

## Note Dyslexia

### Abstract

The article tells a story of a student who although a proficient violinist did not become a professional musician. Is there a possibility to speak about another specific learning difficulty – note dyslexia?

The notion that individual stories can help us understand the extraordinary situation of an individual nowadays as well as in the past is given by a brief reference to a situation 100 years ago.

**Key words:** *dyslexia; note dyslexia; a partial inability in learning to read and write, combined with excellent memory.*

The fount of knowledge of dyslexia can be noticed finding its way through antiquity and the Middle Ages to modern times. We make a note of terms such as word blindness, congenital word blindness, children stuttering in orthography, or children writing as if they were blathering, etc.

It is year 1904. An article of Dr. Heveroch, a senior lecturer of Nervous and Mental Diseases, *A partial disability in learning to read and write, combined with excellent memory* is published in *Ceska skola* [Czech school]. It is a story and examination result of a girl, *who because of being restless disturbs the class. She unexpectedly stands up, walks around the class, teases other children ... We can notice striking contrasts in her results. She is immediately able to repeat word by word what was said in front of her a few times. She is good at religious education and she is numerate. But she cannot read or write.* The girl differs from other children who also have a poor record. Heveroch points out the fact that it is necessary to inform the doctor and also teachers about such abnormalities. To give a clearer picture of the situation I will cite another extract: *The disability to talk, read and write is not surprising in the case of those whose mind is developed only to a very low degree. I do not want to draw attention to this disability in my article; therefore I gave it the*

*title A partial disability in learning to read and write, combined with excellent memory.*

*What in some unhappy people is caused by disease proves in others to be the result of insufficient namely one-side insufficient development.*

*In such cases the ability to read and write became obviously stunted in comparison with other abilities.*

*This is a psychologically interesting topic for doctors as well as for teachers. I decided to deal with the topic in a teacher magazine because I am convinced that such cases are not as rare as they appear to be from the point of view of the medical literature - I am not sure whether this topic was not dealt with in the pedagogical literature - and I hope that paying attention to this partial disability may remind the readers of similar cases in their own school experience and maybe some of them would write to us about their own observations.*

**It is year 2005.** There is exactly the same child going to school as 101 years ago – longing for knowledge of reading, writing and counting. Parents' prospect of success in results and behaviour are very often accompanied by a notion of a future impressive social and working position. The majority of parents in spite of frequent warnings associate a child's success with excellent results at school.

Our schoolchild has to know more than his/her ancestors did 100 years ago. The comprehensive knowledge of humankind has been multiplied, educational pressure has grown stronger, and requirements have been changing. Children, who do not have expected results that would correspond to their intellectual capacity although they receive usual pedagogical surveillance and have the same social and cultural opportunities and family care, are legislatively treated. The percentage of children with specific learning difficulties (the most common one is dyslexia with dysorthography) ranges from 3% to 18% (Zelinkova, 2003). Non-verbal learning difficulties appear, among which dyspraxia is a more common phenomenon, and upbringing of a child with a hyperkinetic disorder is a serious pedagogical problem. Teachers, who successfully deal with such children, accept new information mainly from the biological-medical field, boost the lacking confidence of their wards. And they also follow the development of personal qualities of their wards. They possess pedagogical mastery. Let us assume that they view their pupils as grown-ups, who underwent the period of improvement of their difficulty, but they cannot exclude the possibility of failure.

Individual stories attract, they open the problems we did not expect a few years ago and they also lead towards more open and distinctive pedagogy. I have heard lots of life stories in my advisory experience, some of them are from my students.

The story of one of them captured my interest. Little by little he told me the essential part of his problem in a seminar in specific learning difficulties – why he

did not start his professional violinist career. He said about himself that “what contributed towards my thinking about myself was a continuous study of dyslexia; the first impulse was the familiarization of the term ‘word blindness.’”

As he says, he started to read at the preschool age. He finished primary school with straight As. His mother did not notice any problem that could be a signal of any specific learning difficulty. In the 5th year he started to attend school where greater attention was paid to the development in mathematics. He was accepted at secondary school without any need to pass an entrance exam. He took his A levels with grades mean 6, three As, C in the Czech language. His favourite subject was neither the Czech language, nor history nor geography. He enjoyed mathematics and music lessons.

He started to play the violin when he was 5, and as he says, without a keen interest. Despite that he won district and also national violin competitions. He attended both cycles of the playing violin at music school. He dates back the interest in violin to the period of secondary school. In the 3<sup>rd</sup> year he won the national violin competition.

He successfully passed the aptitude test and was accepted at the University of Ostrava, College of Education, to study the artistic-pedagogical subject of violin playing. He graduated with a first-class honours degree and a few weeks later he wanted to participate in a public competition to Janacek’s Philharmonic Orchestra in Ostrava. He did not attend the competition.

For him the most difficult task during his university studies was playing “prima vista” (play at sight), which demands relatively quick reading of notes. He lagged behind his classmates in this category. He remembers a not exactly specified statement of his Professor: “There is some problem!” He was aware of this weakness and this is why he did not go to the public competition. He also was not really sure in the student orchestra while playing prima vista. He never wanted to play the first violin.

He told me about his problems with reading English texts. What drew his teacher’s attention was his slow reading. He preferred to read slowly and correctly, rather than quickly and with lots of mistakes. He also found it difficult to study Hebrew so he gave up.

He wrote about himself: “How is it with reading notes? A note is a graphical representation of a tone, similarly as a letter is a graphical representation of a phone. Individual tones differ from each other in height, duration, energy and timbre. We have 12 possibilities in the chromatic scale. We can play them in 4 octaves on the violin. That means 48 tones. They differ in duration: we have 5 usual durations, from semibreves to semiquavers. So 48 multiply 5 possibilities of writing the notes in and on top of that we have 5 rests. Such a number of combinations

is really impossible at one go. But if we put emotional charge into a high-quality performance, we get a rather complex function of both hemispheres.

Musical imagination plays a key role while playing at sight, followed by the ability to transfer the idea to motor movements of the left and right hand. My problem was not to be seen in my motor activity.”

In his attempt at self-diagnosis he says: “While playing music it is improper to make mistakes. The chance to foresee from the context is sporadic. So as to be able to lower the number of mistakes, I have to slow down the playing. When I could play really slowly the number of mistakes declined. If I played quickly I had to either partly improvise or play by ear completely. Sometimes I was lost and I tried to play in my estimation. When I had enough time and the composition record was available, I managed to play.

I am very good at playing by ear. I can improvise the songs I have heard for the first time.

My disability to play at sight deprived me of a chance to devote myself to a professional career of a musician, but at the same time it made it possible for me to recognize the facts I would not know otherwise. Finally, I have to say that no matter what problems the disability caused, I am happy to be where I am now.”

Our former student worked as a teacher, and now he is head of the department of social services for handicapped children in Silesian Diaconia and he is a preacher of Brethren Church.

Nowadays he is aware of his specific difficulties. They especially concern written speeches. He does not like to fill any forms, because he makes mistakes while writing similar letters in shape and inverts the letters. His boss could see it as carelessness. To a certain extent, the higher number of mistakes influences his working success, because it is negatively reflected in written projects, etc.

During our interviews we tried to find some points of contact between his experience and theory and we called this interesting phenomenon NOTE DYSLEXIA.

Some time later I met him. Smiling as usual, with a charming wife and two children, they strolled around the town. He agreed to have the story of his difficulties published.

## **Postscript**

For interest I mention his reading examination results of an article Latys (Matejcek, Z. – Sturma, J. – Vagnerova, M – Zlab, Z – 1987), where he reached RQ = 106 (he read 58 words in 1 minute, 11 wrongly read words). He read with impressive

intonation that showed his language experience of perception and production of spoken texts and also his musical feeling.

I consulted the results of this case with Professor Z. Matejcek, who confirmed my suspicion that the problem lies in the hemisphere coordination. In October 2004 he wrote as a continuation of our interview that took place in spring 2004: *“Your ‘‘little’’ discovery is really interesting and is worth a publication. I encountered the term ‘‘note dyslexia’’ in literature – but only superficially – some of the dyslexics have difficulty reading notes. I have neither noticed any specific research nor read such an interesting description of a case like yours. I think that the problem is not the visual differentiation and a perception of shapes – on the contrary, the man sees and distinguishes well – but he fills them with content and meaning with difficulty, it means what it is and what it means. In reading it means that he says a word and if possible in a proper context. The visual is done mainly by the right hemisphere, and the filling with the content and meaning by the left one – so the coordination is necessary. Sometimes its dynamics languishes, which means that the process is slower and does not become automated. While playing the violin it is probably more difficult than while reading – a violinist cannot slow down without ‘‘solving’’ of musical notation not being disturbing. In reading it is possible. The translation of letter sequences into sequences of phones works according to his Latys quite well. If we intensify the requirements it gets worse – that is Lurija’s principle.*

*So that is a sort of explanation. But the main thing is that the man ‘‘has found’’ himself and that he is happy. His preaching is mainly a left-hemisphere activity, so there is no need for connection of anything and above that he can be successful.*

I think that it is necessary to add the opinion of Professor Gola, who was the guide of the man in question during his university studies. Professor Gola talked about him as someone talented, someone who was gifted to play the violin. There remains a question whether the academy of music training would not be a better solution for artistic study than the secondary school he attended. Would he cope with the prima vista? Did he pay enough attention to the disability to play at sight? It was not only the violin he wanted to devote himself to. He was tempted by other musical instruments as well as social activities that he is concerned with now. Anyway, Professor Gola does not rule out the possibility of *note dyslexia*. The longer we discussed, the more questions appeared. He ended our meeting with stories of outstanding violinists who have problems with playing prima vista.

I believe that we are at a threshold of new discoveries, which we record together with our clients, and that dyslexia and its forms will surprise us.

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