The Effect Of Using Metalinguistic Awareness On Developing English Reading Skills For The Primary School Pupils With Dyslexia

Tawfik Mabrouk Tawfik¹, Lamiaa Kamel²

^{1.}PhD Researcher Curriculum and EFL instruction, Faculty of Education, Helwan University ^{2.}Lecturer of Curriculum and EFL instruction, Faculty of Education, Helwan University ¹Email: <u>Proftawfik03@gmail.com</u> Helwan University ²<u>Lamia-kamel@hotmail.com</u> Helwan University

Abstract:

The current study was conducted to investigate the effectiveness of using Metalinguistic Awareness on developing English reading skills for the primary school pupils with dyslexia. A pre- post experimental group design was designed to achieve the study objectives, as the researcher used the explicit teaching by promoting metalinguistic awareness activities in a classroom to develop reading skills for dyslexic pupils. Twenty dyslexic pupils were inentionaly chosen for the experimental group and twenty for the control group from the fifth primary dyslexic pupils. Pupils were trained to develop their reading skills by using metalinguistic awareness activities while the control group used usual instruction. Instruments of the study included metalinguistic awareness checklist and reading skills checklist to determine metalinguistic awareness skills and reading skills that were mostly needed by the fifth primary pupils, a pre-posttest in reading skills. Some lessons were reformed by promoting metalinguistic awareness activities and teaching them by explicit teaching by the researcher to develop reading skills for the sample of the study. Analysis of data obtained by dyslexic pupils revealed that the experimental group significantly achieved higher on the post reading test as the difference in the mean scores of the two administrations was statistically significant in favor of the experimental group. . Discussion of these findings, recommendations and suggestions for further research are presented

Key Words: Metalinguistic Awareness, Reading skills, Dyslexia, Primary

Introduction:

Nowadays, learning English is essential for the normal students as well as disabled students, as English is integrated in almost every profession. For many people, especially the pupils with learning disorders, the process of writing is a challenging process, which is one of the most powerful forms of communication.

The goal of language instruction for primary students is to provide them with a learning environment with various opportunities to use the language for meaningful interaction with others. For primary pupils, Children with low quality reading or writing will sooner or later face obstacles in their courses of study. Such impediments in achieving analytic intelligence make it difficult for them to

internalize some of the abstract concepts (Casey, 2012, p. 35).

Reading is essential in primary stage, the majority of what children learn in school requires them to read. It is a crucial mean for obtaining knowledge, information and acquiring the other language skills. The ability to read is necessary for learners' academic success and lacking the ability to read can diminish a student's ability to acquire knowledge and skills in the general education curriculum, thereby reducing or limiting learning outcomes.

It is not surprising that many students struggle with the reading process (Ghoneim, 2021; Elfiky etal, 2021; Gundogdu, 2009, El Masry, et al, 2016; Nashaat, etal. 2017; Yuzaidey, etal. 2018). According to statistics, 20 percent of school children are mentally deficient, a condition reducing their ability to read and write. They are classified and identified as a group with learning disabilities (Santangelo, 2008, p. 8).

The most common specific learning disability is dyslexia. It influences the development of reading and writing skills. There is a neurological basis for the illness. Children with dyslexia find it difficult to read correctly and quickly enough. Dyslexia is typically identified when a child consistently struggles with reading and the issue cannot be explained by lack of interest, inadequate instruction, low general intellect, or sensory problems. This impairment significantly affects a child's growth as well as their future chances.

The American Psychiatric Association (APA) roughly estimated that 4 percent of adults and between 5-15 percent of school children suffer from any type of learning disorder. Dyslexia more prevalence in males than females.

In fact, dyslexia is one of the disabilities that need care and attention, especially in the primary stage, as it effects on pupils' academic development and the

progress of language acquisition in the following years (Nordqvist, 2017; Jones, 2015; Pokrivcakova, 2015). Dyslexia causes problems with reading, writing and spelling which are important skills for language acquisition.. More care on teaching methods and learning interventions needed to help dyslexic pupils overcome disability.

A new, modern methods and theories had appeared for learning language, such as approach, collaborative. metacognition psychological, phonological, and the writing process approach, these approaches assured the importance of awareness of the basic, linguistic skills for the first educational stages and the metalinguistic awareness for learning language (Tarrant, P. & Holt, D. (2016).). Metalinguistic awareness is a necessity for learning language, and it is the individual's knowledge about language and the ability to analyze, recognize, monitor its components and focus his attention to specific features of language, as it enables learner to understand meaning of vocabulary and form and knowing of morphological, phonological, rules syntactic and semantic features. (Zipke, M, 2007).

As dyslexics lack phonological awareness, they have difficulties in the orthographic and phonological reading aspects (O'Brien, etal. 2019). So increasing learners' metalinguistic awareness may lead to a clear development in reading skills.

Dyslexia

Due to neurological issues that make it difficult to recognise speech sounds and learn how they relate to letters and words, dyslexia is a learning impairment that makes it difficult to read. Dyslexia, sometimes known as a reading handicap, is brought on by individual variations in language processing regions of the brain.

The word 'dyslexia' comes from the Greek meaning difficulty with words or language'. The simplest definition is that it is a difficulty in learning to read and write, especially, in learning to spell correctly and to epress thoughts in paper which affects those who have normal schooling and do not show backwardness in other subjects (Hornsby, 2011, p.11).

Dyslexia is a language processing disorder in which pupils with dyslexia experience weakness in one or more areas of language, such as encoding, decoding, phonological awareness, and syntax. To succeed within a Foreign Language, it "needs the use of specifically those language skills in which dyslexics are weak in their language" (Lee, 2016). Dyslexia has been defined by researchers as a problem that makes learners in spite of their classroom experience, have difficulties to read, write, and spell in keeping with their cognitive ability"(Barnard, 2014, p. 2).

The international dyslexia association (2019) defined it as Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and / or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically results from a deficit in the phonological components of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge.

The Diagnostic and Statistical Manual DSM 5explains the dyslexic has inaccurate and effortful word reading difficulty understanding the meaning of what is read" spelling." difficulty with These and difficulties must have persisted for at least six months and remain below the skills expected for the chronological age. The difficulties are not better accounted for by intellectual disabilities, uncorrected visual or auditory acuity, other mental or neurological disorders, psychological adversity, lack in the proficiency in the language of academic instruction, or inadequate educational instruction (DSM 5, 2013, p. 67).

To sum up, dyslexia is a neurological disorder that causes many problems in a child's ability to read, write and spell which are important skills for language learning.

Enlish Reading Skills:

Reading is one of the a crucial skills in learning any language. It is believed that the more students read, the more they learn. Learning to read is an important educational goal. Brown (2010) , Farag, (2019) state "Reading is arguably the most essential for success in all educational contexts. It remains a skill of paramount importance as we create an assessment of general language ability. In the setting of English as a Foreign Language, it is frequently supposed that reading skill is the fundamental way of learning new information and it is the most significant skill required for the students' success.

Reading Skills As an Active Process:

Reading is an interactive process in which the reader actively explains meaning through a set of mental processes. Reading skills is commonly known as an interactive mental process between a reader's linguistic knowledge, knowledge of the world, and knowledge about a given topic (Abu Shihab, 2011, p.209). Learning to read is a key objective of early education and difficulties in learning to read can have serious adverse consequences. A proficient reader can decode print efficiently and build a coherent "mental model" of the meaning of a passage. Although being a good reader involves much more than having efficient decoding skills, it is certainly the case that poor decoding will be an obstacle in developing adequate comprehension skills, (Hulme & Snowling, 2011). Brown (2010, p. 210) defined reading comprehension as "the capability to perceive and understand the meanings communicated by texts. While reading, the reader is viewed as an equal and

active partner with the text in the meaningmaking process of comprehension". Grabe (2009: 12) mentions "In accordance with schema theory, comprehension is the result of the interaction between the background knowledge of the reader and the text". Thus, the process of comprehending involves decoding the writer's words, and then using background knowledge to construct an approximate understanding of the writer's message

Reading Skill involves at least two persons; the reader and the writer. Rumelhart, (2013), Yeung et al, (2013) assert that reading consists of four resource models where the reader is involved in four practices, as code breaker, meaning maker, text user, and text analyst. They explain that as a code breaker. the reader uses graphonic, grammatical and semantic knowledge to work out what the text says. As a meaning maker, the reader assigns meaning to the text, mediated by his social and cultural understanding and experiences. As a text user, the reader considers text from the point of view of consumer (that is, how to use the text). As a text analyst, the reader deconstructs the text to uncover ideologies, viewpoints, gaps, silences and bias. The reader is always making guesses, which may be correct or incorrect; the efficient reader is the one who, with some consistency, guesses correctly.

Reading Skill and Dyslexia

The main feature of dyslexia is the difficulty in reading and writing skills, thus, there is a correlation between reading development and dyslexia. Rosen, (2019) explains that dyslexia causes difficulty in segmenting the words into sounds, associating those sounds to letters and blending sounds into words. Students with dyslexia frequently confuse similar letters. Vowels can be vary tricky and may even get deleted. Dyslexic may also mix up the letters order and misspell common words, even after practice. They may recall words for spelling tests and quickly forget them once the test is done (Mulholland& Turnock, 2013, P. 123)

Werth (2019) & Reid (2019) sum up the effects of dyslexia on reading. Reading is a complex skill that requires many different brain functions. The gaze must be directed approximately at the middle of the word or word segment that must be read so that as many letters of the word as possible are projected into the area of the retina, which has a sufficiently high visual acuity for reading. It causes lack of attention that is directed to all letters that must be recognized. The word or word segment has to be fixated for a sufficiently long time such that the pattern and arrangement of the letters, their size, and their position within the word can be processed by the visual system.

In addition, the shape and position of the letters of a word cannot be processed letter by letter. The pattern and position of a sequence of letters must be recognized almost simultaneously, which requires a separate brain capacity for simultaneous recognition (Werth, 2018). It is necessary to retain the read words in memory and construct sentences using them. A reading deficit may result from a deficiency in one or more of these skills that are necessary for reading. It's unknown whether irregular eye movements result from other reading disabilities or whether they are a source of dyslexia as well. (Stein 2018).

Additionally, the reading errors of dyslexic students are related to experience difficulties remembering the sound corresponding to a letter being read, not distinguish between letters that have similar shape, e.g. pd, d-g, read words backwards, especially short ones, e.g. god-dog, saw-was, read the first and the last syllable, skip the syllable/s in the middle, skipp words, lose the pace of reading, skip lines, read the same line again, skip the beginnings or endings of words, as well as, guess words on the basis the first letter, syllable, or the global 'picture' of the word (Wreth, 2019).

In brief, dyslexia makes it difficult for pupil to decode or sound out words and recognize them. Because of this, it makes it difficult to read fluently. Moreover, it causes a weak phonemic awareness which lead to have trouble with spelling, related to reading deficiency. When pupils practice metalinguistic activities, their phonemic, phonological and syntactic awareness may increase which improve their reading abilities. When students can hear and shape these sounds, they can increase their reading proficiency.

Metalinguistic Awareness

Metalinguistic awareness is a language concept that focus on the explicit acquisition and learning of language components. The word "metalanguage" was created by Roman Jakobson in his works on the purposes of language fifty years ago (Roehr-Brackin, 2018. p. 8). According to him. "metalanguage" only includes terms that characterise words and structural elements in their functional sense. As a result, any verbal reflection on the functional aspects of well as linguistic language as any classification, like the determination of word class, for example, reflect metalanguage.

According to Falk, Y., Lindqvist, C., & Bardel, C. (2015), "metalinguistic awareness implies that attention is actively focused on the domain of knowledge that describes the explicit properties of language." She further refers to it as "a momentary phenomenon, something achieved at a point in real time because attention has been focused on certain mental representations"

Within the linguistic discipline, metalinguistic awareness could be defined as an activity that may be viewed as 'language about language', but within the psycholinguistic discipline, it may be referred to as 'language cognition', two separate constructs (Fontich and Camps, 2013) More recently, in the fields of second language acquisition, metalinguistic awareness is the explicit knowledge about language (Hulstijn, 2015). Additionally, metalinguistic awareness may refer to the "ability to focus attention on language as an object in itself or to think abstractly about language, and, consequently, to play with or manipulate language"(El Euch, 2015, p. 18).

Accordingly , metalinguistic awareness can be defined as a growing awareness of certain properities of language and the ability to analyze linguistic input, that is to make the language forms the objects of focal attention and to look at language rather than through it to the intended meaning (Roehr-Brackin , 2018).

Reviewing the above mentioned definitions, it could be assumed that:

- Metalinguistic awareness is the awareness that you can change language in different ways, that you have the power to manipulate it.
- Metalinguistic awareness not only helps EFL learners see how oral language relates to written language, but also provides a basis for them to acquire a deeper understanding of important features of linguistic input.
- Metalinguistic awareness can express the explicit knowledge of underlying linguistic structures, such as reflected in the appropriate use of terms for grammatical categories and rules.
- MA is knowledge about language that is intuitive and cannot be explained by the user of the MA.

Components of metalinguistic awareness:

Metalinguistic awareness is a cognitive generator, as it develops the consciousness for the learner of metalinguistic awareness, and it has various components such as phonological awareness, morphological awareness, syntactic awareness, semantic awareness, pragmatic awareness and orthographic awareness,(El Euchs & Huot, (2015) The first Phonological awareness component of (acoustic consciousness) indicates that it is the ability to process the vocal system of spoken language, Phonemes refers to the acoustic units that make up the language, and phoneme does not make sense alone, but when produced and entered into the word installation will permanently change the meaning of the word; So the pupil should learn how to determine the sounds (awareness of the sounds of speech), and then learn to match these sounds to the letters (phoneme), so that he can produce individual phonemes to develop the natural language understandably and so that he can effectively write (Berninger, etal. 2011)

The second component is morphological awareness which refers to the Child's ability to divide the language into acoustic units, or syllables. Being able to divide sentences into words and then divide words into voices is an important element of writing mastery. Children are expected to find words containing the same sounds or rhythms in early reading exercises, and by understanding the rules and regulations of language, children can perform such tasks (Willingham, D. T,2017) (Lee, 2061).

The third component of grammatical consciousness (syntactic awareness), refers to the order of words in phases and sentences that have meaning, The installation of words can have a significant impact on the meaning of sentences given, So a simple recombination of words is a sign that the meaning of the original sentence has changed, Where a pupil must learn the importance appropriate of arrangement of words within sentences to facilitate receptive and expressive language, Grammar plays a necessary role in the production and understanding of language. Although a pupil has a problem with the acquisition or use of grammar, the development of his oral and written language will seem unregulated, and this pupil will have difficulty at understanding.(Phillips &Uccelli, 2015).

The fourth component of Semantics which indicates that other awareness components of the language may have been extensively studied, but the meanings of words and sentences received little attention. In principle, the pupil has connections between common words and things in the environment, and many pupils quickly show what words mean by learning common verbal (Wang, & Gathercole. symbols S. S,2013),(Perfetti ,&Stafura , 2014).

The fifth component refers to Pragmatic awareness (awareness of the use of the language) which indicates that the ability of the pupil to use language and content forms. The use of the language communicates knowledge of how things are at the heart of the language to match the speaker's needs and objectives (Ginsberg, &Oneil 2011). After the development of the elements and components of the language, the pupil is able to use them in academic skills, especially written expression.

The Influence of Metalinguistic Awareness on Developing Reading Skills

Studies on attributes of metalinguistic awareness have shown strong correlations between reading performance and metalinguistic skills. (e.g. Ibrahim, et al., 2007; Nagy et al. 2013; Aydın (2018).

Kou, etal (2020) discovered that the relationship between learning language skills in general and developing metalinguistic awareness is interchangeable. Varga,S (2021) found that metalinguistic awareness weakness results in language skills weakness, and that predicting the level of metalinguistic awareness for the pupil at an early stage is evidence of his level of linguistic development at the advanced stages.

As indicated by El Tighe and Binder (2015), that the level of phonology and morphology is therefore one of the most

linguistic levels associated with reading and writing skills, and most modern treatment and training programs for those with reading and writing weakness are concerned with the development of phonological and morphological awareness.

Additionally, MA made an independent contribution to reading and writing ; in Nagy et al.'s (2013); Freitas et al.(2017) study, MA was found to make an unique contribution, beyond that of PA, orthographic awareness, and vocabulary knowledge to reading comprehension for the 2nd graders. Moreover, morphological awareness helps to decode the words, infer their meaning and encourage learners to understand and comprehend the complex words in texts (Amirjalili & Jabbari, 2018; Carlisle, 2013).

Another study which were conducted at the early years of literacy, and revealed a positive correlation between Phonological awareness and reading was Mota, etal, (2018)

Godoy (2017) established that the best predictor of word reading and spelling at the end of the 1st grade was the participants' level of phonemic awareness at the end of the preschool, explaining 21% of reading and 43.6% of writing.

Reviewing the previous theoretical literature, it could be assumed that training on metalinguistic awareness components seems to be effective in developing reading development.

1.2. context of the Problem

According to the standards of the Ministry of Education of the primary graders concerning reading, learners progressively are able to recognize words and phrases that have been studied, read aloud simple words, read and understand simple information. In spite of this standard, The "Time for English series of primary schools pays more attention to oral communication skills than reading skills (Ali, 2011; Alharbi, 2016, Alnabulsi, 2017; Ghoneim 2021).

Based on TIMMS, 2015 and PIRLS, 2016 results, more than half of the students in Egypt do not even meet the low benchmark in international learning assessments – 69% of grade-4 students in reading, 53% of grade-8 students in mathematics, and 58% of grade-8 students in science. Thus reading skills need more focus and care either teaching skills or in textbook.

As reading is an limportant skill for ordinary pupils, it is also more important for disabled learners. In Egypt, the prevalence of LD varied among districts and time frames. It was estimated to be 28/1000 in 1995, 10.7% in 2003 and 12.6 % in 2014 (Farrag 2000; Mohamed 2014; Ghoneim, 2021; Elfiky etal, 2021). It's worth noting that these studies, focused on reading and spelling disorders (Berninger, 2015).

Dyslexia is one of the prelevant disorder in Egyption schools. Dyslexic pupils suffer from difficulties include word recognition, reading fluency, spelling and writing (Ashbaugh, 2016).

Efforts for helping those disabled learners are very low as revealed by many studies as Hassan (2013), Omar (2016), El Sady et al (2011), Nashaat et al (2016), Gohar et al (2019) which recommends the need to conducting more instructional programs to help students with dyslexia. This problem was further emphasized by the results of the survey that was designed and administered by the researcher. The survey was administered to forty senior teachers and supervisors of English. It aimed at answering the question: Do teachers care about pupils' reading skills and activities of primary graders, and tried to identify the practices of the primary teachers in teaching.

Thus ,the importance of teaching students with dyslexia how to read and the necessity of developing their basic reading skills is very needed. So the present study is an attempt to make use of a metalinguistic awareness based activities for developing reading skills of primary pupils with dyslexia.

Statement of the problem

The problem of the study could be stated in The fifth year primary school students with dyslexia suffer from low level of English reading skills .This might be due to the methods used in teaching English language at this stage that are not suited to their natures and disability.Therefore, the present study attempts to use metalinguistic awareness activities for developing some English basic reading skills to primary school students with dyslexia.

Questions of the study:-

To tackle this problem, this study attempted to answer the following question: What is the effect of using metalinguistic awareness activities on developing reading skills for the 5^{th} year primary students with dyslexia?.

Aim of the Study:

The present study aimed at Identifying the effectiveness of using a suggested activities based on metalinguistic awareness for developing English reading skills for the 5th year primary students with dyslexia.

HYPOTHESES OF THE STUDY

- There is a statistically significant difference between the mean scores of the experimental and the control groups on the postadministration of the reading skills, in favour of the experimental group.

- There is a statistically significant difference between the mean scores of the experimental group on the pre - and post administrations of the reading skills, in favour of the post administration of the Scale.

Delimitations of the Study:-

This study was limited on two groups of 40 selected intentionally from fifth primary school graders with dyslexia. They were divided into two equivalent groups; the

control group (n=20) and the experimental group (n=20). they were selected from one of Bedsa governmental primary schools, Giza Governorate, namely, Bedsa primary School, in the school year 2021/2022, second term, started on 1^{st} May 2022 and ended on the 15^{th} May 2022.

The study was limited to teaching the first two units of EFL textbook of fifth primary school using metalinguistic activities.

Significance of the Study:-

The importance of the current study can be summed up in the following points:-

- 1- It may help students with dyslexia in developing their English reading skills in primary stage.
- 2- It is an attempt to draw teachers' attention to their real roles as facilitators and supervisors for students with dyslexia.
- 3- It increases the awareness of educational decision makers to an important category of learning disability ; that is dyslexia and its roles in hindering reading and writing development
- 4- It offers EFL teachers a manual for using the metalinguistic activities in teaching reading.
- 5- It may draw the course designers' attention to the importance of metalinguistic activities in instructing other language learning disabilities

METHODOLOGY OF THE STUDY

- Design of the Study

The study followed the quasi experimental design of two groups and pre post application of the instruments of the study. The two groups were a sample of 40 (20 as control and 20 as experimental) fifth year primary school pupils with dyslexia that was intentionally selected. They were exposed to pre-post test of reading skills, but only the experimental group was instructed by the metalinguistic based units.

Variables of the Study:

The independent variable:

Using metalinguistic awareness activities

The dependent variable:-

Reading Skills of Fifth primary school Pupils with dyslexia.

Participants of the Study

This study was limited on two groups of 40 selected intentionally from 400 pupils of fifth primary school graders who suffers from dyslexia after applying the following procedures:

- 1- Teachers' observations of repeated problems in reading. Their main complaint as stated by their parents was poor scholastic achievements or difficulty in reading and/or writing. All cases had an average IQ on formal tests and with no sensory deficits.
- 2- The Modified Arabic Dyslexia Screening Test as a primary screening test for Dyslexia. Patients scoring below 25th percentile in more than seven items of the test are considered "At risk
- 3- Language test by PLS4-modified test (Abou Hasiba, 2011)

Pupils of hearing or visual impairment and delayed language development were excluded

from the sample of the study. Results of the diagonestic procedures revealed that 40 pupils of fifth primary graders suffer from reading problems. Pupils of dyslexia were divided into two equivalent groups; the control group (n=20) and the experimental group (n=20). both groups' age ranged from (10 to 11 years old). All participants are of the same social class and economical position.

Instrument of the Study

To achieve the study objectives and answer its questions, the researcher used the subsequent tools:

Reading skills pre post test

The purpose of the test was to assess fifth primary dyslexia pupils' level in reading skills, comparing the reading skills of the sample after and before applying the suggested metalinguistic awareness based program.

- .To construct the test the following procedures were followed:
- building a reading skills list through reviewing the syllabus of Time for English 5 and related studies of reading skills
 - the reading skills list in the initial form was consisted of the following subskills:
- Discriminate isolated words
- distinguish between phonemes in words
- differentiate between words and sounds that are similar and words and sounds that are different.
- identifying more closely linked sounds
- join speech sounds together to make words
- break up spoken words into their separate sounds
- recognize a set of high frequency English words
- identify letter-sound relationships
- identify letter patterns

- correctly pronounce written words
- Strong eye-hand co-ordination
- Literal interpretation of language
- The list was submitted to a jury of thirteen TEFL specialists. who judged the relevance and suitability of those sub skills to the sample of the study.
- The list was approved by the jury members with little modifications in the linguistic stating of the skills and the appropriateness of the skills to the sample of the study. The jury members omitted two subskills (**identify letter-sound relationships** & Strong eye-hand coordination).
 - constructing the test: Atable of 0 specifications was developed to specify the content and the number of items included to guarantee that the intended learning outcomes were measured, and assure that the number and type of items were suitable for assessing all the desired objectives. The test included (20) questions. The questions were MCQ and open ended questions. Each MCQ item had four alternatives from which the student should choose one.
- One mark was given for each correct answer
- testing the validity of the test through submitting it to the jury members in May, 2022.The jury members approved the test, after implementing some modifications on it, as an appropriate tool to test fifth grade primary school pupils' reading skills.
- piloting the test aimed at assuring the reliability and determining time of the test, item difficulty and item discrimination. Therefore, twenty five pupils of fifth grade primary school pupils with dyslexia were selected for piloting the test who were excluded

from the whole experiment. The results of the pilot study revealed the following :

- period of (30) minutes would provide enough time for the students to perform the test
- the clarity and the suitability of the test items to the pupils in terms of content and item type.
- The reliability of the test was determined by using Cronbach Alpha formula. The reliability coefficient of the test (0, 775) and it was found to be significant at (0,01) level
 - An analysis of the pupils' responses to individual items was conducted to determine the item difficulty index of this test. The value of difficulty ranges from 0.33 to 0.7.
 - The discrimination indices were found to be acceptable as they ranged from 0.33 to 0.47.

The Metalinguistic Awareness based Activities:

- The main objective of the activities is to develop some reading skills among fifth graders with dyslexia. It provides pupils with some possible chances to train on English language morphological, phonological, syntactic, orthographic and pragmatic aspects and practice those skills in various reading activities which give them many opportunities to read and comprehend words, sentences and short passages.
- The objectives of the program were based on the analysis of:the dyslexia pupils in primary schools; the general outcomes of EFL course in fifth grade primary school; the nature of reading skills suitable for dyslexia pupils.So, by the end of this study, students were able to:

- Develop their reading skills through practicing morphological, phonological, syntactic, orthographic and pragmatic awareness activities
- The content of the program consists of four units based on metalinguistic components which stemmed from Time for English 5. Examples and texts are of the pupils' interests and related to topics studied in Time for English 5. Each unit is followed by a an evaluation which is designed to revise and consolidate language learnt. Each unit consists of four parts handled which the various components of metalinguistic awareness.
- This metalinguistic awareness based program is based on scaffolding metalinguistic awareness skills of primary pupils, so the learning activities are directed to help students train on metalinguistic awareness skills and practice those skills through practicing reading activities
- The program contained a teacher's guide which begins with summary of the overall objectives of the unit followed by the procedures of teaching each section of the unit.

There are step by step instructions for each section. The student book included the objectives of the program, the learning activities and quizzes, handouts, unit evaluation.

The metalinguistic awareness based program was submitted to the jury members. They were reported the validity of the program. The judges stated that the program was comprehensive. They asserted the creativity and variedness of the designed activities and tasks. They all approved its suitability for the subjects and the objectives of the study. They also asserted the variedness and relatedness of the behavioral objectives to the general ones, to the content and to the evaluation techniques. They recommended modifying some objectives.

Procedures of the experiment

To execute the experiment, the following procedures were done:

Pre testing: The reading skills test was administered to the whole sample in one session before applying the metalinguistic awareness based program.

Group	N.	Mean	Sum of	"z" value	Sig
		ranks	ranks		
Control	20	20.63	412	0.069	Not
Experimental	20	20.38	407		

Teaching: the researcher taught the program based on metalinguistic awareness to the sample of the study.

Post testing:

After teaching the program, the post reading skills test was re-administered to the participants of the study in order to measure the effectiveness of the suggested program on their reading skills.

RESULTS OF THE STUDY:

On displaying the results of the present study, verifying its hypotheses and answering its questiondealt with;

First: Verifying the Hypotheses of the Study:

The First Hypothesis

To test the first hypothesis of the study, which predicted that " There is a statistically significant difference between the mean scores of the experimental and the control groups on the post- administration of the reading skills, in favor of the experimental group. The researcher analyzed the quantitative data using "Man-Whitney" test formula of two independent samples. The findings were presented in the table (1):

Table(2) Analysis of Scores of the experimental and	nd control groups in the Post-Testing of reading	Skills
---	--	--------

Group	N.	Mean	Sum of	"z" value	Sig
		ranks	ranks		
Control	20	10.55	609	5.411	0.01
Experimental	20	30.45	456		

According to the data in table (2), "z" (5.411) is significant at (0.01) level. This finding affirms and supports hypothesis one and indicated that the experimental group surpassed the control group on the post-test of the reading skills. It is clear that using metalinguistic awareness based program has a strong positive effect on developing the experimental group's reading skills. To test the second hypothesis of the study which predicted that " There is a statistically significant difference between the mean scores of the experimental group on the pre - and post administrations of the reading skills, in favor of the post administration of the test, the researcher used Wilcoxon Signed Ranks **Test to compare means of the sample's scores in the pre and post testing.** Table (3) shows the sample's' scores and shows "zvalue" of subjects' mean scores.. The findings were presented in table (3):

The Second Hypothesis

Table(3) Test Analysis of Scores Obtained By the Experimental Group in the Pre/Post Test of the reading Skills

Administration	N.	Mean rank	Sum of ranks	"z" value	Sig
Negative ranks	20	00	00	3.928	0.01
Positiveranks		10.50	210		

According to the data in table (3), "z value" (3.928) is significant at (0.01) level. This finding affirms and supports he second hypothesis and indicates that the experimental group surpassed in the posttest of the reading skills. It is clear that using the metalinguistic awareness based program has a strong positive effect on developing reading skills of pupils with dyslexia.

The results of the present study is in accordance with the results of other studies

which revealed the positive effectiveness of metalinguistic awareness on reading skills either for ordinary pupils or disabled. (e.g. Ibrahim, et al., 2007; Abu al-Diyar, 2012; Nagy et al. 2013; Tighe and Binder (2015); Freitas et al. 2017, Aydın, 2018; Tibia &Kirb , 2018;

pupils with dyslexia struggle to understand the meaning of words. Recognize a set of high frequency English words, recognise letter-sound relationships, words, distinguish between words and sounds that are similar and words and sounds that are different, identify more closely linked sounds, combine speech sounds to make words, break up spoken words into their individual sounds. The program's emphasis on linguistic awareness provided students with a variety of opportunities to learn about the phonemic and phonological aspects of language, train them repeatedly to pronounce words by breaking them down into simple morphemes, and recognise the orthographic and pragmatic uses of words in a variety of situational contexts

The pupils' participation at the beginning of the program was very low, gradually, they like the metalinguistic awareness activities, they participated in the tasks especially phonemic exercises. In brief, metalinguistic awareness activities encourage pupils to read and practice language activities.

Recommendations of the Study:

Based on the previous results, it is recommended to:

- Train teachers of primary schools on using new methods of teaching EFL that are suitable for different styles of learners.
- New methods of teaching should be applied for disabled learners.
- Pay more attention to explicit instruction of linguistic aspects.
- develop dyslexic pupils 's literacy skills especially in the early stage of learning.
- apply identification instruments continuously to elicit disabled learners that need help and therapeutic interventions.
- Curriculum designers must take into their account the importance of metalinguistic awareness in the syllables of different stages.

Suggestions for further research:

Within the limitations of the present study as well as the findings being achieved , the following areas are suggested for further research:

- 1- Using Metalinguistic awareness to develop English writing skills for EFL students.
- 2- Using Metalinguistic awareness to develop other English language skills for EFL students.
- 3- Conducting more studies on the effect of metalinguistic awareness in teaching English.

References:

- Abdallah, M. (2016). Issues with the 'Time for English' Textbook Series at Egyptian Primary Schools: An Evaluative Study. Journal of Faculty of Education, Assiut University. 32. 10.12816/0042306
- 2. Abo Diyaar et al,(2012)Phonological Processes and Reading, Writing Difficulties.Kuait. Children Learning and Evaluation Centre.
- Abouhasseba, A. (2011): Standardization, translation and modification of the preschool language scale- 4. Thesis submitted to Phoniatric Unit Ain Shams University. Cairo.
- Abu Shihab, I. (2011). Reading as Critical Thinking. Asian Social Science, 7 (8), 209- 219.
- 5. Alharbi, A. S. (2016). the effectiveness of interactive visualized software in the acquisition of reading and speaking skills in English course for EFL students in the primary stage. The specialized international educational journal, 5(8): 315- 321
- 6. Ali, M. (2011). USING BLENDED LEARNING FOR IMPROVING SIX PRIMARY PUPILS ORAL

READING SKILLs. Faculty of education journal, Ain shams university, 17 (1): 69- 110

- 7. American Psychiatric Association (2013), Diagnostic statistical Manual of Mental Disorders. 89042-555-8978-0-ISBN,p.5-25, Arlington,VA : American Psychiatric Publishing,(fifth edition).
- Amirjalili, Forough& Jabbari, Ali. (2018). The impact of morphological instruction on morphological awareness and reading comprehension of EFL learners. Cogent Education. 5. 10.
- Ashbaugh, A, "Multi-Sensory Techniques in Spelling Instruction: An Action Research Study for Students with Dyslexia" (2016). Masters Theses/Capstone Projects. 6. <u>https://digitalcommons.otterbein.edu/ stu_master/6</u>
- Aydın, F. (2018). L2 metalinguistic knowledge and L2 achievement among intermediate-level adult Turkish EFL learners. Journal of Language and Linguistic Studies, 14(1), 28-49.
- Barnard, L. (2014). Aro Healing Touching Lives – Theories, Techniques and Therapies: The Techniques and Therapies of Aro-Healing. Xlibris Corporatio.
- Berninger, V. W., Nagy, W., & Beers, S. (2011). Child writers' construction and reconstruction of single sentences and construction of multi-sentence texts: Contributions of syntax and transcription to translation. Reading and Writing, 24(2), 151–182. https://doi.org/10.1007/s11145-010-9262-y.
- Brown, H. (2010). Teaching by principles: An interactive approach to language Pedagogy.(4th ed.). New York: Longman, Inc.

- 14. Carlisle, J., & Goodwin, A. (2013). Morphemes matter: how morphological knowledge contributes to reading and writing. In C. A. Stone, E. Silliman, B & Wallach,G (Eds.), Handbook of Language and Literacy. Development and disorders [2nd Edition] (pp. 265–282). New York: Guilford PublishingHouse.
- Casey J. E. (2012). A model to guide the conceptualization, assessment, and diagnosis of Nonverbal Learning Disorder. Can J School Psychol .27(1):35–57.
- DSM-5 (2013). American Psychiatric Association, DSM-5 Task Force. (2013). (5th ed.). American Psychiatric Publishing, Inc.. https://doi.org/10.1176/appi.books.97 80890425596.
- 17. El Euch, S & Huot, A. (2015). Strategies to develop metalinguistic awareness in adult learners. WEFLA 2015, International Conference on Foreign Languages, Communication and Culture, Holguin (Cuba), April 27-29
- ElFiky, Y. AbdelAziz, N. & Hassan (2021). Screening for reading errors among Egyptian Dyslexic children. Ain Shams medical journal, 72(4): 807-817.
- El-Masry, Ahmed & Agag, Gomaa. (2016). Understanding consumer intention to participate in online travel community and effects on consumer intention to purchase travel online and WOM: An integration of innovation diffusion theory and TAM with trust. Computers in Human Behavior. 60. 10.1016/j.chb.2016.02.038.
- 20. El-Sady S, El-Shoubary A, El-Assal N, Abou-Elsaad T, Afsah O(2011) . The Efficacy of A Language-based Training Program as a Phoniatric Approach for Remediation of Egyptian Learning-Disabled Children. PhD thesis.Ain-Shams

University, Department of Otorhinolaryngology, Phoniatrics unit

- Falk, Y., Lindqvist, C., & Bardel, C. (2015). The role of L1 explicit metalinguistic knowledge in L3 oral production at the initial state. Bilingualism: Language and Cognition, 18(2), 227-235. https://doi.org/10.1017/S1366728913 000552.
- 22. Farrag, M., & Badawi, A. (2019). The Effect of Explicit English Morphology Instruction on EFL Secondary School Students' Morphological Awareness and Reading Comprehension. English Language Teaching, 12(4), 166-178. doi: 10.5539/elt.v12n4p16.
- 23. Fontich X, Camps A, 2013. Towards a rationale for research into grammar teaching in schools. Research Papers in Education, 1–28.
- 24. Freitas, P., Mota, M. & Deacon, H. (2017). Morphological awareness, word reading, and reading comprehension in Portuguese. Applied Psycholinguistics. 1-19. 10.
- 25. Ghoneim, N. M. (2021). Using a VAkT based program to develop EFL primary stage Dyslexic pupils' reading skills. The educational journal, sohag university, (89): 1-34.
- Ginsberg, D., Honda, M., & O'Neil, W. (2011). Looking beyond English: Linguistic inquiry for English language learners. Language and Linguistics Compass, 5(5), 249–264.
- 27. Godoy, Dalva & Pinheiro, Ângela & Defior, Sylvia. (2017). Initial literacy: Influence of phonemic awareness and teaching method. Psicologia Teoria e Prática. 19. 10.5935/1980-6906/psicologia.v19n3p226-241.
- Gohar R. H. A. G. (2019). The Effect of a Multisensory Structured EFL Program on Developing Dyslexic Primary Pupils Phonological

Awareness and Spelling. The educational journal, Sohag university,27 (2).

- 29. Grabe, W. (2009). Reading in a second language: Moving from theory to practice. New York: Cambridge University Press.
- 30. Gundogdu, K. (2009).The effectiveness multiple of а intelligencesbased program on improving certain reading skills in 5th-year primary learning disabled Electronic students. Journal of Research in Educational Psychology, 7(3), 673-690. 2009 (nº 18).
- 31. Hassan, E. (2013). Central auditory functions in primary school children with and without phonological awareness problems. Egyptian Journal of Ear, Nose, Throat and Allied Sciences ; 14: 137-142
- 32. Hornsby, B. (2011). Overcoming Dyslexia. Random House, England.
- 33. Hulme C, Snowling. (2011),Children's reading comprehension difficulties: Nature, causes and treatments. Current Directions in Psychological Science ,20:139–142.

doi:10.1177/0963721411408673.

- 34. Hulstijn, J. H. (2015). Explaining phenomena of first and second language acquisition with the constructs of implicit and explicit learning: The virtues and pitfalls of a twosystem view.
- Ibrahim, R. ;Eviatar, Z. &Aharon-Peretz, J. (2007). Metalinguistic Awareness and Reading Performance: A Cross Language Comparison. Journal of psycholinguistic research. 36. 297-317. 10.1007/s10936-006-9046-3.
- 36. The international dyslexia association (2019). Structured literacy resources. https://dyslexiaida.org/

- 37. Kou, L., Ku, Y. & Chen, Z. (2020). The relationship between input and literacy and metalinguistic development: A study with Chinese– English bilinguals. Education & psychology, 24, (1).
- Lee, H. (2016). Dyslexia: A Beginner's Overview and Guide to Overcoming Dyslexia. No Fluff Publishin.
- Mohamed W., Lander K. & Elbert T. (2014). An epidemiological survey of specific reading and spelling disabilities in Arabic speaking children in Egypt. Handbook of Arabic Literacy of the series Literacy Studies; 9: 99-117
- Mota, M., Santos, A. &Guimarães, S. B. (2018). Evidências de validade e consistênciainterna de tarefas de analogiagramatical [Evidence of validity and internal consistency of a test of grammatical analogy]. Estudos de Psicologia, 19, 250–257.
- Mulholland , J. &Turnock, C. (2013) Learning in the Workplace: A Toolkit for Facilitating Learning, and Assessment in Health, and Social Care Settings. Routledge,
- 42. Myhill & Jones, Susan. (2015). Conceptualizing metalinguistic understanding in writing. 27. 839-86710.1080/11356405.2015.1089387
- Nagy, W.; Carlisle, J. & Goodwin, A. (2013). Morphological Knowledge and Literacy Acquisition. Journal of learning disabilities. 47. 10.
- 44. Nashaat, N. et al (2017). Correlation between reading and spelling performance of Egyptian children with reading disorder and their cognitive and linguistic abilities. J. Indian Assoc. Child Adolesc. Ment. Health, 13 (2), 82-106.
- 45. Nordqvist, C. (2017). What you need to know about Retrieved dyslexia? from

https://www.medicalnewstoday.com/ articles/186787.php

- 46. O'Brien, Beth & Mohamed, Malikka & Yussof, Nurul & Ng, Siew Chin. (2019). The phonological awareness relation to early reading in English for three groups of simultaneous bilingual children. Reading and Writing. 32. 10.1007/s11145-018-9890-1.
- 47. Omar W, Nasir M, Yahaya M &Halim Z (2016). ImprovingArabic writing skills "JawlahLughawiyyah": an analysis. In M.A.
- 48. Perfetti, C., & Stafura, J. (2014). Word knowledge in a theory of reading comprehension. Scientific Studies of Reading, 18(1), 22–37. <u>https://doi.org/10.1080/10888438.20</u> <u>13.827687</u>
- 49. Phillips, E., Stude, J., & Uccelli, P. (2015). Adolescents' metalinguistic reflections on the academic register in speech and writing. Linguistics and Education, <u>http://dx.doi.org/10.1016/j.linged.20</u> <u>14.10.006</u>
- 50. Pokrivčáková, S. (2015). Teaching foreign languages to learners with special educational needs in Slovakia
 In Pokrivčáková, S. et al. (eds) Teaching Foreign Languages to Learners with Special Educational Needs : e textbook for foreign language teachers. Nitra : Constantine the Philosopher University.
- 51. Reid , G. (2019). Dyslexia : teaching approaches . Retrieved from https://www.drgavinreid.com/freeresources/dyslexia teaching approaches /
- 52. Roehr-Brackin, K. (2018). Metalinguistic Awareness and Second Language Acquisition. Routledge
- 53. Rosen, P. (2019). How various learning and attention issues can

cause .trouble with spelling . Retrieved from https://www.understood.org/en/learni ng-attention incunala1 : 111 1.154

- 54. Rumelhart, D.E. (2013). Toward an interactive model of reading. 719-747. In D. E. Alvermann, N.J. Unrau, & R.B. Ruddell (Eds.). Theoretical models and processes of Reading (6th ed.). Newark, DE: International Reading Association
- 55. Santangelo, T. Harris K.R. &Graham S. (2008). Using Self- regulated strategy development to support students who have 'Trouble Getting Thanks into Words. Remedi Spec Educ;29(2):78–89.
- 56. Stein, J. (2018). What is developmental dyslexia? Brain Science, 8, 26. doi: 10.3390/brainsci8020026
- 57. Tarrant, P. & Holt, D. (2016). Metacognition in the primary classroom. London: Routledge The BFG Lesson Plans (2018). http://www.roalddahl.com/createand-learn/teach/teach-the-stories/thebfg-lesson-plans The BFG Phizzwizzing Lesson Plans (2017).
- 58. Tibi, S, & Kirby, J. (2018). Investigating phonological awareness and naming speed as predictators of reading in Arabic. Scientific studies if Reading, 22(1), 70-84.
- 59. Tighe, E. & Binder, K. (2015). An investigation of morphological awareness and processing in adults with low literacy. <u>Appl</u> <u>Psycholinguist.</u> 36(2): 245–273.
- 60. TIMSS & PIRLS (2015-2016) . 2011-2020: Altering the culture of education in Egypt.
- 61. Varga, Szilvia. (2021). The relationship between reading skills and metalinguistic awareness. Gradus. 8. 52-57. 10.47833/2021.1.ART.001

- 62. Wreth, R. (2019). What causes dyslexia? Identifying the causes and effective compensatory therapy. Restorative Neurology and Neuroscience(37): 591–608
- 63. Wang, S. & Gathercole, S. E. (2013). Working memory deficits inchildren with reading difficulties: Memory span and dual taskcoordination. Journal of Experimental Child Psychology, 115(1).
- 64. Werth, R. (2018). Rapid improvement of reading performance in children with dyslexia by altering the reading strategy: A novel approach to diagnoses und therapy of reading deficiencies. Restorative Neurology and Neuroscience, 36, 679–691.
- 65. Willingham, D. T. (2017 b, March 27). What happens when you teach children to make inferences while reading? [Blog post]. Retrieved from http://www.danielwillingham.com/da niel-willingham-science-and education-blog/what-happens-when-you-teach-children-to-make-inferences-while-reading.
- 66. Yeung PS, Ho CSH, Chan DWO, Chung KKH, Wong YK (2013) A Model of Reading Comprehension in Chinese Elementary School Children. Learning and Individual Differences 25: 55–66.
- 67. Yuzaidey , N. A. et al . (2018). Interventions for children with dyslexia : A review on current intervention methods . Med J Malaysia, 73 (5), 311-320
- Zipke, M. (2007). The role of metalinguistic awareness in the reading comprehension of sixth and seventh graders. Reading Psychology, 28, 375–396.