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EXPLORING THE ROLE OF DIRECT PHONEMIC AWARENESS INSTRUCTION OF DECODING AND LETTER NAMING ON READING ABILITIES OF UAE KINDERGARTENERS

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

Under the Supervision of Dr. Negmeldin Alsheikh

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Declaration of Original Work

I, Eiman Abdulla Muhsen Altheeb Alkhlaifi, the undersigned, a graduate student at the United Arab Emirates University (UAEU), and the author of this thesis entitled "*Exploring the Role of Direct Phonemic Awareness Instruction of Decoding and Letter Naming on the Reading Abilities of UAE Kindergartners*", 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. Negmeldin Alsheikh, in the College of Education at UAEU. This work has not previously been presented or published, or formed the basis for the award of any academic degree, diploma or a similar title at this or any other university. Any material borrowed from other sources (whether published or unpublished) and relied upon or included in my thesis have been properly cited and acknowledged in accordance with appropriate academic conventions.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 thesis.

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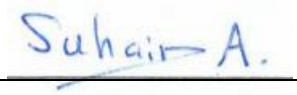
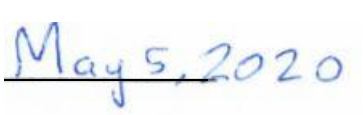
Signature  Date 

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Abstract

This study aimed at exploring the role of direct phonemic awareness of letter naming and decoding on the reading abilities of Emirati kindergartners. Mixed method adopted to achieve the purpose of this study. In the first phase of the study quantitative means were used by conducting a pre and a post-test after implementation of a program for six weeks. The second phase of the study featured a collection of qualitative data by means of document analysis which was randomly selected from the participants' performances during the program. The participants in this study were KG1 students who were selected conveniently (n = 40) and were divided into two groups: Experimental and Control group. Generally, the results gleaned from the pre- and post-test showed that there is a significant difference between experimental group and control group in terms of letter naming and decoding skills in favor of the experimental group. The qualitative results revealed that the use of direct phonemic awareness instruction leads to tangible, incremental gain in letter naming and decoding skills. The study addressed key issues related to EFL kindergartners' reading literacy skill in terms of the role of direct phonemic awareness instruction on reading abilities, and it gives some recommendations for EFL instructors, curriculum planning, instructional materials and suggest some implications for future research.

Keywords: Phonemic awareness, direct phonemic awareness instruction, letter naming skill, decoding skills, emergent reading literacy, EFL kindergarteners.

Title and Abstract (in Arabic)

استكشاف دور التعليم المباشر للوعي الصوتي في قراءة الحروف و فك الرموز الصوتية للكلمة لدى طلبة رياض الأطفال

الملخص

هدفت هذه الدراسة إلى استكشاف دور التعليم المباشر للوعي الصوتي في قراءة الحروف و فك الرموز الصوتية للقدرة على القراءة لدى طلبة رياض الأطفال الإماراتيين. اعتمدت الدراسة المنهج المختلط ليحقق الهدف منها في المرحلة الأولى تم استخدام الوسائل الكمية من خلال تطبيق الامتحان القبلي والبعدي بعد تنفيذ البرنامج لمدة ست أسابيع. والمرحلة الثانية من الدراسة مجموعة من البيانات النوعية عن طريقة تحليل الوثائق التي تم اختيارها بشكل عشوائي من بين أداء المشاركين خلال البرنامج. كان المشاركون في هذه الدراسة من طلاب الروضة الأولى (العدد = 40) الذين تم اختيارهم بشكل ملائم وتم تقسيمهم إلى مجموعتين : المجموعة التجريبية ومجموعة التحكم. بشكل عام، النتائج التي تم جمعها من الاختبار القبلي والبعدي أظهرت أن هناك فرقا بين المجموعة التجريبية ومجموعة التحكم من حيث مهارات تسمية الحروف وفك رموزها الصوتية لصالح المجموعة التجريبية. وكشفت النتائج النوعية أن استخدام التعليم المباشرللوعي الصوتي يؤدي إلى مكاسب ملموسة وتدريجية في مهارات تسمية الحروف وفك رموزها الصوتية. وتناولت الدراسة القضايا الرئيسية المتعلقة بطلاب الروضة الذين يتعلمون اللغة الإنجليزية كلغة أجنبية ودور التعليم المباشر للوعي الصوتي في مهارات القراءة. كما تم إدراج بعض التوصيات للمتخصصين في تعليم اللغة الإنجليزية كلغة أجنبية، وتخطيط المناهج، والمواد التعليمية واقتراح بعض التوصيات للبحوث المستقبلية.

مفاهيم البحث الرئيسية: الوعي الصوتي، التعليم المباشر، مهارة تسمية الحروف، مهارة فك الرموز الصوتية للكلمة، مهارة القراءة، طلبة رياض الأطفال.

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Dedication

To my beloved my mother and dear husband Sultan

My kids: Saif, Mariam, Meera, Zayed, Theyab

My brothers: Saeed, Maktoom, Ali, Mohammed

and sisters: Entesar, Amal, Hanan, Huda, Yasmeen and Saba

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Chapter 1: Introduction

1.1 Overview

This study is designed to explore the role of using direct phonemic awareness instruction of letter naming and decoding skills on the reading abilities of Emirati kindergarteners. The study strives to show enriching data that serves in nurturing the purpose of the study, by focusing on the actual gains in kindergarteners' phonemic awareness skills. This introductory chapter provides a brief description of the research topic's background, problem statement, purpose of the study, research questions, significance of the study, definitions of key terms, and the study's limitations and delimitations.

1.2 The Importance of Reading Skill for Emergent Learners

Reading as an input skill contributes to gaining information and knowledge about language. Through reading, students can comprehend lessons that are taught at school because the acquirement of the reading skill, allows students to better grasp other content areas. Additionally, reading can have a course of action that assists in building up students' vocabulary repertoire and language expressions (Honchell & Schulz, 2012). For example, Campbell et al. (2002) emphasized that that nurturing strong literacy education for children in the early years leads to better consequences later on in their academic success. In a very important sense, reading as a literacy skill serves in feeding children's brains with data for language development. The ability to read and write is identified as one of the essential elements in language learning and academic success. Emergent literacy skills (reading and writing) are fundamental in

building language skills in a subsequent and constructive manner. However, emergent readers face many challenges when they approach reading because the ability to read needs a broad range of language and literacy knowledge and skills. These skills develop and interact with one another simultaneously throughout the reading acquisition process (Baroody & Diamond, 2016).

1.3 Phonemic Awareness as an Important Skill in Emergent Reading

To build up constructive emergent literacy skills, different areas must be promoted during the early childhood as a critical stage of development for emergent readers. Many researchers (e.g. Yopp, H. & Yopp, R., 2000; Soltz, 2016; Otaiba et al., 2010) indicated that emergent literacy is progressed based on five essential areas that pertain to reading development. The outlined areas are: compression, vocabulary, fluency, phonics and phonemic awareness. As such, phonemic awareness specifically is considered to be a strong predictor of early reading success. Specifically, phonemic awareness is crucial because it the essential ability to understand how spoken language is linked to written language. Researchers (e.g. Suggate, 2016; Phillips & Torgesen, 2006) have found that phonemic awareness instruction are effective in reading comprehension.

Reading comprehension gives opportunities for learners to be more critical thinkers and meaning makers (Tang, 2016; Nation, 2007). Thus, empowering student growth in phonemic awareness is essential as an initial stage in building up reading comprehension. Accordingly, by the end of the Kindergarten, students should at least acquire the basic reading skills such as, letter naming and decoding skills that serve in promoting reading as a literacy skill. In fact, the lack of these skills might stifle the

progress of reading in a way that leads to different issues related to reading accuracy, fluency, comprehension and interpretation (Alvermann & Unrau, 2013).

Reading issues are common concerns for educators. The National Reading Panel (2000) found that difficulties in reading caused by inadequate phonological and phonemic awareness might have a long-term impact on students' achievement in reading. The success of students' attainment depends on the development and growth of phonemic awareness as a fundamental skill, yet students struggle to learn to read (Catts et al., 2015).

It is essential that phonemic awareness is further explored as one of the main demands for both the knowledge and the practical basis of the reading skill for both English as a second language (ESL) learners and English as a foreign language (EFL) learners. For example, in a study conducted by Good III, Simmons and Kame'enui (2001), they identified three foundational beginning reading skills for ESL learners: (a) phonological awareness, which means the ability to hear and manipulate the sound structure of language; (b) phonemic awareness including alphabetic understanding, which refers to matching between the printed and the spoken language, corresponding sounds and blending stored sounds into words; and (c) accuracy and fluency in reading with connected texts.

It is not only about exploring phonemic awareness as a main demand for reading skill, but also investigating the pedagogical strategies needed to be implemented in the class to make the process of raising phonemic awareness more effective and practical.

Recently, there has been an exploration of phonemic awareness practices in the United Arab Emirates (UAE) as a mixed context between EFL and ESL. Specifically, in a study conducted by Alghazo and Al-Hilawani (2010) the researchers explored the

teachers' knowledge, skills and practices of phonological awareness that were employed in their classroom. It was found out that amongst 83 kindergarten teachers, there were significant gaps between what kinds of knowledge and skills the teachers have about phonological awareness and their real practices in the classroom.

1.4 The Importance of Direct Instruction in Promoting Phonemic Awareness

The importance of phonemic awareness in reading success requires teachers to take a closer look into the effectiveness of instructional strategies, which helps young children develop their phonemic awareness when reading a text (National Reading Panel, 2000). Identifying strategies best increase the phonemic awareness skills of students, which will allow teachers to creatively hone their practices and enhance students' achievement in reading. For example, Adam and Osborn (2006) believe that phonemic awareness can best be taught through direct instruction by the teacher. In addition to that, Flett and Conderman (2002) indicated that the explicit or direct teaching of phonemic awareness in the early stages of learning can increase the ease of acquiring the important skills of reading. Sine phonemic awareness is a conscious knowledge that need high awareness of breaking words into small unites (e.g. sounds and phonemes), direct instruction is the best way to apply for the sake of developing reading abilities (Evinger, 2000).

Based on that, this study addresses the practicality of employing direct instructions to raise phonemic awareness for kindergarten learners. Therefore, this study uses different direct teaching activities to serve in exploring the role of direct phonemic awareness instruction in Emirati kindergarten students' naming letters and decoding skills.

1.5 Problem Statement

In the United Arab Emirates context, policy makers encourage education stakeholders to create a culture of reading (Dubai School Inspection Bureau (DSIB), 2020). Hence, by the end of kindergarten stage, policy makers expect kindergarteners to read and write at their grade level. To support and help students achieve this goal, teachers need to assess students though identifying their gaps in reading; especially, those who have limited knowledge and skills about how text works (Dubai School Inspection Bureau, 2020).

Despite the overwhelming efforts stressing the need for developing English reading literacy skills in the UAE context. The Emirati students are still striving to achieve higher levels in English reading skill; particularly when they take standardized tests such as the Program for International Students Assessment (PISA). Therefore, today students face difficulty with reading as a literacy skill and their weakness holds them back in achieving the baseline level of reading proficiency (Ness, 2016; OECD, 2016). In reference to PISA, achieving level 6, the highest level in reading literacy, means that students must be able to comprehend, interpret, make inferences, reflect and interact with particular written texts (OECD, 2016).

In order to reach such a high level of interpretation as required in PISA test, students' basic skills of reading must be constructed from the beginning in their emergent literacy stage. However, results of PISA showed that 20% of students in OECD participated countries, including the UAE, do not achieve the baseline level of reading proficiency (OECD, 2019). Currently, the latest results revealed that in the UAE, 57% of test takers reached at least Level 2 proficiency in reading with a band score of 432, which is a stable score that has been maintained since 2009 (OECD,

2016). At a minimum, these students are only able to identify the main idea in a moderate length text, find explicit information and are able to reflect on the purpose and form of texts when they are explicitly directed to do based on the test instructions (OECD, 2019). These results should trigger policy makers and stakeholders' curiosity, as to seriously question from where they should start to solve this issue. Intuitively, they should start from the roots of the problem, which is focusing on emergent learners where basic skills of reading must be scaffolded and acquired. Although students are being exposed to English language training from kindergarten stage, policy makers and stakeholders need to raise the concern as to why students are still facing difficulty in grade 6 and 7 to comprehend and interpret English language texts.

In view of the above, researchers in the UAE should focus on the emergent literacy stage and try to investigate what kinds of issues halt the development of students' reading literacy skills. For examples, some researchers (e.g. Yopp, H. & Yopp, R., 2000; Soltz, 2016; Otaiba et al., 2010) concluded that emergent literacy is progressed based on five fundamental areas pertinent to reading development, these areas are: Phonemic awareness, phonics, text comprehension, vocabulary and fluency. Investigations about the smallest components of emergent literacy such as phonological/phonemic awareness skills along with word recognition might reveal what students need to work on to develop their reading as a literacy skill.

In fact, some studies addressed the idea of phonological awareness generally in the UAE context, addressing particularly students who have disabilities (Elhoweris et al., 2017; Al Muhairy et al., 2018). Other studies conducted by Alghazo and Al-Hilawani (2010), and Tibi (2005) addressed the idea of how teachers' levels of knowledge and skills in phonological awareness affects students' development of reading skills. However, a little attention was given to the idea of the practicality of

using direct phonemic awareness instruction in kindergarten stage in English as a foreign language (EFL) context. Additionally, how the focus on phonemic awareness skills serves in building up strong basic skills of reading literacy for emergent readers as a kind of preparation for moving to the next stages of their reading development process, is still not addressed clearly in the literature.

1.6 Purpose

Given the scarcity of research on phonemic awareness programs in teaching English as a foreign language at kindergarten level in the UAE context; this study aims at exploring the role of direct phonemic awareness instructions of decoding and letter naming skills on kindergartener's emergent reading ability. Moreover, this study investigates how the actual use of direct phonemic awareness instruction contributes to promoting kindergarteners' letter naming and decoding skills. This executed through using direct instruction through deploying different materials and activities in the classroom to show the real gains in these areas.

1.7 Research Questions

The research questions that will be explored in this study are:

1. Does the use of direct phonemic awareness instruction of letter naming positively affect Emirati Kindergarteners' emergent reading ability?
2. Does the use of direct phonemic awareness instruction of decoding positively affect Emirati Kindergarteners' emergent reading ability?

3. How does the use of direct phonemic awareness instructional of letter naming and decoding actually contribute to promoting kindergarteners' emergent reading ability?

4. To what extent does the qualitative results support the quantitative results?

1.8 Significance

Given how rigorous literacy standards have become for the 21st century learners, phonemic awareness as a key area in reading development is considered to be a strong indicator of early reading success. Providing direct and diverse phonemic awareness instructions may have a powerful impact on a kindergartener's ability to manipulate sounds, name letters and decode texts. Thus, this study may contribute to the knowledge and instructional base for UAE kindergarten schools, teachers and parents because it shows the stakeholders the practical use of direct phonemic awareness instruction in real classrooms. For instance, it may add to the field of pedagogy and instruction on how teachers can use direct instructions to promote phonemic awareness skills such as letter naming and decoding skills. Some of its contributions might include: the appropriate selection of materials, activities and tasks to serve kindergarteners' needs and development in reading literacy skills, as well as suggesting ways of implementing these activities through different pedagogical strategies and techniques.

In terms of the research base, there is a lack of experimental studies that investigate the role of direct phonemic awareness in improving Emirati Kindergarteners' phonemic awareness. Therefore, this study attempts to fill a gap in the literature through addressing the role of direct phonemic awareness instruction as an initial stage in improving Emirati kindergarteners' reading literacy skill. This will

be employed by an explanatory sequential mixed method design to capture deep understanding of the role of direct instruction in promoting the area of phonemic awareness in emergent literacy stage.

1.9 Delimitations

Due to the nature of the study, some delimitations were specified. They include the following: 1) The participants were selected according to their availability and willingness to participate. Therefore, the participants were limited to kindergarten students (KG1) in one of the public schools in the UAE context. Additionally, this study targeted only two components of phonemic awareness, namely, decoding and letter naming skills, which are phonemic awareness subskills. So, it was directed by pre and post-tests and a designed program for six weeks, which was applied to explore the role of direct phonemic awareness instruction in promoting kindergartners' letter naming and decoding skills. Moreover, this study targeted the students' performances during the implementation of the program, while the teachers' views were not taken into account because the time is limit just six weeks and the researcher want to focus more on practical strategies on teaching direct phonemic awareness instruction for kindergarteners.

1.10 Limitations

This study attempts to explore the impact of using direct phonemic awareness instruction on reading skills. Hence, it relies on experimental measures that will be taken including the convenience sampling based on the availability of classrooms. This may limit the generalization of the study because it is only applied across two

classrooms in one public school. Furthermore, the study was conducted within a short time frame.

1.11 Definition

Phonemic Awareness: Phonemic Awareness is defined by Phillips, Menchetti and Lonigan (2008) as the ability to recognize and manipulate the smallest sound pieces in words and the phonemes. Moreover, the National Reading Panel (2000) defined phonemic awareness as the ability to identify the sequence of sounds that a spoken word consists of and the ability to segment or blend sounds into a word.

Emergent Literacy: Children acquire knowledge of language, reading and writing before kindergarten (Tracey & Morrow, 2006).

Explicit or Direct Instruction: Explicit or Direct Instruction (DI) is defined by Phillips, Menchetti and Lonigan (2008) as "an approach used for beginning reading instruction which emphasizes a procedural or a step by step instruction of phonics and decodable texts that make use of unique initial teaching alphabet, and structured guides for teachers" (p. 1406).

Decoding: Decoding is defined by Perfetti (1985) as he ability to transform printed letter strings into a phonetic code. It can be measured by the accuracy of pronouncing increasingly difficult words or by the pace to pronounce increasingly difficult words correctly.

Letter Naming: Stage et al. (2001) defined letter naming as a prediction of "reading growth" for it could contribute in assessing "a gateway skill for the development of more complex grapheme-phoneme knowledge" In this way students

could visually discriminate the letter and then name it before they can develop orthographic knowledge and the ability to decode words" (p. 226).

1.12 Summary

This study divided to five chapters. Chapter one introduction the topic, statement of the problem, purpose, research questions and significance of the study. Chapter two includes the conceptual framework, theoretical framework and relevant studies related to the research topic. Chapter three is exclusively focuses on outlining the methodology of the research by delineating the research design, the study participants, the instruments used in the study, data collection and data analysis. Chapter four shows the main results related to the research questions which is includes quantitative and qualitative results. Chapter five discusses the major findings of this study and add recommendation and implications for future research.

Chapter 2: Literature Review

2.1 Introduction

This chapter addresses the conceptual framework, the theoretical framework and other relevant studies. The conceptual framework contains the main concepts addressed in this study including, phonemic awareness and its relation to reading skills, emergent literacy and decoding skills. The theoretical framework demonstrates the main theories that show a connection with the idea of direct phonemic instruction including, behaviorism theory, Ehri's phase theory, Scaffolding theory and bottom-up model. The relevant studies in this section delves into the ideas of using direct phonemic awareness instruction in improving letter naming and decoding skills within different contexts, particularly Arab countries.

2.2 Conceptual Framework

Conceptual framework in literature review used to illustrate what is expected to find in research including how the variable which are considering in research related to each other.

2.2.1 Phonemic Awareness and Reading Skill

Educators would have to agree that learning to read is the most fundamental aspect of a child's learning and education. One of the essential components used to enhance reading skill for kindergarteners is the development of phonemic awareness. For example, Yeh and Connell (2008) defined phonemic awareness as the ability to

recognize the spoken words within a reading text, as those words are made up of a set of phonemes. A phoneme is the smallest part of speech that affects the meaning of a word within a reading text. For example, in the word hat, /h/ is considered a phoneme (Yeh & Connell, 2008). Students who enter kindergarten stage with poor phonemic awareness skills will struggle and face difficulty in reading when moving on to higher grades (Al-Bataineh & Sims-King, 2013). In fact, phonemes scaffold readers with a strategy for decoding unfamiliar words, which serves in building up vocabulary knowledge; thus, whetting reading as a literacy skill (Armbruster, Lehr & Osborn, 2001; Mann & Foy, 2006). However, Shulman and Capone (2013) pointed out that breaking words up into sounds is difficult for young children. Dividing words into their phonemes is not easy for kindergarteners because there are no clear boundaries in speech and the sounds tend to be overlapped in kindergarten stage (McEwan, 1998).

Therefore, the ability of young children to listen and hear 26 letters and 52 sounds within words varies. This has led Stanovich (1986) to emphasize the importance of phonemic awareness at an early reading development stage and how teachers should use effective pedagogical strategies, which will enhance phonemic awareness from the beginning. In fact, phonemic awareness is associated with enhancing vocabulary and reading comprehension (Yeung & Chan, 2013). The effectiveness of phonemic awareness programs could lead students to successful pathways to understand new words' meaning and the main idea of texts being read (Adams, 2000).

2.2.2 Phonemic Awareness and Emergent Literacy

Kindergarten is a crucial part of the school experience in reading and specially in literacy development. According to International Literacy Association (ILA, 2010), the most important period of literacy development is from birth to age eight. Additionally, they indicated that children in kindergarten need exceptional support in their learning through the usage of appropriate practices to enhance their literacy development. The primary purpose in kindergarten stage is to develop the physical, social and cognitive abilities through making students being exposed to different learning experiences. Reading as a part of cognitive abilities must be enhanced by starting with the smallest units of words like letters and their corresponding sounds. According to Samuels and Farstrup (2006), most kindergarten children will not make progress toward reading as a literacy skill unless they have great familiarity with letters and phonological skills and can begin to integrate both together.

Phonemic awareness is a fundamental early literacy skill which is an indicator to reading acquisition and future reading success (Carson, Gillon & Boustead, 2013; Kaminski & Good III, 2012). In fact, the two best predictors of reading acquisition during the first two years of school and they are precursors for reading according to National Reading Panel (2000) are phonemic awareness and letter knowledge. The relationship between phonemic awareness and early literacy skills is a reciprocal relationship. Where, the argument is that phonemic awareness improves literacy; while literacy development in other areas improves phonemic awareness (Bell, 2011; Ehri, 2005; Mann & Foy, 2006).

2.2.3 Letter Naming and Decoding as Main Phonemic Awareness Skills

It is very important for children to learn letter naming and decoding skills at an early age. They are skills that help children to look at the print word and able to read it through connecting letters with sounds (Mody, 2003). Readers in decoding skill sound out the targeted words by breaking up the words' parts to pronounce them, then joining those parts again to form back the words (Hudson et al. 2011; Suggate, 2016). Decoding words serve in increasing the level of reading comprehension through joining parts of words as quickly and accurately in a meaningful way (Ghoneim & Elghotmy, 2015).

Therefore, those students who did not develop their decoding skills in their early stage of learning will struggle with reading comprehension (Capraro, 2006). Hence, preparing students to grow the ability to decoding words will help them become good readers (National Reading Panel, 2000). Phonemic awareness indicates that there are several different letters and sounds in words and it helps in making a correspondence between these two components in order to make meaning at the end (Paris, 2005).

Furthermore, Foorman et al. (2003) indicated in their study that phonemic awareness is important in early reading education because children can associate sound with letters, which is a useful skill when they start to decode. In kindergarten, students become aware of how groups of sounds operate in words when speaking the language. Also, developing awareness of individual sounds can help students attend to and manipulate in words. These individual sounds of language are known as phonemes (Adams, 2000). Hence, the ability to hear and manipulate the sound in spoken words

and the understanding that spoken words and syllables are made up of sequences of speech sounds (Carson, Bayetto & Roberts, 2018).

2.2.4 Direct Phonemic Awareness Instruction

Explicit or direct phonemic awareness instruction is more helpful than incidental exposure to letter-sound relationships. For example, Bell (2011) has defined direct instruction as "an approach to beginning reading instruction that emphasizes a step-by step approach to phonics, decodable texts that make use of unique initial teaching alphabet, and structured guides for teachers" (p. 1406). Moreover, Mathes et al. (2005) pointed out that effective reading instruction should be directed and modeled explicitly.

Additionally, explicit, or direct instruction in one or two phonemic awareness skills is more beneficial than instruction in multiple skills (Cardoso-Martins, Mesquita & Ehri, 2011; Foorman et al., 2003). For instance, Al-Bataineh and Sims-King (2013) investigated the effects of explicit phonemic awareness instruction to early reading success in kindergarten students' early literacy and reading abilities. They adopted a program designed by Heggerty (2005) for kindergarteners and it was taught explicitly and directly. The results revealed that kindergartners showed significant improvements in their phonemic awareness skills; thus, improving their reading abilities. Moreover, the results revealed that those struggling students have improved, by which the gap between them and the students who are strong in phonemic awareness was minimized. This raised their confidence and their understanding of how letters and sounds are working together.

2.3 Theoretical Framework

In this section of literature review, theories related to the research study will be addressed in detail including: Behaviorism theory, Ehri's phases theory, Vygotsky's scaffolding theory and bottom up model.

2.3.1 Behaviorism Theory

Behaviorists believe that humans are able to learn a language if both time and opportunities are available. However, the computing power that is required to learn thousands of letters, sounds and words, and the associations that links these components together must be also available (Bates, 1999). Skinner (1957) posited that children learn language through conditioning and habit formation. The idea of nurture is the core here, which means creating an environment that facilitate children's language learning to be nurtured through imitating and drilling. As Shulman and Capone (2013) stated that the main principle of the nurture approach to language learning is that language, whether first or second language, can be taught as a learned behavior, where language behaviors are not that much different from other types of learned behaviors or skills that can be observed. Moreover, they believed that the teacher and the environment play a critical role in the children's learning of language (Skinner, 1957).

Learning was understood by behaviorists as a process of changing in behaviors due to external experiences. Explaining these behaviors is occurred by observing the responses which existed when stimuli are introduced. Therefore, when a particular stimulus is associated with a particular response, a habit is constituted. Habits have two main characteristics in which they are observable and automatic (Ellis, 1985). These habits are difficult to be eradicated unless the environmental changes lead to the

evanescence of the stimuli in which habits built upon. This type of behavior is called the classical conditioning in which it is related to the early language-learning behaviors of infants when they response to some letters, sounds and words uttered by others, particularly their mothers.

Moreover, Skinner (1957) overemphasized the consequences of the responses. Responses should be reinforced and help in strengthening the associations. So, learning of habits occurs through imitation to reach to the stage of automaticity and through reinforcement whether by rewarding or punishment (Ellis, 1985). According to the behaviorist learning theory children acquire their first language through imitating utterances produced by adults. These utterances, mimicked by children, are rewarded or corrected by adults like parents or teachers. In this way, children build up their knowledge of patterns and habits that constitutes the language they are trying to learn. Also, acquiring second language proceeds in a similar way through identifying the stimulus-response association that constitutes the habit of the L2 (Ellis, 1985). "Language learning, first and second, was most successful when task was broken down into a number of stimulus-response links, which could be systematically practiced and mastered one at a time" (p. 21), (Ellis, 1985).

Finding answers to children's reading problems during 1950 to 1965 was influenced by psychological research in the form of Skinnerian behaviorism, which was the prevailing research orientation during that time. It served in bringing the scientific perspective to the reading problem by applying the principles of analysis that explained and controlled the behavior of animals observed in the laboratory to children's language learning. Therefore, pedagogical techniques were extracted based on the psychological and environmental understanding of human behavior. The idea of analysis meant clearly defining and breaking down the processes and skills involved in learning to read

into their constituent parts. Then these parts were diagnosed to identify areas of deficiencies and could then be practiced and reinforced in a systematic way according to the classroom instructions, which were considered as prescription and remediation (Alexander & Fox, 2013).

The great influence of behavioristic theory in education made reading a conditioned behavior, where it can be acquired as a result of certain environmental contingencies rather than as growth or developmental process. Thus, the acquired behaviors will be useful to learners under other contingencies later on. Thus, learning to read results from the repeated and controlled environmental stimulations that come to provoke predictable responses from the learners (readers) based on a careful selection of rewards and punishments, which leads to the habituation of the reading act (Alexander & Fox, 2013). Reading was dealt as a discrete skill by untangling the chained links of behaviors involved in reading into components in which each component skill should be trained (Glaser, 1978). Accordingly, the emphasis on the observable behaviors in the learning process alluded to the consideration that reading is a perceptual activity. This meant including the identification of visual signals, then translating these signals into sounds, and assembly of these sounds into words, phrases and sentences. The phonics instruction came to be the basic foundation for beginning to read (Chall, 1967).

2.3.2 Ehri's Phase Theory

Ehri's Phase Theory refers to the phases, which children pass through when developing reading skills (Boyer & Ehri, 2011; Ehri, 2004, 2005). There are four phases: Pre-Alphabetic, Partial Alphabetic, Full Alphabetic and Consolidated

Alphabetic (Ehri, 2004, 2005). Children read words by using visual cues in the pre-alphabetic phase. Words are remembered by the visual context associated with the word. For example, the visual representation may be a picture related to the word or the shape of the word itself. Research with preschool-age children found out that even with changing a letter, student read words associated with signs by memory based on the visual cues of shape and colors (Boyer & Ehri, 2011; Ehri, 2004, 2005). In this phase, words are associated with actions. An example would be when a young child associates the word "Crest" with the context of brushing teeth (Ehri, 2004, 2005). In this case, children utilize visual cues because they have not developed letter-sound connections (Ehri, 2004, 2005). As children progress to the partial alphabetic phase, early readers start to acquire letter knowledge (Boyer & Ehri, 2011; Ehri, 2004). Learning to write their name was a strong predictor of future reading skills in children (Ehri, 2004). Letters provide concrete phoneme representations that disappear as soon as they are heard (Boyer & Ehri, 2011). Once there are no longer enough visual cues to support a child's reading; they move to a combination of cues and letter knowledge (Ehri, 2004). Children in the partial alphabetic phase demonstrate quick growth in their sight vocabulary (Ehri, 2004). Reading using either visual cues or partial phonetic cues is insufficient for reading success. Relying only on visual cues burdens a child's memory while phonetic cues also do not always work. Students often misread similar words such as balloon and button because they are relying on the first and last letter sound while ignoring the letters in between. In the full alphabetic phase, make connections between letters and sounds. The sound-symbol relationship retained in memory can be triggered when needed for reading (Gaskins et al., 1997). Learning to read requires recognizing words from memory through connections between letters and phonemes (Boyer & Ehri, 2011). Phonemic awareness is necessary to read words from memory

while also identifying phonemes in unfamiliar spoken words (Boyer & Ehri, 2011). The consolidated alphabetic phase, as the last phase, leads to further efficiency in reading. In this phase, learners start mastering the sound-symbol relationships and are able to chunk letters in groups such as –ing, -ment and –tion, in which decoding words becomes easier with consolidated letter units (Gaskins et al., 1997). Early language acquisition, phonemic awareness skill development, and teacher professional development each play a critical role in a child's ability to learn to read (McCollin, O'Shea & McQuiston, 2010).

2.3.3 Vygotsky's Scaffolding Theory

The Scaffolding concept was first coined by Wood, Bruner and Ross (1976), who defined it as a control over the assigned tasks' elements by a teacher, wherein learners focus on completing the assigned tasks, which should be within their levels, through their teacher's support. Therefore, Scaffolding reflected any kind of support provided with learners to help expand their knowledge and skills. In fact, learners do not act directly on the physical environment; however, they rely on symbolic tools, signs and activities as a kind of scaffolding that allows for progressing and changing. Accordingly, learners' minds are mediated to show how their social and mental abilities are organized and shaped through the integration of scaffolded artifacts (Lantolf, 2000). Vygotsky (1978) emphasizes the importance of creating a supportive and rich environment for learners based on their levels, needs and interests to cause development. In a very important sense, identifying the kinds of materials, activities and instructions should be based upon the learners' actual levels. These supportive sources must be well-selected, challenging and achievable at the same time to create a

sense of progress. Therefore, the ability to distinguish between the actual level and the potential level of the learners' development, which is called the Zone of Proximal Development (ZPD) could be achieved. The ZPD is defined by Vygotsky (1978) as: "The distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p.68).

The role of scaffolding in Vygotsky's theory is to functionalize the Zone of Proximal Development concept in the learning process (Wells, 1999). Vygotsky (1978) specifies particular features of scaffolding which are dialogical, supportive and challengeable. Additionally, Hammond (2001) indicate that there are many advantages for scaffolding in language learning which are: providing clear direction for second language learners, explicitly clarifying the activities' purposes, keeping learners working on activities, supporting and motivating learners and providing learners with worthy sources.

2.3.4 Bottom-Up Model

It is an analytical model which begins with low-level sensory representation (letter input) and continues through phonemic and lexical level representation, to reach to a deeper-structural representation. There is no higher level of processing in the flow of information and it is completely bottom up such as holding information in long-term memory. This model leads to the use of more direct instructional techniques when teaching reading (Alvermann & Unrau, 2013). Therefore, this model concentrates on learning in discrete order before more complex tasks can be mastered (Birch, 2002). For example, students should learn to identify their letters before they try to read words

and before they try to comprehend meaning within a context. Hence, phonemic awareness instruction is often associated with the bottom-up model. This is because it targets teaching smaller, discrete skills in language (e.g., letter identification, memorization of sounds) before reading words and before mastering higher order thinking skills (e.g., metacognition, comprehension of reading texts).

The idea of bottom-up model is influenced by behaviorists such as Pavlovs', Skinner's, and Thorndike's perspectives. During behaviorism, the focus of psychology shifted from the workings of the inner mind (unconscious, feelings, drives, impulses, and wishes) to observable behaviors that could be studied and explained (Kruidenier, 2002).

2.4 Relevant Studies

In this section in literature review the relevant studies include similar of some phonemic awareness research conducted in different country with different context.

2.4.1 Phonemic Awareness and Letter Naming Skill

Letter naming knowledge has played an important role in the acquisition of reading skill. In fact, letter knowledge is deemed to be a cornerstone for kindergartners' literacy acquisitions. Students in kindergarten stage must be able to learn how to identify and name letters in a way that assists in making meaningful associations between letter symbol and its sound (Carson, Gillon & Boustead, 2013; Jamaludin et al., 2015; Pinto et al., 2015). Many researchers (e.g. Benjamin et al., 2013; Cassidy, 2004; Gillon, 2005; Martin, 2014) have reached to a conclusion about how important is letter naming skill besides other decoding skills in nurturing the idea of reading with

understanding. For example, Gillon (2005) found that letter naming knowledge has helped children connect print to speech. Children who know how to name letters may be able to detect the relationships between letters in written forms and letter names in spoken or pronounced forms. Thus, they begin to understand the sound symbolizing function of letters. Another study conducted by Martin (2014) that aimed at determining how beginners in reading move from using visual to visual-phonetic cues while learning to read. His findings suggested that the mastery of the letters of the alphabet is the key factor, which enables beginners to learn and read by processing and remembering sound-letter relations in words and moving from being prereaders to being real readers.

Showing the importance of letter naming skill has been addressed from other perspectives through connecting this skill with other skills like phonological awareness and spelling. For example, a study that used direct instructions to measure letter naming, phonological awareness, and spelling knowledge by Paige et al. (2018) which used 2,100 kindergarteners who belong to 63 schools of a large, urban metropolitan schools district in the USA. In this study Paige et al. (2018) found that showed that letter naming and phonological awareness skills are considered best predictors for identify the level of students' spelling abilities. The study also found that seventy-one of the kindergarteners had gained full-fledged knowledge and use of letter naming knowledge. Furthermore, the study found that phonological awareness emerged gradually and gain momentum by forty-eight kindergarteners who had strong foundation and who rely on phoneme segmentation and phonemes blending. Moreover, the study found that almost 72% of the kindergartens were basically in the partial-alphabetic phase with regard to phonics knowledge that led to incremental development in spelling ability. Another similar Canadian study that was conducted by Evans et al. (2006) that focused on examining and assessing one hundred and forty-nine kindergarteners on their

knowledge of: letter names, letter sounds, phonological awareness, and cognitive abilities. Other scope of the study focus was on how these types of knowledge influence the acquisition of alphabetic knowledge in a naturalistic context, the relationship between letter-sound knowledge and the prediction of the students' phonological awareness as well as their word identification abilities. The gleaned from this study indicated that knowledge of uppercase letters precedes that of lowercase letters. Although the individual quirks of particular letters, type of letter naming revealed a significant effect on letter-sound knowledge, with acquired knowledge of sounds including vowels and for letters whose sounds are at the beginning of the word. Moreover, acquiring letter-sound knowledge at the beginning of the word was higher than acquiring letter-sound knowledge at the end of the word.

Although the previous studies addressed the idea of the importance of letter naming skill and its relation to phonological awareness and spelling, none of these studies address the idea of phonemic awareness as specific ability to focus on individual letters and their sounds (phonemes) and to manipulate these sounds in spoken words for the sake of accurate developing word recognition and spelling skills; instead of dealing with these skills from a very broad angle (phonological awareness). Since "phonemic awareness is one of the best predictors of how well children will learn to read during the first two years of school instruction" (Reading Rocket, 2020, p.1), this study focuses on exploring the role of direct phonemic awareness instruction in letter naming abilities of kindergarteners.

2.4.2 Phonemic Awareness and Decoding Sounds Skills

Phonemic awareness instruction is most effective when direct instruction is focused on one or two phonemic awareness skills, such as letter naming, blending and segmenting or decoding sounds, which are the most powerful phonemic awareness skills. Phonemic awareness is needed for children to be able to fully understand the function of letter-sound relationship found in print (Cardoso-Martins, Mesquita & Ehri, 2011). For example, the National Information Center for Children and Youth with Disabilities (as cited in Al-Bataineh & Sims-King, 2013) have conducted studies showing some tests that serve in developing the process of assessing phonemic awareness, phonics and an awareness to the concepts of print. They reported that these assessments can account for 85% of children who will face difficulty and struggle with reading, particularly beginners in kindergarten stage. However, 90-95% of students who are diagnosed as reading impaired can overcome these difficulties if they are scaffolded with opportunities to increase their awareness of sound-letter relationships.

The positive impacts of phonemic awareness instruction on kindergartener's ability to decode sounds has also been investigated extensively by different researchers (e.g. Carson, Bayetto & Roberts, 2018; Kessey, Konard & Joseph, 2014). For instance, a study was conducted by Carson, Bayetto and Roberts (2018) aimed at investigating and evaluating first-grade level students' phonemic awareness skills in South California when implementing direct instructional strategies. The researchers deduced that when an explicit instructional approach was used for the children, who lacked phonemic awareness and struggling in understanding of alphabetic principle, their decoding skills were impacted in a way that lead to the increase of their level of reading proficiency, particularly when they were assessed by Developmental Reading Assessment (DRA)

and Test of Early Reading Ability-Revised (TERA-R). Therefore, the students who received this explicit instruction demonstrated significant growth over time and 90% of the students reached grade – level proficiency according to the DRA and TERA-R tests. The studies enunciated the positive impact that explicit phonemic awareness instruction showed on coding and decoding sounds-letter relationship. Another study carried out by Carson, Bayetto and Roberts (2018) investigated the effect of teacher implemented phoneme awareness and letter-sound knowledge instruction on developing base of reading. The participants were 40 kindergarten students living in Australia, in which 10 of them have spoken language difficulties. The results indicated that students showed significant improvement in their phoneme awareness and their decoding skills, in which it reflects how important the use of explicit, direct and systematic code-based knowledge as a part of students' pre-schooling experiences. From another perspective Kessey, Konrad and Joseph (2014) focused on the use of Word Box as a direct instruction philosophy that is delivered individually to each student to teach phoneme segmentation, letter-sound correspondence and spelling. Three kindergarten students participated in this study within the USA setting. The study revealed that there is a functional relationship between the use of Word Box instruction and the increase of students' letter-sound correspondence and segmenting skills beside spelling and reading abilities.

Most of the previous studies tackled the idea of using explicit instructions in improving letter-sound relationships and decoding skills for kindergartners. However, none of these studies addressed the process of tracking the development of letter-sound relationships knowledge and decoding sounds skills. Moreover, this current study will address the role of direct phonemic awareness instruction in developing the basic

decoding skills through blending letters naming skill with decoding sounds and segmentation skills for Arab EFL kindergarteners.

2.4.3 Phonemic Awareness and Arabic Native Speakers

There are some studies that have addressed the idea of how the need of improving phonemic awareness skills serve in promoting reading skills by using different direct and explicit instructions for kindergarten students, particularly with Arabic native speakers. For example, a study was carried out by Ghoneim and Elghotmy (2015) who aimed at investigating the effect of suggested multi-sensory program in improving EFL kindergarteners' reading accuracy and phonemic awareness in Egypt. The program was implemented for 40 kindergarteners to assess their phonic skills through associating the visual, auditory, and kinesthetic language simultaneously in the program. The results revealed that the use of multi-sensory program contributes to the development of the participants' word identification and decoding skills. Thus, their reading accuracy and phonemic awareness would be raised and developed. Additionally, other studies addressed only the idea of developing phonological awareness of Arab learners. For example, an empirical study conducted by Elhoweris et al. (2017) aimed at identifying phonological awareness deficits among UAE's struggling first-grade readers (n = 50). The researchers applied direct training intervention program to determine whether phonological awareness abilities might be increased or not and to determine the effect of gender on the reading intervention. The results of the study indicated that a direct training intervention program in the UAE positively impacted struggling first-grade readers' phonological awareness abilities in terms of word recognition, word segmentation, phoneme manipulation and syllable

blending. Furthermore, the results revealed that there is no significant difference between male and female in the effects of direct instruction on phonological awareness. Another study conducted by Al Muhairy et al. (2018) examined the effect of using direct instruction approach in improving reading comprehension for children with learning disabilities in the UAE context. The participants were 60 students from seven to eight years old. The results revealed that using the direct instruction was more effective than the traditional instruction in the treatment of reading difficulties for the participants, particularly it was more effective on females than males.

Most of the previous studies addressed the idea of phonological awareness with learning disability students except the study conducted by Ghoneim and Elghotmy (2015) as their study focused on the implementation of multi-sensory program for kindergarteners' reading accuracy and phonemic awareness, as mentioned previously. However, the current study focuses on exploring the role of direct phonemic awareness as a specific part of phonological awareness in improving letter naming and decoding skills for regular kindergartners' students in the UAE context. This will be executed through tracking the progress of students' letter-sound relationship knowledge and sound segmentation abilities during the implementation of the program.

2.5 Summary

The essential examination of using phonemic awareness instruction is portrayed in many studies. Previous literature shows that phonemic awareness can be beneficial to the literacy skills of students. Also, it shows that explicit instruction of this strategy may impact the students' letter knowledge, letter-sound relationships, sound segmentation, spelling, reading accuracy and reading comprehension positively.

However, the gap, which this study addresses is the exploration of the role of direct phonemic awareness of letter naming and decoding skills as basic needed skills on improving the emergent reading ability of UAE kindergarteners. The idea of addressing phonemic awareness in Arab regions is rare specifically in the UAE context where English is taught as a second language in kindergarten. Hence, it is important to tackle the pedagogical aspect of using direct phonemic instruction for the sake of causing development in students' reading and literacy skill.

Chapter 3: Methodology

3.1 Introduction

This chapter addresses the methods and procedures used for exploring the role of direct phonemic awareness instructions of decoding and letter naming skill on kindergarteners' reading abilities. It includes a detailed description of the research design, the participants and sampling selection technique, the instrumentation, and data collection procedures by which both quantitative and qualitative means were used. Additionally, it describes the data analysis techniques, validity and reliability of the instruments and the ethical considerations. The four guided research questions are as follows:

1. Does the use of direct phonemic awareness instruction of letter naming positively affect Emirati Kindergarteners' emergent reading ability?
2. Does the use of direct phonemic awareness instruction of decoding positively affect Emirati Kindergarteners' emergent reading ability?
3. How does the use of direct phonemic awareness instructional of letter naming and decoding actually contribute to promoting kindergarteners' emergent reading ability?
4. To what extent does the qualitative results support the quantitative results?

3.2 Research Design

This research employed an explanatory sequential mixed method design in two consecutive phases (QUAN→qual), in which this study was quantitative-oriented more than qualitative. The rationale behind the use of explanatory sequential design was to

support and explain the quantitative data through providing additional qualitative information (Creswell & Clark, 2011). In the first phase, quantitative data was collected by means of a pre- and post-test. The qualitative phase in this study was carried out by means of document analysis, in which the researcher selected a particular activity performed by the participants during the implementation of the program to track and monitor the participants' progress.

3.3 Participants

The participants were conveniently selected. The criteria for selecting the participants were their availability and willingness to participate in this study as one of convenience sampling (Bryman, 2012). Accordingly, the participants in this study were 40 kindergarteners Emirate in KG1 from one of the public schools in the UAE, which were randomly divided into two equal groups: experimental (n = 20) and control (n = 20). Both groups were equally heterogeneous in terms of the students' abilities and genders.

3.4 Instrumentation

The nature of the study directed the researcher to implement a program through applying direct phonemic awareness instructions by using different hands-on activities and materials. The instruments used in this study are a) Pre and post-test; b) Document analysis taken from the program implementation.

3.4.1 The Pre- and Post-Test

The pre- and post-test as a quantitative tool was essential in this study, in which it was used to measure the students' letter naming and decoding skills before and after implementing direct phonemic awareness instructions for the experimental group. While for the control group, the researcher used a traditional style of teaching letters and sounds by only pronouncing the letters in front of the students or showing them flash cards and then they were asked to repeat letters. This pre-test and post-test is based on and adapted from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS).

The DIBELS is one of the standardized tests which gauges the test taker's oral reading fluency depending on the student's grade level. In this study, the researcher used DIBELS test designed only for kindergarten stage. The DIBELS are a set of standardized, independently administered, timed tests, which is designed to assess the level of early literacy development. DIBELS was structured based on literacy domains included in both the National Reading Panel (2000). The rationale behind applying DIBELS is to assess three main elements of early literacy: Phonological Awareness, Alphabetic Principle, and Fluency with Related Text. These elements are measured using five sub-tests: 1) The measurement of phonological awareness with the Initial Sounds Fluency (ISF) and Phonemic Segmentation Fluency (PSF) tests. 2) The measurement of alphabetic principle, which is assessed by the use of Nonsense Word Fluency (NWF) and Letter Naming Fluency (LNF) tests. 3) The measures of fluency with related text are carried out by Oral Reading Fluency tests (Good III & Kaminski, 2002). For example, the DIBELS Letter Naming Fluency is generally used to measure leaners between the middle of the kindergarten year and the end of the first grade, in which test takes are asked to name as many letters and possible in one minute. These

letters are ordered upper- and lower-case letters (Good III & Kaminski, 2002). In terms of DIBELS Phonemic Segmentation Fluency, it assesses test takers' abilities to segment three to four phonemes in a word fluently. It is administered orally by Kindergarteners and first grade students within 2 minutes. DIBELS Initial Sound Fluency measure ability to recognize and generate the initial sound Orally in a presented word. Its measure takes about 3 minutes for kindergarteners. According to Good III and Kaminski (2002) the test-retest reliability coefficient for the DIBELS LNF, ISF and PSF was established to be 0.90, and the validity of the test was established through carrying out multiple piloting studies targeted kindergarteners and first grade students.

Following the main structure of the DIBELS test, the pre- and post-test in this study was modified and divided into two parts which were: l) Letter Naming and Sound Recognition, which should be accomplished within 3 minutes; 2) Decoding which measures two sub-skills: First Sound Recognition in a word, which should be completed within 3 minutes and Phoneme Segmentation, which must be done within 4 minutes. The researcher added the recognition of letter-sound relationship for all alphabets including upper- and lower-case and modified the timing needed to complete both sections. Also, the content of the test itself was changed through selecting words that fit the Emirati context and the grading system was designed by the researcher (See Appendix A).

3.4.2 Document Analysis

The document selected from the program was the letter-sound recognition activity. It has three sections. Section one measures the letter-sound relationship with alphabets, section two measures the first sound recognition in ten words and section

three the participants should decode sounds for 6 words in which each word consists of three or four sounds. This activity was practiced through intervals and the participants' performances were monitored. It took place every two weeks while implementing the program to keep tracking the participants' progress when using direct phonemic awareness instruction. The researcher used a checklist to assess the participants' level for both letter naming and decoding sounds skills (See Appendix B).

3.4.2.1 The Nature of the Program

The direct phonemic awareness instruction program focused on letter naming and sound decoding skills as means of developing kindergarteners' reading as a literacy skill. The program was carried out in one of the public schools in the UAE where 20 kindergarteners (experimental group) were the participants. Therefore, the researcher's pedagogical approach passed through two main stages in this program in order to make it more achievable, applicable and measurable. The first stage featured a construction of a pre- and post-test in which the instructor adapted DIBELS test. The second stage was the selection of the materials, activities and the assessment tools used in the program. The researcher was keen on the participants' interests and needs. Therefore, the researcher adopted direct and explicit instructions and activities, but at the same time these made students more engaged in their learning process for the sake of promoting letter naming and sound decoding skills. Through repetitive practicing of the adopted activities and through scaffolding provided by the researcher, the students started to develop incrementally by using what they have already been taught to practice letter naming and sound decoding skills by themselves. The researcher made an integration between direct instructions and the idea of learning by doing, to raise the

students' phonemic awareness. As Catts et al. (2015) alluded that literacy and phonemic awareness can also be effectively taught through play, in which students can explore and make connection through using concrete materials. Integrating learning by doing is a powerful philosophy for teaching phonemic awareness through direct support and active guidance, which serves in causing development. Table 1 shows the kind of activities and instructions used in the program as follows:

Table 1: Activities and Materials

Activity	Main Objective	Used Material	Direct Instruction
Forming letters	To recognize the letter's form.	Clay, dough, sand, salt or shaving cream	The researcher introduced and placed a flashcard that represents the target letter in front of the students. Then the students were asked to form the same shape using different materials
Searching for letter	To find and pronounce the target letters of the week.	Wooden letters, sands, water, net, magnifying glass	The researcher asked the students explicitly to find the target letters of the week by searching around the classroom context using different materials. Then the students were asked to pronounce the letters.
Ordering letters	To recognize the names of the letters	Flashcards, smart board with pointers and songs.	The researcher directly introduced the names of the letters and sang with them the letters in order.
Song of Sounds (adopted from ADEK)	To recognize the sounds for each letter. To pronounce the sounds. To match each sound with specific body movement.	CDs including songs, Flash cards.	The researcher modeled the song in front of the students using flash cards and the students imitated the researcher by repeating the song and using body movements.
Matching upper-case with lower case	To differentiate between upper-case and lower-case letters.	Flash cards with different shapes, clips, magnetic letters.	The researcher explicitly asked students to match between upper-case and lower-case letters
Guessing sounds of letters	To identify and utter the sound of the letters.	Big flash cards	Three students held three target letters illustrated in big flash cards and then the researcher asked the other students to guess the sounds and names of the illustrated letters. The children who guessed the correct answer, obtained one point.

Table 1: Activities and Materials (Continued)

Activity	Main Objective	Used Material	Direct Instruction
First Sound in a Word	To recognize the first sound in a word.	Flash cards and Songs.	The researcher sang a short song "if you have a word starts with /a/ raise your hand…" then the student should directly recognize what the sound of a word that he or she had.
Snail Talk Activity	To decode the sounds for a word consisting of three to four sounds.	Flash cards and smart board.	The researcher reviewed the sounds. Then she decoded the sound of a word in front of the students by using the snail talk strategy, in which the students had to pronounce each sound clearly and with low speed.
Blending Sounds	To blend sounds in a word.	Magnetic letters, wooden letters, smartboard, and Starfall.com website.	The researcher modeled in front of the students. Then students were asked to blend three sounds to form a word.

3.4.2.2 The Purposes of the Program

This program aimed at exploring the role of direct phonemic awareness instruction in promoting letter naming and decoding abilities for kindergarteners through using different materials and activities. Two main purposes of this program where: 1) Identifying the role of using direct phonemic awareness instruction in promoting letter naming skills; 2) Identifying the role of using direct phonemic awareness instruction in promoting decoding skills.

3.4.2.3 The Learning Outcomes of the Program

The participants in this program were expected to achieve some outcomes, such as follows: 1) ability to recognize the letter's form; 2) to pronounce the target letters of the week; 3) to recognize the names of the letters; 4) to recognize the individual sound for each letter; 5) to differentiate between upper-case and lower-case letters; 6) to recognize the first sound in a word; 7) to decode the sounds for a word consisting of three to four sounds; 8) to blend sounds in a word.

3.4.2.4 Settings and Procedures

The setting of the program was in and out of classrooms activities. The in-classroom activities were implemented in one of the public schools in the UAE. The pedagogical activities were based on hands-on activities, which were carefully selected and prepared. Participants could freely choose the assigned materials they like and could move between activities they engaged in. The researcher played an active role during program by selecting and preparing activities, developing document analysis, interacting with participants through modeling, giving clear and direct instructions, asking questions and scaffolding their levels. Whereas, in the out of classroom activities, the researcher used WhatsApp application on smartphone as a way to send videos of the letter of the week songs and encourage parents to let their kids watch videos, or send links of some online games related to sounds such as, starfall.com.

3.4.2.5 Time and Program Duration

This program was held over a period of six weeks where the participants attended classes for five days and 45 minutes per day. So, the total hours per week were three hours and 45 minutes. During the lesson, the researcher took out the participant to a rich designed classroom that was designed to serve the program. Therefore, the participants had wide exposure to rich literacy environment that contains phonemic awareness activities. During the program, all the activities served letter naming and sound decoding skills. Each week had its own planning and its own activities prepared and planned by the researcher (see Appendix C).

3.5 Data Collection

The data collection continued for six weeks during the academic year 2019-2020. In this study, data collection passed through two phases. The first phase involved the collection of the quantitative data through implementing the pre- and post-test to measure the participants' letter naming and decoding skills before and after conducting the program. The data, which was collected from the pre- and post-test, was assessed through adapting DIBELS test, in which the data was illustrated in grades reported in an Excel sheet (See Appendix D).

The second phase of data collection was the collection of the qualitative data including documents' analysis. First, the collection of documents took place during the program, in which the participants' letter naming and decoding skills were monitored, documented and graded through using a checklist. Second, the data of the activity was collected in 3 occasions; the first time was on the 7th of November 2019 after two weeks of the program implementation, the second time was on 21st of November 2019 and the

third time was on 28th of November 2019. Finally, the grades were illustrated in tables using Excel sheet (see Appendix E).

3.6 Data Analysis

Due to the nature of the study, data analysis was passed through two consecutive phases. The first phase was the pre- and post-test analysis; the quantification of the data was based on grading the parts of the test including: Letter Name and Sound Recognition section and Decoding section. The first part, Letter Naming and Sound Recognition, contains all letters whether they were upper- or lower-case along with their sounds. This section was counted out of 100 in which each letter with its sound was assigned one point. To make the total of this section out of 10, the researcher calculated the total correct answers and divided by 100; then the total was multiplied by 10. The second part, Decoding, measured two sub-skills. The first sub-skill was First Sound which contains 10 words. In this sub-skill, if the participant decoded one sound, he or she would take one point, while if he or she decoded more than one sound in a word, he or she would take two points. To make the total of correct answers out of 5, the calculated total of the correct answers was divided by 20; then the total was multiplied by 5. The second sub-skill was phoneme segmentation in which the participants segmented sounds for ten words; each correct segmentation had two points. The researcher calculated the total correct answers and divided it by 20; then the total was multiplied by 5. Therefore, the second part including both sub-skills became out of 10 points. Finally, the final grades of the participants for pre- and post-test were entered into the SPSS for both experimental and control groups, where paired sample t-

test was carried out to show whether there is a significant difference or not between both groups.

The second phase was the qualitative analysis including the document selected by the researcher. The activity was letter-sound recognition and it was measured by using a checklist. Every two weeks the researcher assessed participants in the experimental group by asking them in section one to utter the 10 letters with their sounds, where each letter was assigned one point. In section two the students had to pronounce the first sound of 10 words in which each sound was assigned one point. The third section, students were asked to decode 6 words each word was assigned one point. Then the researcher counted the total of the correct answers to be out of 26. To quantify the document, descriptive analysis was extracted through identifying the mean scores and comparing them from one practice to another of the assigned activity, which demonstrates the process of monitoring the progress of the participants. Then the results were illustrated in line graphs using Excel sheets.

3.7 Validity

Quantitative and qualitative data were collected and analyzed in this study; different types of validity were achieved in this study. Therefore, establishing validity went through two phases. The first phase was ensuring the construct validity for both the quantitative and qualitative instruments. Since the pre- and post-test as a quantitative instrument was adapted from one of the standardized tests, DIBELS, the construct validity of the pre- and post-test was credulously ensured. According to Gay, Mills and Airasian (2011) they identified construct validity as "the degree to which a test measures the intended construct" (p. 163). The intended constructs in this study were letter naming and sound decoding abilities as part of phonemic awareness skills.

Gay, Mills and Airasian (2011) suggested that construct validity could be achieved by collecting evidence to demonstrate this kind of validity, which is called by Popham (2014) as the "construct-related evidence of validity" (p. 114). To establish construct validity in the pre- and post-test, the researcher used a program which is defined by Popham (2014) as how the students will respond differently to the assessment instrument after having received some type of intervention (or program). In this study, the researcher used a designed program, in which the participants' scores in the post-test were higher than their scores in the pre-test after implementing the program. This showed the different responses that participants had to the post-test after implementing the program. Hence, one part of the construct-related-evidence of validity was established.

In terms of the document analysis as a qualitative instrument, the use of construct-related-evidence validity has appeared in the way through tracking the participants' performances in the experimental group. This happened while they were practicing the letter-sound relationship recognition activity and through using a checklist to assess their letter-sound relationship recognition every two weeks during the implementation of the program. The intervention here is the types of teaching strategies and content materials employed. The results showed in this study that the last monitoring for the activity showed a higher score as compared to the first trial; thus, the construct validity was attained.

The second phase was establishing the content validity for both quantitative and qualitative instruments. To ensure the content validity for the pre- and post-test and the designed program including document analysis, a panel of experts checked the content of the pre- and post-test and the program. As Young, So, and Ockey (2013) stated that "The composition of such a panel should include individuals who represent

different stakeholder groups, including test-takers and decision makers, to ensure that the design and content of the assessment is not biased in favor of any identifiable group of test-takers" (p. 6). Accordingly, the pre- and post-tests and the designed program were presented to a panel composed of two faculty members from the College of Education in the UAEU, as well as three expert EFL teachers in order to check the degree of relevance between the content of the pre- and post-test and the content of the program. Also, the content of the pre- and post-test and the program, was checked and approved by Ministry of Education (MOE) in the UAE (See Appendix F). The comments and the feedback gained from the panel were adopted by the researcher to modify the structure and the content of the pre- and post-test and the designed program. The modifications provided by the panel focused on the following: adding letter naming beside sound recognition and modifying the content in which the researcher included words consisting of three to four letters maximum, which also fits the levels of the participants as they were from KG1.

3.8 Reliability

To establish the reliability in this study, the researcher checked the internal consistency reliability which is defined by Popham (2014) as "the extent to which items in the assessment instrument are functioning in a consistent fashion" (p. 82). Based on the structure of the instruments (pre- and post-tests, and document analysis) the participants were required to name letters and pronounce sounds; this meant using the Cronbach's coefficient alpha, due to its suitability as the most common internal consistency approach (Popham, 2014). According to Gliem, J. and Gliem, R., (2003) the Cronbach's alpha reliability coefficient measure range between "0 and 1." Furthermore. Gliem, J. and Gliem, R., (2003) indicated that: "the closer Cronbach's

alpha coefficient is to 1.0, the greater the internal consistency of the items in the scale" (p. 87). In this study, the Cronbach's alpha coefficient using SPSS was performed on the pre- and post-tests as well as on the analyzed document. The results of using Cronbach's alpha coefficient are shown in Table 2. The internal reliability for the pre- and post-tests for both control and experimental groups as well as for the document were high; this showed that the values were acceptable as the Cronbach's alpha were closer to 1.0.

Table 2: Cronbach's Alpha Reliability

Instrument	Cronbach's Alpha	Number of Items
Test Items of Control Group	0.700	6
Test Items of Experimental Group	0.739	6
Document Analysis: letter-sound relationship recognition.	0.826	12

3.9 Ethical Considerations

The ethical consideration in this research mainly focused on the approval of the participants to take part in this study. The participants' willingness to participate is a cutting-edge matter that required informing both the participants and their parents about the purpose and the procedures of the study. Therefore, upon the approval, the parents were asked to sign the informed consent form (See Appendix G) to maintain confidentiality and privacy. Additionally, symbols were used to refer to the participants rather than their real names to ensure further privacy. Also, upon agreeing to participate,

the parents and participants were made aware of the ways the researcher would be using the study's results (Creswell, 2012). Moreover, the parents and participants were acknowledged with their right to freely withdraw from the study with no negative impact at all and ensured that their participation is completely voluntary. Finally, the confidentiality of the data collected was maintained by ensuring that the data was stored safely and securely away from any external use and will be destroyed later on once the purpose of the research was fulfilled.

3.10 Summary

The study is aimed at exploring the role of direct phonemic awareness instruction of letter naming and sound decoding skills on prompting kindergarteners' emergent reading ability as EFL learners in the UAE. The researcher adopted an explanatory mixed method design in which both quantitative and qualitative means were used to achieve the goal of the study. Forty kindergarten students were selected conveniently based on their availability and willingness to participate in this study, where they were divided equally into two groups: control and experimental. Data collection passed through two phases. The quantitative phase was the first phase through conducting the pre-test, then the implementation of the program and followed by the post-test. The qualitative phase was the second phase in this study through using document analysis in which letter-sound relationship recognition activity was selected to monitor and measure the students' performances during the implementation of the program.

Chapter 4: Results

4.1 Introduction

This study aimed at exploring the role of direct phonemic awareness instruction of decoding and letter naming in promoting emergent reading abilities of the UAE kindergarteners. Particularly, the study featured a direct phonemic instruction program that focuses on decoding ability and letter naming through using different adopted lesson materials and activities. This chapter reports the major findings of this study. The study employed an explanatory sequential mixed method design in two phases. The first phase was quantitative, where the researcher conducted the pre-test then applied the designed program for six weeks and finally retested the participants by using a post-test. The second phase was purely qualitative by applying document analysis. Hence, the data collected for this study is a mixture of both phases, the quantitative and the qualitative. The study attempted to answer the following research questions:

1. Does the use of direct phonemic awareness instruction of letter naming affect Emirati Kindergarteners' emergent reading ability?
2. Does the use of direct phonemic awareness instruction of decoding affect Emirati Kindergarteners' emergent reading ability?
3. How does the use of direct phonemic awareness instructional of letter naming and decoding actually contribute to promoting kindergarteners' emergent reading ability?
4. To what extent does the qualitative results support the quantitative results?

4.2 Results

Q1. Does the use of direct phonemic awareness instruction of letter naming positively affect Emirati Kindergarteners' emergent reading ability?

To answer this question, a paired sample t-test was carried out to examine whether there is a significant difference between the control group and experimental group in terms of the letter-naming skill based on the post-test scores. The results shown in Table 3 revealed that there is a significant difference between the control group and experimental group in terms of letter naming skills measured in the post-test. The post-test score in the experimental (M = 2.16; SD = 0.69) is higher than the post-test score in the control group (M = 0.84; SD = 0.32) at ($t = -7.705$, $df = 19$, $p \leq 0.05$).

Table 3: Letter Naming Skill for Control & Experimental Groups

Category	M	SD	t	df	Sig. (2-tailed)
Letter-Sound Post-Control-	0.8350	0.32489			
Letter-Sound Post-Experimental	2.1550	0.68785	-7.705	19	0.000

Q2. Does the use of direct phonemic awareness instruction of decoding positively affect Emirati Kindergarteners' emergent reading ability?

To answer this question, a paired sample t-test was carried out to examine whether there is a significant difference between the control group and the experimental group in terms of decoding skills measured in the posttest. The results shown in Table 4 revealed that there is a significant difference between the control group and

experimental group in terms of measuring first sound pronunciation ability. The post-test score in the experimental group (M = 1.48; SD = 0.50) is higher than the post-test score in the control group (M = 0.91; SD = 0.51) at (t = -4.682, df = 19, $p \leq 0.05$). Whereas in terms of measuring the phoneme-segmentation ability and according to the statistical analysis, no significant difference is found between the control group and the experimental group in the post-test; with a mean score of (M = 0.70, SD = 0.47) and (M = 0.81, SD = 0.50) respectively at (t = -1.093, df = 19, $p \geq 0.05$).

Table 4: Decoding Skills for Control & Experimental Groups

Category	M	SD	t	df	Sig. (2-tailed)
First Sound Post-Control - First Sound Post-Experimental	0.9125 1.4750	0.51475 0.49271	-4.682	19	0.000
Phoneme Seg. Post-Control- Phoneme Seg Post-Experimental	0.6975 0.8065	0.47213 0.50141	-1.093	19	0.288

Generally, the results displayed in Table 5 indicate that statistically significant difference is not found between the control group (M = 0.82, SD = 0.45) and the experimental group (M = 0.85, SD = 0.41) at (t = -242, df = 19, $p \geq 0.05$) in terms of their total mean scores in the pre-test. Whereas, in terms of the total mean scores of the posttest, the results show that there is a significant difference between the control and the experimental groups, in which the total mean score of the experimental group (M = 4.44, SD = 1.37) is higher than the total mean score of the control group (M = 2.45, SD = 1.03) at (t = -6.878, df = 19, $p \leq 0.05$).

Table 5: Total Mean Scores of Pre- & Post-Tests for Control & Experimental Groups

Category	M	SD	t	df	Sig. (2-tailed)
Total Pre-Control	0.8200	0.45056			
Total Pre-Experimental	0.8500	0.40814	-0.242	19	0.812
Total Post-Control	2.4450	1.02558			
Total Post-Experimental	4.4365	1.36706	-6.878	19	0.000

Q3. How does the use of direct phonemic awareness instructional of letter naming and decoding actually contribute to promoting kindergarteners' emergent reading ability?

To answer this question, data extracted from students' performances for six weeks were quantified to show whether there is a significant difference between the control and the experimental groups or not per twice a week. Table 6 and Figure 1 indicate that statistically significant difference is not found in the first two weeks of the program between the control and the experimental groups in terms of letter naming practice (M = 1.95, SD = 0.83) and (M = 1.95, SD = 0.89) respectively at (t = 0.000, df = 19, $p \geq 0.05$). However, after four weeks from the implementation of the program, a slight difference can be noted but according to the statistical analysis, it is not major a difference. The values for the control and the experimental groups at that point are (M = 2.96, SD = 1.32) and (M = 3.76, SD = 2.27) respectively at (t = -1.550, df = 19, $p \geq 0.05$). Additionally, at the end of the program, the students in the experimental group (M = 6.36, SD = 3.23) showed higher performance in naming letters than in the students in the control group (M = 3.65, SD = 1.42) at (t = -3.796, df = 19, $p \leq 0.05$).

Table 6: Performances of Control & Experimental Groups in Letter Naming Activity

Category	M	SD	t	df	Sig. (2-tailed)
7th of Nov. Letter naming/Con.	1.9500	0.82558	0.000	19	1.000
7th of Nov. Letter naming/Exp.	1.9500	0.88704			
21st of Nov. Letter naming/Con.	2.9500	1.31689	-1.550	19	0.138
21st of Nov. Letter naming/Exp.	3.7500	2.26820			
28th of Nov. Letter naming/Con.	3.6500	1.42441	-3.796	19	0.001
28th of Nov. Letter naming/Exp	6.3500	3.23265			

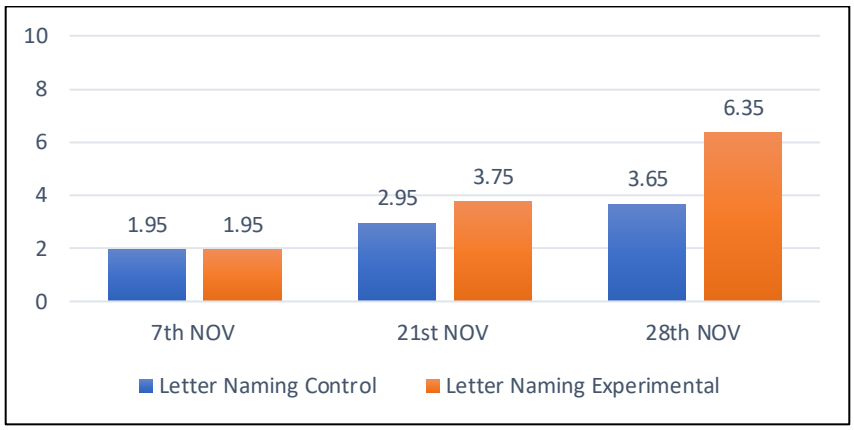

Figure 1: Tracking of the Participants' Letter Naming Skill Every Two Weeks

In terms of decoding sounds, Table 7 and Figure 2 signify that statistically significant difference is not found in the first two weeks of the program between the control and the experimental groups (M = 2.05, SD = 0.99) and (M = 2.0, SD = 1.26) respectively at ($t = 0.149$, $df = 19$, $p \geq 0.05$). However, after four weeks from the implementation of the program, statistically significant difference exists between the control and the experimental groups (M = 4.85, SD = 1.46) (M = 6.30, SD = 2.34) respectively at ($t = -2.813$, $df = 19$, $p \leq 0.05$). Additionally, at the end of the program, the students in the experimental group (M = 8.25, SD = 2.67) still showed a higher

performance in decoding sounds than in the students in the control group (M = 6.75, SD = 2.24) at (t = -2.173, df = 19, $p \leq 0.05$).

Table 7: Performances of Control & Experimental Groups in Decoding Activity

Category	M	SD	t	df	Sig. (2-tialed)
7th of Nov. Decoding Sound/Con.	2.0500	0.99868	0.149	19	0.883
7th of Nov. Decoding Sound/Exp.	2.0000	1.25656			
21st of Nov. Decoding Sound/Con.	4.8500	1.46089	-2.813	19	0.011
21st of Nov. Decoding Sound/Exp	6.3000	2.34184			
28th of Nov. Decoding Sound/Con.	6.7500	2.24488	-2.173	19	0.043
28th of Nov. Decoding Sound/Exp	8.2500	2.67296			

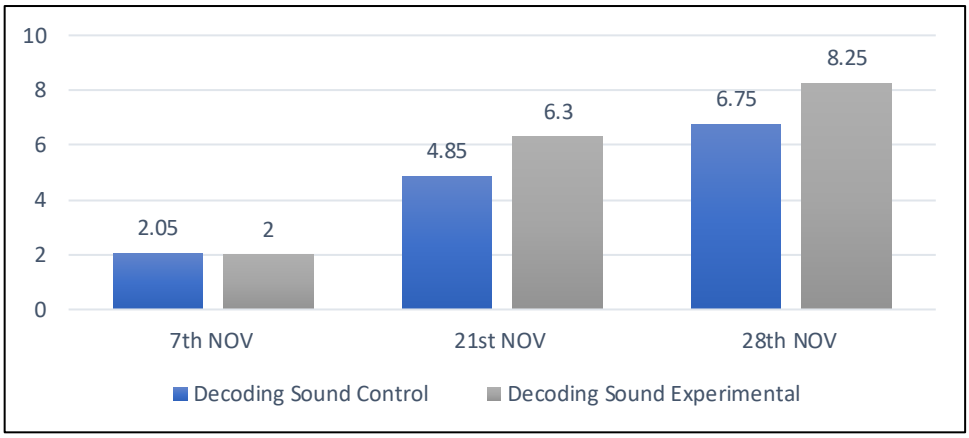

Figure 2: Tracking of the Participants' Decoding Skill Every Two Weeks

Q4. To what extent does the qualitative results support the quantitative results?

In this question, the researcher tried to tap the whole experience that the experimental group went through during the program. The quantitative results showed that there was a noticeable increase in the experimental group's letter naming and decoding skills. This was represented in their mean scores in the posttest as compared to the participants in the control group. To further analyze how this increase has

happened, the quantitative results were followed up with the qualitative results. The consistency and variation between the quantitative and qualitative results are illustrated in Figure 3.

The consistency between the quantitative and the qualitative results existed in two points. The first point is that a significant difference between the experimental group and control group is observed. The experimental group had a mean of (M = 4.44) and the control group had a mean of (M = 2.44). This shows that participants in the experimental group achieved higher scores in the post-test than those in the control group. This may be due to the direct phonemic awareness instructions and activities applied for the experimental group only. The documents analysis also confirmed how this gain has been obtained through tracking the participants' performances throughout a frequent practice of the analyzed activity, in which the experimental group shows piecemeal development for both letter naming and decoding skills. The second consistency existed that the decoding skills mean score (M = 2.28) is a little bit higher than the letter naming ability (M = 2.16), which also confirmed by the document analysis in which the gradual improvement in the decoding skills monitored by the activity, is higher than letter naming skill improvement.

On the contrary, the variation between the quantitative and the qualitative results was visible in the part of decoding skills including first sound recognition and phoneme segmentation. In the posttest, the results indicate that there is a significant difference between the experimental group with a mean score of (M = 1.48), and the control group, with a mean score of (M = 0.91) in terms of the first sound recognition. Nevertheless, there was no significant difference between both groups in terms of phoneme segmentation. However, when it comes to the qualitative results, using the document analysis, the results show that the incremental improvement in the decoding

skills from one activity to another every two weeks during the implementation of the program, was noticeable than in the letter naming skill.

4.3 Summary

Chapter four showed the finding of the study. Through employing the explanatory mixed method, the researcher used the qualitative data to explain the quantitative data. The document analysis along with the pre- and post-test methods were used in this study to reach valuable and rich findings. The first major finding is that there is a significant difference between the control group and the experimental group in terms of the letter-naming and decoding skills based on the post-test scores. The second major finding is that there is an incremental improvement in the experimental group performance over the six weeks in terms of the letter naming and decoding skills.

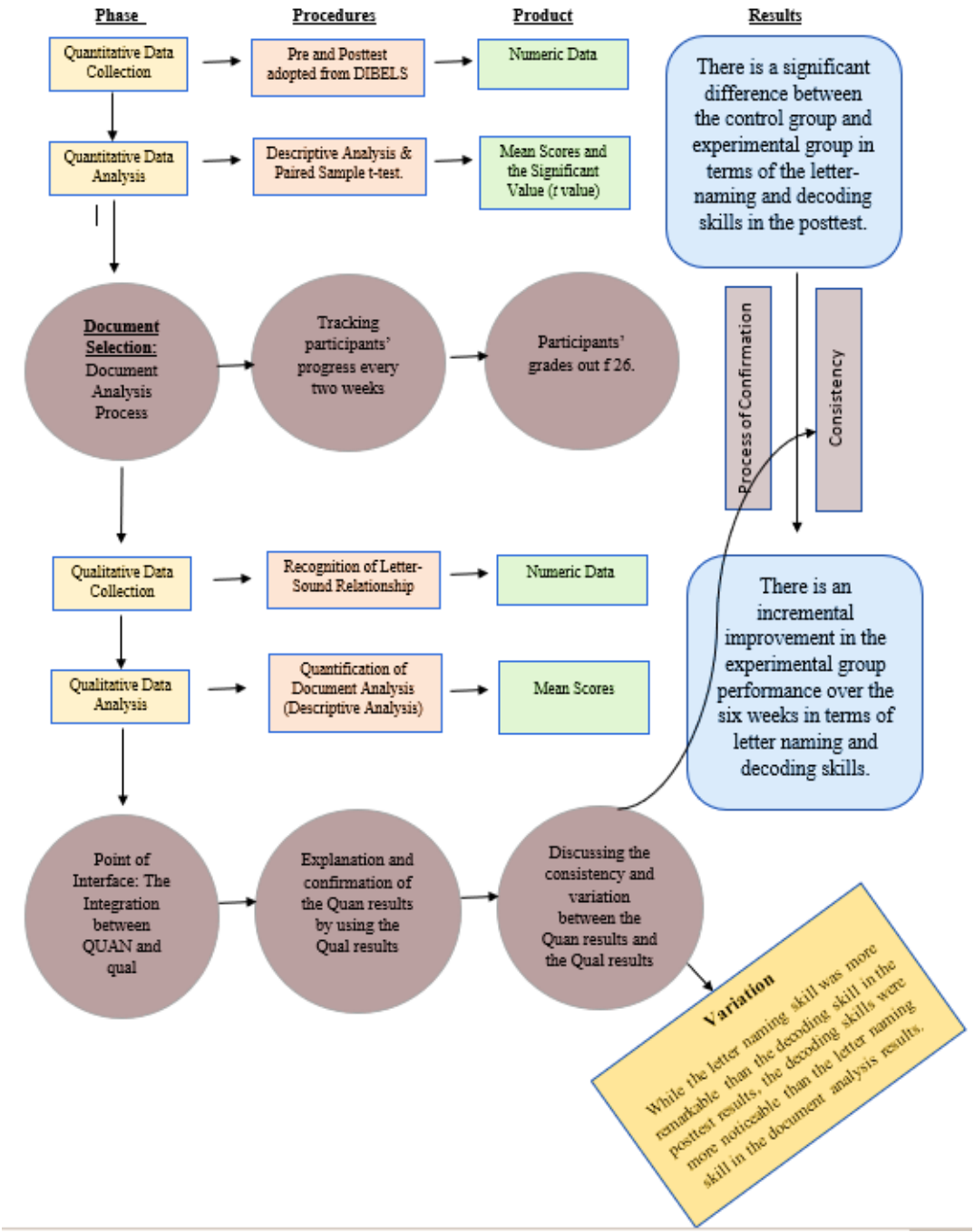

Figure 3: Mixed Method Interpretation

Chapter 5: Discussions, Recommendations and Implications

5.1 Introduction

This study is aimed at exploring the role of direct phonemic awareness in promoting kindergartners' letter naming and decoding skills. The study employed the explanatory mixed method design in which both quantitative and qualitative results were extracted. The instruments used in this study were: a pre- and post-test, and documents analysis. This chapter outlines the major discussed findings, the recommendations, and the implications of the study.

5.2 Discussion

Q1. Does the use of direct phonemic awareness instruction of letter naming positively affect Emirati Kindergarteners' emergent reading ability?

The major finding related to this question was that a noticeable general increase in the participants' letter naming skill in the experimental group was observed. This increase appeared from the experimental group's results in the post-test as compared to the control group. The total mean score of the experimental group for the letter naming skill in the post-test was higher than the mean score of the control group. This reflects how the use of direct phonemic awareness instructions led to the development of the letter naming skill for kindergartners. This result supports other arguments discussed by (Al-Bataineh & Sims-King, 2013; Cardoso-Martins, Mesquita & Ehri 2011; Foorman et al., 2003; Gillon, 2005; Mathes et al., 2005) who pointed out that the use of direct and explicit phonemic awareness instructions to early learners contributes to developing reading as an emergent literacy skill through building up letter

knowledge as a main predictor of reading acquisition. As Ehri (2004, 2005) and Martin (2014) confirmed that the child in his early stage of learning gradually starts to move from pre-alphabetic phase to the partial alphabetic phase, where the child starts to acquire letter knowledge and make a combination between the visual cues introduced explicitly in his pre-alphabetic phase and the letter knowledge during his partial alphabetic phase. Thus, it will serve in moving to the full alphabetic phase where the child starts to recognize the letter-sound relationship as a main indicator to the improvement of reading as an emergent literacy skill.

Q2. Does the use of direct phonemic awareness instruction of decoding positively affect Emirati Kindergarteners' emergent reading ability?

The major finding related to this question was that a remarkable gain in the participants' decoding skills in the experimental group was observed. This gain appeared from the experimental group's results in the post-test as compared to the control group. The total mean score of the experimental group for both first sound recognition and phoneme segmentation skills in the post-test was higher than the mean score of the control group. This shows how the use of direct phonemic awareness instructions led to the development of decoding skills for kindergartners. This result is in line with Carson, Bayetto and Roberts (2018), Ghoneim and Elghotmy (2015), Kessey, Konrad, Joseph (2014), and Suggate et al. (2014) who found that the use of explicit instructional approach contributes to improving emergent learners' decoding skills through showing the functional relationship between the use of direct and explicit instructions and the development of learners' letter-sound correspondence and their segmenting skills in a way, which gradually leads to reading accuracy and proficiency. As Ehri (2004, 2005) alluded that when the child reaches to the consolidated alphabetic

phase, he will master the sound-symbol relationships in which decoding words becomes easier; thus, leading to building up the efficiency in reading skill. Dealing with reading as a discrete skill assists in starting with the low-level sensory representation (letter input) and continues through phonemic and lexical level representation to reach at the end to a deeper-structural representation through using direct phonemic awareness instruction, which is totally associated with bottom-up model as an analytical model in reading acquisition (Alvermann & Unaru, 2013).

Q3. How does the use of direct phonemic awareness instructional of letter naming and decoding actually contribute to promoting kindergarteners' emergent reading ability?

The major finding related to this question was that an incremental increase in the participants' performances in the experimental group was observed. This increase was seen during their frequent participation in the letter-sound relationship recognition activity, which measured both letter naming and decoding skills. The results reveal that the accurate selection of the activities serves in scaffolding the participants' phonemic awareness for the sake of nurturing letter naming and decoding skills. This result is in tandem with Foorman et al. (2003) and Paige et al. (2018) who revealed that the use of explicit phonemic awareness instruction helps in achieving incremental development in the recognition of letter-sound relationship; thus, decoding skills start to be enhanced in an early childhood stage. As Vygotsky (1978) emphasizes on the importance of creating supportive sources that must be well-selected based on learners' actual levels; yet, they have to be challenging but at the same time achievable to create a sense of progress.

Additionally, Skinner (1957) believes that the teacher and the environment play a crucial role in the children learning of language through explicitly introducing the language and giving the chance for children to practice it until they reach to the level of automaticity.

Q4. To what extent does the qualitative results support the quantitative results?

There are consistency results between the quantitative and the qualitative. The main consistency was demonstrated in the participants' letter naming and decoding skills, where a general gain in the experimental group was observed. This observation was made when using direct phonemic awareness and it was reflected in the results of the posttest as compared to the control group, which is consistent to the document analysis' results. The data gleaned from the document analysis revealed that the participants' performances in the letter-sound relationship recognition activity increased gradually throughout a frequent practice of the activity, which serves in nurturing both the letter naming and decoding skills as an initial stage for future development of the reading skill for emergent readers. These consistent results are supported by Alvermann and Unaru (2013), and Brich (2002) who indicated that the use of direct instructional techniques as part of the bottom-up model in early stage concentrates on teaching reading in a discrete order before more complex abilities can be mastered such as, comprehension and interpretation of the reading texts. As National Reading Panel (2000) alluded that there is a reciprocal relationship between phonemic awareness and early literacy skills. While the development of phonemic awareness skills serves in improving literacy, the development of literacy in other areas also improve phonemic awareness (Bell, 2011; Ehri, 2004; Mann & Foy, 2006).

Despite the consistency between the quantitative and the qualitative results, a variation between both results was apparent in one aspect of the study. While, there is no significant difference between the experimental group and the control group in terms of phoneme segmentation as one part of the addressed decoding skills in this study, the decoding skills showed higher gradual increase than the letter naming skill in the document analysis results. This variation could be explained in terms of Evans et al. (2006) results, who revealed that the acquiring letter-sound relationship at the beginning of the word proceeds the acquiring of letter-sound relationship in the middle and at the end of the word, which justify why the posttest results in this study shows that there is no significant difference between the experimental group and the control group in terms of phoneme segmentation. However, there was a significant difference between both groups in terms of first sound recognition, in which phoneme segmentation needs time and more practice in order to be developed (Ghoneim & Elghotmy, 2015; Capraro, 2006), although it shows an incremental improvement when practicing the activity in the document analysis.

5.3 Recommendations

This study has some recommendations for teachers, instruction and curriculum planners and research as the following:

1. EFL/ ESL teachers in kindergarten stage should consider the use of direct phonemic awareness instruction as an initial step to develop their letter naming and decoding skills.
2. EFL/ESL teachers in kindergarten stage should be provided with different training sessions as a kind of professional development that serve in building up their

knowledge and experiences about ways of raising their students' phonemic awareness skills.

3. Curriculum designers in the kindergarten stage should insert the direct phonemic awareness instructions and the required materials in the content of the curriculum in order to be generalized and applied in all kindergarten schools in the UAE context.
4. Assessment designers should adopt DIBELS as a standardized test to assess the students' phonemic awareness skills as an important part for building up their reading emergent literacy skill.
5. The selection of materials in the kindergarten stage, such as stories and songs should be socially and culturally relevant, which provide an opportunity for students to expand the practical use of reading as a literacy skill in real life situations.
6. A future research should consider a longitudinal mixed method study where more participants will participate for a length of time, particularly in the area of phoneme segmentation.

5.4 Implications for Future Research

Since developing reading as a literacy skill is one of the MOE expectations (2020) in the UAE context, the ways of implementing the direct phonemic awareness instructions in the UAE should draw more attention. Therefore, EFL/ESL researchers and scholars should conduct studies similar to the nature of this study, but with a large number of sampling employed in different kindergarten schools in the UAE context within a longitudinal mixed method design. Furthermore, researchers can also carry

out studies to trace stages of the development of the reading skills through using direct phonemic awareness instructions from kindergarten stage to the grade level stage. It is clear that there is still much to be investigated and learned about the direct phonemic awareness instructions in terms of teachers' views and experiences.

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Appendices

Appendix A: Pre and Post Test

School Name: **Class:** **Date:**

LETTER & SOUND RECOGNTION ASSESSMENT

d L S	L L S	G L S	q L S	o L S	K L S	n L S	c L S
R L S	x L S	f L S	u L S	W L S	A L S	i L S	h L S
v L S	e L S	J L S	t L S	D L S	M L S	g L S	S L S
b L S	N L S	P L S	Y L S	I L S	p L S	U L S	F L S
H L S	w L S	r L S	Z L S	a L S	X L S	y L S	O L S
C L S	s L S	j L S	V L S	T L S	m L S	I L S	B L S
z L S	Q L S	E L S	k L S	***Note:***			

ASSESSMENT

1- First Sound Fluency Practice

School Name: **Class:** **Date:**

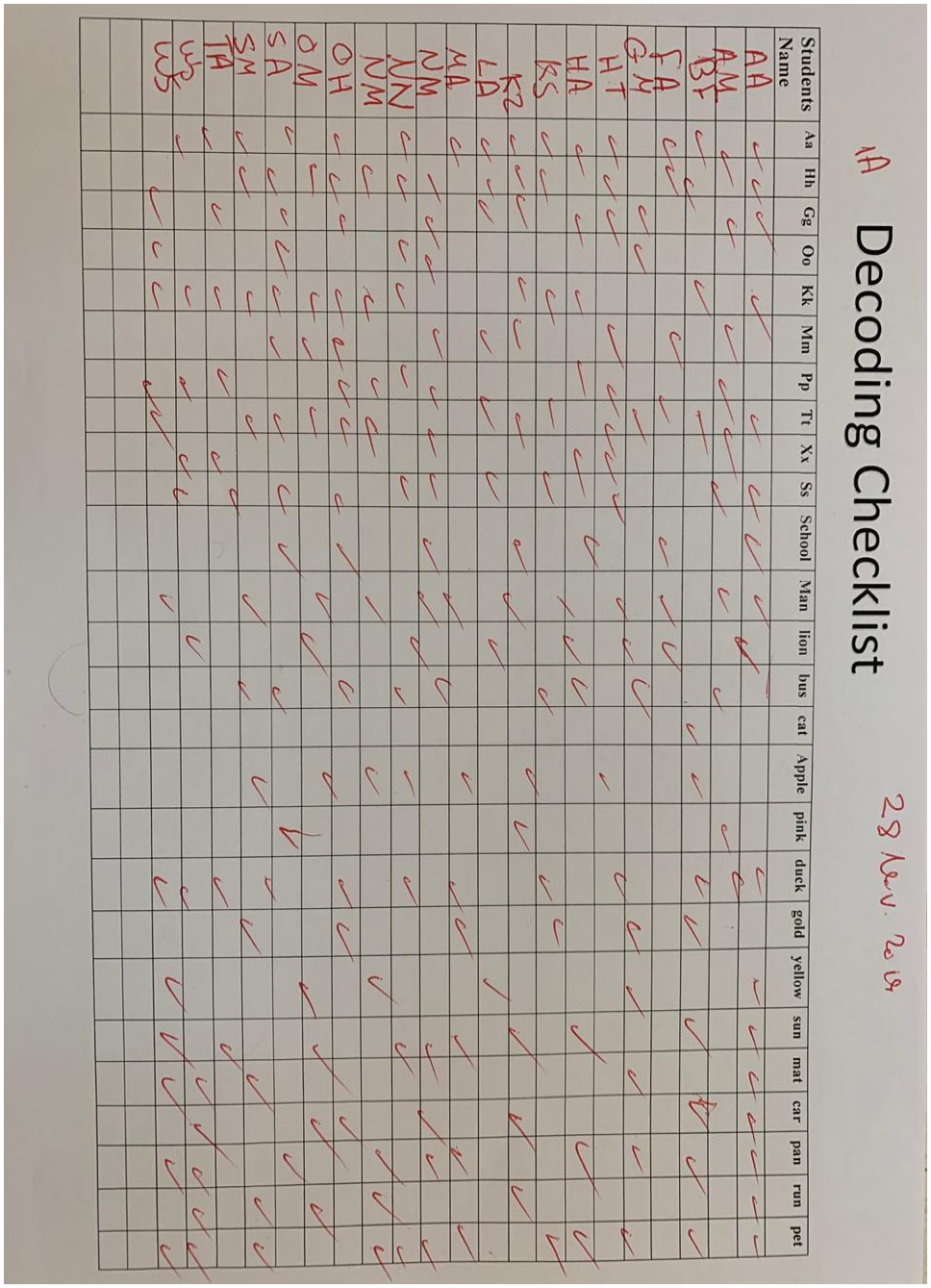
Test Items	Correct/2 points	Correct/1points	Incorrect
1.land			
2.gift			
3.snail			
4.mild			
5.sweet			
6.doll			
7.peace			
8.bag			
9.ride			
10.fruit			

Total: */5*

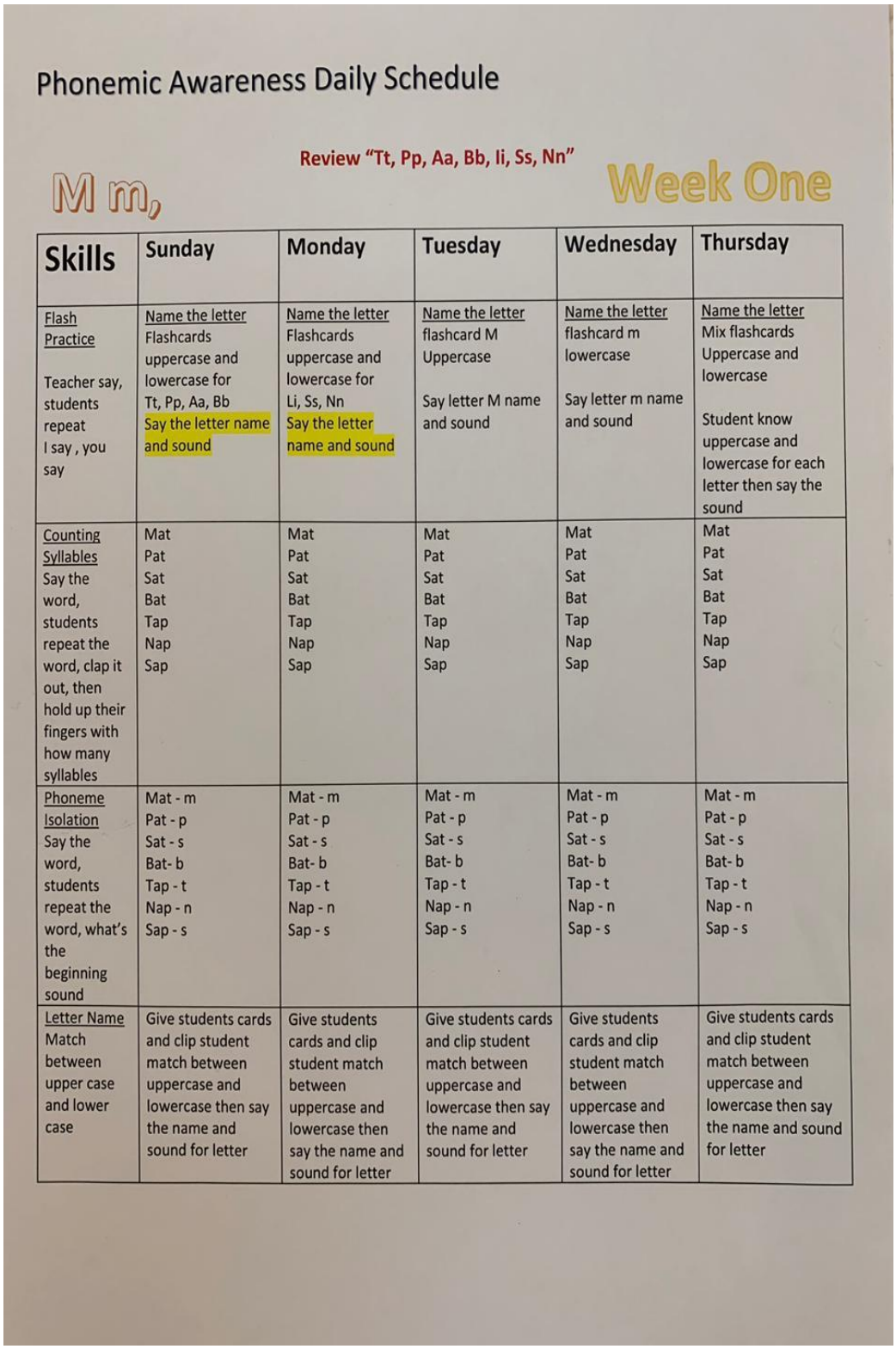
2- Phoneme Segmentation Fluency (each word 2 marks)

sat	*and*	*mat*	*mop*
mad	*net*	*red*	*sun*
cold	*send*	*meet*	*land*

Appendix B: Document Analysis: Decoding Checklist



Appendix C: Sample of Daily Week Schedule Implemented in the Program



Phonemic Awareness Daily Schedule

Review "Tt, Pp, Aa, Bb, Ii, Ss, Nn"

M m,

Week One

Skills	Sunday	Monday	Tuesday	Wednesday	Thursday
Flash Practice Teacher say, students repeat I say , you say	Name the letter Flashcards uppercase and lowercase for Tt, Pp, Aa, Bb Say the letter name and sound	Name the letter Flashcards uppercase and lowercase for Li, Ss, Nn Say the letter name and sound	Name the letter flashcard M Uppercase Say letter M name and sound	Name the letter flashcard m lowercase Say letter m name and sound	Name the letter Mix flashcards Uppercase and lowercase Student know uppercase and lowercase for each letter then say the sound
Counting Syllables Say the word, students repeat the word, clap it out, then hold up their fingers with how many syllables	Mat Pat Sat Bat Tap Nap Sap	Mat Pat Sat Bat Tap Nap Sap	Mat Pat Sat Bat Tap Nap Sap	Mat Pat Sat Bat Tap Nap Sap	Mat Pat Sat Bat Tap Nap Sap
Phoneme Isolation Say the word, students repeat the word, what's the beginning sound	Mat - m Pat - p Sat - s Bat- b Tap - t Nap - n Sap - s	Mat - m Pat - p Sat - s Bat- b Tap - t Nap - n Sap - s	Mat - m Pat - p Sat - s Bat- b Tap - t Nap - n Sap - s	Mat - m Pat - p Sat - s Bat- b Tap - t Nap - n Sap - s	Mat - m Pat - p Sat - s Bat- b Tap - t Nap - n Sap - s
Letter Name Match between upper case and lower case	Give students cards and clip student match between uppercase and lowercase then say the name and sound for letter	Give students cards and clip student match between uppercase and lowercase then say the name and sound for letter	Give students cards and clip student match between uppercase and lowercase then say the name and sound for letter	Give students cards and clip student match between uppercase and lowercase then say the name and sound for letter	Give students cards and clip student match between uppercase and lowercase then say the name and sound for letter

Appendix D: Final Grades of Pre and Post-Test

Assessment- Experimental Group

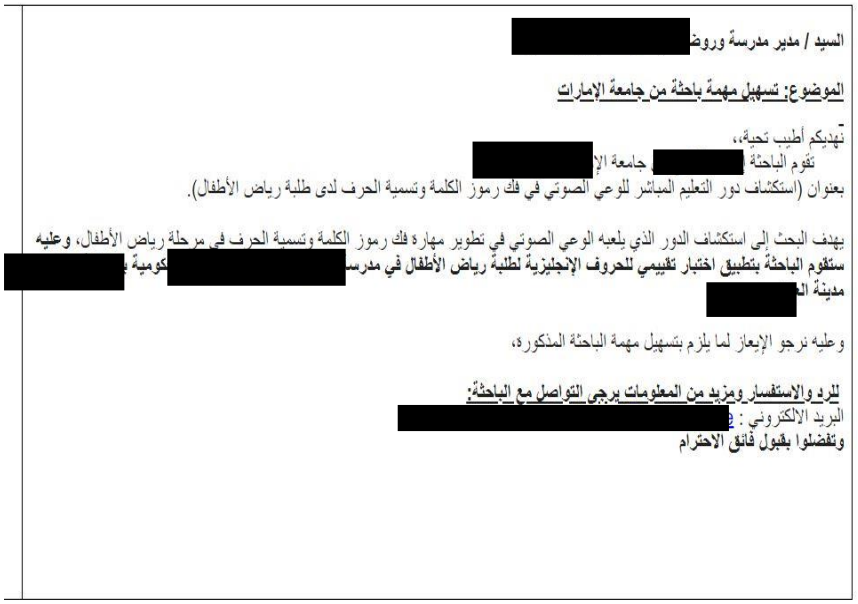
Student#	Pre – Test			Post Test		
	Letter& Sound /10	First Sound Fluency/5	Phoneme Segmentation Fluency /5	Letter& Sound /10	First Sound Fluency/5	Phoneme Segmentation Fluency /5
1	0.4	0.25	0	1.9	1	0.83
2	0.3	0.25	0	2.3	2	0.8
3	0.7	0.25	0	2.1	1.25	0.42
4	0.3	0	0	1.2	1	0.2
5	0.2	0.25	0	2.8	1.5	0.83
6	0.5	0.5	0	1.9	2	1.7
7	0.9	0.5	0	3.3	2.25	1.25
8	0.4	0.25	0	2.5	1.5	0.42
9	0.2	0.25	0	2.4	1.25	0.42
10	0.2	0.5	0	2.8	1	0.83
11	0.4	0	0	0.9	0.5	0
12	0	0	0	0.4	1	0.42
13	0.8	1	0	1.9	2.25	2.08
14	0.6	0.25	0	2.3	1.5	0.83
15	0.9	0.5	0	2.5	2	0.83
16	0.6	0.25	0	2	1.75	0.42
17	0.5	0.25	0	2.8	1.25	1.25
18	0.5	0.25	0	2.2	2	1.25
19	0.4	0	0	2.7	1.5	0.83
20	0.1	0	0	2.2	1	0.42

Appendix E: Students' Final Grades in Document Analysis

Experimental Group

Student #	Letter Name			Decoding		
	7 Nov.	21 Nov.	28 Nov.	7 Nov.	21 Nov.	28 Nov.
1	3	11	17	5	11	14
2	0	1	2	1	4	5
3	1	1	2	0	5	8
4	2	2	5	0	6	4
5	1	3	6	1	7	7
6	0	3	5	0	3	6
7	0	2	6	2	7	8
8	0	2	6	1	5	5
9	1	3	5	0	1	3
10	1	1	5	0	9	11
11	1	2	5	3	3	6
12	2	2	5	1	4	5
13	0	1	4	0	7	8
14	2	5	7	1	4	5
15	1	3	4	2	3	8
16	2	2	3	1	6	9

Appendix F: MOE Approval



السيد / مدير مدرسة وروض [redacted]

الموضوع: تسهيل مهمة باحثة من جامعة الإمارات

تحية طيب،
تقوم الباحثة [redacted] جامعة الإ[redacted]
بعنوان (استكشاف دور التعليم المباشر للوعي الصوتي في فك رموز الكلمة وتسمية الحرف لدى طلبة رياض الأطفال).

يهدف البحث إلى استكشاف الدور الذي يلعبه الوعي الصوتي في تطوير مهارة فك رموز الكلمة وتسمية الحرف في مرحلة رياض الأطفال، **وعليه ستقوم الباحثة بتطبيق اختبار تقييمي للحروف الإنجليزية لطلبة رياض الأطفال في مدرس[redacted]كومية [redacted] مدينة ال[redacted]**

وعليه نرجو الإيعاز لما يلزم بتسهيل مهمة الباحثة المذكورة،

للرد والاستفسار ومزيد من المعلومات يرجى التواصل مع الباحثة:
البريد الالكتروني : [redacted]
وتقضلوا بقبول فائق الاحترام

UNITED ARAB EMIRATES
MINISTRY OF EDUCATION

الإمارات العربية المتحدة
وزارة التربية والتعليم

قطاع العمليات المدرسية
School Operations Sector
أبوظبي، الإمارات العربية المتحدة
Abu Dhabi, United Arab Emirates

Appendix G: Parents' Consent Form

Parents' Consent Form

Dear Parents,

My name is [redacted]; I am a master student at UAE University. I am providing the following information in order make an informed decision whether to let your child participating in this study. You have the choice to let your child participate or withdraw from this study at any time.

My study is trying to explore the role of direct phonemic awareness on decoding and letter naming abilities of kindergarteners. In other words, the study aims at investigating the effect of explicit phonemic awareness instruction on a kindergartener's ability to manipulate sounds and decoding. There are no risks associated with this study. The expected benefits of this study increased student achievement in phonemic awareness which lead to an increase in reading proficiency.

Please, do not hesitate to ask any questions regarding this study before or during the study. I would be happy to share results of the study with you at the conclusion of the research. More importantly, neither your name nor your child be identified in this study and the information will be treated with high confidentiality.

Any questions regarding this study may be addressed to [redacted] at [redacted] or [redacted]

To have your consent, please sign this form, which give the permission for your child to participate in this study.

Portents Consent:

I understand my child's participation in this study is voluntary and I can withdraw from the study at any time. I also understand that my name and my child name will remain entirely anonymous in this study. Additionally, I understand that all data collected will be limited to the study use.

By signing this consent form, I acknowledge that I have read and understand the above information.

I give my consent for my child to participate in the study:

Father Name: _____ Date: _____

Father of: _____ Date: _____