



## **Introduction**

The following study is about dyslexia which is not yet a well known disorder in North Cyprus. However it is thought that there are many people who are suffering from dyslexia disorder. Out of 270 million population in the United States there are 40 million people diagnosed with dyslexia. This means that there is 1 person in every seven Americans that suffer from dyslexia. If the same proportion applies to Turkish Republic of Northern Cyprus, which has little over 200 thousand population, it can be suggested that there may be around 30 thousand people who may suffer from dyslexia.

In order to start a research we first need to learn what dyslexia is. Dyslexia is a term that has been loosely applied to reading disabilities. Specific definitions for dyslexia vary with disciplines. Those in medicine define dyslexia as a condition resulting from neurological, maturational, and genetic causes, while those in psychology relate dyslexia on the basis of the specific reading problems evidenced and give no reference to causation. All disciplines would probably agree that dyslexia is evidenced by persons of

otherwise normal intellectual capacity who have not learned to read despite exposure to adequate instruction.

An individual is identified as dyslexic when a significant discrepancy exists between intellectual ability and reading performance without an apparent physical, emotional, or cultural cause. Common findings in the history include, but are not limited to: (1) family history of reading problems; (2) a predominant occurrence in males (males to females 8:1); (3) an average or above average IQ and, not uncommonly, a proficiency in math; (4) no enjoyment of reading as a leisure activity; (5) problems of letter and word reversal; (6) developmental history of problems in coordination and left/right dominance; (7) poor visual memory for language symbols; (8) auditory language difficulties in word finding, fluency, meaning, or sequence; (9) difficulty transferring information from what is heard to what is seen and vice versa.

Specific reading problems associated with dyslexia include difficulty in pronouncing new words, difficulty distinguishing similarities and differences in words (no for on), and difficulty discriminating differences in letter



sound (pin, pen). Other problems may include reversal of words and letters, disorganization of word order, poor reading comprehension, and difficulty applying what has been read to social or learning situations.

### **Aim of the Study**

Aim of this study is to make a research to find out the estimated number of people suffering from dyslexia. The research will bring out many information including the awareness of people about the disorder, estimated number of people who are suffering from the disorder and general approach of teh families to the disorder.

### **Method of Study**

Method of the study is to conduct a primary research. The sample will be the parents of 11 years old primary school children. 30 students are selected and their families are interviewed. Conclusion will be reached by evaluating the findings from the research

## Previous studies

Several reliable studies (Helveston 1969; Blika 1982; Keys 1982; Hiatt 1984) have found that dyslexic individuals have no greater incidence of eye problems than do individuals with normal reading ability. Such parameters as visual acuity, stereo acuity, ocular alignment and motility, fusion status (break point amplitude), and refractive error have not been shown to be significantly different in poor versus normal readers. Individuals with reading problems should, however, have a careful eye examination as part of an overall medical examination. There is no scientific evidence that visual training (including eye muscle exercises, ocular tracking or pursuit exercises, or glasses with bifocals or prisms) leads to significant improvement in the performance of dyslexic individuals.

According to Mattis (1978), the primary contributing factor to dyslexia is an auditory language deficit. Approximately 86% of the individuals identified as dyslexic evidence an auditory language disorder that prevents the individual from linking the spoken form of a



word with its written equivalent. In light of this, any individual with reading problems should have a careful evaluation of his or her language capabilities and where indicated, appropriate speech and language intervention should be provided.

In contrast to language problems, visuo-spatial-motor factors of dyslexia appear less frequently (Robinson and Schwartz 1973). Approximately 5% of the individuals identified as dyslexic have a visuo-spatial-motor problem that interferes with sequential organization, scanning, and the perception of temporal and spatial cues. Although visuo-spatial-motor confusion is common in young children who are just learning to read, these problems do not tend to account for severe and persistent reading difficulties unless the child has missed so much basic reading instruction that he cannot get caught up. Assessment of visual, spatial, and motor capacities should be included in the diagnosis of any coordination or orientation disorder; however, there is no scientific evidence that interventions such as neurological and sensory organizational training, laterality training,

dominance training, balance beam, or reflex inhibition will significantly accelerate reading performance.

The importance of general intelligence in learning to read has been examined and shown to be a critical factor in both reading and language abilities. Investigations of the role of dominance in handedness, eyedness, and mixed laterality have produced no consistent conclusions. Studies investigating low birth weight, EEG abnormalities, temperamental attributes, attention deficit disorders, birth order, food additives, and chemical allergies have yielded mixed results. What is clear is that a wide range of factors can be associated with reading difficulties but that these factors work differently in different children. There is no simple formula for diagnosing and treating a dyslexic child. Each one requires his or her own individual program.

## FINDINGS

Children who are at 6 years old have mentally developed to a stage to receive formal education. First thing the children learn at the schools is reading. Children with learning disorder has not yet mentally developed to this stage. Children may not be mentally organized to learn. Although they have no mental problems these children find it difficult to read, write and make mathematical calculations. Parents and the people in the close environment may find it difficult to recognize this situation. Even when they recognize they may not be able to cope with it. Dyslexia is one of the problems in learning and receiving education. The following study is a serious attempt to recognize the problems regarding dyslexia in this country.

A survey was prepared to carry out the study. There were 31 questions in the survey. First there is a summary of the mothers' socio-demographic background. The next part is about the health of the children. This is followed by the schooling of the children and findings on the use of left or right hands of the children.



## 1. Socio-Demographic Condition of the mothers

Mothers that were interviewed ranged from 22 to 49 years old. There were 1 person at the age of 22 (1.3%), 1 person at 23 (1.3%), 2 persons at 25 (6.7%), 1 at 29 (3.3%), 1 at 30 (3.3%), 1 person at 31 (3.3%), 6 persons at 32 (20%), 6 at 34 (20%), 2 at 35 (6.7%), 2 at 36 (6.7%), 2 at 38 (6.7%), 1 at 39 (3.3%), 2 at 43 (6.7%), and 1 at 49 (3.3%). The average age of the mothers were 33.

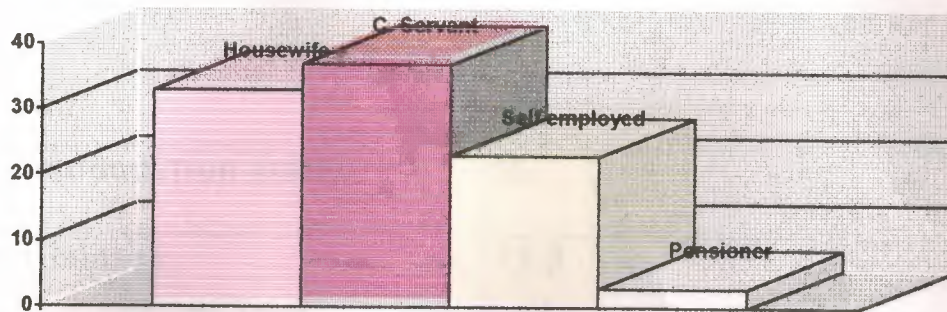
### a. Questions Relating Mothers

#### 1- Employment statuses of respondents

Status	%
Housewife	33.3
C. Servant	36.7
Self employed	13.3
Pensioner	3.3



Most of the mothers, 36.7% were working at the government offices. The second biggest group was the housewives.



## 2. Nationality of the Participants

One of the questions asked to the participants was regarding their nationalities. Results indicate that the majority of the participants were Turkish Cypriots. 76.7% of the participants were Turkish Cypriots while the remaining 23.7% were Turkish in origin.

Nationality	%
Turkish Cypriot	76.7
Turkish	23.3



### 3. Living conditions

Findings was that 53.3% of the questioned were living in their own houses. 16.7% lived in their parent's houses, and 30% lived in rented houses.

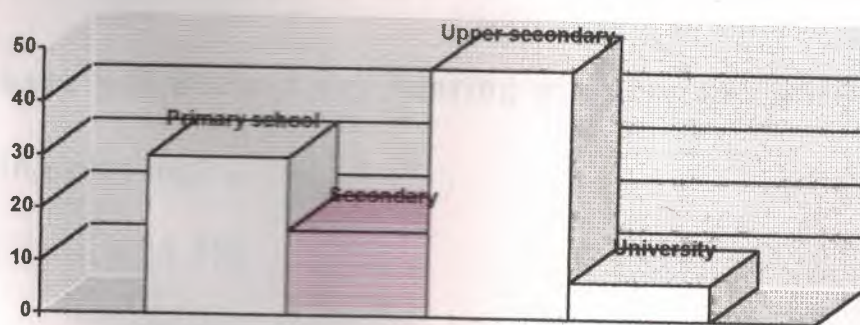
Accommodation status	%
Own houses	53.3
Parents	16.7
Rent	30

### 4. Age group

Mothers interviewed ranged from 22 years old till 49 years. The most crowded age group was 33 and 34.

## 5. Educational level

Education level	%
Primary school	30
Secondary	16.7
Upper secondary	46.7
University	6.7



### b. Questions Relating the children

Q. Was there any abnormality at the birth of the child?

Yes: 16.7%

No: 83.3%



Q. Has your child suffered from repeated ear infections?

Q. Has your child been subjected to an eyesight test in the last year?

Yes 26.7%

No 73.3%

Q. Does your child suffer from any eyesight problem?

Yes 46.7%

No 53.3%

Yes 50%

Q: have you noticed any hearing problem and late response during playing?

Yes 23.3%

No 76.7%

Yes 30%

No 70%

Q: Has your child suffered from repeated ear infection or had been to hospital to have tubes inserted in the ear at any time?

Yes 46.7%

No 53.3%

Q: Is your child experiencing low self-esteem about school work?

Yes 90%

No 10%

Q: Has your child ever been reluctabt or unwilling to go to school or experienced a nervous stomach ache on a school day?

Yes 80%

No 20%

Q: Does your child has spelling problems?

Yes like 52.3%

No normal 46.7%

Enjoy

Q: Does your child have any problems with numbers and arithmetic?

Yes 46.7%

No Often 53.3%

Occasionally 46.7%

Enjoy

Q: Is your child slow in solving maths problems at the school?

Yes 43.3%

No 56.7%

Often 43.3%

Not 56.7%

Q: What is your child's attitude towards spelling?

Dislike 43.3%

Normal 43.3%

Enjoys 13.3%



Q: What is your child's attitude towards maths?

Dislike 50.0%

Normal 36.7%

Enjoys 13.3%

Q: Have you noticed that your child sometimes misses out words when reading?

Yes Often 86.7%

Occasionally 36.7%

No 20.0%

Q: Is your child left-handed or right-handed?

Right 23.3%

Left 43.3%

Not certain 33.3%

Is their anyone else in the family left-handed?

Yes 53.3%

No 46.7%

Does your child hit a ball with the left or right foot?

Right 43.3%

Left 56.7%

### CONCLUSION

The study was carried out by asking questions to mothers. Majority of mothers were secondary school graduates. The age group ranged from 22 to 49. Largest population was at age group 33. Majority of the children had no problems at the birth. About 83.3% of the children were problem free when they born. Families failed to realize the importance of eyesight tests. Only 26.7% of the parents cared to make tests for their children. In contrast almost half of the parents were aware that heir child had eyesight problems. Children had less hearing problems than eyesight. Only 23.3% of the children had any hearing problem. But almost half of the children suffered from ear

infection. The self-esteem problem was found to be very high. 90% of the children had low-esteem. 80% of the children showed reluctance to go to school. Number of children who had problems with spelling and arithmetic figures were about the same and amounted to almost 50%. It was found that most of the mothers (86.7%) were aware that their child had missed some words.

With the above findings we can conclude that there is little awareness about dyslexia and more research should be carried out. There is also a need to inform mothers to be more observant about this problem. It can be recommended that the parents should pay more attention to eyesight tests and ear tests.



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