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# INVESTIGATE THE GENERAL AWARENESS OF DYSELIXA AMONG IRAQ ENGLISH TEACHERS IN HILLA CITY

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A Dissertation submitted in partial fulfillment of the requirements for the award of the degree of

**Master of English (TESL)** 



The English & Foreign Languages University

April 2012

## **Dedication**

I dedicate this research work to my family who supports me in everything and to my supervisor Dr. Madhhavi Gayathri Raman who never failed to teach and guide me, , to my friends who helped me finished this project, and most of all to the Almighty God who gives me strength and good health while doing this.

## Acknowledgement

First and foremost, I would like to express my deepest gratitude to Allah Almighty as with the blessing this project has successfully been concluded.

I am highly indebted to Dr. Madhavi Gayathi Raman for her guidance and constant supervision as well as for providing necessary information regarding the project & also for her support in completing the project.

I would like to express my gratitude towards my family for their kind co-operation and encouragement which help me in completion of this project.

My thanks and appreciations also go to my colleague Viqi in developing the project and people who have willingly helped me out with their abilities.

#### **Abstract**

This study aims to identify whether or not English teachers of some primary schools in Hilla city and English teachers of University of Babylon have general awareness of dyslexia. There are thirty nine subjects as the samples of the population.

The study draws attention to the consequences of a poor understanding of dyslexia, i.e., students who may suffer from reading difficulties are often <u>clubbed</u> together with those who may be mentally challenged.

Chapter one begins with the rationale for the study and then goes on definitions of dyslexia, types of dyslexia, and symptoms of dyslexia. This chapter ends with a brief account of the Language Coding Differences Hypothesis (LCDH). Chapter two discusses the sample population, tools, and methodology which are followed to implement the survey. Data obtained from a total thirty nine subjects is analysed in chapter three. In chapter four, findings and recommendations are presented. This study ends with the conclusion.

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## **Chapter One**

## **Dyslexia:** general overview

#### 1.0 Introduction

This chapter begins by presenting the rationale for the study and then goes on to discuss definitions of dyslexia. After a brief discussion of the types of dyslexia, we present a list of symptoms of the types of dyslexia among populations of different age groups. Areas of language that are affected in dyslexia and the link between dyslexia and foreign language learning are also discussed. The chapter ends with a brief account of the Language Coding Differences Hypothesis (LCDH) with attempts to explain the etiology of dyslexia in foreign Language learning.

## 1.1 Rationale of the study

In the third semester of my M.A program, I joined a course titled "Reading problems in ESL classroom "I expected that this course would deal with ordinary reading problems like difficulties in reading due to lack of exposure to the language, lack of motivation, and socio-cultural problems. However, what I found was that this course was concerned with the cognitive and linguistic aspects of language learning difficulties. I was quite surprised to learn that reading problems on this course referred to a disorder known as dyslexia which manifests as difficulties in reading, spelling and writing.

Readings and discussions during the course, prompted me to make some assumptions about the prevalence and awareness of the disorder in my country. Coming from Iraq, a developing country, I assumed that general awareness of dyslexia in my country especially in Hilla city which is a part of Babylon

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provincemay be low. I assumed that, if anyone was aware of or knew about dyslexia, his knowledge would be no different from mine when I joined this course. This provided the inputs for the present study which seeks to find out what levels of awareness exist among university English teachers and primary schools English teachers.

#### 1.2 Definitions of dyslexia

There are many definitions of dyslexia. Brunswick (2009:01)says, "The term dyslexia comes from the Greek dys – 'impaired' – and lexis – 'word', and refers to an impairment in the ability to read and spell that is not due to low intelligence or lack of educational opportunity".

The following definition, widely cited, was compiled in 1994 by the Orton Dyslexia Society Research Committee in conjunction with the National Centre for Learning Disabilities and the National Institute of Child Health and Human Development.

Dyslexia is one of several distinct learning disabilities. It is a specific language-based disorder of constitutional origin characterized by difficulties in single word decoding, usually reflecting insufficient phonological processing. These difficulties in single word decoding are often unexpected in relation to age and other cognitive and academic abilities; they are not the result of generalized difficulty developmental disability or sensory impairment. Dyslexia is manifested by variable with different forms of language, often including, in addition to problems with reading, a conspicuous problem with acquiring proficiency in writing and spelling. (ibid)

Sandra F. Riefand Judith M. Stern (2010:04) define dyslexia as a language - based disorder that involves weaknesses in phonological awareness, word decoding, and the ability to do rapid naming (quickly naming common items or symbols such as colors, numbers, and familiar objects) and quick recall. They also add that it is a brain - based disorder that causes difficulty in using and processing linguistic (speech) and symbolic (letter) codes — that is, letter - sound correspondence (ibid).

#### 1.3 Types of dyslexia

There are two types of dyslexia: developmental dyslexia and acquired dyslexia.

#### Developmental dyslexia

"Developmental dyslexia is an impairment in the development of skilled reading and spelling. Although there is no single, universally accepted, definition of developmental dyslexia, many definitions that have been proposed generally describe its symptoms and hint at its possible cause; some also suggest ways in which its symptoms might be managed."(Brunswick,2009:02-03).

#### Acquired dyslexia

Acquired dyslexia is a reading impairment resulting from brain injury (hence, the disorder is acquired). The most common forms of acquired dyslexia are deep dyslexia, surface dyslexia, and phonological dyslexia.

Deep dyslexia is a severe, but extremely rare reading disorder where the patient experiences great difficulty reading simple words, such as *the*, *and*, *so*, and abstract words, such as *calm*. Nouns may be read although they will often be read incorrectly.

For example, the word sofa might be read as 'soft', dream as 'sleep'. Made-up, nonsense words (pseudo words) such as *grik* will not be read at all.

Surface dyslexia is a disorder in which patients are able to read regularly spelt words such as *hand* and *mat*, and nonsense words such as *wolb*, but not irregularly spelt words such as *pint*. Regularly spelt words (or regular words) are pronounced according to the most common letter-sound patterns of the language, so *hand* is pronounced to rhyme with similarly spelt words like *land*, *stand* and *bland*. Irregularly spelt words (or irregular words) do not conform to common letter-sound patterns, so *pint* is not pronounced to rhyme with the similarly spelt (but regular) words *mint*, *glint* and *stint*.

Phonological dyslexia is an ability to read regular and irregular real words but an inability to read nonsense words. The term phonological refers to the speech sounds within language. A patient with phonological dyslexia, whose ability to appreciate the sound of language is impaired, is unable to convert the written letters of nonsense words (e.g. *filstromp*) into the sounds that they represent, so these words are not read (Brunswick, 2009:01-02).

## 1.4 Signs of dyslexia

Dr. Nicola Brunswick in her book "Dyslexia A Beginner's Guide" (2009:06-10) provides signs of dyslexia in pre-school children, primary school children (five to eleven years), secondary school children (twelve to sixteen years), and in adults. It should be noted that not all dyslexic persons will have the same symptoms of dyslexia because there are other factors which differentiae individuals from each other like sex, family background, educational experience, and level of intelligence. Given below are some of the characteristic symptoms of dyslexia at different stages of development.

#### 1.4.1 Early signs of dyslexia in pre-school children

The signs inlcude the following;

- delayed speech development, i.e. not be able to speak by the age of two to three years;
- persistent difficulties with the pronunciation of multi-syllabic words, e.g.
   animal might be pronounced as 'aminal', hospital as 'hopital';
- difficulty in learning nursery rhymes, and providing rhymes for simple words such as *cat* or *door*;
- difficulty in learning spoken letter/word sequences, e.g. days of the week, the alphabet, or numbers;
- difficulty in playing simple sound games, e.g. 'I spy with my little eye';
- difficulty in acquiring new vocabulary, even familiar words, e.g. table or milk;
- showing no particular interest in written letters and words;
- difficulty in clapping out a fairly simple rhythm;
- difficulties in getting dressed putting clothes on properly, and in the correct order – and putting the correct shoe on the correct foot;
- difficulty in following simple spoken directions, particularly if two or more instructions are involved;
- problems with catching, kicking, or throwing a ball.

#### 1.4.2 Signs of dyslexia in primary school children (five to eleven years)

The signs include as the following;

- attempting to avoid reading out loud;
- reading that is hesitant and laboured the child may become tired quickly;
- difficulty in sounding-out unknown words;

- frequent loss of place in the text when reading;
- the same word is read correctly and incorrectly in the same piece of writing;
- frequent omission and/or repetition of words when reading;
- inaccuracy in reading similar-looking words, e.g. saw and was, lots and lost;
- poor reading comprehension;
- a significant difference between written and spoken language ability e.g.
   written work that is poorer than would be suggested by a child's spoken answers in class;
- messy handwriting, including much crossing-out;
- effortful-looking handwriting;
- frequent misspellings, even of high-frequency (common) words;
- bizarre spelling resulting from confusion between letters, e.g. writing p as q, m as w, f as t;
- the same word is spelt differently in the same piece of writing, e.g. catch and cach;
- continous difficulty with pronouncing multi-syllabic words such as microscope;
- taking much longer than expected to complete written work;
- memory limitations, e.g. difficulty remembering months of the year,
   multiplication tables, classroom instructions;
- short attention span the child is easily distracted from his/her work;
- frequent confusion between left and right, and a generally poor sense of direction;
- clumsiness;
- frustration, which may lead to behavioral problems in the classroom;

poor confidence.

#### 1.4.3 Signs of dyslexia in secondary school children (twelve to sixteen years)

The signs include as the following;

- many spelling mistakes in written work that should easily have been identified and corrected;
- poorly planned, poorly structured written work that does not properly reflect the pupil's abilities;
- poor time-management skills leading to problems completing written work on time;
- difficulty in taking written notes during class;
- classroom instructions need to be repeated;
- difficulty in following the school timetable, and remembering which books to bring to class each day (symptomatic of poor memory and poor organizational skills);
- difficulty in remembering mathematical formulae, poetry, and foreign language vocabulary;
- difficulty in completing written tests and exams in a structured and coherent way;
- poor pronunciation of long words, such as extraordinary or temporary;
- low self-esteem.
- tape-recording lessons to avoid the need to take contemporaneous written notes;
- using computers with spell checks and grammar checks;
- having other people read through written work to check for errors; and

allowing a longer than expected time to complete written work.

#### 1.4.4 Signs of dyslexia in adults

- poor spelling;
- poor time-management often arriving late for appointments or missing them completely;
- difficulty with planning and organisation;
- difficulty in following directions, with confusion between left and right;
- having a more menial occupation than expected, based on their level of intelligence;
- difficulty in taking down messages, especially if these involve strings of numbers – e.g. telephone numbers;
- avoidance of reading and writing wherever possible.

#### 1.5 Aspects of language affected in Dyslexia

To gain a clear idea about dyslexia, we need to know which aspects of language it affects. Learners at high risk of dyslexia face great difficulties in the following language aspects: phonology, morphology, comprehension, and spelling.

#### 1.5.1 Dyslexia and phonology

"Phonology deals with how speech sounds are organized into systems for each individual language; for example how the sounds can be combined, the relations between them and how they affect each other" (Davenport & Hannahs, 1998:03).

Phonological awareness, on the other hand, is the area of oral language that relates to the ability to think about the sounds in a word rather than just the meaning of the word. Children who have developed their phonological awareness will come to

school with a clear idea of making sense of how sounds and letters operate in print. This ability is important for using sound-letter knowledge effectively in reading and writing (Trehearneet al.'s,2003:117). Dyslexia has often been characterized as a disorder with a core cognitive deficit in phonology (de Bree,2007: 07). So the development of phonological awareness has an important role in learning how to read and any learner who has phonological difficulties is probably at risk of reading problems. Children and adults with dyslexia are supposed to have difficulty in encoding, maintaining, and retrieving phonological representations. This has been evaluated via phonological processing tasks, phonological learning tasks, and phonological awareness tasks (rime matching, phoneme segmentation, initial phoneme deletion, and pictures naming).

#### 1.5.2 Dyslexia and morphology

"Morphology refers to the mental system involved in word formation or to the branch of linguistics that deals with words, their internal structure, and how they are formed" (Aronoff &Fudeman, 2011:02). Morphological awareness means the ability to recognize the parts of words and word segments that convey meaning. A morpheme is the smallest element of a word that can change a word's meaning. It can be a single letter for example, the *s* at the end of a noun such as in *cat*, which converts the singular to plural: (cat/cats); or the *a*- at the beginning of a word such as *atypical*, which is a prefix conveying the meaning "not."

Understanding the morphological structure of words is crucial to developing reading fluency. At school age, morphological awareness becomes more important for decoding words in order to read them correctly. At this point, students need to

increase their reading speed, and letter-by-letter decoding is inefficient. Students who are good readers will naturally have acquired a good basic sight vocabulary of familiar words and will easily be able to transfer what they know to decode new words using morphological analysis. Morphological awareness can be measured via word analogy, word blending, and word attack tasks.

The English language is morphophonemic. This means that English represents words at a morphological as well as a phonological level. Consequently, not only awareness of phonemes but also morpheme awareness is a necessary condition for speakers of English to read and write successfully in this language.

Dyslexics who lack this kind of awareness often have very poor decoding skills which, in turn, may cause them to have serious problems with comprehending written texts. However, often due to print exposure, many dyslexics learn to compensate for their decoding deficits by developing alternative reading strategies (e.g., relying on context more than their normally-reading peers).

#### 1.5.3 Dyslexia and comprehension

"Reading comprehension moves beyond the mechanics of learning to read" (Wolfe and Nevills, 2004:121).Reading comprehension is challenging for many children, and particularly dyslexic children. One of the reasons for this fact is that sometimes, dyslexic children simply cannot decode words ,i.e., they have problems making sound-symbol (phonetic) correspondence. Many dyslexic children end up skipping over difficult words. This is due to lack of vocabulary. "Comprehension is tied very closely to children's vocabulary knowledge. Children who have a wealth of experiences and a well –established vocabulary are much more likely to comprehend

what they read" (ibid,154).So, dyslexic children only get an incomplete picture when they read something. Another reason is that dyslexic children may have difficulty with reading comprehension because of reading fluency, were it takes them what seems like forever to read the sentence or they have omitted or repeated words when reading. Word skipping is extremely common among dyslexics, and this can cause them to misread sentences, even when they read most of the words correctly. Dyslexic children who skip words may correctly read many of the words, but still not understand the intended meaning of a sentence.

#### 1.5.4 Dyslexia and spelling

At the simple level, spelling is the association of alphabetic symbols called graphemes with speech sounds called phonemes, the smallest identifiable sounds in speech. In English we use 44 distinct phonemes out of a possible 70. The association of speech sounds with the alphabet symbols is called 'sound-symbol correspondence' or systematic 'phonics'. Spelling requires the recall of spellings from the memory in exactly the correct order or the construction of such spellings if they are not already stored in the word memory store or lexicon (Montgomery2007:07).

A dyslexic person, because of his/her learning difficulties, will struggle to make progress when taught the skills of reading and writing by normal way of learning. Dyslexics suffer from short term visual and auditory memories. This means that they cannot recall the look or the sound of the sequence of letters in words. Therefore, they have to be able to work out how to spell every word as they come to them and be able to decode every word as it is read. They need, therefore, to be taught how to build words and need to know basic phonics and spelling rules.

#### 1.6 Dyslexia and learning a foreign language

It is expected that dyslexic learners who want to learn a foreign language may have difficulties while learning it, since foreign language learning depends on native language learning (Ganschow, and Sparks 1993;Ganschow, Sparks, and Schnider 1995),i.e., students who have learning difficulties in their native language will have these difficulties in learning a foreign language. Phonological awareness, recalling and processing linguistic information, and short-term memory are categorized as the main factors that play important role in learning a native language. A difficulty in any one of these processes may affect the learning of a foreign language.

Concerning foreign language acquisition, it is thought that language learning failure is due to a number of factors. They are:

- Anxiety in the foreign language classroom (anxiety about making mistakes in grammar and pronunciation, about understanding the teacher, and about remembering vocabulary)
- 2. Lack of effort

#### 3. Lack of motivation

In the late 1960's, Dr. Kenneth Dinklage of Harvard University attempted to find out why some of Harvard's brightest and best students did not pass their language classes. He quickly dismissed lack of effort, noting that most of these students put other courses and their degrees at major risk by devoting unusual amounts of time and effort to their language classes. Similarly, lack of motivation was not a cause, as these students could not graduate without completion of their language requirement. As for anxiety, he realized that the students came to see

him because they were suffering from extreme anxiety as a result of not being able to pass their language classes. Since most of these students had never failed a class before, he felt that anxiety had not originally played a part in their failure.

Thus nearly 30 years ago, Dr. Dinklage pinpointed most of the basic ideas and principles relating to foreign languages and learning disabilities: The problem was related to being learning disabled, not to lack of motivation or effort or to anxiety by itself. Anxiety was the result of failure not the cause. Students who were not previously diagnosed as learning disabled showed up learning disabilities in the foreign language classroom. The learning disability had to be addressed and educational measures taken. Once the learning disabilities issues were addressed, the students could learn, (Schwarz, 1997).

Many studies have been published in a review of research on the features of students who have difficulty to learn foreign languages. Ganschow, Sparks, and Javorsky (1998) cite a number of studies (Ganschow, and Sparks 1993;Ganschow, Sparks, and Schnider 1995) documenting how one's native language learning facility affects one's potential for learning a foreign language. In addition, they have found similarities between the linguistic profiles of students who fell in the "high risk" category on foreign language aptitude tests and subsequently did poorly in a foreign language courses, and students who had a history of language disabilities, including difficulty in learning to read. Both groups had difficulties in making connections between phonology and orthography and remembering and applying spelling rules.

The researchers concluded that students who did poorly in foreign language had a collective profile of weakness similar to the profile typically described for students with dyslexia. The research of Ganschow, Sparks, and Javorskyled to the following general observation(Simon, 2000:156-58):

- 1. The efficiency of one's language skill plays a large part in the success or failure of foreign language learning.
- Difficulties with phonology/orthography and syntax in one's native language are likely to negatively affect one's performance in the foreign language classroom.
- 3. Most foreign language difficulties do not seem to be at the semantic level.
- 4. Lack of motivation and high anxiety are likely to be the consequence rather than cause of foreign language learning problems.

In the following section, we present a hypothesis that has attempted to explain the etiology of dyslexia within the context of foreign language learning.

#### 1.6.1 Linguistic Coding Differences Hypothesis(LCDH)

This hypothesis was derived from native language reading research by Vellutino and Scanlon (1986), Simon (2000). It was initially proposed as a plausible explanation for the Foreign Language (FL) learning problems of a particular FL atrisk population of students with Learning Disabilities (DL) (Ganschow, and Sparks 1993:58). It attributes the difficulty of learning a foreign language to the problems the learners suffer from with one or more ofthe three native language components-phonological/orthographic (sound-letter correspondence), syntactic (grammatical), and semantic (vocabulary, meaning).

In other words, Sparks and Ganschow (1991) see that there are innate individual differences in students' ability to use language. In phonological processing, there may be problems in auditory discrimination and blending of sound elements, memory for sound elements, sound/symbol code deficiencies, spelling problems, and auditory distractibility (Sparks et al. 1989: 191). In syntactic processing, there maybe problems involving understanding grammatical rules, constructing grammatical sentences, tenses, appropriate word usage, prefixes, suffixes, and problems involving short-term auditory memory for structured language and verbal inflexibility (Sparkset al. 1989: 191). In semantic processing, there may be problems in vocabulary knowledge, word retrieval, semantic referencing, understanding multiple meanings of words, inferences, understanding and using cohesive ties, and managing different language formats (Sparks et al. 1989: 192). Sparks et al. (1992a: 150) suggest that students with FL learning disabilities have difficulties primarily in the phonological and syntactic components of language. According to Sparks and Ganschow (1991:10), also verbal memory differences may account for the quality and speed by which an individual gains access to the linguistic codes. Sparks and Ganschow (1991: 8) suggest that the reason why the difficulties do not appear until in adolescence or adulthood for some people is that the native language problems may be so subtle that only when these people are faced with the demands of the study of a new and unfamiliar symbol system, they begin having problems. All in all, Sparks and Ganschow (1993: 59) see that the problems of students with FL learning disabilities are similar to those of students with dyslexia.(Viskari 2005:21)

In the following chapter, we present a brief discussion of the teaching of English in Iraq, before going on to discuss the details and the sample population and the methodology used to collect data from this sample.

## **Chapter Two**

## Methodology

#### 2.0 Introduction

In order to gather information about the general awareness of dyslexia among English teachers in Hilla city, I conducted a survey when I returned home. The tool used in this survey was administered to 2 sets of teachers: (i) English teachers of primary schools and (ii) university English teachers. In this chapter, I discuss the details of the tools, the methodology, and the sample of population. I begin with a brief discussion of the teaching of English in Iraq.

#### 2.1 The teaching of English in Iraq

Iraqi education follows a 6-3-3 system: 6 years of primary education, 3 years of intermediate secondary education and 3 years of preparatory secondary education. All levels are highly centralized and under the direct supervision and administration of the Ministry of Education in Baghdad. The Iraqi Minister of Education appoints and assigns teachers, who are government employees. Teaching English in Iraq, the only compulsory foreign language taught in Iraqi schools at present, is one of the complicated subjects of education system. This is because Iraq is a semi-monolingual community (i.e. people in the Northern of Iraq speak Qurdish). The population of Iraq consists of 80% Arabs and the dominant language spoken in Iraq is Arabic. The use of English is limited to the classroom and it is taught as a foreign language in schools and universities.

Before 2003,the teaching of English started from the  $5^{th}$  class in primary schools and continued till class  $6^{th}$  in the preparatory secondary schools. The English curricula

was worked out by committees and prescribed by the Ministry. The result was generally overloaded curricula with no differentiation on the basis of sex or area. All Iraqi schools used uniform text-books, the production of which has been nationalized. It was rare for teachers to give pupils assignments from sources outside the textbooks.

Since 2003, new English curricula have been adopted by The Iraqi Minister of Education. These curricula follow the Communicative Language Teaching approach (CLT). The teaching of English now starts from the 3<sup>rd</sup> class in primary schools instead of class 5<sup>th</sup> and continues till class 6<sup>th</sup> in the preparatory secondary schools. Since then, a remarkable improvement in the use of English among Iraqis can be noticed. This has come about with the help of the use of new methods of teaching and the presence of technology.

#### 2.2 Sample population

While I was in Iraq, I visited eight primary schools in different places in Hilla city. Some of these schools cater to students from socio-economic background. In these schools, which have very well equipped classrooms, the number of students in each class is not more than 30. The other schools I visited cater to students from low-social background. In these schools, which have very poorly equipped classrooms, the number of students in each class is about 80.

During my visit I met twenty eight schools teachers. Twenty of them are women and eight are men. They are in the age group of 27-60 years. The number of years of The experiences in teaching English varies from a few years to more than thirty years.

The group of university teachers of English consists of eleven teachers of English, seven men, and four women. There are academicians who have taught

English for 4 to 20 years. They are in the age group of 33-50 years. The range of age is 33-50. They are from different departments — linguistics, literature, English teaching methodology, and English as a foreign language— of University of Babylon in Hilla city. I decided to involve both groups of teachers as it would help me to understand the general awareness of dyslexia in Hilla city across different levels in the education system.

While the data from the schools teachers was collected in person by me, data from the university teachers was collected via emails because I had returned to India by then.

#### 2.3 The tools

The survey that I used two sets of questionnaires (i) for English teachers in primary schools consisting of twelve questions. The first four questions are about the personal information of the teacher. The remaining questions seek to elicit information about the general awareness of dyslexia (ii) for university English teachers consisting of fourteen questions. The first five questions are about the personal information of the teacher. The remaining questions attempt to gather information about the general awareness of dyslexia. (see Appendix 1,2 for the questionnaire).

#### 2.4 Methodology

For English teachers in primary schools, I made two versions of the questionnaire: Arabic and English so that the teachers could understand and answer the questions. It took from me two weeks to meet the twenty eight teachers. I visited two schools per day. During my visit, I met the English language teachers in a group

meeting. I talked with them about the aim of my study and gave them a brief description about dyslexia. After distributing the questionnaire to them, I asked them if they had any question or doubts about it. They were given 2-3 days time to answer it, after which I collected it back from them.

The questionnaire for the eleven university teachers was only in English. As I returned to India, I couldn't meet them in person. I continued contacting them via emails. It took one month to collect their answers.

#### 2.5 Difficulties in administering the questionnaire

#### Primary teachers' questionnaire

I faced many problems and difficulties while administering the questionnaire.

They are:

- 1. The majority of the subjects didn't take it seriously. One of the reasons why the teachers did not take the questionnaire seriously is because they face very difficult circumstances in their daily teaching. So they do not consider it important to answer such a questionnaire. For examples, the number of the students in each class is large, and there is a lack of the simple equipment in each class.
- 2. More than one subject had the same answers indicating that one subject answered on behalf of others.
- 3. Although I provided two forms (English & Arabic) of the questionnaire, most of the subjects didn't answer all the questions or gave wrong answers.

- 4. A majority of the English teachers are married women who are busy with their family lives. Consequently, they don't find time to sit and answer the questionnaire.
- 5. Few of them showed real interest of the questionnaire topic and others asked for more time to read about dyslexia to answer the questionnaire properly.
- 6. Some of them suspected that some students could be suffering from dyslexia. However, when I wanted to meet the students, many of students' families refused because they thought that this topic (depending on the social restrictions and cultural barriers ) referred to mental illnesses that their children might have. This is a common misunderstanding about dyslexia. (See chapter 3 for a fuller discussion)
- 7. For those who answered that they had heard about dyslexia, an analysis of their responses showed they do not have a proper idea of what dyslexia is. This is reflected in their comments on the topic. For example, a teacher answered that "dyslexia means the students can't read because the teacher didn't teach students how to pronounce words correctly or dyslexia means the students suffering from hearing problems such they can't hear words clearly."

#### University teachers' questionnaire

The problems I faced while administering this questionnaire are:

- I couldn't meet the university teachers and give them an explanation about the topic which would help them to get clearer idea about it.
- 2. It took a long time to collect their answers.
- 3. Because of the shortage of time, I couldn't include English teachers in the sample.

## **Chapter Three**

## **Data analysis**

#### 3.0 Introduction

As mentioned in Chapter two, a questionnaire was administered to twenty eight English teachers of primary schools —twenty of them women and eight men, and eleven university English teachers — seven of them were men and four women. In this chapter I will analyze the data obtained from a total of thirty nine subjects.

#### 3.1 Analysis of data from Primary school English teachers

The questionnaire consists of twelve questions. The first four questions are about the personal information of the teacher. The remaining questions are about the general awareness of dyslexia.

Questions 5-7, 9-11 which are about the general awareness of dyslexia, have been analyzed and the results are presented below:

In response to Q 5/ Do you follow: a. phoneme-based way or b. syllable-based way

or c. whole word way to teach your students? The results were as follows:

Table 1 Method followed while teaching reading

The method	Responses	%	No response	%
phoneme-based way	15	53.57	2	7.1
syllable-based way	7	25	-	
whole word way	4	14.2	-	

The table shows that more than 50% of teachers use the phonics method while teaching reading in English. Children are taught explicitly the sound – symbol correspondences in the language while learning to read. Another 25% of teachers teach reading by teaching children to break words up into syllables. Only 14% use the whole word method. This shows that the teaching of English follows a largely western pattern of phonics device interaction. However my own observations while they were answered this question somewhat contradicts. I noticed that some of the teachers had no idea of the different approaches to teaching reading were therefore answering it at random.

In response to Q6/ Before reading the attached hand-out ,do you know about dyslexia? if yes, please give a brief comment, the results were as follows:

Table 2 Prior awareness of dyslexia

	Responses	%	No response	%
Yes	10	35.7	3	10.7
No	15	53.5		

We find that once again more than 50% of the teachers are not aware of a disorder called dyslexia, providing support to our original assumption that not many people are aware of such a problem. Of the 35% who said that they were aware of dyslexia, only one subject (out of ten) gave an appropriate comment about it "Dyslexia is a problem in brain that causes difficulties in reading and spelling". Seven subjects (out of ten) gave wrong comments. Two subjects didn't write any comment at all. Three subjects did not even answer the question.

In response to Q7/ After reading the attached hand-out, do you have students that have the characteristics of dyslexia. If yes, can you mention them?the results were as follows:

Table 3 Do you have students who might have dyslexia?

	Responses	%	No response	%
Yes	6	21.4	22	78.5

Table 4 Numbers of teachers contacted parents of students who might have dyslexia (out of six)

	Responses	%	No response	%
Yes	2	33.3	4	66.6

As we can see, a huge percentage of teachers, 78.5% said that their students did not show any of the characteristic features of dyslexia. However, a sizable percentage of teachers, 21.4% answered that there could be some such students. Two teachers (out of six) gave names of students who might be suffering from dyslexia. The remaining four refrained from giving students' names but they could be dyslexic, I met the guardians of two students. In the first case, I met the older brother of a student who might be suffering from dyslexia (his father has a physical handicap and I was unable to meet his mother due to cultural traditions and social restrictions). When I asked him questions about the his younger brother's childhood, like *did he crawl as a normal baby? did he have difficulties with motor skills? Did he starts to speak normally like other children*? he couldn't answer these questions, because he was (the older brother) a semi-illiterate person and the age gap between them was approximately 4 years.

Check the word

In the second case, I met the mother of a student who might also be suffering from dyslexia. The moment I asked her about her son, she started to tell me that her son is normal boy and he doesn't suffer from any mental deficits. I tried to explain to her that dyslexia has no relation with what she said, but she insisted on confirming that her son did not suffer from dyslexia. The second case reflects the general trend among parents and families when they are asked such questions about their children. They immediately go on the defensive saying that their children are normal. This comes from their misunderstanding of dyslexia as a mental disorder and the wrong social concept that mental problems mean that the child is abnormal one.

In response to Q9/ Did you contact parents of children who suffer from any other problems or difficulties? if yes, how was their response? the results obtained were as follows:

Table 5 Parental response

	Responses	%	No response	%
Yes	23	82.14	2	7.14
No	3	10.7		

The large percentage reflects the teachers concern for students who might have different kinds of problems in the language classroom. When I asked the teachers about any enhancement of students' outcomes after contacting their families, they replied that not much change was visible students whose parents are educated, are busy with their work and those whose parents are uneducated are not concerned by the difficulties that their children seem to show.

The response to Q10/ If there are courses of 'Methods / Ways to teach dyslexics', will you participate in these courses which provide you methods or ways of how to teach students that suffer from dyslexia? , was as follows:

Table 6 Readiness to participate in remedial education course

	Responses	%	No response	%
Yes	13	46.4	5	17.8
No	10	35.7		

As we can see from the table, there is high percentage of teachers who don't want to participate in courses of dyslexia. The reason is that the majority of English language teachers are married women and they are busy with their daily routines, so they don't have enough time to participate in such programs. However, a large percentage ,i.e., 46% of teachers are ready to participate in courses that would give them information in dyslexia. This once again reflects the teachers' genuine desire to help students in their class who might suffer from dyslexia.

The response to Q11 / Do you think that knowing about dyslexia is important? If yes, why?, was as follows:

Table 7 Importance of knowledge about dyslexia

	Responses	%	No response	%
Yes	18	64.2	8	28.5
No	2	7.14		

From the number of teachers answering this question, it shows that the majority of teachers are eager to know more about dyslexia. They believe that by knowing

what dyslexia is, they can follow new methods to develop and enhance their teaching approaches which may reflect positively on students who may suffer from dyslexia.

Having analysed the results obtained from the primary school teachers and spoken with them, I found that there were four primary schools which established a private class for students who are slow learners, have mental problems, andare handicapped. When I asked teachers about the criteria according to which students had been assigned to this class, they answered this class included all students who face problems while learning. This means the students of the private classroom are not at the same level of intelligence and have very different needs. Therefore, the class needs a special educator who can tutor them according to their needs. As a result of the current practice, students who suffer only from reading difficulties could receive remedial help which is different from what they need to overcome their reading difficulties.

As a solution to overcome the problem mentioned above and to create greater awareness of reading difficulties, it would be help if workshops were organised and courses were offered for teachers about reading difficulties. It would also help if school separated those who might have reading difficulties from slow learners and those who are mentally challenged. This would help both groups to get the specific kind of remedial help that they need.

## 3.2 Analysis of data university English teachers

The questionnaire included fourteen questions. The first five questions were about the personal information of the teacher. The remaining questions were about the general awareness of dyslexia.

Question three to thirteen, which about the general awareness of dyslexia, have been analyzed and the results are presented below:

The response to Q3/ Do you find that some of your students have difficulties while reading?, is:

Table 8 Do students have difficulties while reading?

	Responses	%	No response	%
Yes	10	90,9	1	9
No	0	0		

Going by high percentage of positive, i.e., 90.0% we assume that there are some students who may suffer from reading difficulties. However, there is a possibility that there are other reasons causing difficulties while reading like the difficulty with pronunciation due to lack of grapheme-phoneme correspondence, insufficient exposure to language and the lack of enough instances in the input for the students to abstract the rules. We say this based on the teachers' comments and many of these difficulties are also typical of normally developing ESL learners.

Another reason for difficulties while reading is the difference between Arabic and English. Arabic words are very different from words in Indo-European languages, where words tend to be made up of a relatively stable root. For example, the root k-t-b that is combined with vowel patterns can produce: *maktabah*— 'library', *ketaab*—'book. This, of course, does not apply to English, and we could argue that an Arabic speaker who is learning to read English is faced with what seems to be far too much information when he reads a English word (Ryan and Meara,1991:531)

The response to Q4/ What kinds of difficulties do they have?, was:

The majority of subjects' phonological problems relating to reading difficulties. This leads support to the vast body of research that claims a major role for the phonological awareness in learning to read and in determining those who may suffer from reading difficulties.

In response to the Q5/ Do they make any of the following mistakes while reading (please read the attached handout and tick on the mistakes which they usually make)? We found that out of twenty five symptoms of dyslexia, most teachers chose the following:

- 1- Reads very slowly and hesitantly.
- 2- Puts the stress on the wrong syllables, a common mistake in syllabification being 'photography' for 'photo graphy'.
- 3- Confused with the short vowels, reading 'beg' as 'bag', 'lid' as 'led'.
- 4- Ignores pronunciation, thus often confusing the sense of the text.

All teachers answered 'yes', and this implies the possibility that there could be students who have reading difficulties. This finding is supported by research which shows that phonological awareness is out of the best indicators dyslexic.

The response to Q6/ Do you have students suffering from reading comprehension due to :

 a- Problems in making sound-letter (phonetic) correspondence, i.e., difficulties in word decoding.

- b- Reading fluency (which shows the reading ability in term of whether or not they take a long time in reading a text, or they have skipped, omitted or repeated words when reading).
- c- Lack of language and vocabulary (these prevent the students to comprehend or be able to understand what they read), is tabulated below:

Table 9 Reasons for problems in reading comprehension.

	Responses	%
A- Problems in making sound-system(phonetic)	6	54.5
correspondence, i.e., difficulties in word decoding		
B- Reading fluency( where it takes them what seems like	7	63.6
forever to read the sentence or they have skipped, omitted		
or repeated words when reading)		
C- Lack of language and vocabulary ( this prevent	10	90.9
comprehension or being able understand what you read)		

Difficulties in reading comprehension is another indicator of reading difficulties.

But because English, in Iraq, is a foreign language, there are other factors that could cause reading comprehension difficult like lack of exposure to English, using the Arabic as a medium of instruction, etc.

Also the problem of comprehension could be due to the fact that they have not acquired enough language. The profile of difficulties that the students show is matched with that of children who might be at risk for dyslexia. The students could overcome difficulties in reading once they get sufficient exposure to the language. This finding highlights the occurrences of what Cummins (1984) calls " mistaken

identity". Mistaken identity occurs when a typically developing L2 learner is inappropriately diagnosed as language or learning disabled and receives unnecessary services and/or is inappropriately placed in special education classes (Paradis,2005:173).

The response Q7/ Do you think that this occurs because they only have less exposure to the language?, is tabulated below:

Table 10 Is insufficient response the cause of reading difficulties?

	Responses	%
Yes	10	90,9
No	1	9

These results imply that the students do experience less language exposure because in the classroom they are only exposed to situational conversation (i.e. conversation that is only set for classroom not in real condition). What the students experience is the same as what I experienced when I was a student. The students only have time to practice their English in classroom not outside the classroom. As a result, this affects the development of fluency in English. Also, English is not used outside the classroom during social interactions with friends and relatives. Thus, the only source of English is the classroom.

The response to Q8/ Do they have difficulties in following instructions when 3-4 instructions are given at the same time?, is given below:

Table 11 Difficulties in following instructions

	Responses	%	No response	%
Yes	10	90,9	1	9
No	0	0		

The result above (90.9%) tends to support one of the chief characteristics of dyslexia, i.e., problems with the working memory (short-term memory). Those with dyslexia find it difficult to carry out a series of instructions because of problems with short term memory.

The response to Q9/ Are they good at oral work but reluctant when it comes to written work?, suggests that teachers found that such students made spelling errors as well as grammatical ones. This indicates that learners had problems with grapheme-phoneme correspondence and orthography. This was also the response to Q10/ What kinds of errors, if any, do they make in writing?.

In response to Q11/ Have you heard about dyslexia (the difficulty with reading which is manifested primarily in difficulty with reading and spelling problems)? If yes, please give a brief comment. The results are as follows:

Table 12 Prior Knowledge of dyslexia

	Responses	%	No response	%
Yes	1	14,2	1	9
No	9	81,8		

Most of the teachers, and that too university level teachers are unaware of dyslexia. This supports my assumption that the general awareness of dyslexia in Hilla is very low. So it is important especially in the field of education field to have a clear

idea about it. This will help us to find ways to offer the remedial help that these students might require.

In response to Q12/ Will you participate in courses that teach you how to identify, remediate students who might be facing difficulties with reading?, we found the following:

Table 13 Readiness to participate on courses in dyslexia

	Responses	%	No response	%
Yes	6	54,5	1	9
No	4	36,3		

The results showed that although all the subjects were interested in finding out about dyslexia, only (54.5%) or six of them were ready to take part in courses that teach them how to identify and remediate students who might be facing difficulties with reading.

In response to Q13/ Do you think that it is important to know about dyslexia? If yes, why? the result is as follows:

Table 14 Importance of awareness of dyslexia

	Responses	%
Yes	11	100
No	0	0

It is heartening to know that all teachers who responded think it is important to be aware of dyslexia even though only 54.5% are ready to take part in courses on

dyslexia. This could be the first step towards raising an awareness among teachers about dyslexia.

In fact, two subjects gave their suggestions and comments as the following:

- A. The teachers should work towards developing methods of teaching English
- B. The university where they work should open training courses to train the university staff on the latest methods, strategies, and techniques of teaching.

## **Chapter Four**

## **Findings and Recommendations**

#### 4.0 Introduction

In this chapter I will discuss the findings of the study. In addition, I would like to discuss the implications of the study, limitation of the study, suggestions for further studies. The recommendations end this chapter.

## 4.1 Findings of the study

I assumed at the beginning of this study I had hypothesized that the general awareness of dyslexia in my country especially in Hilla city which is a part of Babylon province may be low. The analysis of data in chapter three supports this hypothesis. Out of the thirty nine subjects, of both primary schools and university English teachers who were included in this study, only two knew about dyslexia. The first one is an English teacher in a primary school who gave an appropriate comment about dyslexia "Dyslexia is a problem in the brain that causes difficulties in reading and spelling". The second one is a university English teacher who knew about dyslexia because his colleague had written a paper about dyslexia.

The other main findings can be summarized as follows:

1- Tough the general awareness about dyslexia is poor, teachers are keen to know more about it. However, not all of them willing to participate in courses that would give them more information about dyslexia.

- 2- The attitude of parents (just the ones I met) towards dyslexia is no different from what it is in other parts of the world. People are either ignorant about it or tend to ignore it.
- 3- The amount parental involvement in children's academic life is varied. There are many reasons for this; the educational background of both parents, the socio-economic status of the family, and number of children that the parents have.
- 4- As mentioned in chapter three, since 2003, new curricula for teaching English in Iraq has been adopted. But what I have found is that most of English teachers in primary schools hadn't attended courses to learn how to teach the new curricula because no such courses were conducted. Unfortunately, the advantages of the new curricula could not achieved because teachers training courses were run by people who had no background in teachers training.
- 5- Teachers feel that in addition to workshops and courses on dyslexia, it would also help them if class sizes were reduced, schools were better equipped and more teachers were employed. This would help them to pay more attention to their students' difficulties.
- 6- In teacher training programes at the undergraduate level, there are no courses on special education. It is important to include a course Special Education so that teachers of English can be trained to handle such difficulties.

#### 4.2 Implications of the study

The study has shown that there is low awareness of dyslexia among English teachers in both primary schools and University of Babylon. It has also found that most of English teachers do not know or have not heard about reading difficulties. As a result, though the number of teachers who know about dyslexia is low, some teachers were eager to know about it. Furthermore, they asked me to give them the recommendations of this study, so that they could implement those recommendations in their classrooms. Other teachers were happy and showed their motivation to enter courses that deal with reading difficulties. The reason is that in their opinion this will help them to teach students who may have reading difficulties in a way that helps students to come their problem in reading.

## 4.3 Limitations of the study

In general, I can say that the study meets its goal i.e. to identify whether or not the English teachers in primary schools and University of Babylon in Hilla city have general awareness of dyslexia. However, this study has the following limitations:

- It is exploratory in nature and attempts only to find out about the general awareness of dyslexia.
- It only involved eight primary schools in Hilla city.
- The time for data collection was short (two weeks).
- The time allotted to meet English teachers of primary schools in order to give them a clear idea about dyslexia and answer all their doubts was insufficient.

- I didn't directly meet and give English teachers of University of Babylon the questionnaire, but instead contacted them via their emails.
- The study did not involve students as the samples of population.

## 4.4 Suggestions for further studies

For future studies, I suggest the following:

- Conducting studies involving all the academic institutions (primary schools, secondary schools, high schools, universities ...etc)..
- Conducting studies to assess and diagnose students who may suffer from reading.
- Study should include students in the samples.
- Ccomparative studies between reading difficulties in Arabic and English will be interesting topic for further studies.

#### 4.5 The Recommendations

In accordance with what I have found and my observation in this study, I recommend the following:

To increase the general awareness of readings difficulties can
be done by opening courses that explain what dyslexia means,
its causes, its symptoms, its effects, and the solutions to
overcome it should be conducted. These courses should be

offered especially are given to language teachers of different academic institutions.

- As in Kuwait and Egypt, either governmental organization dealing with dyslexia or nongovernmental organization to deal with Special Education needs.
- Students suffering from reading difficulties must be separated from other private classes in which there are some students who are mentally challenged. The reason is that the impacts of having students with reading difficulties and students with different types of difficulties at the same class affect their confidence. So, that is why separation of private classes is much needed.

#### Conclusion

This study aims to identify whether or not English teachers of some primary schools in Hilla city and English teachers of University of Babylon have general awareness of dyslexia. There are thirty nine subjects as the samples of the population. The results of the study show that the general awareness of dyslexia among English teachers is low and there is a common misunderstanding about what dyslexia means.

The study draws attention to the consequences of a poor understanding of dyslexia, i.e., students who may suffer from reading difficulties are often <u>clubbed</u> together with those who may be mentally challenged.

It becomes clear that there are other circumstances affecting students' outcomes of learning English such as a large number of students in each class, untrained English teachers, and the inability of the of university to meet Iraqi society needs.

In sum, this study sheds the light on the importance of dyslexia since many studies have shown approximately 10% of students in each class suffer from reading difficulties. It is also clear that steps taken by Iraqi scholars who are interested in dyslexia must <u>undertake</u> research in the field as it will have a great influence on the teaching system in Iraq.

## **Appendix I**

## Primary teachers' questionnaire

#### School name:

- 1. Teacher's age:
- 2. Teacher's sex:
- 3. For how many years have you been teaching English?
- 4. Which grade / class of students do you teach?
- 5. Do you follow: a. phoneme-based way or b. syllable-based way or c. whole word way to teach your students?
- 6. Before reading the attached hand-out ,do you know about dyslexia? if yes, please give a brief comment.
- 7. After reading the attached hand-out, do you have students that have the characteristics of dyslexia. If yes, can you mention them?
- 8. How do you teach students suffering from dyslexia?
- 9. Did you contact parents of children who suffer from any other problems or difficulties? if yes, how was their response?
- 10. If there are courses of 'Methods / Ways to teach dyslexics', will you participate in these courses which provide you methods or ways of how to teach students that suffer from dyslexia?
- 11. Do you think that knowing about dyslexia is important? If yes, why?
- 12. Any other comments or suggestions you would like to add.

# Appendix II

Your name:

## University teachers' questionnaire

Department nan	ne:
Academic title:	
Age:	
Sex:	
1. For how	many years have you been teaching English?
2. Which g	grade/class of learners do you teach?
3. Do you	find that some of your students have difficulties while reading?
4. What kir	nds of difficulties do they have?
	make any of the following mistakes while reading (please read the handout and tick on the mistakes which they usually make)?
uttuenea	nandout and tiek on the inistakes which they assumy make).
6. Do you l	have students suffering from reading comprehension due to:
d- Prob	lems in making sound-letter (phonetic) correspondence, i.e.,
diffic	culties in word decoding.
e- Read	ling fluency (which shows the reading ability in term of whether or
not t	hey take a long time in reading a text, or they have skipped, omitted or
repea	ated words when reading).

- f- Lack of language and vocabulary (these prevent the students to comprehend or be able to understand what they read).
- 7. Do you think that this occurs because they only have less exposure to the language?
- 8. Do they have difficulties in following instructions when 3-4 instructions are given at the same time?
- 9. Are they good at oral work but reluctant when it comes to written work?
- 10. What kinds of errors, if any, do they make in writing?
- 11. Have you heard about dyslexia (the difficulty with reading which is manifested primarily in difficulty with reading and spelling problems)? If yes, please give a brief comment.
- 12. Will you participate in courses that teach you how to identify, remediate students who might be facing difficulties with reading?
- 13. Do you think that it is important to know about dyslexia? If yes, why?
- 14. Any other comments or suggestions you would like to add.

#### References

- Aronoff, Mark, and Kirsten Anne. Fudeman. *What Is Morphology?* Chichester, West Sussex, U.K.: Wiley-Blackwell, 2011. Print.
- Bree, Elise De. *Dyslexia and Phonology: A Study of the Phonological Abilities of Dutch Children At-risk of Dyslexia*. Utrecht: LOT, 2007. Print.
- Brunswick, Nicky. Dyslexia: A Beginner's Guide. Oxford: Oneworld, 2009. Print.
- Davenport, Michael, and S. J. Hannahs. *Introducing Phonetics and Phonology*. London: Arnold, 1998. Print.
- Montgomery, Diane. Spelling, Handwriting and Dyslexia: Overcoming Barriers to Learning. London: Routledge, 2007. Print.
- Paradis, J. "Grammatical Morphology in Children Learning English as a Second Language: Implications of Similarities With Specific Language Impairment."

  Language, Speech, and Hearing Services in Schools 36.3 (2005): 172-87.

  Print.
- Rayn, Ann, and Paul Meara. "The Case of Invisible Vowles: Arabic Speakers Reading English Words." *Reading in a Foreign Language* 7.2 (1991): 531-40. Print.
- Reid, Gavin. *Dyslexia: A Complete Guide for Parents*. Hoboken, NJ: Wiley, 2005.

  Print.
- Rief, Sandra F., and Judith M. Stern. *The Dyslexia Checklist: A Practical Reference*for Parents and Teachers. San Francisco, CA: Jossey-Bass, 2010. Print.

- Schwarz, Robin L. "Learning Disabilities and Foreign Language Learning." *LD OnLine: The World's Leading Website on Learning Disabilities and ADHD*. 1997. Web. 26 Mar. 2012. <a href="http://www.ldonline.org/article/6065/">http://www.ldonline.org/article/6065/</a>>.
- Simon, Charlann S. "Dyslexia and Learning a Foreign Language: A Personal Experience." *Annals of Dyslexia* 50.1 (2000): 155-87. Print.
- Sparks, Richard L., and Leonore Ganschow. "The Impact of Native Language Learning Problems on Foreign Language Learning: Case Study Illustrations of the Linguistic Cooling Deficit Hypothesis." *The Modern Language Journal* 77.1 (1993): 58-74. Print.
- Trehearne, Miriam, Lynne Hemming. Healy, Maria Cantalini, and Joan L. Moore.

  \*Comprehensive Literacy Resource for Kindergarten Teachers." Vernon Hills,

  IL: ETA/Cuisenaire, 2003. Print.
- Viskari, Katriina. "Foreign Language Learning Disabilities Theoretical and Practical

  Tools for English Teachers in Finnish Upper Secondary Schools" Diss.

  Jyvaskyla U, 2005. Print.
- Wolfe, Pat, and Pamela Nevills. *Building the Reading Brain, PreK-3*. Thousand Oaks, CA: Corwin, 2004. Print.