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FOREIGN LANGUAGE LEARNING IN CHILDREN
WITH LANGUAGE IMPAIRMENTS
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1. INTRODUCTION

Children today are judged based on their grades and achievements during education and therefore, school success plays a big role in their development. Ever since kindergarten, children are taught how to read, write and study hard. One of the prerequisites for these skills is their cognitive, linguistic and motoric development. This thesis focuses on language development, i.e. the problems that occur during this process – the so-called language impairments in children who attend elementary school. Most of the children learn languages other than their first language in schools from the first grade, and one of these languages is the English language. It is the most widely used language not only in Croatia, but all around the world. Jelaska (2005: 34) puts it nicely and says that so far English is “the only global language”. We are surrounded by it everywhere we look – from the TV and radio to all the other types of media. That is why it is sometimes hard to differentiate between English as a second and foreign language.

There are children with language impairments of various kinds who face problems in speaking, reading and writing or in the comprehension of their first language. Thus, it can be concluded that they would face the same or similar problems while learning or acquiring a second or a foreign language. The aim of this thesis is therefore to see which problems, errors and difficulties occur in children with language impairments who learn English as a foreign language in school, with the purpose of raising awareness of the difficulties children with language impairments face in Croatian schools. We hope to prove that such children have bigger problems in the foreign language¹ in comparison to their first language, regardless of their age. Both younger and older children show similar problems and errors, which means that errors persist throughout their elementary school education. The research was done on a rather small independent sample, due to the fact that a large number of children with some kind of language impairment is often unregistered and not involved in any kind of treatment. Our research involves ten children with language impairments and ten children as a control group. Eight children from the each group were in the fourth grade and two were seventh. They were given two tests, one in Croatian and the other in the English language which tested their reading, writing, memory and comprehension.²

¹The English language taught in Croatian schools has been referred to as the foreign language throughout this paper. For more information on terminology go to pages 4 and 5.

² I would like to thank my mentor, prof. Irena Zovko Dinković for understanding and help during the research, prof. Maja Peretić from the Faculty of Education and Rehabilitation Sciences in Zagreb for giving me the

In order to understand the research and its results, it is important to provide some theoretical background on language development and language impairments in general as well as some insights into second and foreign language acquisition, and differences between the Croatian and the English language.

2. LANGUAGE DEVELOPMENT

Humans are the only living beings that use language as means of communication (Field, 2003: 4-5), which makes the topic of language development most intriguing and well worth researching. As a result we can choose today from an array of language and speech theories in various fields of science – from sociology, psychology and linguistics to neurology.

Language development is a complex field that gives us the insight into human brain and mind, and their function. Throughout history there were two general theoretical frameworks which stood in opposition. One was behaviourism, which advocated the standpoint according to which the “change in behaviour occurs in response to the consequences of prior behaviour” (Hoff, 2000: 4).³ As the most important representative of behaviourism, Skinner (1957) claimed that children acquire language through imitating adult speech (Field, 2004: 30). On the other hand “cognitivism asserts the opposite – that we cannot understand behaviour without understanding what is going on inside the mind of the organism producing the behaviour” and after the so-called cognitive revolution (1950s), “explanations of human behaviour shifted to internal mental processes” (Hoff, 2000: 4). Two important representatives of cognitivism were Jean Piaget and Lev Vygotsky. Piaget (1923/1955) claimed that language was the product of cognitive and perceptual processes, while Vygotsky (1934/1987) claimed that thought exists pre-verbally (cf. Field, 2004: 63).⁴ Hoff (2000: 5-6) claims that the knowledge of language consists of the knowing of sounds and sound patterns, words, grammar and the way language is used in communication. That is why it is necessary

opportunity to conduct the research on children who attend her therapy sessions, as well as prof. Cecilija Hranilović from Grigor Vitez elementary school for allowing me to conduct the research there as well, and for helping me find children with language impairments. Last, but not least, I would like to thank my sister, Ana Matić, for providing me with all the necessary help and advice when I needed it most.

³ Behaviourism was based on a view prevalent from 1920s to 1950s. „Pavlov trained dogs to associate food with the ringing of a bell and they finally began to salivate when they heard the bell alone“ and that is known as *classical conditioning* as opposed to *operant conditioning* in which a “response becomes established because it is rewarded or reinforced” (Field, 2004: 30).

⁴ Piaget (1923/1955) came to the conclusion that there were four stages of language development that „represent a gradual progression and not a sudden shift in behaviour“, and Vygotsky (1934/1987) thought “there is initially a separation between thought and language: the infant’s first words are devoid of thought”.

to present an overview of language development so that we could understand the difficulties children with language impairments face during the acquisition of their first language, as well as during foreign language acquisition.

Up until the first year of their life, children change in terms of the sounds they produce⁵ and show that they understand few words in the second part of the first year (Hoff, 2000: 6). During the second year, the vocabulary is the segment of language that undergoes the biggest development. Not only do they have a vocabulary that consists of around 300 words, but they also use word combinations. Around three years of age, the biggest development occurs in the field of grammar (e.g. the usage of declarative sentences, plural and past tense markers, etc.) while the vocabulary keeps growing (Hoff, 2000: 5-6). Furthermore, during the period from three to four years the biggest development occurs in grammar when children start producing multiclausal sentences. It is usually said that language acquisition is completed during the first four years of a child's life.⁶ Babić (1993) claims that "the prenatal period has also been recognized as a period crucial to subsequent language development". Also,

'Early language development has been seen from a new perspective and different theoretical models explaining the acquisition of language components are emerging...' (Kovačević, 2001:3).

When it comes to the issue of speech and writing as two different modalities, Field (2003: 5) states that

'Of the two, speech is regarded as primary. This is partly because it preceded writing historically; writing is a by-product of speech. It is also because, in the life of an individual, reading and writing are learnt as a consequence of having acquired speaking and listening skills.'

Nijakowska (2004: 10) in her description of the development of literacy argues that

'...literacy concerns the skills of reading and spelling, learning of which requires intentional and conscious control.'

She discusses the development of reading and writing in the school context saying that the readiness to read and spell is a moment in

⁵ The so-called *prelinguistic period* –speech sounds gradually emerge, followed by babbling with the intonation contour of the adult language. The period ends with the formation of the first word (Hoff, 2000: 124).

⁶ The overview of language development is taken from Hoff (2000).

‘...which a child reaches the level of physical, social and psychological development which makes him/her both sensitive and susceptible to systematic teaching of reading and spelling.’
(Nijakowska, 2004: 12).

In connection to this, it is important to provide a functional and comfortable environment for children to develop all the skills needed for the life ahead. However, there are situations when a child’s linguistic development goes wrong and they end up with difficulties in speech, writing, reading or comprehension. It is clear that these conditions affect the child’s confidence and school success. Similarly, Nijakowska (2004: 14) continues her discussion on reading and spelling by saying that school life presents a “cognitive burden as well as psychological and social pressure on children” especially when reading skills are poor. There are theories on how to help children with language impairments or learning disabilities so that they can have a normal childhood as well as help them during their education.⁷ If children with language impairments face difficulties in their first language, it seems logical to assume they will face same or even more severe difficulties during the acquisition or learning of the second or foreign language. Connected to that,

‘...the "talent" for learning foreign language consists of three components. The first is verbal intelligence, by which is meant both familiarity with words (this is measured in the *Language Aptitude Battery* by the "Vocabulary" part) and the ability to reason analytically about verbal materials (this is measured by the part called "Language Analysis"). The second component is motivation to learn the language (...) The third component (...) is called "auditory ability".
(Krashen, 1981: 21)

This quote nicely illustrates the prerequisites for more successful second language learning and also shows why children with language impairments have difficulties. Nijakowska (2004: 67) mentions various researches from different authors and on one occasion paraphrases Chodkiewicz’s theory (1986) that individuals who struggle with reading in their native language will more likely face failure in attempts to become fluent in foreign languages.

This issue is discussed to a greater extent in chapter 5, but first of all it is necessary to define and differentiate between first, second and foreign language.

⁷ One of these theories is a *multisensory structured learning approach*, i.e. “simultaneous activation of the auditory, tactile, visual and kinaesthetic pathways” (Nijakowska, 2004:122-127).

2.1. SECOND LANGUAGE AND FOREIGN LANGUAGE LEARNING THEORIES

Nijakowska (2004: 66) points out that “familiarity with foreign languages is a must in the multilingual society we live in today”. Taking into consideration the connectivity between countries and cultures, it is even more apparent that knowing a foreign language is the advantage that can help a person become more successful. Second and foreign language learning present different fields of study from first language acquisition, and they draw from areas such as sociolinguistics, cognitive linguistics, social psychology, etc. (Field, 2003: 2)

Additionally, there are authors (e.g. Finocchiaro 1974; Nijakowska 2004; Jelaska 2005) who claim there is a difference between second and foreign language learning. It is usually considered that foreign languages are languages taught in formal environments of countries where the first language differs from the foreign language that is being taught. On the other hand, second language refers to the language taught in the country where that language is spoken.⁸

It was mentioned that we can differentiate between second and foreign languages; however, Medved Krajnović (2010: 3) claims that second language (L2) includes foreign language (FL) and third language (L3) as well. She points out that second language is the umbrella term for all languages acquired after the completion of first language acquisition (2010: 3). She further defines three types of environment for mastering languages other than the first. The first type is second language acquisition which refers to the language an individual spontaneously acquires in an environment where that language is official, i.e. the first language. On the other hand, foreign language learning/acquisition presents learning in an institutionalised environment where the emphasis is put on a formal approach and where the language learned is not present in vicinity. Finally, the third type involves second language acquisition in the mixed context, where the term acquisition includes both formal and informal acquisition, and formal learning, and where the term second refers to any language except the first language and is actually superimposed to the already mentioned terms L2, L3 and FL.⁹ Likewise, Krashen differentiated between

‘...two sorts of linguistic environments [...]: artificial, or formal environments, found for the most part in the classroom, and natural or informal environments.’ (1981: 40)

⁸ Taken from: <http://grammar.about.com/od/e/g/English-As-A-Second-Language-Esl.htm>

⁹ See Medved Krajnović (2010: 2-6).

Medved Krajnović (2010: 5) argues that the boundaries between second and foreign languages cease to exist in the contemporary society. The same opinion on terminology can be found in Jelaska (2005). She differentiates between second and foreign languages and also emphasizes the difficulty in defining the boundary between these two terms in some situations (2005: 27-30). Foreign and second language learning are an important part of our education since nowadays people are required to know languages other than their first language. The most common foreign language, not just in Croatia, but all around the world is definitely the English language. Taking this theoretical overview into consideration, and the nature of this research, the English language taught in Croatian schools is in this thesis referred to as the foreign language (FL). This decision does not undermine the role of the English language in Croatian society – it is widely used in schools, media and often in everyday communication.

What about the influence of the first language on foreign, as well as on second language learning? Krashen (1981: 7) discusses the role of first language and emphasizes the notion of interference. This issue is dealt with in chapter 5, when mistakes in the Croatian and the English language are compared and discussed. Likewise, Medved Krajnović (2010: 11) mentions the term *code-switching*, which refers to the fact that bilingual speakers tend to use both languages in communication. It seems that these hypotheses are correct since the research done for the purpose of this thesis showed that some children (especially younger ones, and those with language impairments) showed instances of both interference and code-switching.¹⁰ Again, it seems that these processes tend to become more prevalent and frequent in children with language impairments, and this is also illustrated in the research.¹¹ We have addressed the issue of language impairments several times, but before we define and illustrate them, it is necessary to point out the differences between the Croatian and the English language, i.e. the difference between their orthography systems. That way it will be easier for readers to understand the types of difficulties present in children with language impairments.

2.2. THE DIFFERENCES BETWEEN CROATIAN AND ENGLISH ORTHOGRAPHY

According to Nijakowska (2004: 21-22)

¹⁰ View chapter 5, p.14

¹¹ View chapter 5, p.14

‘Alphabetic orthographic systems can be classified according to the consistency of the letter-to-sound relations, defined as orthographic depth.’

Similarly,

‘...three different types of writing system are used by the world’s languages. No language’s orthography provides an exact example of one of these systems. But in idealised terms they are: alphabets, syllabaries and logographic systems. In principle, the first two are based upon the phonology of the language, while the third is based upon language’s lexical system’.
(Field, 2003: 21-22).

We will focus on alphabetic systems because both Croatian and the English fall into that group. However, these two languages vary considerably. The difference lies in grapheme-phoneme correspondence (GPC), which means that we can differentiate between transparent and opaque orthographies (Field, 2003: 23). The Croatian language has transparent orthography, that is, it has one-to-one relationship between written forms and sounds. On the other hand, the English language has opaque orthography which contains words that can be spelled using the GPC rules (e.g. *canteen*), words where the weak phoneme /ə/ is represented by one of the five vowels, words that can be spelled by analogy with other words (e.g. *light*), and words that are unique in their spelling (e.g. *yacht*) (cf. Field, 2003: 23-24).

During the sixties, Lado (1964) came up with the term *contrastive analysis* claiming that in cases in which the elements of the student’s first and target language are similar, positive transfer will occur, which means that the mastering of the target language will be somewhat easier. In contrast, if there are different elements of the first and the target language, negative transfer will occur, i.e. it will be more difficult to master the target language (Medved Krajnović, 2010: 21). Nowadays, the more accepted theory seems to be the *error analysis theory*. Unlike contrastive theory, error analysis tries to explain language processes that led to errors students made during language production. In other words, it means that attention has been shifted towards student’s mind during language acquisition process. This theory does not perceive student’s errors as ‘bad habits’, but tries to understand how that new language system functions, and test whether there is some knowledge of the first language present in the second language system (Medved Krajnović, 2010: 22-23).

If we connect this information with foreign language learning, we can conclude that it would be easier for native speakers of Croatian to learn a foreign language that shares

transparent orthography. Since English has opaque orthography, it can be concluded that it is harder for native speakers of Croatian to learn it, regardless of whether they have or do not have language impairments. This is what Nijakowska (2004: 29) claims as well. She mentions the psycholinguistic grain size theory, which argues that opaque orthographies like English or French tend to present much more pronunciation problems in individuals with dyslexia than transparent languages such as Italian or Spanish. In addition, she mentions that there is a

‘...greater prominence of the causal relationship between problems in word identification and deficits in phonological skills in dyslexics learning to read in opaque orthographies such as English. [...] the core phonological deficit in dyslexics is harder to detect and not so persevering in more transparent orthographies with regular relationships between letters and sounds.’

(Nijakowska, 2004: 30)¹²

3. LANGUAGE IMPAIRMENTS

Language impairments are widely discussed and researched by psycholinguists, cognitive linguists, speech pathologists and rehabilitators (Blaži 1997; Miles and Miles 2004; Nijakowska 2004; Blaži, Ivšac, Lenček 2007; Lenček 2011, 2012). It is crucial to be acquainted with them in order to help individuals with language impairments, and make their education and everyday life easier and more functional. The issue of Croatian education system regarding children with language impairments presents an important field of research among scientists that deal with this topic (e.g. Arapović 2003). Before we turn to this particular research and the discussion of results, we have to define and identify language impairments in general, as well as particular types of these impairments. Connected to that, the Individuals with Disabilities Education Act, or IDEA, defines the term *speech or language impairment* as follows:

‘Speech or language impairment means a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, that adversely affects a child’s educational performance.’¹³

Moreover, language impairments can be defined as

¹² Phonological deficit is more broadly discussed in chapter 3 (8-10).

¹³ The National Dissemination Centre for Children with Disabilities
<http://nichcy.org/disability/specific/speechlanguage#def>

‘...disorders of language that interfere with communication, adversely affect performance and/or functioning in the student’s typical learning environment, and result in the need for exceptional student education. A language impairment is defined as a disorder in one or more of the basic learning processes involved in understanding or in using spoken or written language. Language-based learning disabilities are problems with age-appropriate reading, spelling, and/or writing.’¹⁴

One group of these impairments are learning disabilities (LD) or language based learning disabilities (LBLD).¹⁵ They are defined as

‘...a group of varying disorders that have a negative impact on learning. They may affect one’s ability to speak, listen, think, read, write, spell or compute. The most prevalent LD is in the area of reading, known as dyslexia.’¹⁶

Dyslexia is one of those disabilities which can simply be defined as “a specific learning difficulty in reading and spelling” (Nijakowska, 2004: 1). It is thought that dyslexia stands for the difficulty – not only in reading – but in the usage of words, their identification, pronunciation, spelling, what they stand for and how to deal with them (Miles and Miles, 2004: 22). One of the symptoms of dyslexia and the one that has been thoroughly researched over the years is definitely the difficulty of segmenting speech into phonemes.¹⁷ Miles and Miles (2004: 42) explained it by saying that in speech, even though there are acoustic measures that show where we can separate syllables, there are no similar measures that would show where phonemes can be separated. What is needed is the decoder that would divide inseparable acoustic signal according to linguistic rules. It is thought that dyslexic children are not aware of the fact that written letters correspond to sounds and if and when they learn that, it is probably harder for them to implement that knowledge. Nijakowska (2004: 43) also stated that one of the causes of dyslexia is phonological awareness and processing, as well as brain mechanisms. Phonological awareness was tested in this research and it is shown that children with language impairments have a lot of difficulties in this area.¹⁸ Let us explain these terms for better understanding. Phonological processing refers to

‘...children using speech, without reflecting on the structure of spoken words.’

and phonological awareness refers to

¹⁴ Florida Department of Education <http://www.fldoe.org/ese/li.asp>

¹⁵ American Speech-Language-Hearing Association <http://www.asha.org/public/speech/disorders/LBLD/#g>

¹⁶ National Centre for Learning Disabilities <http://www.nclد.org/types-learning-disabilities/what-is-ld/learning-disability-fast-facts>

¹⁷ Some research can be found in Miles and Miles (2004).

¹⁸ View chapter 5, p.14

‘...the ability to perform explicit judgements with regard to the structure of spoken words...It is basically defined as an ability to identify, distinguish between, detect and manipulate the sound structure of words.’ (Nijakowska, 2004: 44)

It was said that children with dyslexia have difficulties on the phonological level, but what is also interesting is the fact that this phonological deficit persists through time, before and after reading has begun (Nijakowska, 2004: 47). Nijakowska (2004: 47) also states that some other symptoms of dyslexia are problems of verbal short-term memory, non-word repetition difficulties, poor phonological learning of new verbal information, word retrieval and rapid naming problems. Nevertheless, the phonological deficit hypothesis is not the only theory of the causes of dyslexia. As Nijakowska (2004: 63) puts it,

‘...the scale and scope of research devoted to discovering the underlying cause of dyslexia is beyond doubt impressive.’

In short, the double-deficit hypothesis claims there are two independent causes of dyslexic difficulties – phonological core deficit and naming speed impairment. Slow naming speed stands for low-level ability to recognise words quickly, which causes reading difficulties (Nijakowska, 2004: 54-56).¹⁹ These two hypotheses have been mentioned because they are relevant for our research since children with dyslexia and reading and writing impairment have all shown these symptoms and difficulties.²⁰

The research done for this thesis involved children with dyslexia and children with reading and writing impairment. Although it was almost impossible to find something about the latter impairment in literature, it seems as though children in Croatia are regularly diagnosed with this impairment. It is characterised with a slightly lower rate of errors and difficulties in reading and writing compared to dyslexia. This fact will be illustrated by examples from tests performed for the purpose of our research. It has been noted that if children show some of the symptoms typical for dyslexia, they will be sent to therapy. If during therapy their condition does not improve or if they start showing more symptoms typical for dyslexia, they are diagnosed with reading and writing impairment. The question that arises is whether it is good to give such diagnoses and insist on therapies if the child’s

¹⁹ There are two more hypotheses mentioned by Nijakowska (2004: 56-63): the magnocellular deficit hypothesis and the cerebellar deficit hypothesis. The latter operates on the cognitive level and can be traced back to the biological level – to a cerebellar malfunction – whereas the former stands for visual systems deficit hypothesis – abnormalities of perception, of visual motion, visual tracking problems and visual transient system deficit.

²⁰ View chapter 5, p.14

reading and writing skills are just slightly less developed than usual. However, this issue is beyond the scope of this thesis and will not be further discussed.

4. THE RESEARCH

The goal of this thesis is to determine the mastery of foreign language, i.e. the English language in elementary school children with learning disabilities, and compare the errors that occur in the first language (Croatian) with the errors in the foreign language (English).

4.1. PARTICIPANTS

The research included a total of 20 participants aged 10-14 out of which 10 (6 female and 4 male) have learning disabilities (LD) and 10 (7 male and 3 female) have no disabilities and served as a control group. Out of 10 children with LD 3 have dyslexia and 7 present some symptoms of dyslexia and are considered to have reading and writing impairment. Moreover, 4 of these children regularly go to therapy, which needs to be taken into consideration. Finally, one participant along with reading and writing impairment has ADHD (Attention Deficit and Hyperactivity Disorder).²¹ When in regular school environment, 4 out of 10 participants have specialized instruction in school.

Children with LD were recruited from the Faculty of Education and Rehabilitation Sciences, as well as from the Grigor Vitez elementary school in Zagreb. The control group was recruited from the Grigor Vitez elementary school and these participants were chosen randomly. However, it is important to mention that it was very difficult to find children with LD in Zagreb, which is why this research involves a rather small sample. The results therefore cannot be taken as conclusive but as indicative. The children's parents were informed about the research and the children participated voluntarily and anonymously.

To 19 out of 20 participants Croatian is the first language and English is a foreign language they learn in school, whereas the participant with LD and ADHD lives in a bilingual home (adopted child with a Croatian mother and British father).

²¹ ADHD is a condition of the brain that affects a person's ability to pay attention. It is a chronic disorder, meaning that it affects an individual throughout life. (<http://www.asha.org/public/speech/disorders/ADHD/>)

4.2. METHOD

The research measured participants' reading, writing, memory, phonological processing and comprehension skills in both Croatian and English. The participants were presented with two tests, one in the Croatian language, which tested their knowledge of their first language, and one in the English language, which tested the knowledge of the foreign, or a second language. The tasks were the same in both tests, but with different examples, and each test consisted of 7 tasks. The participants were not given a time frame within which they needed to answer or solve the test or a particular task, but if they were taking too much time, they were asked to start solving the next assignment and the unsolved task was considered to be wrong.²² Task efficiency was not measured by any particular test, but was based on observation and theoretical information in other similar research.

Prior to solving the tests, the children were asked questions about the English language: whether they liked it and how they rated their knowledge of the English language. All children with language impairments said they did not like English and assessed their knowledge as not good. The participants in the control group, on the other hand, enjoyed learning English language to various extents, and were excited to participate in the research.

The testing of participants recruited from the Faculty of Education and Rehabilitation Sciences was done under the supervision of the official speech-language pathologist, whereas testing in the Grigor Vitez elementary school was done without any supervision.

Explanation of tasks from both tests, with examples:

1. Word reading

Word reading task in Croatian consisted of 11 and in the English test of 9 words. Examples of words in the Croatian test were *broš*; *anomalija*, and in the English test *eight*; *expensive*. The participants were asked to read one word at a time in the order presented in the test.

2. Word reading of false words

²² Taking too much time to solve a task is also considered to be a sign of LD and it will be discussed later in the paper.

This task in Croatian consisted of 8 and in the English version of 9 words. Examples of those words in the Croatian test were *lakašteliz*; *plivorka* and in the English test *tood*; *pight*.²³ Participants were asked to read one word at a time in the order presented in the test.

For both tests the rule was that if participants took too much time or they did not succeed in reading the whole word but were reading it letter by letter, the word was considered to have not been read correctly.

3. Working memory and writing skills

a) Monosyllabic words

The participants were presented with 10 monosyllabic words in Croatian and 13 in the English language. Examples of words in the Croatian test were *ranč*; *džip* and in the English test *choose*; *twelve*. The researcher read the words one by one to each participant and asked them to try to utter as many words as they can remember from the list. After that, they were asked to write all the words down in order to test their writing abilities.

b) Disyllabic and polysyllabic words

The second part of the same task consisted of 10 disyllabic and polysyllabic words in the Croatian language and 11 in English. Examples of the words in the Croatian test were *svjetionik*; *arhitektura* and in the English test *animal*; *disappear*. The procedure was the same as in the first part of the same task.

4. Phonological awareness

a) Reading of words with the first letter missing

The participants were given 10 words (in both tests) and were asked to read them out loud, but without the first letter. Examples of the words in the Croatian test were *(p)ramen*; *(s)tolica* and in the English test *(r)un*; *(d)anger*.

b) Reading of words with the last letter missing

The participants were given 10 words (in both tests) and were asked to read them out loud, but without the last letter. Examples of the words in the Croatian test were *prs(t)*; *zajednic(a)* and in the English test *sin(g)*; *kitche(n)*.

²³ False words in the Croatian test were taken from Vuletić (1990) and in the English test from Field (2003).

Again, if they took too much time or read the whole word prior to reading it without the first or the last letter, the word was considered not to have been read correctly.

5. Rhyme

The task consisted of five lists of three words in both Croatian and English tests. The participants were asked to find and read out loud the word that does not fit in, the so-called intruder. Example of a three-word list in Croatian was *zov: kov: lav* and in the English test *time; white; write*. This task tested their phonological awareness as well but in a different way.

6. Repeating sentences

The sixth task consisted of 5 sentences in both the Croatian and the English version of the test. An example of a sentence in the Croatian version: *Otac je kupio veliku količinu hrane za sutrašnje rođendansko slavlje* and in the English version: *Students like mathematics because the teacher is great*. In this case the researcher read one sentence at a time and after each sentence asked the participants to repeat that sentence. This task not only tested the participants' working memory, but also their usage of the knowledge of the world and the ability to understand context. The sentence was considered correct if the participant altered one small part of the sentence which did not affect the overall context and meaning. However, if the participant made one big mistake that altered the overall meaning of the sentence, it was considered not to have been repeated correctly.

7. Reading and comprehension

The task consisted of a text followed by four questions about it. The text in the Croatian version was slightly longer than the one in the English version.²⁴ The participants were asked to read both texts out loud and answer the questions regarding their understanding of the text afterwards. During the reading part of the task, the emphasis was put on observing reading speed, number of mistakes, type of mistakes the participants made and whether they skipped words or a whole row of the text. Questions about the text tested their comprehension, i.e. if they took too much time to answer the question, that was considered wrong and the same stood for going back to the text and taking too much time to find the answer and before finally uttering it.

²⁴ The text for the Croatian test was taken from Gardaš, A. (1999).
The text for the English test was taken from Filipović, R, Ivir, V. and Filipović, Z. (1984).

The results were written down and processed through the statistical programme SPSS. Two types of analysis were done – descriptive statistics and T-test. It is important to mention that because of a small sample some statistical analyses could not be performed. When the task was correct, the participant was given 1 point and if it was incorrect they were given 0 points. The results 1 and 0 were then processed through the statistical programme SPSS.

5. RESULTS AND DISCUSSION

Table 1 shows the number of participants divided by groups – (1) children with language impairments in the fourth grade (N=8), (2) children with language impairments in the seventh grade (N=2), (3) children without language impairments in the fourth grade (N=8) and (4) children without language impairments in the seventh grade (N=2). This table shows the success on the Croatian test where the abbreviation *hrvčítuk* stands for word reading, *hrvčítlruk* stands for word reading of false words, *hrvpamauk* stands for working memory of monosyllabic words, *hrvpambuk* stands for working memory of polysyllabic words, *hrvpisauk* stands for writing of monosyllabic words, *hrvpisbuk* stands for writing of polysyllabic words, *hrvprvosuk* stands for reading of words with the first letter missing, *hrvzadnjjesuk* stands for reading of words with the last letter missing, *hrvrimauk* stands for rhyme, *hrvrečuk* stands for repeating sentences and *hrvpitanjauk* stands for the comprehension of the text.

GRUPA	N	Minimum	Maximum	Mean	Std. Deviation
1 hrvčítuk	8	5	10	7,00	2,070
hrvčítlruk	8	3	6	5,00	1,195
hrvpamauk	8	1	8	3,75	2,188
hrvpambuk	8	3	6	4,00	1,069
hrvpisauk	8	8	10	9,13	,641
hrvpisbuk	8	7	9	8,25	,707
hrvprvosuk	8	6	10	8,38	1,302
hrvzadnjjesuk	8	6	9	7,38	1,188
hrvrimauk	8	3	5	4,50	,756

	hrvrečuk	8	1	4	2,75	,886
	hrvpitanjauk	8	2	4	3,63	,744
2	hrvčitik	2	6	11	8,50	3,536
	hrvčitlruk	2	3	4	3,50	,707
	hrvpamauk	2	3	3	3,00	,000
	hrvpambuk	2	5	5	5,00	,000
	hrvpisauk	2	9	9	9,00	,000
	hrvpisbuk	2	8	9	8,50	,707
	hrvprvosuk	2	8	10	9,00	1,414
	hrvzadnjasuk	2	6	7	6,50	,707
	hrvrimauk	2	5	5	5,00	,000
	hrvrečuk	2	5	5	5,00	,000
	hrvpitanjauk	2	4	4	4,00	,000
3	hrvčitik	8	11	11	11,00	,000
	hrvčitlruk	8	5	8	7,63	1,061
	hrvpamauk	8	4	7	5,13	1,126
	hrvpambuk	8	4	8	5,88	1,356
	hrvpisauk	8	9	10	9,88	,354
	hrvpisbuk	8	8	10	9,00	,756
	hrvprvosuk	8	10	10	10,00	,000
	hrvzadnjasuk	8	8	10	9,75	,707
	hrvrimauk	8	4	5	4,75	,463
	hrvrečuk	8	3	5	4,38	,744
	hrvpitanjauk	8	3	4	3,75	,463

4	hrvčítuk	2	11	11	11,00	,000
	hrvčítlruk	2	7	8	7,50	,707
	hrvpamauk	2	6	6	6,00	,000
	hrvpambuk	2	7	7	7,00	,000
	hrvpisauk	2	10	10	10,00	,000
	hrvpisbuk	2	10	10	10,00	,000
	hrvprvosuk	2	10	10	10,00	,000
	hrvzadnjesuk	2	10	10	10,00	,000
	hrvrimauk	2	5	5	5,00	,000
	hrvrečuk	2	5	5	5,00	,000
	hrvpitanjauk	2	4	4	4,00	,000

Table 1. Descriptive statistics: Croatian test

This table clearly shows the minimum and maximum of correct answers for every group, the mean and the standard deviation. The higher the standard deviation, the bigger is the discrepancy between the participants and their answers. The standard deviation of zero illustrates that participants did equally good or equally bad on the test. That is why the last two groups had lower standard deviations – they did equally good on the test, whereas the standard deviation of groups with language impairments showed somewhat different standard deviations, which means that they did equally bad on some assignments, but on some they had various rate of success. The first and the third task gave the most diverse scores for group 1. Here the participants made most mistakes, but there were some participants who gave some percentage of correct answers. The writing task had the smallest standard deviation which means the answers were the least different among the participants from group 1. They had no bigger problems writing in the Croatian language, but the mistake 90% of participants made was with the words *džip* (*đip*), *svjetionik* (*svetionik* or *svijetionik*, some even omitted the line on the letter *t* or the dot on letters *i* and *j*) and *arhitektura* (*arhikitektura* or *arhihtektura*). Adding letters or syllables is a typical sign of language impairment, as well as adding or omitting of signs on letters (Lenček, 2012:14).

In the word reading assignment in the Croatian version, none of the participants from group 1 read the word *anomalija* correctly. Some were spelling it out before reading the whole word and some did not even succeed in spelling it. This shows the inability of children with language impairments to distinguish between phonemes and illustrates how longer words pose more difficulties for them. Additionally, the fact that the word is not used in everyday communication often may also be the reason for so many wrong pronunciations. This is proved by the fact that children from group 3 (control group, fourth grade) all read the word *anomalija* correctly, which means the word was not too hard for younger children. One participant from group 2 read it correctly and one did not, unlike participants from group 4 (control group, seventh grade), who all read the word correctly. One more example from the first task seemed interesting. Out of 8 participants in group 1, four read the word *naranča* correctly and the remaining four read it *narandža*. It may be concluded that the latter form was read because in Croatian there is usually the dilemma between these two pronunciations and the fact that they may use that form in their everyday communication made them read it wrong.

In the second task the most problematic false word to read for both group 1 and 2 was *plistvorka*. Out of 8 participants in group 1 only two read it correctly, and out of 2 participants from group 2 none provided the correct answer. The most common pronunciation was *plisorka* or *plistvoka*. It seems that a non-existing word comprised out of several consonant clusters posed quite a problem for children with language impairments.

Finally, let us analyse the working memory task. None of the participants from groups 1 and 2 remembered all the words from the list. Only one participant with reading and writing impairment remembered 8 words from the list, but the most frequent number of remembered monosyllabic words was 3, and for polysyllabic words 4. The participants most frequently remembered the first, the last and sometimes an occasional word in the middle of the list. Field (2004: 176) defines this phenomenon as a primacy (first words on the list) recency (last words on the list) effect, i.e. “subjects are able to retrieve words that are still available in STM (short term memory)”. This not only confirms the fact that children with language impairments have problems regarding working memory, but also proves the existence of the

‘the central executive, responsible for a range of functions including the retrieval of information from long-term memory, the regulation of information within working memory, the attentional control of both encoding and retrieval strategies, and task shifting (...) A complex memory span

such as listening and counting span appear to tap both the central executive and the phonological loop”.²⁵

Nevertheless, there were not any significant differences between group 1 and 2, which nicely illustrates one of the hypotheses – as they grow older, children with language impairments do not seem to provide significantly better results.

The overall results in Table 1 shows that children with language impairments (both younger and older) provided less correct answers (lower scores) in all the other tasks.

Table 2 shows information about the English language test where the abbreviation *engčítuk* stands for word reading, *engčítlruk* stands for word reading of false words, *engpamauk* stands for working memory of monosyllabic words, *engpambuk* stands for working memory of polysyllabic words, *engpisauk* stands for writing of monosyllabic words, *engpisbuk* stands for writing of polysyllabic words, *engprvosuk* stands for reading of words with the first letter missing, *engzadnjesuk* stands for reading of words with the last letter missing, *engrimauk* stands for rhyme, *engrečuk* stands for repeating sentences and *engpitanjauk* stands for the comprehension of the text. Much like in Table 1, there are four different groups: (1) children with language impairments in the fourth grade (N=8), (2) children with language impairments in the seventh grade (N=2), (3) children without language impairments in the fourth grade (N=8) and (4) children without language impairments in the seventh grade (N=2). The same information is presented in this table – the minimum and maximum number of correct answers, the mean and standard deviation.

GRUPA	N	Minimum	Maximum	Mean	Std. Deviation
1 engčítuk	8	2	6	3,75	1,282
engčítlruk	8	0	5	2,25	1,982
engpamauk	8	1	5	2,75	1,581
engpambuk	8	0	5	2,75	1,753
engpisauk	8	1	5	2,63	1,188
engpisbuk	8	0	4	1,63	1,408

²⁵‘Working Memory in Children with Reading Disabilities’, University of Durham Liverpool, John Moores University <https://dSPACE.stir.ac.uk/bitstream/1893/799/1/GathercoleJECp.pdf>

	engprvosuk	8	0	10	4,25	3,059
	engzadnjesuk	8	3	7	4,00	1,414
	engrimauk	8	2	5	3,75	1,282
	engrečuk	8	0	3	1,88	,991
	engpitanjauk	8	0	4	2,25	1,581
2	engčituk	2	3	4	3,50	,707
	engčitlruk	2	2	4	3,00	1,414
	engpamauk	2	2	4	3,00	1,414
	engpambuk	2	4	4	4,00	,000
	engpisauk	2	1	4	2,50	2,121
	engpisbuk	2	2	6	4,00	2,828
	engprvosuk	2	3	4	3,50	,707
	engzadnjesuk	2	4	5	4,50	,707
	engrimauk	2	4	5	4,50	,707
	engrečuk	2	0	1	,50	,707
	engpitanjauk	2	2	3	2,50	,707
3	engčituk	8	7	9	8,63	,744
	engčitlruk	8	7	10	8,38	1,302
	engpamauk	8	3	8	5,63	1,847
	engpambuk	8	4	10	5,63	1,996
	engpisauk	8	3	12	7,13	3,720
	engpisbuk	8	1	9	6,00	2,878
	engprvosuk	8	8	10	9,50	,926
	engzadnjesuk	8	7	10	9,13	1,126

	engrimauk	8	4	5	4,88	,354
	engrečuk	8	3	5	4,63	,744
	engpitanjauk	8	3	4	3,87	,354
4	engčituk	2	9	9	9,00	,000
	engčitlruk	2	7	10	8,50	2,121
	engpamauk	2	5	7	6,00	1,414
	engpambuk	2	6	6	6,00	,000
	engpisauk	2	10	13	11,50	2,121
	engpisbuk	2	8	10	9,00	1,414
	engprvosuk	2	10	10	10,00	,000
	engzadnjesuk	2	10	10	10,00	,000
	engrimauk	2	4	5	4,50	,707
	engrečuk	2	5	5	5,00	,000
	engpitanjauk	2	3	4	3,50	,707

Table 2. Descriptive statistics: English test

The interesting thing with Table 2 is the fact that standard deviations seem to be more diverse than in Table 1, which is logical. Results from the English version of the test proved the hypothesis that children with language impairments will have worse results in the foreign language, especially since it differs from their first language. Throughout all tasks, participants from groups 1 and 2 did not provide the same number of correct answers on a particular task and their answers were quite diverse, but less correct than in the Croatian version. Looking at Table 2, it is clear that younger children with language impairments did better on some tasks than older children. Moreover, results from groups 3 and 4 were a lot better, which means that the control group had no significant problems with the English version of the test.

Out of all tasks in the English version of the test, children with language impairments had most difficulties with working memory task, reading tasks (with both existing and false

words) and writing tasks. These results go hand in hand with the aforementioned theories on language impairments – learning disabilities, as well as with former studies that emphasise that main cause of reading and writing difficulties are working memory and phonological awareness deficits (Blaži, Buzdum, Kozari–Ciković (2011) and Lenček, (2012)). For example, the biggest discrepancy between the results in group 1 was, surprisingly, found on the 4th task: reading words without the first letter – some participants provided all the correct pronunciations whereas some provided none. Likewise, none of the participants from group 1 provided the correct pronunciation of the false words *doise*, *pight* and *heaf*. Out of two participants from group 2 one provided the correct pronunciation for the false word *doise* and none provided the correct pronunciation for words *pight* and *heaf*. Furthermore, the reading task was problematic for children with language impairments. Only one out of eight participants from group 1 provided the correct pronunciation of the word *eight* whereas none of the participants from group 2 did. The words *expensive*, *aeroplane* and *unimportant* were problematic for them as well. As was said before, children with language impairments had problems with working memory and writing tasks. Memorising monosyllabic and polysyllabic words for group 1 resulted in 5 remembered words as the highest score, and none as the lowest score. Even though participants remembered less words in English, the pattern of remembering words was the same – the first, last and some words in the middle seem to be mostly remembered. As for the control groups 3 and 4, they also did not perform well in remembering words even though group 4 was slightly better, with 7 as the highest number of remembered words.

Additionally, the biggest discrepancy in group 2 was found on the 3rd task: the writing of monosyllabic and polysyllabic words. Regardless of the standard deviation, participants did not provide more than 4 correct written forms (out of 13 and 11 respectively). Children with language impairments had most problems, and even provided spellings typical for the Croatian language (*čuse* instead of *choose* or *čip* instead of *cheap*). This illustrates the aforementioned interference of first and foreign language. Out of 13 monosyllabic words, children with language impairments, in groups 1 and 2, did not provide the correct written forms for 6 words (*worse*, *really*, *choose*, *straight*, *throw* and *quiet*). Out of 11 polysyllabic words, children with language impairments did not provide the correct written forms for 4 words (*disappear*, *enormous*, *continue* and *impossible*). It seems as though children with language impairments have still not mastered the basic rules of the English language (reading and writing). In our discussion of the Croatian version of the test, we mentioned rhyme and its

connection to phonological awareness. Most children with language impairments did worse on that task than control groups, which means they have problems distinguishing between phonemes, especially in the English language. Reading comprehension was also problematic for most of the children with language impairments since they had problems reading the text in the English language and therefore, they had problems answering questions about the text.²⁶

Both control groups did better in all tasks in the English language, which proves the hypothesis that children with language impairments will have bigger problems with English. Also, the presupposition that older children with language impairments will not be much better than younger children was proven as well since they did worse than younger participants on some tasks and better on others. Furthermore, the results of control groups show that tasks were not too hard for children to solve or understand.

As a final point, there is one factor not present in the tables that was observed throughout the research, and that is the time needed for children with language impairments to solve both tests. Children with language impairments, both younger and older, needed 45 minutes to solve both tests, whereas the control groups took only 10 to 15 minutes. This clearly shows the difficulties children with language impairments must face in everyday life as well as in school environment, and it is obvious that problems in the first language shift to foreign/ second language.

The two tables that follow present between-group comparisons. To determine the differences between groups, an independent sample t-test has been used via SPSS. Table 3 shows the comparison between groups 1 and 3. It can be clearly seen that the differences between groups are statistically significant ($p \leq 0,05$) on every task except for rhyming and questions regarding reading comprehension. Children from both groups were equally good on the rhyming task. This may be in opposition with authors (Blaži, Buzdum, Kozari–Ciković (2011) and Lenček, (2012)) that claim rhyming poses problems for children with learning disabilities because it demonstrates the children's phonological awareness. The reason for a good overall result in the task may be the fact that some participants with language impairments outdid their colleagues and provided the maximum of correct answers. In reading comprehension question task the difference was also not statistically significant, the reason being that the participants were allowed to look back at the text and search for answers.

²⁶ For more information about these two tasks, see p. 24 (Table 3).

However, children with language impairments took more time to do that and had problems understanding questions in the English language.

GROUPS 1 AND 3	Levene's Test for Equality of Variances		t	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
	F	Sig.					Lower	Upper
	engčituk	2,213					,159	-9,304
engčitlruk	4,605	,050	-7,304	,000	-6,125	,839	-7,923	-4,327
engpamauk	,438	,519	-3,345	,005	-2,875	,860	-4,719	-1,031
engpambuk	,046	,833	-3,062	,008	-2,875	,939	-4,889	-,861
engpisauk	36,842	,000	-3,259	,006	-4,500	1,381	-7,461	-1,539
engpisbuk	3,335	,089	-3,862	,002	-4,375	1,133	-6,805	-1,945
engprvosuk	5,645	,032	-4,646	,000	-5,250	1,130	-7,674	-2,826
engzadnjesuk	,100	,756	-8,019	,000	-5,125	,639	-6,496	-3,754
engrimauk	13,464	,003	-2,393	,031	-1,125	,470	-2,133	-,117
engrečuk	,197	,664	-6,277	,000	-2,750	,438	-3,690	-1,810
engpitanjauk	10,844	,005	-2,837	,013	-1,625	,573	-2,854	-,396

Table 3. T-test between groups 1 and 3

Table 4 illustrates the comparison between groups 1 and 2 and clearly shows that differences between groups are not statistically significant ($p \leq 0,05$) in any of the tasks.

Both younger and older children with language impairments provided similar test results. This proves the hypothesis that errors and difficulties persist throughout elementary school education.

GROUPS 1 AND 2		Levene's Test for Equality of Variances		t	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.					Lower	Upper
engčítuk	Equal variances assumed	,914	,367	,258	,803	,250	,968	-1,983	2,483
engčíttruk	Equal variances assumed	2,400	,160	-,494	,635	-,750	1,518	-4,251	2,751
engpamauk	Equal variances assumed	,160	,700	-,203	,845	-,250	1,234	-3,096	2,596
engpambuk	Equal variances assumed	2,857	,129	-,964	,363	-1,250	1,296	-4,239	1,739
engpisauk	Equal variances assumed	1,333	,282	,118	,909	,125	1,060	-2,319	2,569
engpisbuk	Equal variances assumed	2,613	,145	-1,817	,107	-2,375	1,307	-5,390	,640
engprvosuk	Equal variances assumed	1,851	,211	,330	,750	,750	2,271	-4,486	5,986
engzadnje	Equal variances assumed	,533	,486	-,470	,651	-,500	1,064	-2,954	1,954
engrimauk	Equal variances assumed	1,641	,236	-,775	,461	-,750	,968	-2,983	1,483
engrečuk	Equal variances assumed	,145	,713	1,811	,108	1,375	,759	-,375	3,125
engpitanjuk	Equal variances assumed	1,440	,264	-,211	,838	-,250	1,186	-2,985	2,485

Table 4. T-test between groups 1 and 2

Finally, a T test for comparison between groups 2 and 4 was not used because the sample was too small. However, we are able to discuss and describe this comparison and come to a conclusion. Participants from the control group provided more correct answers in the test and even said the test was too easy for them. Participants with language impairments, on the other hand, had more problems solving the test, especially the one participant with

dyslexia. For example, this participant had problems understanding instructions for each task and had a lot of problems reading the text in the English language. He got 0 out of 5 in the rhyming task, but realised he misunderstood the task completely and redid it with only one mistake. Finally, the two participants with language impairments overall took more time to solve the test.

The research proved the hypotheses mentioned at the beginning of this thesis – children with language impairments perform worse in both Croatian and English tests with more mistakes in the English test than in the Croatian one; and younger and older children with language impairments do not differ significantly in their test results which means the problems persist over time. The time needed for these children to solve both tests seems to be an important factor of language impairment because it also influences their success in school. The same thing has been noted in the research conducted by Lenček and Anđel (2011:7).

Nevertheless, these data must be interpreted with caution because of a rather small sample. The fact that it was hard to find more participants with dyslexia in order to be able to make generalisations may be the downside of this research. That is why future studies on the topic are recommended.

6. CONCLUSION

Language impairments seem to be widely discussed and researched nowadays, and that is not surprising since more and more children get diagnosed with them. However, there are not many studies that deal with foreign language learning in children with language impairments and that was the main motive for this study. Ten participants with learning disabilities and ten participants from the control group were tested in both the Croatian and the English language to prove or dismiss three hypotheses. All three hypotheses were proven – children with language impairments make more mistakes in both tests; children with language impairments have more mistakes in the English language than in Croatian; younger and older children with language impairments made similar mistakes and took the same amount of time to solve the tests. The differences between the Croatian and the English language seem to be the reason for antagonism towards the English language and subsequently for making more mistakes. Issues dealing with language impairments have been discussed and described, and the results illustrated the difficulties children with language impairments face in their school environment. One of the most important issues seems to be

the amount of time these children need to solve a particular task. Studies like this are therefore necessary to raise awareness about these issues and to help both teachers and parents.

Children with language impairments require specialised instruction in schools and sometimes even therapy to help them minimise the errors and difficulties they face in school, as well as in their everyday life.

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National Centre for Learning Disabilities: <http://www.nclld.org/types-learning-disabilities/what-is-ld/learning-disability-fast-facts> (11th Aug 2013)

The National Dissemination Centre for Children with Disabilities:
<http://nichcy.org/disability/specific/speechlanguage#def> (10th Aug 2013)

8. APPENDIX 1
TEST – CROATIAN VERSION

1. ČITANJE RIJEČI

broš

okno

miš

stablo

knjižara

svijećnjak

naranča

anomalija

skulptura

zajednički

računovođa

2. ČITANJE LAŽNIH RIJEČI

tolpa

tedev

plaku

plistvorka

asačuvis

plocopak

krotkar

lakašteliz

3. RADNA MEMORIJA

A) JEDNOSLOŽNE RIJEČI

nož

panj

žir

ranč

miš

krov

pas

džip

rob

glad

B) VIŠESLOŽNE RIJEČI

more

glava

sestra

svjetionik

država

formula

arhitektura

moderno

krasopis

hladovina

4. FONOLOŠKA SEGMENTACIJA

A) BEZ PRVOG GLASA

srce

livada

anđeo

pramen

voditelj

uho

želja

majka

stolica

dalekozor

B) BEZ ZADNJEG GLASA

tenk

odjeća

student

čavao

prst

dimnjačar

kirurg

fakultet

zajednica

kaput

5. RIMA

zov kov lav

luk muk rak

fin dan san

krava prava koliba

leća sreća meta

6. PONAVLJANJE REČENICA

Jučer je padala jaka kiša pa su učenici pokisli na putu do doma.

Neke djevojčice vole igrati nogomet s dečkima.

Otac je kupio veliku količinu hrane za sutrašnje rođendansko slavlje.

Čekao je savršeni trenutak za objavu sretne vijesti.

Bilježnica mojeg mlađeg brata puna je zanimljivih crteža.

7. ČITANJE I RAZUMIJEVANJE

Na klupi pod kestenom sjedio je neki dječak. Glavu je spustio na ruke prekrižene na naslonu klupe. Pokraj njega je na klupi bila putna torba. Miron mu priđe i nekoliko trenutaka postaja pokraj klupe. Dječak ga nije primijetio. I dalje je držao glavu spuštenu na prekrižene ruke. S vremena na vrijeme mršava bi mu se ramena potresla od plača. Miron mu blago dotakne rame.

- Zašto plačeš? – zapita ga.

Dječak se trgne i podigne glavu, okrenuvši prema njemu suzama umrljano lice. Oči mu bijahu krupne i plave, najplavlje koje je Miron vidio u nekog dječaka; kosa mu smeđa i nakostriješena, lice blijedo, a nos tanak, ušiljen. Gornja mu je usna po svojoj prilici nekad bila rasječena, još se vidio ožiljak. Gledao je Mirona ništa ne govoreći.

- Što ti je, zašto plačeš? – ponovi Miron.
- Ništa – šmrcne dječak i gornja mu usna malo zadržće.
- Kako ništa? – Miron sjedne pokraj njega. – Je li te netko istukao?
- Nije – odmahne dječak glavom.
- Ili te ostavila djevojka? – pokuša Miron okrenuti na šalu, kako bi ga malo razvedrio.

Dječak na ovo ne reče ništa; očito je posljednje Mironovo pitanje shvatio kao zafrkanciju.

1. Tko je sjedio na klupi pod kestenom?

2. Čime je bilo umrljano dječakovo lice?

3. Kako se zove lik koji je prišao uplakanom dječaku?

4. Pokušaj opisati uplakanog dječaka.

9. APPENDIX 2
TEST: ENGLISH VERSION

1. ČITANJE RIJEČI

bed

shoe

good

fire

eight

expensive

impossible

aeroplane

unimportant

2. ČITANJE LAŽNIH RIJEČI

doise

gead

pive

tood

soat

kear

pight

bice

gope

heaf

3. RADNA MEMORIJA

A) JEDNOSLOŽNE RIJEČI

smell

worst

really

choose

straight

twelve

part

cheap

plant

throw

science

quiet

lunch

B) VIŠESLOŽNE RIJEČI

animal

somebody

computer

disappear

seventeen

enormous

continue

cinema

company

beautiful

impossible

4. FONEMSKA SEGMENTACIJA

A) BEZ PRVOG GLASA

run

dog

boat

ride

danger

time

house

king

beach

pillow

B) BEZ ZADNJEG GLASA

sing

soccer

guitar

skirt

kitchen

heart

leaf

six

bus

flower

5. RIMA

run

west

rest

time

white

write

rain

which

rich

mouse

house

learn

wing

ring

right

6. PONAVLJANJE REČENICA

My dog can run very fast.

I play the guitar in a rock band.

Jenna listened to music all day yesterday.

The doctor saved three very sick people today.

Students like mathematics because the teacher is great.

7. ČITANJE I RAZUMIJEVANJE

Željko went to the travel agency to get some information about his journey to England. He wanted to go by plane but it was too expensive so he is going by train. It is a long journey, but he is going to see several foreign countries and cross the Channel by boat.

Željko packed his suitcase yesterday morning. His mother had to help him because he is a bad packer. He put his shirts in first and then his shoes on top. His mother had to iron his shirts again. As it is rather wet and cold in England he took some warm clothes and two pairs of shoes. Lastly, he packed a present for his friend Paul.

The journey was rather long, but Željko enjoyed it very much. He was looking out of the window most of the time.

1. Where is Željko going?

2. Is Željko traveling by plane or a train?

3. Who helped Željko pack his suitcase?

4. Did Željko enjoy his journey?
