entire learning strategy is being developed. Conducting a practical assessment and evaluating all the elements will help determine the most appropriate method that will impact the learning process with a more important aspect of achieving the goal. Dellos (2015) stated that assessment and evaluation of various factors also help to determine the DGBL that is relevant to a particular topic and meets the requirements of a particular task.

The second type of DGBL is simulations, which are based on the use of digital media combined with the creation of scenarios in a real context (Martens, Diener, and Malo, 2008). This enhances students' ability to understand situations in which they may face various hazards and difficulties in real life and promotes awareness of the impact of different elements in a practical situation, such as decision-making strategies to control costs in certain activities. Finally, another type of DGBL refers to mini-video games, such as vocabulary quizzes, which were developed to enhance the experience through the development of short games as part of a course study on the use of the digital medium to improve the learning mechanism.

Piirainen-Marsh and Tainio (2009) noticed that repetition and imitation are crucial features of video games that make them a suitable medium for vocabulary learning in ESL classes. By repeating the vocabulary words in the audio commentary and text, players paid more attention to the new vocabulary words and their meanings. According to Sawyer, Smith, Rowe, Azevedo, and Lester, (2017), "Introducing facial expression tracking can improve the accuracy of student models, both for predicting student learning gains and also for predicting student engagement." (p.192)

The fourth type of DGBL is considered under the aspect of playful tools, designed by using digital tools in the application to provide the objective of learning. The element of learning is provided from playful tools using a digital medium with the context of providing students with the capability to handle the situation according to different logistic needs within the gaming process. According to Zhao, Chis, Muntean, and Muntean (2018), the fifth type of DGBL is interactive which is developed with the pattern of following similar interactions like board games to generate cause-and-effect and teach the learner the fundamental concepts of a

particular topic. The cause-and-effect interaction also allows the learner to visualize various behaviors to learn the working pattern and carry out certain practices.

2.2.2 DGBL and Gamification

The main difference between DGBL learning and gamification in the classroom learning aspect is related to the context of training provided under the DGBL approach. In contrast, gamification is more about the mechanics of the game application (Caponetto, Earp, and Ott, 2014). The DGBL approach is used more in delivering training to students by using different game elements to enhance their ability to gain specific skills. The main objective of DGBL is to provide specific learning outcomes to gain particular knowledge about a certain subject. The DGBL approach is related to the main content of the subject. It uses the subject to develop the game to provide interaction that enhances learning objectives with interactive fun activities. Pesare, Roselli, Corriero, and Rossano (2016) explained that "games enhance student motivation, and this means improvement also in knowledge acquisition." (p.5)

According to Al-Azawi, Al-Faliti, and Al-Blushi, (2016), gamification differs from DGBL in applying mechanics in a non-game approach with the primary objective of promoting certain behaviors as well as triggering outcomes for learning particular features. Gamification is more based on the context of enhancing the learning process with various incentives such as points, badges, and leaderboards. The main difference between these two is integrating the training content with the game mechanics, as GBL fully utilized all these elements to make the game more in the training context. However, Al-Azawi et al. (2016) stated that gamification is based on using the game's

features to generate rewards for carrying out the training process to complete specific learning objectives.

2.2.3 Significance of Gamified Learning in Education

The significance of games in the learning process related to the classroom environment is directly concerned with three major areas: reinforcing the objective of concept learning within the classroom, enhancing the engagement level effectively with the course material, and providing various multiple dimensions of understanding the subject. In the contemporary school environment related to improving the learning process among the students, the learning is based on identifying the strategic application of games to generate learning objectives effectively and appropriately by using all resources according to the context. According to Brezovszky et al. (2019), the current practice is more based on the utilization of digital technologies to develop games more in areas of contributing toward practical learning experiences from games as a primary context of usefulness in making the educational objectives more applicable and ideal.

Crocco, Offenholley, and Hernandez (2016) likewise depicted that the gamified learning approach also creates a sense of responsibility among students for the outcome generated from their role during action in the game. The gamified learning approach within the classroom environment also enhances leadership qualities among students to take a systematic and planned approach in the video games, where the problems are presented in a manner that relates with easy level to become more challenging. The higher the level of difficulty gets in the video game; the player must

use his problem-solving skill to address the progress in the challenge (Crocco et al., 2016).

The teachers are instructed to integrate mobile digital game-based learning applications using digital devices such as YouTube, whiteboard, apps, etc., to enhance learners' motivation and lifelong learning. Ebrahimzadeh and Alavi (2016) experimented with evaluating the impact of using digital games for learning vocabulary and creating motivation among EFL learners. The results depicted that the use of digital video games increased the ability of students to learn vocabulary and enhanced their level of motivation. It is possible to accomplish EFL learning via activities that can be audio or video, and these could be made available through mobile learning. Digital games are also likely to offer learners an interactive learning experience and bolster independent learning compared to traditional strategies (Yükseltürk, Altıok, and Başer, 2018). Moreover, digital games also enable students to connect learning content to everyday life (Cam and Tran, 2017).

2.2.4. DGBL in the UAE

Being a relatively new country, United Arab Emirates (UAE) has a new and advanced education system. The government funds the public education and curriculum to match the development goals and values of the UAE. In UAE, English is emphasized as a second language because the medium of instruction in public schools is Arabic. The Educational reforms focus on greater accountability, improved professionalism, better preparation, and high standards (Ali Ramsi, 2015). An important role is played by language competency in children's early development. Therefore, there is a need for alternative resources to replace traditional education to

enhance effectiveness. Significant challenges are encountered in learning English for Arabic-speaking individuals in UAE.

Due to such DGBL, there is a need to provide these opportunities to acquire linguistic knowledge coherently and systematically. In such cases, GBL is likely to play an essential role in reinforcing learning in the classroom for supporting English language learning among Arabic speakers. GBL in the UAE would help the learners focus on the letters themselves and learn their pronunciation (Ali Ramsi, 2015). As the students fail to recognize the English letters, the games could display some pictures with the letters and some songs. In conclusion, this highlights the importance of using educational theory and game design to build a complete game design.

2.3 Theoretical Framework

2.3.1 Henry Murray's Achievement Motivation Theory

The theory of achievement motivation defined by Henry Murray refers more to the study of the combination of internal motivation and external demands to achieve specific objectives with a higher level of motivation. The achievement motivation theory is more associated with the context of individual nature that needs dynamic and complex integration of various factors to generate outcomes specific to the environment. Under this theory, the needs and motivation factors are more stressed as the main driving factor to promote behavior for an individual. This, according to Franciosi (2017), can be related to the motivation level of an individual to carry out certain practices with the factor of affiliation towards a particular social group for the organization.

In the same frame, Al-Azawi et al. (2016) depict this theory as the area of providing context to the achievement of motivation is based on specific elements such as autonomy where an individual can adopt particular behavior with the independence of others in the learning process; dominance is also the main motivational factor that provides the need to control and influence others from an experience. According to Al-Azawi et al. (2016), motivation is also achieved through affiliation. An individual enjoys the company of others with the exhibition's objective is related to accepted and heard by others.

The achievement of motivation is also related to avoiding harm by taking precautions to prevent a particular injury-specific behavior. Achieving motivation is also a related play factor based on the need for enjoyment and fun with the element of order to perform all operations in an organized manner. Taub et al. (2018) explained that the main objective of motivation achievement theory is related to the aspect of improving the understanding level, which is based on the need of an individual to carry out assessment and analysis for any potential risk that may act as a hurdle to achieving the objective.

The theory of achievement motivation is used in this study for the approach of DGBL essentially in three main areas: Intervention, Enrichment, and Enforcement. The element of intervention is related to providing students with learning materials to improve their understanding of a particular subject from proper utilization of the game process to address the problem that is faced by the student toward achieving the learning objective (Palomo-Duarte et al., 2016). The element of enrichment, however, is related to using different mediums to present the game to enhance the mastery aspect of students for a specific material. The enrichment is mainly provided by using various

elements of life images, videos, texts, audio files, and infographics to encourage students to explore challenging ways to process the content and gain information.

The reinforcement factor can be applied in any way that encourages all students to take part in the game process. Instead of using games to teach, it needs to be more related to engaging in applying the full content. This can be practiced by developing games that require group activity, and it is based on multiple aspects where students need to compete against each other to gain a high level of the score and actively benefit in meeting the student needs to learn new things effectively and retaining the information (Ke et al., 2016; Yee, 2006).

The present study highlights GBL's potential benefits for the teaching and learning process based on the achievement motivation theory and computer engineering studies. If students are motivated to learn and develop, they will likely achieve the desired goals. This is likely to pose a dual experience considering the particularities of the practical and theoretical components. Therefore, the study aims to assess the effect of student satisfaction, considering their level of motivation while they are taught through DGBL. It is suggested that the personalities of an individual reflect the behaviors controlled by needs, based on the theories that are based on individual character; the same is the case with an achievement motivation theory. Based on the achievement motivation theory, mostly the psychogenic needs function on an unconscious level; however, an important role is played by it in the personality building of the children.

2.4 DGBL in Language Learning

For many years, language learning has been limited to traditional teaching methods. Students are just considered passive learners and are expected to learn the language through rote learning and teacher-centered instruction (Green, 2020). This traditional perspective of language learning has gradually and consistently shifted to a more contemporary teaching method that is student-centered and emphasizes real-life learning and application. The advancements in technology also aided the changes in the language classroom. However, Green (2020) noted that despite these changes brought by technology, there is still limited research on how it can affect language learning and the acquisition of specific skills that students need to succeed in life. Because of this, Green (2020) conducted qualitative research to understand how the use of technology, specifically video games, can improve and encourage strategic language teaching, motivate students, and enhance students' learning experience.

In Green's (2020) research, thirty Chinese junior students were engaged in a game called *Scribblenauts* to learn English. The participants played the game for thirty minutes every session, and they reflected on their experiences after. The researcher utilized semi-structured interviews, focus groups, and documentation to collect the needed data. The research showed that students become motivated to learn English through *Scribblenauts* because it consists of collaboration and equally levelled gameplay and learning. In addition, the feature to have multiple possible solutions in *Scribblenauts* allowed students to become creative problem-solvers and learn new vocabulary. The students also gave the game more value and, in fact, recommended it as a teaching instruction because it allowed them to be creative and solve problems

collaboratively while having fun. The results found in this study were also aligned with other research studies that focused on the use of DGBL inside the class.

On a related note, Cam and Tran (2017) researched to understand and evaluate the use of games in teaching English grammar for first-year English primary students. There were twenty-five students who participated in this study; all of them were first-year students who had studied English for seven years by the time the research was conducted. The researchers employed a mixed-method approach to avoid ambiguity in their study. They used the following instruments to collect the data needed for the study: the questionnaire with five closed questions answered with a five-point Likert scale, the observations conducted to determine the effectiveness of games in language teaching and learning, and the semi-structured interviews conducted with selected participants. The responses yielded from the questionnaire showed that most of the students recognized that game integration did not just create excitement but also allowed them to use the learned grammar structure and speak in class. The researchers also concluded that students could learn better because they liked the teacher's new way of teaching grammar since it is integrated with games.

In the same research, Cam and Tran (2017) found that the students who learned the grammar topic using games had more chances to collaborate and participate in the class than the students who received traditional instruction for the same grammar lesson. The students' speaking time in the target language also showed a significant increase of 70-79%. Furthermore, most of the students expressed their positive perceptions of DGBL. According to their responses, they enjoyed the "non-stressful atmosphere, high motivation, and positive competition inside the classroom created by games" (p.66). In addition to the positive reinforcement, the students were eager to

learn the subject and win the games since they would receive a reward at the end of the game. The researchers postulated that the use of games in English classes should be adopted from very young learners to adults because of the positive impact on students.

2.4.1 Implications of DGBL on Students' Motivation

A great deal of research has been conducted and completed to demonstrate the impact of DGBL on students' motivation. Almost all research findings in this area show that DGBL positively affects students' motivation to learn (Ebrahimzadeh and Alavi, 2016; Gamlo, 2019; Lin and Lan, 2015; Cam and Tran, 2017). For example, one of the studies conducted by Ebrahimzadeh and Alavi (2016) examined the effect of a commercial digital video game on students' language learning motivation. The study also observed the impact of digital videos as a source of enjoyment and motivation in learning new vocabulary. Using cluster sampling, the researchers selected 136 male undergraduates from one junior and two senior students.

The senior students were divided into three different treatments: Players (those who played the game), Watchers (those who watched the game), and Readers (those who read the game thoroughly), whereas the junior students were divided into the Watchers and Players' treatments only. In Gamlo's (2019) study, the impact of mobile digital game-based learning apps on students' motivation to learn English was examined. In this quantitative study, the researcher examined participants' perceptions of the following free DGBL mobile apps: Gamebooks: Great Reader, Game to learn English – EnglishTracker and Learn English Vocabulary Pop Quiz. Thirty Saudi

female beginner-level students at King Abdulaziz University were selected to be part of this study. The participants used the apps for one hour in six weeks.

Two types of questionnaires were administered to the participants to determine whether the mobile games impacted the students' motivation. Both the pre-and-post-MGBLLA questionnaires were answered with a five-point Likert scale. However, the pre-MGBLLA questionnaire contained eleven questions designed to determine how students were motivated to learn English. The post-MGBLLA questionnaire contained twelve questions designed to assess whether and how the apps changed students' motivation to learn English.

Based on the data collected with the pre-MGBLLA questionnaire, Gamlo (2019) found that students exhibited higher levels of instrumental motivation than integral motivation. This can be attributed to the fact that English was a required course that students had to pass to continue their studies, so they had no choice but to be motivated to learn it. Furthermore, the post-MGBLLA questionnaire results presented the participants' positive perceptions of the use of mobile games in learning English. Students believed that mobile games improved their motivation to learn English and saw the experience as something memorable and enjoyable that they would like to participate in again and again.

Therefore, it is not surprising that Likert scale scores showed a significant difference between the mean scores for pre-integration and post-integration. Finally, Gamlo (2019) postulated that using MGBLLA to teach English as a foreign language can significantly support traditional teaching and ultimately improve students' motivation. She also encouraged the teachers to develop DGBL activities to enhance students' learning experience.

2.4.2 Teachers' Use of DGBL in the Classroom

The use of GBL in the classroom by teachers must be focused on enhancing instructional objectives related to improving student learning and knowledge acquisition. Teachers' use of GBL in the classroom is related to facilitating instruction and creating tutorials on social media platforms such as YouTube (Chen et al., 2015). Consequently, the creation of manuals and tutorials will also increase engagement, which is the main goal of the learning process. Hsu et al. (2017) stated that the use of GBL also provides various options to develop the content individually according to the different needs of students to improve their learning ability.

2.4.3 The Implication of DGBL in the UAE Middle Schools

DGBL for the English language in the UAE school setting is a new concept. Therefore, it requires adequate planning to generate maximum output to improve learning abilities. Pho et al. (2015) explained that the implication is mainly related to developing a concrete plan for the primary purpose, which the whole approach is considered to ensure success. A further implication of this framework is to engage students in understanding different games that make the entire learning process more effective, solicit feedback from students to modify current practice, and develop a learning platform based on the approach to using digital games in DGBL (Huizenga et al., 2017).

2.5 Summary

The Chapter tackled achievement motivation theory that provides the rationale for making the UAE students independent learners. DGBL's approach in the context

of the teaching process for the UAE school region must be based on providing a platform for students to explore games freely according to their aptitude to acquire maximum knowledge. DGBL approach refers to the design of games according to the subject or area of development and learning.

Using digital devices for playing games from the learning perspective also allows for deepening the learning process through close collaboration between teachers and students. The use of digital technology in DGBL facilitates the application of knowledge from the virtual context to the real world while coming across any familiar situation in the real world. Using digital devices by the teachers mainly in the language learning process provides English language teachers with a strategic advantage to achieve the goals associated with DGBL.

Chapter 3: Methodology

3.1 Introduction

Defining the exact research problem and answering it through a well-defined methodology is the key to a project's success. This study is conducted to know the middle school English teachers' perception of implementing digital game-based learning DGBL in the classroom by answering the following three questions:

- (a) What do English teachers in the UAE report about the use of DGBL?
- (b) How do English teachers view the use of DGBL in the English classroom?
- (c) Are there any variations between teachers' self-reports and their views on using DGBL?

Thus, this section of the study is designed to elaborate on the methodology that is used to answer the three questions above, the techniques used to gather data on the said questions, and the methods used to analyze the data. The chapter also addresses the limitations and delimitations, ethical constraints, and instrumentation formation techniques.

3.2 Research Methodology and Design

This study has employed a mixed-method design (Cresswell, 2014) to collect and analyze the data as it has become one of the prominent means to answer the problem which requires an in-depth analysis of the problem through detailed responses. According to Cresswell (2014), there are four types of mixed methods research: i) embedded, ii) exploratory, iii) explanatory, and iv) triangulation. In this study, explanatory techniques were used in two phases (QUAN-QUAL) to find out how middle school English teachers in the United Arab Emirates view the

implementation of DGBL in the classroom. The reason for using this pattern is to comprehensively follow up the quantitative findings with qualitative data (Creswell and Creswell, 2005).

In the first step of this technique, the quantitative data will be collected through closed-ended questionnaires including a 5-point Likert scale, followed by open-ended questionnaires to answer the research questions because, in this part, the close code can be used to analyze the results related to teachers' understanding of DGBL and the impact of DGBL on students' motivation, enrichment, and reinforcement in learning English. This quantitative data will then be followed by qualitative data collection, used to explore the research questions further. The reason for using the qualitative technique is that different DGBL techniques are used in different schools in the UAE. Then, semi-structured interviews are conducted with the teachers at different private schools in Al Ain to know the factors that inspired them to adopt the different techniques observed, to find out the impact of the selected technique on learning outcomes, and understand the challenges related to these techniques. In the end, a clear picture is developed from the use of quantitative and qualitative data in the results section.

3.3 Research Population

A research population can be defined as a large group of individuals or objects with specified characteristics that a researcher follows to answer the research questions (Cresswell, 2014). This population is then used to form the research sample, ultimately used to conduct the research using instruments. This study is about the perceptions of middle school (6-8) English teachers in implementing DGBL in the

classroom. Almost all teachers are Arabs, and English is their second language. Half of the sample population has more than 15 years of experience. Therefore, all schools using DGBL techniques for teaching English were selected as a research population due to the research topic and problems.

3.4 Research Sample

A research sample is a group of individuals selected by the researcher from a large population-based on their similar characteristics to the group through defined methods (Van, 2017). The research analysis and tests are conducted on the sample and the results are applied to the whole population. According to the needs of this study, the mix method technique is used to answer the research questions, and a combination of different research instruments is used to obtain first-hand data from the respondents just as different samples were used for different research instruments from the entire research population.

For quantitative data gathering, a sample of 70 teachers from different schools in Al Ain who teach English using digital game-based learning was selected for quantitative data collection. From this sample, ten teachers were selected for the interview. For the semi-structured interviews, a sample of 10 teachers from different private schools in the UAE who teach English using digital game-based learning was selected. This sample is selected randomly. Nevertheless, there are specific requirements for the selection of the research sample and these requirements are:

- (a) The sample should be a teacher from grades 6 to 8 (middle school).
- (b) They should be teaching the students in the UAE.
- (c) They must be English language teachers.

- (d) They should have at least an experience of two years of teaching the English language.

3.5 Descriptive Analysis of the Quantitative Participants

The selected population for this research is mainly Arab teachers of different backgrounds and nationalities who teach English in UAE private middle schools. Of the 70 participants, 49 teachers are female, while 21 teachers are male. Twenty-eight of the participants have 15-20 years of experience, more than one-third of the population. However, teachers with more than 20 years of experience have the smallest proportion in this study, representing ten percent of the population.

3.6 Data Collection

The data for this study is gathered through primary and secondary means.

3.6.1 Primary Data Collection

Primary research data is a form of data that a researcher collects to gather first-hand information from the respondents (Williams and Reddish, 2018). This study used two research instruments, a close-ended questionnaire including the Likert scale and an open-ended questionnaire and semi-structured interviews, to answer the research questions. Some open-ended and Likert scale items are adopted from the work of Alhebshi and Halabi (2020) (see Appendix A). These selected statements will be used to collect quantitative data on teachers' understanding of the concept of DGBL. The participant interview technique will analyze the type of DGBL used in the target schools for teaching English. A 5-point Likert scale is used for the questionnaire. This is a type of psychometric response scale in which responders specify their level of

agreement to a statement typically in five points: (1) Strongly disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly agree.

3.6.2 Secondary Data Collection

The secondary type of research data is defined as the work of re-owned authors used by research to build their argument and support their results at the end (Sherif, 2018). The current study requires a wide range of books, journal articles, reports, and other web sources are used to explain the concept of Digital Game-Base Learning and the types of DGBL used in current scenarios. The work of some scholars is also used to provide the base for the formation of research instruments; in the end, it is used to cross-check the results in the discussion section.

3.7 Instrument Development

In this study, two research instruments are used; the Likert scale and an open-ended questionnaire, and semi-structured interviews have been used to gather primary data from the respondents.

3.7.1 Statements of the Questionnaire

This study aims to know the English language teachers' perceptions of implementing DGBL in the UAE. After conducting a literature review, the statements in this research are designed:

- (a) To know the understanding or knowledge of teachers about DGBL in the UAE
- (b) To know the extent to which DGBL helps students to become motivated and independent learners
- (c) To know English language skills that are taught using DGBL.

Consequently, to answer the questionnaire's items, the 5-point Likert scale (1-18), multiple choice (19), and open-ended (20-26) are designed to gather quantitative data from English teachers, which are using digital game-based learning techniques in different private schools in the UAE. Open-ended research instruments are an important tool used in qualitative research design, but this instrument can be turned into a quantitative research instrument by coding the themes. However, the first six items from the questionnaire are adopted from the work of Alhebshi and Halabi (2020).

The statements are designed to know the teacher's level of awareness regarding different activities of DGBL and its effect on learning outcomes and aim to answer the questions related to the impact of DGBL on students' motivation, learning and practice. The reason for adopting these items is that they have been used to answer the same questions in another research environment. Therefore, adopting these writers' work helped reduce the chances of instrument error in a short period. The questionnaire will be shared through the Google Form application and will be sent to 70 correspondents in different private schools. It will take approximately 12-15 minutes to answer all the statements.

3.7.2 Semi-structured Interview

Semi-structured interviews are means to gather detailed knowledge about certain things that affect a person's perception. The interviews can be structured into three formats: semi-structured interviews, highly structured interviews, and unstructured interviews (Merriam and Tisdell, 2015). This study used face-to-face, semi-structured interviews to answer the research questions in the current study. The

interview questionnaire comprises 13 items created for this research's purposes. The researcher used simple and short questions to be understandable to the interviewees (Kvale, 2008). The interview section is divided into two parts; part 1 of the interview aims to elaborate on the demographic background like age, qualification, gender, and respondents' experience. Also, a consent letter has been attached to ensure the ethical practice within the research and to know the respondent's consent to the research. On the other hand, part 2 of the interview consists of the interview statements that aim to answer the research questions (see Appendix B). Kvale (2008) points out that "The setting of the interview stage should encourage the interviewees to describe their point of view (Kvale, 2008, p.55). The researcher followed the seven phases of Kvale's interview procedure, as follows: i) thematizing refers to the creation of the interview questions, ii) designing which involves planning the interview, iii) interviewing phase implies conducting the interviews based on the interview guide, iv) The oral interview material is transformed into a written script in the transcribing phase, v) The analysis phase focuses on meaning and language, vi) verifying phase involves checking the validity, reliability, and transferability of the interview results, and vii) reporting is the final phase of the interview process. Reporting links, the results of the study to the theoretical method within the ethical framework.

3.7.3 Procedure of Data Collection

For the data collection purposes, the researcher attached the required permission form and consent letter (see Appendix C) for the questionnaire and the interview's sake to ease any obstacles that might occur while collecting data in the private schools. The researcher obtained approval from her department at the UAE

University (see Appendix D). Later, she got permission to conduct her research from the Department of Education and Knowledge (see Appendix E).

The researcher started collecting the quantitative data by distributing the questionnaire by hand and online using Google Form. After that, the researcher moved to collect the qualitative data by interviewing some English teachers from different private schools. The researcher followed the interview protocols by transcribing, annotating, and finally coding the interviews. In the last stage, the researcher started to compare and analyze the data and match them with the research questions and problems and the purpose of the study.

3.8 Data Analysis

3.8.1 Quantitative Data Analysis

After completing the code sheets, scores are formed for different themes in quantitative analysis. The points are divided into five scales to analyze the responses. Once each item is scored in a descriptive analysis scores like frequency of scores for each variable, frequencies of demographic information, and other variables are made by using SPSS.

3.8.2 Qualitative Data Analysis

The results from participant semi-structured interviews are transcribed through InqScribe software. All interviews are read thoroughly many times, and the significant information is highlighted to divide it into different codes according to the research questions. The codes are made in Vivo codes as they are instrumental in all types of

qualitative studies (Saldaña and Omasta, 2016). Similar codes from all responses are gathered into subcategories to answer all research questions.

3.9 Ethical Consideration

Ethical issues are considered a significant part of research as they made the study more reliable, unbiased, and valid (Cresswell, 2014). This study has adopted the following research ethics to meet different research standards.

3.9.1 Signing Consent Letter

The prime standard in research is to keep it unbiased and open (Cresswell, 2014). Thus, all participants are requested to sign the consent letter, attached along with the research interview letter. This letter is designed to elaborate on the purpose of the study and the ethics that will be followed while getting the responses.

3.9.2 Use of Clean and Clear Language

Language plays a significant role in understanding the purpose of questions. Therefore, in both research instruments (questionnaire and interview) the statements are designed in simple and clear English to reduce the chances of any error in the results. The respondents are also encouraged to clear their queries regarding the questionnaire or interview before submitting their responses.

3.9.3 Confidentiality and Privacy

Respecting respondents' privacy is another critical research ethic followed in this study to ensure that respondents feel confident and comfortable while joining the research. The study also provides that a copy of the results will be sent to all

respondents and the data will not be used in any other research without the respondents' permission.

3.10 Reliability and Validity of Data

3.10.1 Reliability of Quantitative Data

The reliability of quantitative data in this research is ensured through consulting and getting feedback from UAEU professors and instructors. The finding result is run to check the error in the instrument. As a result, the numbers and codes are checked thoroughly to counter the chances of research biases.

3.10.2 Reliability of Qualitative Data

The reliability of qualitative data in the research is certified through the codification process. The results are checked thoroughly, and data is divided into different codes through Vivo codes to counter the chances of research biases. Number checking is used to check the credibility of qualitative data by asking the respondents to provide feedback on the accuracy of the findings.

3.10.3 Validity of the Qualitative and Quantitative Data

As the researcher employed a mixed-method in this study, she used many validity techniques. Lincoln and Guba (1985) stated that the trustworthiness of a research study is the fundamental aspect of the issues commonly referred to as validity and reliability. In the qualitative phase, interview statements were formulated based on the nature of the study and were reviewed and revised by a panel of UAEU faculty and educators, and peer reviewers to assess content validity.

Some questions were reworded to make them clearer for interviewees. Kvale (2008) declared that validity, in common usage, refers to the truth, accuracy, and strength of a statement. The interview questions were derived from the research questions and literature review. In addition, according to Kvale (2008), "Validation rests on the quality of the researcher's craftsmanship throughout an investigation, continually checking, questioning and theoretically interpreting the findings" (p.123).

To establish the content validity of the quantitative instruments represented in the questionnaire, the researcher discussed the survey items with a group of experts including faculty members of the UAEU and Ministry of Education practitioners who reviewed the survey and gave their feedback which was taken into consideration to finalize the survey item contents. As for the reliability, it was established by calculating Cronbach's Alpha which is a test to measure the reliability of the items on the scale and the internal consistency. Cronbach's Alpha was found around (.80).

3.11 Limitation and Delimitation

Following are the limitation and delimitations of this study.

- (a) Research Topic - The research topic is 'English Language Teachers' Perceptions of Implementing Digital Game-Based Learning in the UAE Middle Schools.
- (b) Academic Limitation- This study has just tested teachers' perception of the DGBL.
- (c) Partial Limitations- The results obtained are limited to the UAE's schooling setting to show some difference if a similar study were implemented in other regions.

(d) Other related Limitations- Covid-19 pandemic withstood collection of sufficient data. Thus, quantitative data was drawn from 70 teachers and qualitative from 10 teachers who use DGBL in teaching English in the UAE's schools.

3.12 Summary

This part of the research elaborates the research methodology (mix method research), research design (exploratory research), data collection techniques (primary and secondary), research instruments (5-point Likert scale, open-ended questionnaire, and semi-structured interview), data analysis techniques, and ethical considerations (sending a letter of permission to conduct the study, obtaining respondents' consent for the research, and ethical issues) used to answer the research questions related to English teachers' perceptions of the adoption of Digital Game-Based Learning and its positive impact on students in the UAE are explained. These techniques will be further used in chapter 4 to test and analyze the data.

Chapter 4: Findings

4.1 Introduction

This chapter describes the analysis of the collected data for the research. This is the essential part of any research project. The findings obtained are summarized in the data analysis phase. It involves applying analytical thinking to statistics to discover relationships, correlations, and themes (Alber, 2004). Researchers use empirical data analysis to reduce it to a narrative and analyze it to gain insights. An appropriate statistical process helps mitigate large amounts of data into small pieces (Bhat, 2021). The researcher uses mixed methods to support the study's findings. For quantitative analysis, she surveyed 70 teachers with a questionnaire about teachers' perceptions of implementing DGBL in their classrooms. SPSS software was used to examine the quantitative data from students and teachers.

For the qualitative analysis, she conducted a semi-structured interview with ten middle schools English teachers to conclude. Then, both data sets need to be mixed to get the final answer to the research questions:

- RQ1: What do English teachers in the United Arab Emirates report about the use of DGBL?
- RQ2: How do English teachers view the use of DGBL in the English classroom?
- RQ3: Are there any variations between teachers' self-reports and their views on using DGBL?

4.2 Data Analysis of the Questionnaire's Respondents

A descriptive analysis of the questionnaire data described the first research question. Descriptive analysis was also performed for the demographic data. Table 1 shows the frequency distribution of the gender of the respondents. The data illustrates that most responding teachers are female, with 49 participants accounting for 70% of the total respondents, while male respondents had only 21 participants in the study, accounting for 30% of the total.

Table 1: The Gender of the Teachers

Gender	Counts	Percentage (%)
Female	49	70
Male	21	30

Table 2 presents the number of research participants' length of teaching experience. Interestingly, the respondents gathered for the study have varied lengths of experience and tenure as a teacher, from those who are still in the early years of their profession up to the seasoned individuals in the teaching professions. As observed from the table and in terms of frequency, teachers with 15-20 years of experience have the highest number of participating individuals ($f = 28$), followed by those who have 6-14 years of experience ($f = 20$), then those with 2-5 years of experience ($f = 15$), and with the least number of participants being those with more than 20 years of experience ($f = 7$). It can be said that it is more difficult to find teachers who have stayed in an institution for more than 20 years. This could be associated with situations where teachers have transferred or changed their workplace, or teachers with more than 20 years of tenure have retired already.

Table 2: Years of Teaching Experience

Job Experience / Year	Frequency	Percentage (%)
2-5	15	21
6-14	20	29
15-20	28	40
> 20	7	10

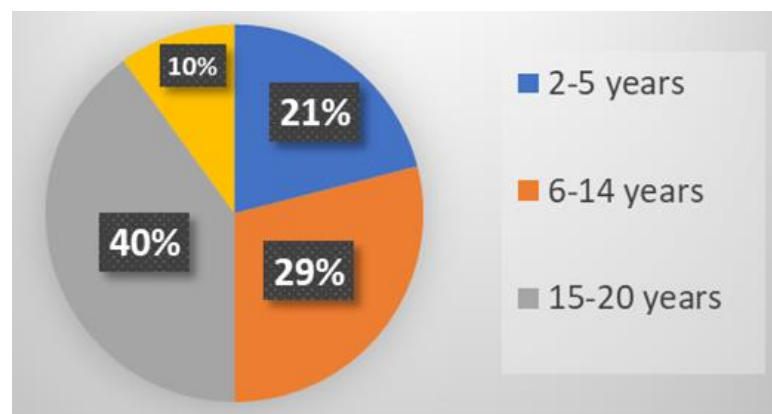


Figure 1: Teachers' Years of Experience Demographic Data

4.3 The Semi-structured Interview Teachers' Background

The population for the semi-structured interview was selected from private schools in Al Ain. The sample consists of 10 teachers. All teachers are Arab except one and English is their second language. The teachers are middle school English teachers with 2-25 years of experience. Four of the teachers have more than 20 years of experience and the rest have between 2 and 17 years of experience teaching English.

4.4 The Results of Question 1: English Teachers Report About the Use of DGBL in the UAE

The answer to this question is concerned with the items that address both positive and negative experiences teachers may have with their students in implementing DGBL and teachers' overall experience of their usefulness and mastery of the learning approach. The findings are as follows: Teachers' general impression of the positive impact of DGBL on students was favorable, according to the survey results.

The results of the survey emphasized that the teachers agreed the most that DGBL; it is believed that DGBL provides a more engaging and motivating learning experience for that student, as shown, by the responses of the teachers which suggested that DGBL incites motivation, item 6 ($M = 4.51$, $SD = .65$). Alongside it, DGBL provides ample opportunities for learning to be practical for the students, item 18 ($M = 4.38$, $SD = .62$). Through its fun and enjoyable approach, item 1 ($M = 4.36$, $SD = .97$) the program's convenience in providing practical activities to practice the concepts taught are deemed effective by the teachers.

The variety of tools present in the approach, such as videos, text, and audio make the learning experience of the students contribute to their development as independent students and improve their problem-solving skills and motivations, item 8 ($M = 4.34$, $SD = .61$) and item 9 ($M = 4.20$, $SD = .69$). This led to the teachers' perception that the students are now able to learn English on their own and by their own volition conveniently anywhere, item 5 ($M = 4.17$, $SD = .72$). Though to compensate for the things they think they lack, the teachers then reportedly try to use various games to support their way of teaching different English concepts and skills

and to improve the problem-solving skills of the students, item 15 ($M = 4.16$, $SD = .77$) and item 2 ($M = 4.16$, $SD = .82$), as well as students, are competent to learn new skills by their own, item 14 ($M = 4.04$, $SD = .71$).

This positive perception of the observed effects of DGBL is further supported by the item scores which can be considered as negative or states disagreements or ineffectiveness of the approach. The teachers leaned towards disagreement on the idea that DGBL were distracting the students, item 3 ($M = 2.01$, $SD = .93$), bores them, item 11 ($M = 1.70$, $SD = 0.98$) and that only high achieving students can get the full advantage with the use DGBL, item 12 ($M = 1.94$, $SD = .86$). These results showed many teachers who think DGBL is worthwhile and can be an effective alternative in teaching students the English subject.

Along with the positive results on the teachers' perception regarding the effects of DGBL on the teaching of the English language, there are also signs of apprehension in certain areas. On the positive side, students' improvement of their language and the students' independent use of DGBL albeit leaning towards agreeableness, the mean scores of items regarding them showed that there are still a few teachers that have rated them lower or are neutral about it, item 4 ($M = 3.80$, $SD = .84$). Also, the perception of the teachers regarding their use and mastery of the approach showed portrayed their inhibitions based on their obtained mean scores on their perceived amount of training that they had regarding DGBL, item 7 ($M = 3.74$, $SD = .94$), the full utilization of DGBL, item 10 ($M = 4.03$, $SD = .83$), and their consistent use of DGBL, item 13 ($M = 3.89$, $SD = .69$).

Albeit the results also can be seen leaning towards the agreement, these areas are still bordering on neutrality. The teachers' overall impressions supported the said results with using DGBL; however, they may perceive DGBL may not necessarily lose out to the traditional teaching method of English, item 16 ($M = 2.47$, $SD = 1.17$); there are still other "specific English skills" that some teachers may believe to be better taught traditional, item 17 ($M = 3.41$, $SD = 1.11$). Table 3 presents the evaluation of the teacher's experience with DGBL and highlights the descriptive analysis of each item on the survey questionnaire used to capture teachers' specific experiences and perceptions of the impact and effectiveness of the DGBL approach.

Table 3: Descriptive Analysis of DGBL Experience and Perception Questionnaire

No.	Statements	Mean	SD
1	Digital game-based learning (DGBL) is a way of teaching through fun.	4.36	0.97
2	DGBL has improved students' problem-solving skills as independent English language learners.	4.16	0.82
3	DGBL distracts my students from studying.	2.01	0.93
4	DGBL has improved the language skills of my students.	3.80	0.84
5	DGBL has motivated students to learn English at any place or at any time as motivated learners.	4.17	0.72
6	Through DGBL, I motivate my students to participate in the class.	4.51	0.65
7	I have attended workshops regarding the use and benefits of (DGBL).	3.74	0.94
8	I think that different aspects of DGBL like videos, text, and audio have improved my students' motivation for learning.	4.34	0.61
9	I think different aspects of DGBL like videos, text, and audio have encouraged the students to solve more challenging tasks as independent learners.	4.20	0.69
10	I am fully aware of using DGBL.	4.03	0.83
11	Most of my students feel bored when I use DGBL.	1.70	0.98
12	Only high-achieving students become motivated and independent learners when using DGBL.	1.94	0.86
13	I consistently use DGBL in my class to teach the English language to help my students to become independent learners.	3.89	0.69
14	My students can learn new language skills using DGBL independently.	4.04	0.71
15	I use a variety of games that support me in teaching the different English skills such as reading, vocabulary, etc.	4.16	0.77
16	I find using the traditional teaching method more appropriate to teach English language skills.	2.47	1.17
17	I prefer using the traditional teaching methods to DGBL to teach specific English skills.	3.41	1.11
18	I think DGBL has provided the opportunities to use the learned material in practice.	4.37	0.61

From a close-ended questionnaire, the researcher analyzed response data to reflect the reporting of UAE teachers on the use of DGBL. According to survey results stated in Table 4, the results of item 1 show that 93% (54%+39%) of the research respondents acknowledged that the digital game-based system is a fun way of learning. And 84% (37%+47%) of respondents agreed that DGBL had improved students'

problem-solving skills as independent English language learners. However, 8% (7%+1) of teachers in item 3 agree that digital game-based learning distracts their students from studying, whereas 77% of teachers disagree (46% +31%) with this. In item 4, 19% of the survey respondents strongly agree with the fact that DGBL has improved their students' language skills, and 51% agree with this, which is 70% in total. Regarding this fact 21% are neutral.

According to item 5, DGBL has motivated students to learn English at any time as motivated learners as 87% (33% + 54%) respondents are in this favor, whereas neutral and only 3% disagree with this fact. Item 6 states that out of the all teachers in the selected schools in UAE 95% (59% + 36%) of teachers motivate their students to participate in the class through digital game-based learning. And 70% of them have attended workshops regarding the use and benefits of DGBL. And in response to item 10, 73% (33%+40%) of teachers are fully aware of digital game-based learning.

From item 8, 92% (41%+51%) of those teachers think that different aspects of DGBL like videos, text, and audio have improved their students' motivation for learning. And none of them disagreed in this regard. In item 9, 90% (33% + 57%) of teachers think that different aspects of DGBL like videos, text, and audio have encouraged the students to solve more challenging tasks as independent learners. According to item 11, only 7% (4%+3%) of teachers think their students feel bored when using digital game-based learning. However, 84% (33%+51%) negated this thinking; the rest were neutral. From a performance point of view of students with different calibres, 79% (46%+33%) of respondents disagree in item 12 that only high achieving students become motivated and independent learners when using DGBL. Therefore, in item 13, 76% (16%+60%) of teachers consistently used DGBL in their

class to teach the English language to help their students to become independent learners. Students of 83% (24%+59%) teachers, as per item 14 can learn new language skills using DGBL independently.

In response to item 15, 83% (36%+47%) of teachers use a variety of games that support them in teaching different English skills such as reading, vocabulary, etc. Regarding teachers' personal preferences, which are asked in item 16, 22% (16% + 6%) of teachers find the traditional teaching method more appropriate for teaching English language skills. However, 57% (34%+23%) of teachers do not find the traditional method more appropriate. In response to item 17, 53% (16%+37%) of survey respondents prefer using the traditional teaching methods to DGBL to teach specific English skills. As a final closed-ended question which is item 18, 93% (44%+49%) of teachers think DGBL has provided the opportunities to use the learned material in practice, and none of them disagreed. Table 4 records the analysis of quantitative survey data.

Table 4: The Questionnaire Responses in Percentage

No.	Statements	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
1	Digital game-based learning (DGBL) is a way of teaching through fun.	6	0	1	39	54
2	DGBL has improved students' problem-solving skills as independent English language learners.	0	6	10	47	37
3	DGBL distracts my students from studying.	31	46	14	7	1
4	DGBL has improved the language skills of my students.	0	9	21	51	19
5	DGBL has motivated students to learn English at any place or at any time as motivated learners.	0	3	10	54	33

Table 4: The Questionnaire Responses in Percentage (Continued)

No.	Statements	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
6	Through DGBL, I motivate my students to participate in the class.	0	1	4	36	59
7	I have attended workshops regarding the use and benefits of (DGBL).	1	11	17	51	19
8	I think that different aspects of DGBL like videos, text, and audio have improved my students' motivation for learning.	0	0	7	51	41
9	I think that different aspects of DGBL like videos, text, and audio have encouraged the students to solve more challenging tasks as independent learners.	0	3	7	57	33
10	I am fully aware of using DGBL.	0	3	24	40	33
11	Most of my students feel bored when I use DGBL.	51	33	7	4	3
12	Only high-achieving students become motivated and independent learners when using DGBL.	33	46	16	3	1
13	I consistently use DGBL in my class to teach the English language to help my students to become independent learners.	0	3	21	60	16
14	My students can learn new language skills using DGBL independently.	0	3	14	59	24
15	I use a variety of games that support me in teaching the different English skills such as reading, vocabulary, etc.	0	3	14	47	36
16	I find using the traditional teaching method more appropriate to teach English language skills.	23	34	21	16	6
17	I prefer using the traditional teaching methods to DGBL to teach specific English skills.	7	13	27	37	16
18	I think DGBL has provided the opportunities to use the learned material in practice.	0	0	7	49	44

4.5 The Results of Question 2: English Teachers' View of the Use of DGBL in English Classroom

For research question 2, the data from the open-ended questionnaires and the responses from the interviews were analyzed. Categorizing the data revealed many subcategories that led to the themes of the survey. Participants reported their perspectives on using DGBL in the classroom by responding to a series of questionnaires. Thematic analysis is a technique for analyzing data to understand respondents' views better. This analysis reveals trends in the information and allows the investigator to understand the results thoroughly. This is a good strategy for analyzing qualitative data because it looks for patterns in respondent interactions that are not hindered by response boundaries. Therefore, thematic analysis is a valuable tool for assessing the nature of responses to the data collected (SAGE Research Methods Datasets Part, 2019).

4.5.1 Results of the Open-ended Questionnaire

From the open-ended questionnaire statements, it is clear that most teachers noticed tangible results in both student academic performance and social interactions when they integrated digital games with the skills being taught. The responses to item number 20, "How do you think DGBL has helped students become independent and motivated learners?" All the responses were positive in terms that DGBL is a tool for the learners that provides the opportunity to create motivated and independent learners and put the learned material into practice. Some teachers said that it motivates students and makes them independent learners "Games motivate young learners, especially with digital tools." "DGBL has improved students' independence because it is easy to

access, as well as the fact that this also incorporates independent learning at home. This motivates students because it is a fun and engaging activity.”

Additionally, some teachers believe that DGBL is efficient and practical “It’s fun and at the same time a good learning resource that can help with many students quickly and efficiently.” Also, teachers believe that DGBL enhances students’ critical thinking abilities and increases learning outcomes in a fun and enthusiastic atmosphere “By combining different teaching techniques into the learning process to improve their critical thinking skills.” Other teachers, likewise, mentioned that DGBL makes the study practically apply the material learning way “It has made learning material more applicable.”

Correspondingly, in item number 21 “What are things you like about using digital games in the classroom?” teachers’ responses varied. Some teachers indicated that it is a source of class management and independence “Students are more independent in their learning and the class is more manageable.” And others showed that DGBL is a tool of measurement “DGBL measures students’ progress.” Teachers view DGBL as a new effective instrument in teaching language “It is a source of creativity and shifting from traditional to digital teaching.” About item number 23, “What results have you observed when using digital games as part of instruction?” teachers’ responses were as follows:

- (a) Enhance students' critical thinking, independence, and eventually better results.
- (b) Class discipline and social interaction.
- (c) Students love this kind of exercise.

- (d) I observed that most students give more attention, and they learn new things quickly.
- (e) The improvement in students' behavior and achievements.

Statement numbers 24 and 25 are interconnected. In item number 24 “How do you decide which digital games to use or not to use?”, most of the teachers replied that they choose the game based on the subject material that they teach as well as the lesson objectives and goals “Based on the goals and the objectives of the lesson as well as student’s academic level.” In the same context, item number 25, “What kinds of digital games do you incorporate in your classroom?” Teachers’ answers mainly were about a free online digital game, Kahoot, Quizzes, and other educational games. The responses to the last statement of the questionnaire “How often do you incorporate digital games into your classroom?” clearly illustrated that the teachers integrate DGBL based on their available time and the type of the skill “Depends on the time, but usually twice a week.” And another responder said, “It depends on the skill.”

4.5.2 Results of the Semi-structured Interviews

The result of the semi-structured interview and the analysis of the open-ended questionnaire is the second requirement for answering the second research question. The researcher interviewed ten middle schools English teachers in Al Ain city. She started by introducing herself and explaining the academic purpose of the interview. Before conducting the interview, the researcher asked the participants to read the consent letter. The researcher used the voice recording as a reference to recording the participants' responses and opinions. Later, she transcribed the audio recording and coded the teachers' names by giving them different names. Based on the interview

results, the data revealed eight themes that helped answer the research question about how English teachers view the use of DGBL in the English classroom. These themes are detailed herein below:

4.5.2.1 Theme (1): DGBL Is a Source of Motivation

DGBL is the source of motivation; both survey and interview data are used to discuss the theme. Throughout the study, there was a strong correlation between DGBL and motivation. Teachers creatively try to encourage and increase student motivation in order to assimilate the subject matter best. Therefore, they are always coming up with new methods and techniques to make students want to learn and thus achieve better learning outcomes. The respondents mentioned that DGBL is a source of motivation in the questionnaire and the interviews. They constantly said that games, especially the digital ones, stimulate students' readiness by increasing competition among students and igniting their desire to reach the next level.

Thus, this situation leads to many benefits, of which motivation is undoubtedly one of them. According to the questionnaire survey, the following are why DGBL is a source of motivation. In response to survey item number 20, a respondent said, "DGBL creates independent and motivated learners through competition and rewards based on the correct answers." Moreover, in answer to survey item 21, a respondent says, "It motivates students to participate. Students enjoy it."

In the interview, on the other hand, Mrs. Nichole, having 10 years of experience in the education sector responded to the interview's question "What are your thoughts about using DGBL in English teaching?" She thinks using DGBL is essential in particular with distance learning due to the Covid-19 pandemic and says,

“Last year since we shifted to online learning, I think this has become the trend now. One of the resources the teachers are using in teaching, and it helps in terms of motivating the students and keeping their interest in the lesson”.

In addition, she believes that DGBL is a source of motivation, especially for low-achieve students when she replies to the interviewer’s question if some skills cannot be taught through DGBL and she said, “Yes, so going back to my point, I think reading and writing needs practice. For example, for the low learners or with low ability, I can use digital games to motivate them at some point in the lesson. Like pictures, graphics, and more words. But they have to push themselves in actual reading.” Miss Aseel, who has more than 20 years of teaching experience, thinks that digital games motivate students to gain more knowledge based on the subject and the game. She said, “Yes, it motivates students to achieve more according to the subject they study and according to the game and to connect between them”.

In addition to Mrs. Aseel, Mrs. Dana and Mrs. Sara, who have taught English for more than 15 years, believe that DGBL motivates students and encourages them to take part in the class “I think it supports teaching and learning. It motivates students and gives them more skills.” And Mrs. Sara said, “Ok...ah.. digital game-based learning means that we use technology for learning. We use some kind of games or quizzes to motivate students to learn but maybe in an interesting way.”

4.5.2.2 Theme (2): DGBL Is Efficient and Instrumental Social Learning

Most of the participants in this study echo this theme. With the advancement of technology, the integration of digital games into the language classroom has become crucial to facilitate the number of information students absorb daily. It is a leap from

the traditional method of teaching to an inspiring and interesting method that, when used correctly, provides the necessary information in a short period of benefits, DGBL is considered an effective social learning tool where students can learn from each other in a fun and friendly environment.

Ms. Aseel responded to the interviewer's question about the benefits of DGBL besides language learning. She replied, "DGBL makes students cooperate among themselves and maybe make new friends from other schools and maybe from other countries. Play and learn from students of different backgrounds." Mrs. Fatima, who has taught English for 24 years, added an interesting point. She mentioned that even low achieving students can work to compete with others to win the game "I think this is a very useful way to teach English, especially in motivating students to participate more in the class and therefore will achieve more and even weak students will participate because the games will attract them to try and to compete and be the best in this game." This indicates that the low achieving students imitate other students and try to compete with them. In the same context, Mrs. Dana pointed out that DGBL improves social interaction and raises students' self-esteem "Students discover many types of games, improve self-esteem, self-confidence, co-operation, and social interaction."

4.5.2.3 Theme (3): DGBL Enhances Positive Competition for High Academic Achievement

Most teachers agree that DGBL creates a positive sense of competition among students, even among the lower achievers, to win the game and achieve the highest score and thus be rewarded. The nature of the game and the social interaction among students are the most important factors that promote competition among them. Ms.

Aseel said that DGBL encourages students to work together and allows them to mingle and eventually learn from each other. In response to the question, “Do you think this type of teaching, DGBL is more in providing extra learning opportunities to your students as compared with other types?” Mrs. Fatima said that the group participating in the game creates a sense of competition among students that make them compete to win “Yeah because all the students are participating at the same time. All of them are trying to win the games and trying their best to find the correct answers.

So, all the class is competing and working at the same time. So, this will help us to manage the time because we have a lot of activities inside the classroom.” In the same vein, Mrs. Dana believes DGBL attracts students toward learning and raises the competition among them “Yes, they can gain more knowledge, they have the sense of competition affects the social side and makes them like this task.” Mrs. Noor, who has 14 years of experience, describes DGBL as appealing activity and students enjoy it “Yes, I think it is because it’s so attractive and fun for learners. It’s like a game. Most of the students like it because they like competition which makes them enjoy their learning.”

4.5.2.4 Theme 4: DGBL Facilitates Class Management and Instructional Procedures

One of the major factors that DGBL facilitates is class management and thus the smooth flow of the learning process. Teachers indicated in the open-ended questionnaire that in addition to learning and revision, DGBL also supports class management through the motivation and self-confidence that students gain from playing. Another one said that “The best things about DGBL are class management

and students' self-dedication.” Teachers’ opinions in the survey were shared in the interview.

Mrs. Fatima stated that DGBL is a pivotal aspect, especially for cycle 1 and cycle 2 students in increasing motivation when the interviewer asked her if she recommends other teachers use DGBL to teach English. She said, “Yes, of course. Especially for the first grades until grade eight. These games will attract and motivate students more and will help the teachers improve the classroom environment and better class management.” Additionally, Mrs. Dana said that DGBL creates a positive environment in that students have fun and as a result, they will participate in the class.

4.5.2.5 Theme 5: DGBL Is Conducive to Creating an Interesting and Appealing Pedagogy

There is no doubt that DGBL creates a fun and interesting atmosphere among students. As teachers reported in the open-ended questionnaire, it encourages students to do their tasks on their own “By doing their assignments independently as it is the preferable way to work on and finish their work. It is effective because they can entertainingly do their work. It seems more interesting and fun. They also engaged are and get motivated to finish their work.” Also, as per one respondent, “DGBL engages students and teaches them the content interestingly.” Overall, teachers share their opinion that DGBL is a source of entertainment and fun that captivates students’ minds. This leads to a better understanding and grasping of the learned material easily.

During the interview, Mrs. Dana eagerly stated that “It gives them a chance to have a fun and effective learning environment.” She later added that she has discovered many types of games that improve self-esteem, self-confidence, cooperation, and social interaction. At the end of the interview, she replied to the

statement that she recommends other teachers use DGBL. She said that digital gaming makes learning fun and to come up with other skills “Sure. Using DGBL would make the learning process effective and more fun. And let the student discover more skills.”

4.5.2.6 Theme 6: DGBL Is a Window for Low Achievers to Excel Academically and Raise Their Self-confidence

The well-structured use of DGBL can harvest many advantages that affect students’ academic achievements as well as psychological support. Among these advantages is that the low achieving students can participate by playing educational digital games. When the low achievers participate and answer some questions correctly, this boosts their self-esteem. In both the open-ended questionnaire and the semi-structured interview, teachers agreed that DGBL supports low achievers along with teachers’ aid, albeit they might face some difficulties and take more time than other students.

The interview results also supported the questionnaire outcomes when the interviewer asked Mrs. Noor if DGBL affects low achievers. She replied that digital gaming supports the low achievers in particular “I think it’s mainly for low achievers because most of them don’t like to write through traditional methods, so this is the best way to attract them to be involved in our class.” Sara, additionally, said that it is crucial for the low achievers, and it enhances their self-confidence “ya... it’s very important for the low achievers. It helps them to think they can do it. They can improve themselves. I can give them simple quizzes or games to make them more confident.”

Mrs. Dana added to the same question, “Yes, I can handle small tasks for them, they can interact with other friends, so they will have the team-working.” Mrs. Farah also agreed that digital gaming engages students by encouraging them to participate

in the class “It would engage all the students. Even the below-level ones, especially or let’s say in particular, had questions that suited their level. So, they will be encouraged to participate.” Mrs. Nicole thinks that it suits all the students in general “Yes, as I’ve said I have used this mainly for the low achievers, but also, I use it for the advanced learners because a lot of the digital games are based in western countries, so they are sometimes more advanced, so of course, well I don’t really, I use them generally to all students.”

4.5.2.7 Theme 7: Using DGBL Is an Innovative and Creative Platform for Teaching and Learning

Teachers agree that integrating educational games is a relatively new method that shifted traditional teaching to smart teaching. Teachers try to find the best digital game that suits students’ academic level, the taught skill, and the lesson objective. Some teachers responded to the open-ended questionnaire statement “What are things you like about using digital games in the classroom?” as “I like the creativity and its shifting from traditional teaching to digital teaching as well as it's fun to apply.” A lot of respondents likewise acknowledged the fact that DGBL’s innovative sources such as videos and audio have encouraged their students to perform better.

Regarding the interview responses, Mrs. Farah asserted that “It’s a creative idea to implement DGBL activities or games in teaching.” She also says, “It’s something engaging, and we should not rely completely on it, but at the same time we shouldn’t ignore it because it adds a flavour to the classroom environment.”

4.5.2.8 Theme 8: DGBL Fuels Students' Imagination

In an interview Farah says she prefers using DGBL because of creativity and the ability to leave the boundaries of the classroom itself, to a virtual one, trying to think outside the box. A survey respondent says that DGBL enhances students' critical thinking, independence, and eventually better results. Several teachers responded to the statement about the way DGBL helps students to be independent learners as follows:

- (a) By combining different teaching techniques into the learning process to improve their critical thinking skills.
- (b) Students work by themselves to seek the correct answer to the required questions.
- (c) Through working by themselves to seek the correct answer.
- (d) It improves their problem-solving skills.

4.6 Research Question 3: The Variations Between Teachers' Self-reports and Their Views on Using DGBL

The researcher analyzed the questionnaire and interview data to find the consistency and variations between the two outcomes to answer this research question. When comparing the results of the teacher's self-report and their views regarding the use of DGBL, a strong correlation can be found by using the questionnaire that included 18 Close-ended items with 5-point Likert scales alongside seven open-ended items and one close-ended item that mentions the English skills which teachers think are best taught by using DGBL (item 19) with the ten recorded interviews that consist of 13 items. The majority of interviews showed positive feedback, with nine out of ten (90%) of the interviewed teachers supporting the idea regarding the implementation

of DGBL in their classrooms when asked about their opinion about using DGBL in English teaching, saying that, for instance:

“I think this is a very useful way to teach English, especially in motivating students to participate more in the class and therefore will achieve more and even weak students will participate because the games will attract them to try and to compete and be the best in this game.”

“I think that using DGBL is very important in teaching the students or giving them extra information about what they are given and studying in their books.”

“I think this is a useful way to teach English, especially in motivating students to participate more in the class and, therefore, achieve more.”

“It’s a creative idea to implement DGBL activities or games in teaching, especially that we are trying to address, or we are constantly addressing 21st-century skills, which includes the implementation of using technology in teaching.”

“It helps motivate the students and keep their interest in the lesson.”

These statements from the interview also directly correlate with the data given from the questionnaire, which shows that the highest mean scoring statements from the close-ended items, for instance, item 6 which states “Through DGBL, I motivate my students to participate in the class.” showed a mean of 4.51 and item 5 states that “DGBL has motivated students to learn English at any place or at any time as motivated learners.” with a mean of 4.17.

Another Close-ended item result that further shows the relation to the interview answers in item 7 in the questionnaire states that “I have attended workshops regarding the use and benefits of DGBL.” In which the results show a mean of 3.74 and a

collective positive percentage of 70% (51%+19%). In comparison, when the interviewed teachers were asked “Have you attended any workshops regarding the use of DGBL for the English language?” 6 out of 10 (60%) answered “Yes” which further signifies the close relationship between the results given the sample number. Furthermore, when the interviewed teachers were asked “*Do you think you need to attend some workshops about using DGBL to be able to use it more frequently and confidently?*” 8 out of 10 (80%) answered “Yes” we need them and the remaining 2 said “No” but emphasized that they will happily join if given the opportunity.

Item 12 in the close-ended questionnaire which states that “Only high-achieving students become motivated and independent learners when using DGBL.” also showed a similar outcome to the interview statement which asks “In your opinion, does DGBL affect low achievers? If yes, explain!”

Given that the close-ended statements had the majority answering negatively with 79% (46%+33%) and 16% answering neutrally and only 4% (3%+1%) answering positively, with the mean value of 1.93. While the interviewed teachers answered “Yes” emphasizing that it helps them, 9 out of 10 times (90%) responded on item 12.

Regarding, the close-ended item 19 from the questionnaire which states that “What skills do you teach using DGBL?” differs from the previous close-ended statements in terms that the other items use the 5-point Likert scale. In contrast, this item relies on the multiple-choice answer, which includes the following choices, Grammar, Vocabulary, Reading, Writing, and Listening. Having Grammar was the most favorable choice with 90% (63/70), including it in their answers, and Writing was the least favorable one with around 17% (12/70).

These answers also further correlate with the statements given by the interviewed teachers when asked "What English skill/skills do you prefer teaching using DGBL and why?" and "What skill/skills, do you think, cannot be taught through DGBL and why?" 7 out of 10 (70%) said that they would include grammar in their DGBL session and 7 out of 10 (70%) would resent from using writing in their DGBL session.

Open-ended items from the questionnaire also showed consistency with the statements from the interviews like in item 20 which states "How do you think DGBL has helped students become independent and motivated learners?" In which a lot of the answers were in alignment with the interview's statements, including answers such as "Games motivate young learners, especially with digital tools." As well as answers that highlight the importance and independency that DGBL provides, such as "DGBL has improved students' independence because it is easy to access, as well as the fact that this also incorporates independent learning at home. This motivates students because it is a fun and engaging activity."

Another, strong correlation between the open-ended items and the interview responses is item 21 which states that "What are the drawbacks you perceive in using digital games in the classroom?" which is answered in the questionnaire by:

"Sometimes the Internet doesn't work, problems with the students' devices, complicated games or software."

"Time limitation and poor internet connections occasionally".

Statements from the interviews also share a substantial similarity; when the teachers were asked "What challenges (if any) do you face when applying DGBL in

your class?” The majority answered that they faced “internet issues” or “technical issues” stating in the interview that

“I might face technical challenges not more than this. But I don’t feel that there are any other difficulties while applying DGBL”

“The only challenge that I might face in the class is sometimes the Wi-Fi connection”.

“I may say that digital competence let’s say, because not all students are on the same level of digital knowledge, so as an English language teacher, not an IT specialist, it’s kind of challenging.”

Overall, due to the strong correlation between the results of teachers’ self-reports and their views regarding the use of DGBL, the presence of variation becomes less significant but still can be taken into consideration. For instance, when the interviewed teachers asked, “What are your thoughts about using DGBL which is Digital Base Learning in English teaching?”

The majority which is 9 out of 10 (90%) answered positively, emphasizing that DGBL would help the students learn better. The interviewed teacher who gave a negative answer was Lana, saying, “I’m a bit conflicted because I know it is fun for students, but I feel like it doesn’t gain as many results. That’s what I feel; that’s my thoughts about it. So, I am a bit conflicted here.”

Another variation that gives interesting feedback comes from the interviewed teacher Lana, when asked, “In your opinion, does DGBL affect low achievers? If yes, explain!”

She answered with “slightly as I mentioned previously, it does depend on the student himself, but low achievers ... they need... they need a guide” on the other hand, the remaining interviewed teachers (9 out of 10) answered with “*Yes*” regarding this question, which also shows a strong relationship with the results from the previously mentioned questionnaire. Item 12 from the questionnaire states that “Only high-achieving students become motivated and independent learners when using DGBL.” had an overall negative outcome with 78% (46%+33%) answering “Disagree” and “Strongly Disagree”, respectively.

Although the interview statements give a lot of insight into the teachers’ overall opinion and feedback regarding DGBL in English learning, it still lacks some information provided in the questionnaire given for the 70 English teachers, which means it cannot be directly compared to the interview statements. Statements such as item number 11 from the close-ended questionnaire state that “Most of my students feel bored when I use DGBL.” Which had the majority of results showing a negative outcome with 84% (33%+51%) answering with “Disagree” and “Strongly Disagree”, respectively.

Another, relatively insightful statements that weren’t covered in the interview are items 16 and 17 of the close-ended questionnaires, which state “I find using the traditional teaching method more appropriate to teach English language skills.” And “I prefer using the traditional teaching methods than DGBL to teach specific English skills.” Item 16 had 57% (34%+23%) negative answers as well as 21% neutral answers but item 17 had 53% (16%+37%) positive answers along with 27% neutral answers and 20% (13%+7%) negative answers.

Some close-ended statements also weren't covered in the interview, such as item 25, which states "What kinds of digital games do you incorporate in your classroom?" Which was answered with statements such as:

"Kahoot, other Google games" and "Usually, quizzes and any available online game."

"Kahoot and Quizlet. These websites help with a vast range of subjects."

Another close-ended statement not covered in the interview statements is item 26, asking, "How often do you incorporate digital games into your classroom?" it answered as "3 or 4 times," "twice a week," and "I try to use it once or twice a week. As mentioned before, a change is good for students."

Even though the mentioned statements from the questionnaire cannot be directly compared to the interview statements, they still provide as mentioned before, valuable quantitative information that helps construct overall feedback about the implementation of DGBL in English learning while also maintaining the teacher's interview as simple and direct.

4.7 Summary

Chapter four tackles the major findings of the questionnaire and the semi-structured interview to answer the three research questions framed with the psychological dimensions represented in the self-esteem and the fun environment that DGBL creates from the English language teachers' perspective. To answer research question one, the researcher analyzed the close-ended questionnaire data that was measured by a 5-point Likert scale through descriptive analysis to find the mean and the standard deviation of the responses. She gave a thorough description to connect

the results of the findings to the research questions starting from the highest mean score to the least.

The close-ended questionnaire results illustrated that motivation is the drive that plays a pivotal role in the digital learning process. For research question two, the researcher employed the open-ended questionnaire results and matched them with the semi-structured interview results to compare them and reach the conclusion. To delve further into the depth, the data analysis for research question three; however, compared the questionnaire results and the interview results and find the consistency and the variation between the two methods.

Chapter 5: Discussions, Conclusions, and Recommendations

5.1 Introduction

As a result of using technology in educational situations, students and instructors are becoming more curious about the many different aspects of learning. Digital game-based learning has emerged as a new method for motivating both students and teachers to improve their skills. Teachers' views on the use of digital games in ESL classrooms are examined in this study. To illustrate and back up the investigation's conclusions, the researcher consults relevant literature. The research is conducted statistically by distributing a questionnaire and conducting interviews with ESL professors. According to the research, a significant number of respondents prefer to use technology gadgets in the teaching and learning process to achieve better results. Learning and teaching engagement and acceptance of DGBL, as well as the effects of DGBL to learn the English language, were all positively influenced by employing digital games. Additionally, this allows individuals to gain real-world experience in their surroundings at their own pace and in any location.

The purpose of this study is to shed the light on the usage and the implementation of DGBL in English classrooms as a new tool to facilitate language learning, enhance motivation and improve social skills among students by encouraging them to take a part in the learning process not just as recipients, but to have an essential role by using the advantage of the advancement of technology and how to employ it for the sake of learning. The researcher aimed to find the answers to the research questions through the questionnaire's quantitative method divided into two parts: the 5-point Likert scale and open-ended statements. She got the response of

70 English teachers from different private schools. This has been done side-by-side with the qualitative method represented by a semi-structured interview conducted with 10 middle school English teachers who were selected from different private schools in Al Ain. The present chapter will recap the research study findings in addition to emphasizing conclusions and recommendations for English language teachers, heads of departments, and future studies.

5.2 Research Question 1: English Teachers Report About the Use of DGBL in the UAE

Research question 1 is associated with the use of DGBL in the class that was declared by English teachers in the UAE. To answer this question, the researcher conducted a questionnaire to measure students' efficacy and motivation, and other benefits of using DGBL in English language learning. The result for this question is clearly stated in table 4. The highest mean score was recorded in item 6 ($M = 4.51$) when teachers stated that DGBL motivates their students to take part in the class "Through DGBL, I motivate my students to participate in the class." This item was followed by item 18 which was the second-highest mean score ($M = 4.38$) stating the ability of the students to apply the learned material practically "I think DGBL has provided the opportunities to use the learned material in practice." The connection between the two highest mean score items reveals that motivation ignites students' desire and capability to apply the learned material in practice.

On the other hand, the least two scores revealed a negative statement regarding students' negative feelings and a high level of the students only participating in the class. Remarkably, the least scores which these two items gained reveal the opposite. Item 11 states that most of the students feel bored when using DGBL implying that

most of the students enjoy playing educational games while learning “Most of my students feel bored when I use DGBL.” In addition to item 11, item 12 states that only high achieving students become motivated and independent learners when using DGBL indicating that enjoying gamified learning is not limited to certain levels of the students which in this case the high-achieve students. In contrast, most of the students including the low achievers enjoy educational gaming during the lesson as well. Even though teachers are keen to incorporate digital games in their classes; however, the results of item 16 indicate that some teachers prefer using traditional teaching skills in learning the language.

The literature review manifested in Henry Murray’s Achievement Motivation Theory when he indicated that the elements of needs and motivation are highlighted as a major dynamic factor in enhancing someone’s behavior. Additionally, the experiment conducted by Ebrahimzadeh and Alavi (2016) associated the learning process with motivation when teachers were asked to amalgamate digital devices in the learning vocabulary to enhance motivation as well as learning. The experiment showed that DGBL boosts students’ capability to motivate as well as enhance their learning.

In brief, the outcomes of the questionnaire alongside the literature review articulate that the teachers are encouraged to implement DGBL in their classes to enhance and raise students’ learning ability and at the same time increase their motivation based on their experience with ESL students. The Likert scale results demonstrated positive outcomes when teachers integrate digital games with English language skills. It makes students motivated and independent, activates the language, increases the ability of problem-solving skills, and enhances their social skills.

5.3: Research Question 2: English Teachers' View of the Use of DGBL in English Classroom

Question 2 stresses the opinion and views of English teachers while using DGBL in the classroom and its benefits and drawbacks. To answer this question, the researcher analyzed the open-ended data taken from the questionnaire in conjunction with the interview responses. Both data presented that DGBL enhances learning and creates motivated and independent students. From the questionnaire, teachers' responses to item number 20 were positive. "How do you think DGBL has helped students to become independent and motivated learners?" Most of the responses declare that DGBL encourages students to participate in the class and improve their problem-solving skills.

Here are some examples from the open-ended questionnaire respondents for item number 20 "How do you think DGBL has helped students to become independent and motivated learners?"

- (a) "Some students don't like being held back and would prefer the opportunity to advance by themselves."
- (b) "By enhancing their problem-solving skills"
- (c) "Students are encouraged to play the educational games alone or in groups, and this motivates them to gain more scores to win the game."
- (d) "Games have levels, so students usually are keen to move to the next level to win the game."
- (e) "They try to find the correct answers on their own."
- (f) "It raises students' participation and improves their attitude toward learning."

Additionally, the teachers' responses on items 21 and 23 are compatible with the previous statement. Do teachers show a positive attitude in response to what things they like about using digital games in the classroom? Most of the responses were about class discipline and management, students having fun while playing digital games, and enhancing students' participation and involvement in the class. "Students get involved in the class and the self-confidence that they get by constant using digital games in the class." Another teacher responded to item number 23 and said, "Playing games in the class creates better teacher-student relationships, and this leads to getting better outcomes."

Along with the open-ended questionnaire results, the interview outcomes were similar to the questionnaire's responses. In response to the researcher's question if DGBL is more helpful in providing extra learning opportunities to your students as compared to other types, the interviewee, Miss Randa, said, "Yes, it is very important for them. Number one we can say it helps them to store the information better in their minds. Number two it helps them to take the information excitingly, and therefore they will learn excitingly." In the same context, another interviewee, Miss Aseel, also responded positively and said, "I think teaching through DGBL provides my students with extra vocabulary and extra information."

Regarding motivation, the interviewer asked Miss Aseel if she thinks using DGBL can motivate the students to achieve the learning outcomes? She replied, "Yes, it motivates students to achieve more according to the subject they study and according to the game and to connect between them." Another interviewee, Miss Fatima, replied to the same question and said, "Yes of course I agree one hundred percent with that."

As I told you before, it motivates students and helps them to achieve more. In general, all the students want to be the best in everything.”

From the aforementioned examples that were taken from both the questionnaire and the interview responses, it is mentioned that DGBL enhances motivation by creating a sense of competition among students to gain the highest scores and win the game.

About the results of the questionnaire and the interview, the literature review also underscored the importance of using DGBL in improving learning outcomes. According to Chen et al. (2015), when English teachers use digital devices, this enhances the learning experience under the context of using various types and breeds of games. The positive result gained under the DGBL, such as points, badges, and high rank facilitates acting as a motivation factor to learn new languages. Along the same lines, Pesare et al. (2016) clarified that there is a positive correlation between games and the quality of knowledge. Through games, learners increase their motivation and hence, better learning outcomes. Regarding problem-solving skills, Crocco et al. (2016) mentioned that as the game levels become more complex, this situation develops the ability of problem-solving skills to address the game’s challenges.

In short, the results of the open-ended questionnaire and the semi-structured interview are driven by the literature review. Teachers agreed that DGBL develops problem-solving skills and improves and facilitates knowledge acquisition. Students have fun while learning and create a better attitude toward learning. This characterization of DGBL is framed by class management.

5.4 Research Question 3: The Variations Between Teachers' Self-reports and Their Views on Using DGBL

To answer research question three, the researcher used the mixed method instruments, the questionnaire, and the interview data and analyzed them to find the consistency and the variation between them. When comparing the results of both the teachers' self-reports and their views regarding the use of DGBL, it can be broken down into three aspects. First, the element that shows the relation between the 10 teachers' interviews with 13 items and the 26 close and open-ended questionnaires was given to 70 English language teachers. It was demonstrated by direct comparison as shown previously in chapter 4 and by using different answers from the interviewed teachers and their correspondent questions from the questionnaire showed a strong correlation using different mean values and percentages to prove it.

The second element shows variation in both the interviewed teachers and the results of the questionnaire results. They were found to be less pronounced than the relationship aspect but still can prove to be a valuable resource by considering these variable answers and constructing a better analysis and overall feedback of the DGBL system. The third aspect, on the other hand, is regarding the close and open-ended items that were also shown previously in chapter 4 in detail, that did not correspond with the items from the interviewed teachers, which furthermore can be shown as a variation and as valuable information that help to improve the feedback given from the teachers regarding the DGBL system. Overall, it can be stated that the relation outweighs the variation when it comes to comparing the results of both, the interviewed English teachers and the feedback from the questionnaire given to the English teachers.

The literature review also highlighted the importance of DGBL in the educational system. As the new millennium witnessed a huge movement toward digital gaming, young students are increasingly interested and attracted to digital games. According to Brezovszky et al. (2019), the current practice is more based on the utilization of digital technologies to develop games more in areas of contributing towards compelling learning experiences from games as a main context of usefulness in making the educational objectives more applicable and ideal. Yükseltürk et al. (2018) alluded that it is possible to accomplish EFL learning via activities that can be audio or video and these could be made available through mobile learning. Digital games are also likely to offer learners an interactive learning experience and bolster independent learning, in comparison to traditional teaching strategies.

To sum up, the results of the consistency and the variations of the semi-structured interview and the questionnaire responses were sent along with the literature review. The majority of the teachers agreed that DGBL enhances and facilitates language skills as well as supports students emotionally and psychologically. However, there are minor disagreements in terms that some teachers do not believe that gamified learning can gain as it's expected although they have fun.

5.5 Conclusion

Teachers' perspectives are rarely taken into account in studies of this nature. Teachers' opinions about DGBL have not consistently yielded positive results in studies yet. This study aimed to investigate teachers' perception of the usage and implementation of DGBL in private schools and how it throws its shadow over the learning process. The researcher believes that DGBL is an effective tool to enhance

the quality of teaching and learning if it is implemented professionally. It is an essential factor to raise students' motivation, class management, and improving social skills. The current study used quantitative and qualitative methods through the questionnaire and the semi-structured interview. The participants for this study were teachers who were chosen from different private schools in Al Ain city in the UAE. The research sample of the questionnaire was 70 teachers, and the semi-structured interview population was 10 teachers. The results of the finding demonstrated that DGBL is a functional tool that teachers like to integrate into their teaching plan and curriculum. This is clearly shown in the following points:

- (a) It raises students' motivation to participate in the class therefore, it leads to better learning outcomes.
- (b) It is dynamic and supports social interaction among students.
- (c) It creates a sense of competition among students to achieve better results.
- (d) It is a major factor for class management that facilitates the learning process.
- (e) It is a source of attraction and creates an interesting atmosphere that makes students enjoy the taught material.
- (f) It aids the low achievers to take part in the class and makes them more confident.
- (g) It is an inspirational platform for both teachers as well as learners to facilitate the learning process.
- (h) It ignites students' imagination and breaks the boundaries to make them think outside the box.

5.6 Limitations

One of the study's major limitations is the availability of the sample. Due to the Covid 19 pandemic, the researcher was unable to complete the current study in time. Schools were closed and the educational process was conducted through online channels. It was difficult for the researcher to collect the necessary data, including conducting semi-structured interviews. Most of the schools were reluctant to accept people from outside the school to apply the caution protocols. This situation hindered the interview data collection and limited access to data. In addition, the study is relatively based on a limited sample size which was conducted in Al Ain city, and the data might be subject to sample selection bias.

5.7 Recommendations

Based on the previous results discussed before regarding the use of DGBL in English Learning, the following recommendations are suggested as follows.

5.7.1 Recommendations for English Language Teachers

The first is to incorporate the DGBL system into their teaching schedules more regularly and monitor the impact it has on the students over some time, in terms of efficiency, behavior, motivation to learn, social interactions, and other skills that can be gained through using DGBL that was discussed before like problem-based learning and critical thinking. Furthermore, more regular implementation of DGBL can also help to address the weak points that can be improved and help the teachers gain more experience and knowledge about the overview usage of DGBL in English learning.

The second recommendation for the English language teachers is to practice using more DGBL before class, as means to be more prepared since it's a relatively new concept that is yet to be incorporated entirely into the educational systems. This in turn will reduce the overall number of technical errors as well as save more time for the teachers to utilize for teaching during the class. Being more familiar with DGBL can also help teachers decide which platform to use for their optimal class since each platform can have a different interface and thus each teacher can have their personal preference.

The third and final recommendation for the English language teachers is to try and help students use the DGBL directly by assisting them when they need help and allowing them to practice using DGBL more regularly, which will also allow the students to get more familiar with using DGBL. Eventually, it will encourage students to learn more efficiently and help them gain better group work skills among other possible benefits.

5.7.2 Recommendations for Heads of Departments, Curriculum Developers, Schools, and Academic Organizations

- (a) First, the heads of departments should provide adequate training programs for teachers to properly implement and use DGBL in their classrooms. This will result in fewer technical errors and an overall better outcome when handling and using DGBL in teaching.
- (b) The second is for the curriculum developers to revise the current curriculum by trying to adjust it so that it better suits the concept of implementing DGBL into English teaching. Making DGBL usage easier and more accessible for both, teachers and students.

- (c) The third recommendation is to provide English teachers and responsible staff with a proper user manual and guide, which is a low-cost and efficient way to help teachers with technical problems and troubleshoot some problems when needed.
- (d) The fourth and final recommendation is for schools and academic organizations to promote the use of DGBL and monitor the teachers' overall performance with the use of DGBL and how well the students benefit from using DGBL and try to adjust and improve the usage and implementation of DGBL accordingly. Also, they provide both, the teachers, and students with the proper and sufficient equipment.

5.7.3 Recommendations for Further Research

Even though this study provided a lot of information regarding the feedback aspect about the use of DGBL in English teaching, there are still more principles and ideas which can further enhance the DGBL system, that can be uncovered with further research.

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Appendices

A: Research Questionnaire Digital Game-based Learning (DGBL)

Background Information					
Choose the statement that reflects your background.					
1. Gender	<ul style="list-style-type: none"> • Male • Female 				
2. Years of Experience	<ul style="list-style-type: none"> • 2-5 • 6-14 • 15-20 • More than 20 years 				
English Language Teachers' Perceptions of Implementing Digital Game-Based Learning in the UAE Middle Schools					
Instructions: Please circle the item number that mirrors your viewpoint.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Digital game-based learning (DGBL) is a way of teaching through fun.					
2. DGBL has improved students' problem-solving skills as independent English language learners.					
3. DGBL distracts my students from studying.					
4. DGBL has improved the language skills of my students.					
5. DGBL has motivated students to learn English at any place or at any time as motivated learners.					
6. Through DGBL, I motivate my students to participate in the class.					
7. I have attended workshops regarding the use and benefits of (DGBL).					
8. I think that different aspects of DGBL like videos, text, and audio have improved my					

	students' motivation for learning.					
9.	I think that different aspects of DGBL like videos, text, and audio have encouraged the students to solve more challenging tasks as independent learners.					
10.	I am fully aware of using DGBL.					
11.	Most of my students feel bored when I use DGBL.					
12.	Only high achieving students become motivated and independent learners when using DGBL.					
13.	I consistently use DGBL in my class to teach the English language to help my students to become independent learners.					
14.	My students can learn new language skills using DGBL independently.					
15.	I use a variety of games that support me in teaching the different English skills such as reading, vocabulary, etc.					
16.	I find using the traditional teaching method more appropriate to teach English language skills.					
17.	I prefer using the traditional teaching methods to DGBL to teach specific English skills.					
18.	I think DGBL has provided the opportunities to use the learned material in practice.					

19. What skills do you teach using DGBL?

- a. grammar
- b. vocabulary
- c. reading
- d. writing
- e. listening

20. How do you think DGBL has helped students to become independent and motivated learners?

21. What are things you like about using digital games in the classroom?

22. What are the drawbacks you perceive in using digital games in the classroom?

23. What results have you observed when using digital games as part of instruction?

24. How do you decide which digital games to use or not to use?

25. What kinds of digital games do you incorporate into your classroom?

26. How often do you incorporate digital games into your classroom?

B: Semi-Structured Interview

Research Topic	
English Language Teachers' Perceptions of Implementing Digital Game-Based Learning in the UAE Middle Schools	
Date of Interview:	Time of Interview:
Place of Interview:	Interviewer:
<p>Interview Purpose</p> <p>My name is Israa Mohammed Abbas, and I am a master's student at the UAEU. Sir/ Madam as a part of my degree requirement, I am required to carry out research and as part of the data collecting technique to carry out the research, I need your responses to the following questions. The purpose of the questions is to evaluate your feedback on these three topics</p> <p>A. What do English teachers in the UAE report about the use of DGBL?</p> <p>B. How do English teachers view the use of DGBL in English classrooms?</p> <p>C. Are there any variations between teachers' self-reports and their views on using DGBL?</p> <p>So, please read the statements carefully and mark your answers. Thanks</p>	
Part 1: Background Information	
<p>Gender</p> <p>a. Male</p> <p>b. Female</p>	
<p>Age</p> <p>a. 30 and below</p> <p>b. 31-40</p> <p>c. 41-50</p> <p>d. Above 50</p>	
<p>Education</p> <p>a. Bachelors</p> <p>b. Masters</p> <p>c. Ms/PHD</p> <p>d. Others</p>	
<p>Experience</p> <p>a. 2-5 years</p> <p>b. 6-14 years</p> <p>c. 15-20 years</p> <p>d. More than 20 years</p>	
Interview Rule	

This interview will be conducted by the teachers at middle schools.
<p>Informed Consent:</p> <p>Meanwhile, your consent shows your approval and agreement to participate in this study. Your permission also shows your acknowledgement of the following terms.</p> <ol style="list-style-type: none"> 1. Your participation showed that you have voluntaries yourself for study. 2. You can ask any question about informed consent. 3. To respect the privacy of the respondent; the Respondent's identity will be kept confidential 4. You can pass the question that you do not intend to answer. 5. You have the right to check the data that has been gathered in this secession. 6. The data cannot be used in any other studies without your permission. <p style="text-align: right;">Thanks</p>
Part 2: Interview Questions
Q1: What are your thoughts about using DGBL in English teaching?
Q2: Do you consider certain points when you select a specific digital game for English teaching as an appropriate source of intervention?
Q3: What English skills/skills do you prefer teaching using DGBL and why?
Q4: What skill/skills, do you think, that cannot be taught through DGBL and why?
Q5: Do you think this type of teaching, DGBL, is more helpful in providing extra learning opportunities to your students as compared to other types?
Q6: Do you think using DGBL can motivate the students to achieve the learning outcomes?
Q7: In your opinion, does DGBL affect low achievers? If yes, explain!

Q8: What benefit(s), do you think, the students might gain when using DGBL other than learning the language?
Q9: What challenges (if any) do you face when applying DGBL in your class?
Q10: Have you attended any workshops regarding the use of DGBL for the English language?
Q11: Do you think you need to attend some workshops about using DGBL to be able to use it more frequently and confidently?
Q12: How does DGBL help the students in mastering a certain skill?
Q13: Would you recommend other teachers to use DGBL for teaching the English language? Why?

C: Consent Letter

English Language Teachers' Perceptions of Implementing Digital Game-Based
Learning in the UAE Middle Schools

Please read carefully!

You are invited to participate in a research study on English teachers' perceptions of implementing digital game-based learning in UAE middle schools.

There are no known risks if you choose to participate in this study, and there is no cost to participating in the study. The information you provide will help me understand how to best the needs of the organizations and staff. The information collected may not directly benefit you, but what I learn from this study should be of general benefit to workers, organizations, and researchers.

This questionnaire is anonymous. If you choose to participate, please do not put your name on the questionnaire. No one will be able to identify you, and no one will be able to determine which company you work for. No one will know if you participated in this study. Nothing you say on the questionnaire will in any way affect your present or future employment with your company.

Your participation in this study is voluntary. If you choose to participate, please indicate your administration. Questionnaires will be collected each afternoon by the researcher.

Your participation in this study will take approximately 13-15 minutes to complete the questionnaire.

If you have further questions or concerns about completing the questionnaire or about being in this study, you may contact me at [\[israa.abbas21@gmail.com\]](mailto:israa.abbas21@gmail.com).

Mrs. Israa Abbas
UAE University

D: Letter of Permission



Date: 26-05-2021

To Whom It May Concern

This is to confirm that **Israa Mohammed Abbas (ID: 201870146)** currently a Master student at the College of Education- Major **Curriculum & Instructions in English** , at United Arab Emirates University .She is conducting a study for her final course on:

English Language Teachers' Perceptions of Implementing Digital Game-Based Learning in the UAE Middle Schools.

We kindly ask for permission to allow Israa to interview some teachers and get their feedback on the research questionnaire and interview in the schools.

Respectfully,

Prof. Ali Shehadeh
Master Coordinator
Ali.Shehadeh@uaeu.ac.ae

037134078



Dr.Badreyya AlKhanbooli
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E: Research Approval Letter from Department of Education and Knowledge



دائرة التعليم والمعرفة
DEPARTMENT OF EDUCATION
AND KNOWLEDGE

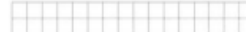
<p>Date: 22-Jun-2021</p> <p>To: Private Schools Principals</p> <p>Subject: Research Permission Request</p> <p>Dear Principal,</p> <p>The Department of Education and Knowledge would like to express its gratitude for your generous efforts and sincere cooperation in serving our researchers.</p> <p>You are kindly requested to allow the researcher: Israa Mohammed Abbas, to complete her research on:</p> <p>English Language Teachers' Perceptions of Implementing Digital Game-Based Learning in the UAE Middle Schools</p> <p>Please facilitate the researcher in conducting the research for the topic mentioned above by allowing her to conduct surveys a sample group of teachers and staff</p> <p>Thank you for your cooperation. Yours respectfully,</p> <p> Raphael Mendes Stein Knowledge Management and Data Analytics Division Director</p>	<p>التاريخ: 22 يونيو 2021</p> <p>السادة/ مديري المدارس الخاصة المحترمين</p> <p>الموضوع: تسهيل مهمة باحث</p> <p>تحية طيبة وبعد،</p> <p>يطيب لدائرة التعليم والمعرفة أن تتوجه لكم بخالص الشكر والتقدير لجهودكم الكريمة والتعاون الصادق لخدمة الباحثين.</p> <p>نود إعلامكم بالسماح للباحثة / إسراء محمد عباس، باستكمال بحثها بعنوان:</p> <p>إدراك معلمي اللغة الإنجليزية للتطبيق الإلكتروني للتعليم القائم على أساس اللعب للصفوف المتوسطة في دولة الامارات العربية المتحدة</p> <p>وبذلك، يُرجى التكرم بتسهيل مهام الباحثة ومساعدتها على إجراء الدراسة المشار إليها، من خلال السماح لها بإجراء استبيانات لعينة من المعلمين والموظفين</p> <p>شاكرين لكم حسن تعاونكم وتفصلوا بقبول فائق الاحترام والتقدير،</p> <p>رافائل مندس ستين مدير إدارة - إدارة المعرفة وتحليل البيانات</p>
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جامعة الإمارات العربية المتحدة
United Arab Emirates University



UAE UNIVERSITY MASTER THESIS NO. 2022:19

This study investigates how English teachers perceive the use and implementation of DGBL in middle schools in the United Arab Emirates. Digital game-based learning is a relatively new method that is being integrated into the classroom. This method requires ICT skills in line with pedagogy to be practiced in a meaningful way.

Israa Mohammed Abbas received her Master of Education from the Department of Curriculum and Methods of Instruction, College of Education at UAE University, UAE. She received her BA from the College of Education, Abu Dhabi University, UAE.

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