

READING ADAPTED TEXTS OF YOUNG ADULT FICTION AND READING MOTIVATION OF PUPILS WITH SPEECH AND LANGUAGE DISORDERS

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The research studied how reading of adapted young adult fiction affects reading motivation of Slovene elementary school pupils with speech and language disorders. The research involved 50 pupils from the last three years of elementary school. Typically, pupils with these disorders do not enjoy reading during adolescence, as texts that would be suitable to their age and interests in terms of content are most often incomprehensible or linguistically too demanding for them. For the purpose of the research, we adapted two complete works of Slovene literature into an easy-to-read form (passages version in easy language). Pupils intensively read the adapted texts and also looked at the originals. This had positive effects both on their comprehension of the literary texts as well as their reading motivation. The results of the research demonstrated that adapted texts positively influence the reading motivation of pupils and their perception of literature.

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1 Introduction

Speech and language disorders are a specific group of disorders that are hard to define precisely. In English-speaking contexts, the expression speech and language disorders which is used in Slovenia, is mostly covered by terms such as developmental language disorder - DLD, specific language impairment - SLI, language delay, or developmental dysphasia. Persons with speech and language disorders are often overlooked, as these disorders are not immediately noticeable. In appearance and in initial contact, these people are entirely normal individuals, but their disorder hinders their everyday life, especially within the educational process. A broad range of disorders are classified under the speech and language disorder label, both in terms of occurrence and cause, but the common difficulty most people with these disorders have is in communication. Deficiencies are especially reflected in the field of reading and written communication (Bishop, 2014).

The specific developmental deficiency is linked to the period of language acquisition in which the child's abilities in linguistic understanding and/or expression are significantly below the levels expected for their age. When a person grows up, their problems, which previously appeared mainly in the educational process, spread to other areas of their life (Botting & Conti-Ramsden, 2008; Snowling et al., 2006).

In Slovenia, pupils with speech and language disorders are educated either in educational programmes with adapted implementation and additional professional help in mainstream elementary school or in institutions with an adapted educational programme with equivalent educational standards for children with speech and language disorders. Due to the nature of their disorders, these pupils find reading and comprehending literary texts hard, and this normally keeps their reading literacy and reading motivation as one of its components at a very low level.

Reading motivation is affected by a number of factors that encourage a person to read, give them a sense of purpose, and influence the individual into wishing to repeat the reading experience (Pečjak & Gradiškar, 2002). With any motivation for a certain activity, it is important that the individual feels competent in it, so adapting reading challenges to the abilities of each individual pupil is of key importance. Not adapting reading challenges to the pupils' abilities has negative consequences both on pupils who are less competent readers as well as those who are competent

(Bošnjak and Košir, 2020). Reading motivation is an integral part of overall reading effectiveness and is closely related to its development (Baker & Wigfield, 1999; Gambrel et al., 1996; Wigfield & Girthrie, 1997).

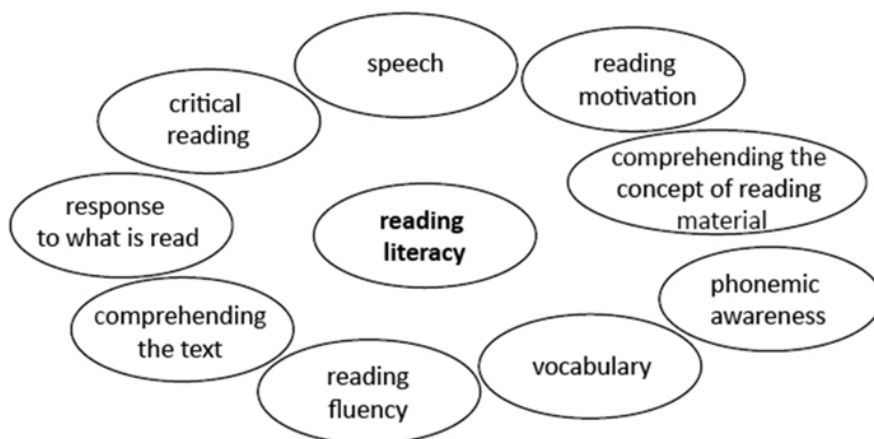


Figure 1: Components of reading literacy
(Haramija, 2020, p. 2)

Among pupils with speech and language disorders who are included in Slovenia's adapted educational programme of nine-year elementary education with equivalent educational standards there are also many pupils with dyslexia. Certain parallels can be drawn between the two disorders (Adolf, 2020). Both often have problems in achieving goals and standards of knowledge set out in the school curriculum. Studies in other countries also indicate this (Bridges et al., 2023; Kurz et al., 2012). Both cases involve pupils who, due to the nature of their deficiencies or disorders, are often unable to recognise the satisfaction that can come from reading a longer literary text on their own. Their comprehension of literary texts is most often limited by the difficulties they have in the area of recalling words and remembering new and abstract expressions. At the same time they find it hard to comprehend complex compound sentences and can find the word order in literary texts confusing (Vizjak Puškar, 2017). They also have difficulties in understanding humour, which is an important element of young adult (YA) literary texts. That there are substantial differences in understanding humour between neurotypical individuals and individuals with dyslexia has also been demonstrated by research (Semrud-Clikeman & Glass, 2008; Wanga et al., 2022).

Pupils with speech and language disorders often have difficulties with picking up vocabulary, which affects many aspects of life even in adulthood. Research (McGregor et al., 2013, Leitão & Fletcher, 2004) has shown that the range of vocabulary significantly affects the acquisition of academic knowledge, as limitations are reflected in pupils' limited abilities in deciphering the meanings of words and thus also the comprehension of what is being read. More often than their peers without recorded disorders, children with speech and language disorders have difficulties with phonological awareness and semantics (Lowe et al., 2022). All this affects their reading comprehension and as a result also their reading motivation. They put a great deal of effort into reading but are at the same time not able to decipher those elements of the literary work that would generally arouse interest and positive emotions in them.

By adapting texts to easy-to-read formats, we enable these individuals to have literary-aesthetic experiences that would otherwise remain unattainable to them. Pupils with speech and language disorders belong to the group of people who need adapted texts on an ongoing basis. Only with an appropriate gradual approach to a literary work can they also attempt the more demanding original. In her work on the didactics of literature in Slovene lessons, Boža Krakar Vogel points out that 'Abridgement or adaptation of literary texts is entirely justified for readers with reading difficulties such as for example readers with disruptions in their emotional development or those with dyslexia.' (Krakar Vogel, 2020, p.185)

The key objective of the didactics in YA literature is to equip pupils for creative communication with the text. This can be achieved by increasing their receptive capacities by enabling pupils to independently read and compose textual meanings. It is essential to enable pupils to have independent and direct contact with the text (Kordigel Aberšek, 2008). Our experiences show that with pupils with speech and language disorders this goal is achievable only with the help of high-quality adapted texts.

Easy-reading abridgements have proved to be a very suitable form of literary adaptations for pupils with speech and language disorders. The first guidelines were set out in the Guidelines for Easy-to-Read Materials (2007, revised 2010) prepared by the International Federation of Library Association (IFLA):

There are two slightly different definitions of the term "easy-to-read". One means a linguistic adaptation of a text that makes it easier to read than the average text but which does not make it easier to comprehend; the other definition means an adaptation that makes both reading and comprehension easier. (Guidelines ..., 2010, p. 3)

The United Nations Convention on the Rights of Persons with Disabilities stipulates equal opportunities for all people regardless of their disabilities. Every individual must be guaranteed access to education and information in a form that is comprehensible to them. This was also the reason why recently guidelines have begun to be developed on forming language that could also be comprehensible to groups of people with reading and comprehension difficulties. Every individual needs to have the choice between information in simplified or standard language that they can choose between according to their needs. This is why it is essential that the easy language form is an accessible, neutral and non-stigmatising option for all communication in society (Lindholm and Vanhatalo, 2021).

Both easy-to read and easy language texts began to develop out of a needs or necessities highlighted by users. The movement began developing simultaneously in numerous countries over the last decade, precisely because of the need for social inclusion of people with reading difficulties. Easy language and easy-to-read texts can thus serve as a bridge between the standard and even professional language and individual target groups. A number of studies in this field unanimously point out the need for simplified texts for individual target groups (Bock et al., 2017).

With the field of easy-to-read material and easy language developing rapidly in recent years, experts are trying to standardise terminology, making it clear and comprehensible to the general public (Lindholm and Vanhatalo, 2021, pp.11-12):

The expression Easy Language is more of an umbrella term for different language varieties than the name for one uniform concept. /.../ Easy Languages have been adapted in terms of content, vocabulary and structure to make them more readable and comprehensible. They are aimed at people who find it difficult to understand standard language. Although the term Easy Language usually refers to various kinds of texts, spoken interactions can also be based on its principles. The term easy to read and understand is used by the UN Convention on the Rights of Persons with

Disabilities (CRPD) in conjunction with inclusion and accessibility, and has equivalents in many European countries and languages.

The chapter then presents the research with which we tested whether we can raise the reading motivation of pupils with speech and language disorders through reading adapted literary texts.

2 Methods

For the purpose of the research (Vizjak Puškar, 2024), we adapted two YA literary texts, the tale by Fran Levstik *Martin Krpan* and the novel *Sprout - From Lanky to Legendary* by Primož Suhodolčan. *Martin Krpan* (*Martin Krpan z Vrha*) by Fran Levstik is one of the most important works of the Slovene literary cannon. It was first published in 1858 in a literary journal; in 1917 it was first published in book form with illustrations by Hinko Smrekar, in what is considered the first original Slovene picture book. Primož Suhodolčan is a contemporary Slovene author. His works are marked with humour, which is especially expressed at the verbal level. In his works he uses colloquial language, slang, dialect expressions, and also many made-up words and metaphoric comparisons, which make his work interesting to young readers.

These two works were chosen on the basis that they are both representative works of Slovene YA literature and are interesting in content and suitable for pupils in their third educational period, but are, in their originals, due to their linguistic features, too demanding for pupils with speech and language disorders. The former due to the archaic vocabulary and syntactic structures, the latter due to its slang, dialect expressions and play on words. Comprehension of these elements, which are key to understanding and experiencing literary texts, is very limited with pupils with speech and language disorders.

An application for approval of the research was submitted to the Research Ethics Commission of the Faculty of Arts, University of Maribor, which approved it on June 10, 2021. Before the start of the research, necessary consents for the participation of pupils in the study were also obtained.

At first we adapted the texts by ear, taking into account the rules of easy-to-read, both in terms of design and language, as described in the manual *Easy-to-Read for Experts* (Haramija and Knapp, 2019). This was followed by test readings. The working version of the text was given to a group of test readers. The initial contact of the test readers with the text showed that certain words and phrases were still too demanding. These words were replaced with others and we also included certain grammatical simplifications. What was deliberately left in the text were a few stylistic elements that we believed were comprehensible to the target audience, pupils with speech and language disorders.

For the next stage of our research, we also adapted a passage from each text into easy language. This means that we simplified the text, replaced archaisms, slang and dialect phrases with literary synonyms, and simplified the syntactic structure of the tale. We chose passages that, based on previous research, we judged to be the ones pupils remembered least after reading the entire text in its easy-to-read adapted version. While we were able to adapt the complete texts to the easy-to-read version, we only adapted the passages that we discussed with the pupils during the research process into easy language.

The research was conducted during Slovene language and communication lessons in the 2022/2023 school year, in schools that offer the adapted educational programme of nine-year elementary education with equivalent educational standards for children with speech and language disorders. The research included 50 pupils from the third educational period (EP) who were part of this adapted programme. Before the start of the research, we obtained the necessary parental consent to the pupils' participating in the research.

According to data obtained from heads of the institutions that offer the abovementioned programme, 115 pupils from the third EP were schooled in the programme during the 2022/2023 school year. The research sample thus includes approximately 43% of all pupils included in the programme in their third EP. This involves pupils in years 7., 8. and 9., who are included in the programme on the basis of assessments on educational guidance. The programme includes mostly pupils with moderate to severe speech and language disorders and only the occasional pupil with milder ones. Beside their speech and language disorders, these pupils also have associated impairments, among them the most common are deficiencies in specific

areas of learning, among which is also dyslexia. The same individuals participated in all stages of the research. If any of the pupils were absent on the day the research was conducted, the research task was conducted with them at a later date. Pupils were not divided into an experimental and control group, and results were also not interpreted according to the age or gender of individuals. Despite this, for the sake of clarity, we present a more detailed description of the sample group. The average age of participating pupils was 14. The sample group included 15 (30%) girls and 35 (70%) boys.

When it comes to age, the pupils included in the abovementioned educational programme are a very heterogenous group, as some pupils had postponed schooling, some had to repeat classes or were included in the programme later. In each class, there might thus be pupils with an age difference of up to three years. Pupils also differ in terms of the disorders based on which they were included in the programme. Pupils with speech and language disorders are classified by their severity, from mild, moderate, serious, to severe. Participating in our sample group were mostly pupils with serious to severe speech and language disorders, often also with other associated disorders.

In this paper we present only part of a broader study in which we compared how two different texts were experienced and understood, first in their original form, then in an adapted versions before finally once again returning to the original form. We studied the advantages and disadvantages of each type of adapted texts and compared how pupils responded. Beside this, we also compared their reading motivation at the start and at the end of the school year. The course and the results of this part of the research are presented below.

To evaluate reading motivation, we used the existing Reading Motivation Questionnaire for Older Students (after Pečjak et al. 2006). This is essentially a questionnaire that author Sonja Pečjak and her colleagues adapted from the 1997 questionnaire by Wigfield and Guthrie. The adapted questionnaire contains 52 statements. Pupils chose on a scale of 1 to 5 to what extent each statement is true for them. The reading motivation questionnaire for older pupils tests four factors of reading motivation:

- factor 1 – external motivation for reading,

- factor 2 – interest and reading in a social context,
- factor 3 – inclusion and immersive reading,
- factor 4 – perceiving reading as a difficult activity.

Due to the considerable length of the questionnaire and the fact that certain terms are not easily understood by pupils with speech and language disorders, we filled out the questionnaire by reading out individual statements to pupils and explaining each one, as this was the only way we could ensure that pupils understood the question and were answering honestly. We summed up the values of each of the four factors for each pupil. Because the research did not focus on the progress of the individual but the progress of the entire group, we calculated the mean average of the entire group and compared it to the Slovene national average.

Pečjak et al. (2006) used the T-scale as a basis for developing norms, converting each individual's result to the T-scale using the following formula:

$$T = \left[\frac{(x_i - M)}{SD} \right] \cdot 10 + 50$$

In this formula, x_i is the raw score on an individual factor, M is the arithmetic mean, and SD is the standard deviation of the factor for the target group. The T-score indicates where an individual student stands within the population of their peers (Pečjak et al., 2006, p. 84).

The same questionnaires were completed in the same way at the start and at the end of the school year, first in September 2022 and then in June 2023. This way we could verify the notion that with adapted literature we can increase the reading motivation of pupils with speech and language disorders and positively influence the way they experience literary texts.

Between the initial and final testing of reading motivation, the research was conducted in two segments. The first segment involved discussing Fran Levstik's *Martin Krpan*, the second segment discussed Primož Suhodolčan's *Sprout - From Lanky to Legendary*. Each segment had five phases.

A graphic representation gives a clearer idea of the research progress.

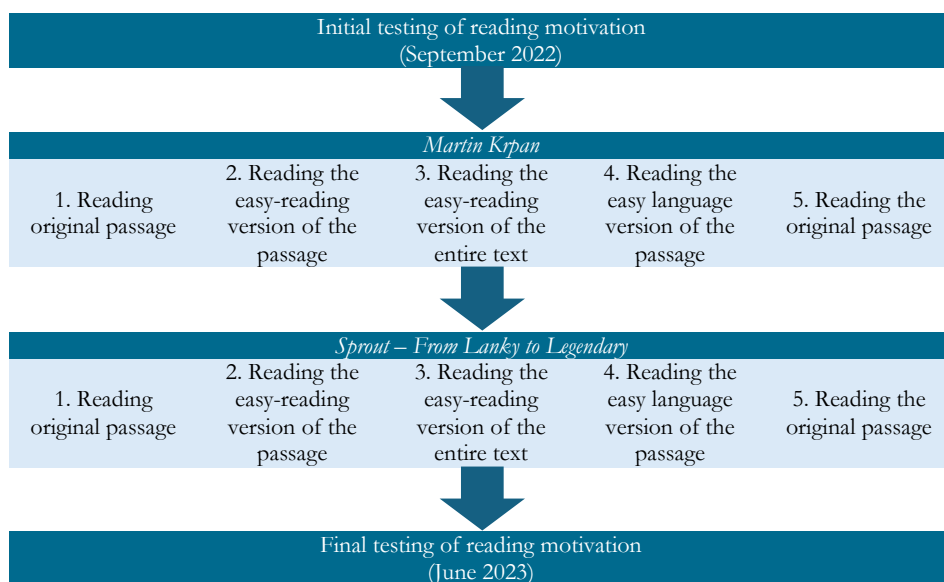


Figure 2: Graphic representation of the progress of the research

In the **first phase**, we gave pupils passages of the original texts to read. This was followed by an analysis of the degree of comprehension of what was read. This was carried out through individual conversations with pupils. Pupils were asked a few questions which did not influence their comprehension or lead them to specific answers. Through this we wished to gain a clear insight into what pupils actually understood and to what degree. The analysis was conducted with the help of questions that were adapted to each pupil and their response during this discussion, also taking into account spontaneous comments and observations by pupils.

In the **second phase** of the research, pupils were given the same passage in an easy-to-read version. This was followed by individual conversations and comparing the comprehension of the adapted version with the original. Once again, we checked comprehension with questions, noting the answers and comments of each of the participating pupils. Initially we had planned to give pupils the second passage in an easy-reading version which was in terms of contents a continuation of the first (original) passage, but after analysing the comprehension of the original passage, we

decided to use the same passage in terms of contents, as comprehension during the first phase was relatively poor with most students.

In the **third phase** of the research, pupils read the entire texts in the easy-to-read version. The texts were read at school during Slovene and communication lessons. After reading, they individually filled out questionnaires with which we verified their comprehension and recognition of certain elements of the texts as well as their feelings while reading and their experience of the longer text. Their responses to the texts were distinctly positive and comprehension of the texts was very good. This phase was followed by a break.

In the following two phases, pupils were once again given passages to read. In the **fourth phase** they read a easy language passage and in the **fifth phase** a different passage from the original text. Based on the fact that the pupils had already read both texts in their entirety when they read the easy-reading version, they already knew the content of both passages. For this part of the research we chose passages that pupils paid least attention to in the third phase but which are full of comic elements. After reading each of these passages, pupils once again answered a set of questions related to the passages read. In this phase of the research we were testing the theory that we can, through different levels of adapted texts, gradually prepare pupils with speech and language disorders for reading more demanding original literary texts.

3 Results

Presented below are the group results at the start and the end of the school year for each factor individually and these are compared with the average, which is based on T-values presented in the guide to measurement and development of reading motivation in schools (Pečjak et al. 2006). T-values up to 40 points mean a below average result, values between 40 and 60 points are an average result, valued above 60 points indicate above averageness. Because boys present a majority of our sample and considering that within this research we are not interpreting the results according to gender, we used the T-distribution table given for boys (Pečjak et al. 2006: pp.85–87).

3.1 Initial testing of reading motivation

Initial testing of reading motivation was conducted in September 2022. The questionnaire was filled out by 50 pupils. The results are given in the table below.

Table 1: Initial testing of reading motivation

Factor	Sample size	Raw score average	Standard deviation	Minimum points	Maximum points	T-values
1 – external motivation for reading	50	30.8	10.22	12	54	40
2 – interest and reading in a social context	50	37.6	12.12	20	65	39
3 – inclusion and immersive reading	50	30.7	9.22	15	56	38
4 – perception of reading as a difficult activity	50	24.4	7.40	10	37	52

On the basis of the raw score average and the corresponding T-values, we can establish that in September 2022 the reading motivation in pupils with speech and language disorders was below average or in the lower margins of average in the first three factors. Only in the fourth factor did pupils on average reach a median result based on T-values. Considering the high statistical deviation in all factors, we note that the values are very dispersed.

Factor 1: In establishing the extent of **external motivation for reading**, the arithmetic mean or raw score average translated into T-values is on the extreme lower margins of the average. Taking into account standard deviation, most results have a raw score between 20.58 and 41.02, which corresponds to a T-distribution between 31 and 49. This means that the sample is very dispersed. This is also evident in the large difference between the minimum and maximum number of points. The minimum in T-value is 29, which is well below average, while the maximum T-value is 61, which is slightly above average.

Based on the results, we can conclude that the pupils in our sample express mostly below average to low average external motivation for reading. Praising them while they read means a great deal to them, they like being successful at reading but we assume that the situations where they are externally motivated for reading are rare.

Factor 2: When determining the **interest in reading in a social context**, the raw score average converted into a T-value, is at the upper limits of below-average. Taking into account standard deviation, most results have a raw score between 25.48 and 49.72, which amounts to a T-distribution between 29 and 49. For this factor the sample is also very dispersed. The difference between the minimum and maximum points is large. The minimum T-value was 25, which is well below average, while the maximum T-value was 61, which is once again just above average.

The interest in reading within a social context is in the upper margins of below average. This means that reading is not a popular activity. Pupils rarely talk about reading with their peers or family and do not often reach for a book on their own initiative.

Factor 3: In the **inclusion and immersive reading** factor, pupils on average reached the lowest results, something which was expected, considering that they need to put a great deal of effort into reading which most often deprives them of the cognitive-aesthetic experience and as a result also of getting absorbed into what they are reading. The raw score average converted into a T-value is at the extreme lower margin of the average. Once standard deviation is taken into account, the raw score for most results is in the range between 21.48 and 39.92, which corresponds to a T-distribution from 29 to 45. This means that the sample is once again very dispersed. The minimum T-value is 24, which is well-below average, while the maximum T-value of 60 is on the lower level of above average.

Factor 4: In determining the **perception of reading as a difficult activity**, the raw score average converted into a T-value is within the average field. Taking into account standard deviation, the raw score for most results is between 17 and 31.8, corresponding to a T-distribution from 38 to 67. This once again means that the sample is very dispersed. There is also a large difference between the minimum and maximum points. The minimum in T-value is 25, which is well below average, while the maximum T-value is 77, which is well above average, and is in fact the highest possible result in this factor.

The results of the factor **perception of reading as a difficult activity** is surprising at first sight. Here pupils reached an average result (T-value of 52), so they perceive reading as an averagely difficult activity. The higher the number of points, the more

difficult pupils see the activity of reading. On average, pupils reached a T-value of 52, which is in the upper half of average. The highest T-value was 77, which indicates that individual pupils indeed perceived reading as a very difficult activity.

When interpreting the results, we need to bear in mind that the research sample are pupils with speech and language disorders who are included in the adapted programme. Their reading, and as a result also their motivation for reading, are difficult to compare to the reading of their peers without evident disorders. Pupils find it difficult to evaluate their reading as they do not compare their reading with peers without evident disorders, and beside this, often reach for texts that are more appropriate for a younger population. As a result they evaluate their reading uncritically. Another fact that also needs to be taken into account is that the adapted programme these pupils follow also includes adapted texts. Their answers were thus most probably formed on the basis of reading adapted texts. The questionnaire did not focus on reading literary texts but on reading in general. Despite this, the results are revealing in themselves, especially when taking into account the big difference between the minimal and maximum number of points.

Below we will interpret in the same way the questionnaire we filled out with the pupils at the end of the school year.

3.2 Final testing of reading motivation

The final testing of reading motivation was carried out in June 2023. In the period from September 2022 to June 2023, pupils read intensely and participated in the research. They independently read whole books in their easy-reading version. Our hypothesis was that these activities will have a positive effect on the pupils' reading motivation. The questionnaire was completed by 50 pupils. The results are presented in the table below.

At the end of the school year, the combined results of the tested pupils are within the average margins in all factors.

Factor 1: The raw score average converted into a T-value is within the average range when it comes to **external motivation for reading**. Taking into account standard deviation, the raw score of the majority of results falls between 28.52 and 53.28,

which corresponds to a T-distribution between 38 and 51. This means the sample is still very dispersed. Proof of this is also the large difference between the minimum and maximum points. The minimum T-value is 26, which is well below average, while the maximum T-value of 67 is slightly above average.

Table 2: Final testing of reading motivation

Factor	Sample size	Raw score average	Standard deviation	Minimum points	Maximum points	T-values
1 – external motivation for reading	50	40.9	12.38	16	60	49
2 – interest and reading in a social context	50	44.6	11.99	24	81	45
3 – inclusion and immersive reading	50	39.4	10.29	20	60	45
4 – perception of reading as a difficult activity	50	18.7	6.00	9	33	40

According to the results of the final testing, pupils demonstrate average external motivation for reading. Praise while reading means a great deal to them, they like being successful at reading and we can assume that, over the last school year, they had more situations that had a positive influence on external motivation.

Factor 2: The raw score average converted into a T-value is also average in determining the **interest in reading in a social context**. Taking into account standard deviation, the raw score of most results is within the range between 32.7 and 56.59, which corresponds to a T-distribution between 35 and 54. This means the result is very dispersed. This is also evident from the big difference between the minimum and maximum points. The minimum T-value is 28, which is well below average, while the maximum T-value of 73 is well above the average or in the upper range of the above average scores.

Interest in reading in a social context is this time average with a very dispersed range. This means that reading is a partially popular activity with pupils. They occasionally talk about reading with their peers and at home, they also occasionally read on their own initiative.

Factor 3: With the **inclusion and immersive reading** factor, pupils on average reached a similar score as in the second factor. The raw score average converted into T-values is within the average range. Taking into account standard deviation, most of the raw results fall within the range between 29.11 and 49.69, which corresponds to a T-value range from 36 to 54. This means that the sample is once again significantly dispersed, also indicated by the large difference between the minimum and maximum points. The minimum T-value is 28, which is well below average, while the maximum T-value of 63 is above average.

Factor 4: The raw score average converted into a T-value in establishing **perception of reading as a difficult activity** was on the extreme low margins of average. Taking into account standard deviation, most of the results fall within the raw-score range between 12.7 and 24.7 points, which corresponds to a T-value from 31 to 54. This means that in this factor the sample is also dispersed, evident from the large difference between the minimum and maximum points. The minimum T-value was 23, which is well below the average and at the same time the lowest possible number of points, while the maximum was 69 points, an above average result.

4 Discussion

Based on the initial and final testing of reading motivation, we analysed the change or differences in reading motivation of the complete sample of fifty pupils with speech and language disorders. The comparative results are presented in the table below. We compared the arithmetic means of the initial and final testing and calculated statistical significance and Cohen's d-value. The results are presented in the table below and interpreted in the following section.

Table 3: Comparison of the average T-values of the initial and final test of reading motivation

		M	SE	t	df	Significance (2-tailed p)	Difference in arithmetic means	Standard error of the difference	Cohen's d
Factor 1	Initial	39,78	1,35	–	98	< 0,001	–9,47	2,12	–0,89
	Final	49,24	1,63	4,46					
Factor 2	Initial	38,88	1,36	–	98	0,005	–5,58	1,92	–0,58
	Final	44,46	1,35	2,90					
Factor 3	Initial	37,36	1,14	–	98	< 0,001	–7,61	1,71	–0,89
	Final	44,97	1,27	4,44					
Factor 4	Initial	52,74	2,00	–	98	< 0,001	11,09	2,58	0,86
	Final	41,65	1,62	4,29					

Factor 1: In terms of external motivation, students achieved higher scores at the end of the school year ($M = 49.24$, $SE = 1.63$) than at the beginning ($M = 39.78$, $SE = 1.35$). The difference in arithmetic means (-9.47) is statistically significant ($t(98) = -4.46$, $p < 0.001$), and the effect was substantial ($d = -0.89$). On average, the external motivation for reading increased by over 9 T-points across the entire sample. This indicates that, compared to the general average, it rose from a borderline average value to a clear average level. The result is encouraging and suggests that students received positive reinforcement through the study and intensive reading of adapted texts which was reflected both in their reading success and in their external motivation for reading.

Factor 2: In terms of interest in reading within a social context, students achieved higher scores after reading adapted texts ($M = 44.46$, $SE = 1.35$) than before ($M = 38.88$, $SE = 1.36$). The difference in arithmetic means (-5.58) is statistically significant ($t(98) = -2.90$, $p = 0.005$), and the effect size was moderate ($d = -0.58$). The increase in interest in reading in a social context shows the smallest average improvement; nevertheless, we observe a shift from a below-average result recorded at the beginning of the school year to an average result recorded at the end. This is also seen as a positive step toward improving reading motivation and interest in reading.

Factor 3: Students achieved higher scores after the study For the factor of engagement and immersion in reading ($M = 44.97$, $SE = 1.27$) than at the beginning of the school year ($M = 37.36$, $SE = 1.14$). The difference in arithmetic means (-7.61) is statistically significant ($t(98) = -4.44$, $p < 0.001$), with a large effect size ($d = -0.89$). Engagement and immersion in reading increased by the end of the school year, moving from a below-average range to an average level. We can conclude that students were more easily engaged and immersed in reading with the help of easy-to-read texts. Based on their positive responses to the texts, we can assert that some students experienced these kinds of feelings for the first time.

Factor 4: For the factor of perceiving reading as a difficult activity, students achieved higher scores at the beginning of the school year, before the start of the study ($M = 52.74$, $SE = 2.00$), than at the end of the study ($M = 41.64$, $SE = 1.62$). The difference in arithmetic means (11.09) is statistically significant ($t(98) = 4.29$, $p < 0.001$), with a large effect size ($d = -0.89$). The perception of reading as a difficult

activity showed the largest difference between initial and final testing. The score dropped from an average level to a borderline below-average level, indicating that by the end of the school year, students experienced reading as a less difficult activity compared to their perception at the beginning of the school year.

5 Conclusion

With the research we confirmed the hypothesis that with the help of adapted texts we can positively affect the reading motivation of pupils with speech and language disorders. In the first three factors, the trend of increasing the average values as well as the minimum and maximum values of points achieved was noted, which testifies to the positive influence of the research or reading adapted texts on the reading motivation of pupils. Throughout the school year, pupils were given positive encouragement, and were also in a way rewarded through reading both books in their entirety in their easy-reading versions. The pupils enjoyed reading and often asked when they could read again. In the fourth factor, where the difference was greatest, there is a clear decrease in perceptions of reading as a difficult activity. There is a notable lowering of the maximum and the raw score minimum rose by one point. This rise cannot be attributed greater statistical significance, as this is the result of only one out of fifty pupils.

The change in reading motivation with pupils with speech and language disorders was achieved in a single school year. The initial testing was carried out in September 2022 and the final testing in June 2023. We were thus able, in a relatively short period of nine months, to significantly raise the level of reading motivation with pupils. Based on this, we conclude that such an approach to reading, gradually introducing texts from easier ones to more demanding ones, and one that would last for several years, would prevent a general decline in reading motivation with teenagers with speech and language disorders and even increase it to a higher level. This is where we see the opportunity for further research that would include a longitudinal case study through which we would follow a specific generation through a longer period of elementary school education, or from fifth grade onwards, as, based on experienced of teachers and librarians, it is from the sixth grade onwards that the greatest drop in reading motivation is noted with pupils with speech and language disorders (Vizjak Puškar, 2017).

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