

Exploring Pre-service and In-service teachers' perceptions about Early Foreign Language Learning and Dyslexia

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ABSTRACT: This contribution addresses Slovenian in-service and pre-service foreign language and general education teachers' awareness of dyslexia in the foreign language classroom. The authors examine and analyse the levels of familiarity with dyslexia among foreign language teachers and primary school teachers (in-service teachers) and foreign language students (pre-service teachers), their perceptiveness regarding the particularly demanding areas of language learning, and their willingness to engage in additional training to obtain the appropriate skills for teaching children with learning disabilities, particularly dyslexia. The results reveal noticeable differences in answers to individual research questions provided by the participants based on their profiles. The majority of participants stated that they were familiar with dyslexia from a theoretical point of view but also indicated that they were aware of the need to further improve their individual specialist-didactic knowledge and skills in order to give successful support to dyslexic pupils engaged in foreign language learning. The authors also predict the necessary extent of additional training measures in which foreign language teachers, primary school teachers, and foreign language students should engage.

Keywords: early foreign language teaching; dyslexic pupils; pre-service teachers; in-service teachers; empirical study

Exploración de las percepciones del profesorado en formación y en servicio sobre el aprendizaje temprano de la lengua extranjera y la dislexia

RESUMEN: Esta contribución aborda la sensibilización de los profesores en activo y en formación de lenguas extranjeras y de educación básica sobre la dislexia en el aula de lenguas extranjeras en Eslovenia. Las autoras examinan y analizan específicamente los niveles de familiarización de dichos profesores con respecto a la dislexia, así como su percepción en relación a las áreas del aprendizaje de lenguas extranjeras particularmente exigentes y a la disposición de los profesores a participar en capacitaciones adicionales para obtener las habilidades adecuadas para enseñar a los alumnos con discapacidades de aprendizaje, especialmente con dislexia. Los resultados revelan diferencias significativas en las respuestas a las preguntas de investigación individuales proporcionadas por los participantes encuestados basados en sus respectivos perfiles. La mayoría de los participantes declararon que, a pesar de estar familiarizados con la dislexia desde un punto de vista teórico, eran conscientes sobre la necesidad de mejorar aún más sus conocimientos y habilidades didácticas para poder apo-

yar con éxito a los niños con dislexia que participan en el aprendizaje de una lengua extranjera. En la conclusión, las autoras predicen las medidas de capacitación adicionales necesarias en las que deben participar los profesores en activo y en formación de lenguas extranjeras y de educación básica, así como los estudiantes de lenguas extranjeras.

Palabras clave: enseñanza temprana de lenguas extranjeras; alumnos disléxicos; profesores en activo; profesores en formación; estudio empírico

1. INTRODUCTION

Changes in society, politics, and language policies have influenced a monumental shift in the status and the role of early foreign language learning (FLL) by raising it from its marginal status in curriculum debates to the front and centre of educational, didactic and language-policy-oriented discourse (Bausch & Christ, 2016; Ellis, 2008; Enver, 2011; European Commission, 2012; Hüllen, 2005). Early FLL is becoming a compulsory part of the school curriculum in most EU countries. In Spain or Belgium, for example, children have FL lessons even earlier, before beginning school (European Commission, 2012, 2014; Mourão & Lourenço, 2015; Muñoz & Singleton, 2011). That's why Mihaljević-Djigunović (2012), Murphy & Evangelou (2016), Cortina-Pérez & Andúgar (2017), define it as the learning of an FL before the traditional starting point for language teaching.

In Slovenia, for instance, with the start of the 2016/17 school year, all pupils in 2nd grade at age seven are required to start learning their first FL. Elementary school classes commonly include up to 28 pupils. While homogeneous concerning age, generally, these classes are highly heterogeneous concerning cognitive ability, language perception and comprehension, motor and social skills, executive functions, and general and specific learning difficulties. Classes often feature children with classified and unclassified specific learning difficulties (SpLD) such as dyslexia, dysgraphia, dyspraxia, speech and language disorders, or ADHD. In spite of such significant learner needs, foreign language skills are taught and evaluated without differentiation for different learner needs and skills. FLL teachers are not trained in the characteristics of SpLD, but we have special teachers in our system to provide additional professional help to pupils with SpLD, including in a foreign language. This paper explores the level of knowledge of the pre-service and in-service teachers about the nature of the difficulties encountered by dyslexic pupils, as one group of children with SpLD who are engaged in FLL. In order to devise effective educational measures for working with dyslexic pupils during the process of early FLL, it is necessary to assess the current state of affairs. Accordingly, this study features an overview of perspectives from two different teacher profiles on EFL teaching and learning related to a specific group of dyslexic pupils aged 6–9. One profile group comprises in-service teachers (FL and general primary school teachers). The other profile group consists of pre-service teachers who aspire to become primary teachers involved in early FL teaching.

Since we assume that the majority of in-service teachers have, in addition to the theoretical concepts they have studied, grasped the complexity of the dyslexia phenomenon through practical work, we were interested in finding out whether in-service teachers observed dyslexia differently from pre-service teachers who, with a mandatory study course, acquired some basic knowledge of dyslexia but lacked previous experience in teaching an

FL to dyslexic pupils. The aims of the study were to determine 1) whether the participants could identify the areas that are considered to be the most critical for success in learning an FL and that would require specific methods of instruction and assessment for successfully teaching an FL to dyslexic pupils; and 2) whether the knowledge about dyslexia and its characteristics expressed by the participants coincides with their perception of the extent of training necessary for proper and effective work in practice.

2. THEORETICAL BACKGROUND

2.1. Early FLL and Dyslexia

Early FLL represents an exacting challenge for teachers and pupils (Pinter 2015). On the one hand, the purpose of early FLL is to acquaint pupils with foreign languages, to develop intercultural awareness and prepare them for occupational mobility (Edelenbos, Johnstone, & Kubanek, 2006); on the other hand, it is to foster the fundamental speaking, listening, reading and writing skills in a foreign language necessary for communicating in a foreign language (Cameron, 2001; Chighini & Kirsch, 2009; Enever, 2011; Gass & Mackey, 2012; Muñoz & Singleton, 2011).

The processing of a (foreign) language is a complex and challenging cognitive and emotional process for all learners, especially for children – and even more so for dyslexic pupils, who by definition, have low-level language skills, such as phonological awareness, word-decoding and orthographic skills, (Kormos, Košak Babuder, & Pižorn, 2019). Specifically, dyslexic pupils encounter difficulties in processing one or more aspects of language, regardless of their intellectual capabilities. Snowling (2006) explains that the reading, writing, and expressive skills of dyslexic persons are inhibited by disharmony between four subsystems of language: Phonology, semantics, grammar, and pragmatics. According to the definition of dyslexia adopted by the International Dyslexia Association (2002), language-learning difficulties in dyslexic pupils emanate from the disorder itself, which is defined as a specific neurobiological learning disability, owing to which affected persons encounter difficulties in recognizing words fluently or accurately. In addition, dyslexic persons also exhibit poor spelling and decoding abilities. Such difficulties usually emanate from deficits in the phonological component of language that are in discord with the other cognitive abilities of dyslexic pupils and with effective teaching in the classroom.

Dyslexia represents a demanding challenge for FL teachers and dyslexic pupils alike. Dyslexic pupils encountering difficulties with reading and writing in their native (first) language also encounter difficulties in (early) FLL. The degree of such difficulties depends on the severity of cognitive and language-related deficits. Weak auditory discrimination skills, weak working memory skills, insufficient phonological processing ability, and slow information processing are only a few of the deficits with which dyslexic pupils encounter problems when learning foreign languages (Crombie, 2000; Kormos & Smith, 2012; Nijakowska, 2010; Sparks, 1995). Dyslexic pupils generally find it difficult to acquire a foreign language, given the phonology-related problems that they confront because they lack awareness of the system of sounds in their native language. Dyslexic pupils also confront problems when

memorizing words and concepts. If they do succeed in memorizing these, they find it more difficult to retrieve these than do their peers without dyslexia. What is characteristic of dyslexic pupils is that they process information more slowly. Hence, they find it difficult to focus and to decipher and comprehend speech delivered in a foreign language at a normal rate (e.g., Crombie & McColl, 2001). An inhibited ability to automatically process linguistic and grammatical structures in the primary language and a weak working memory result in poorly structured sentences with many errors (Schneider & Crombie, 2003).

Dyslexia occurs in all alphabetical writing systems (Ziegler & Goswami, 2005). It occurs in both more transparent languages (e.g., Spanish, Hungarian, or Slovenian) and less transparent ones (e.g., English or French). Dyslexia is considered a specific, neurologically conditioned learning disability. However, language-specific characteristics – particularly orthography and transparency – do significantly influence the way of reading, the language learning process, and the language acquisition process, as well (Youman, 2011).

3. RESEARCH METHOD

3.1. Research questions

The survey included questions aimed at determining the level of knowledge of the pre-service and in-service teachers about the nature of the difficulties encountered by dyslexic pupils in early FLL. The aims of this study were to determine

- (1) whether the participants felt that they knew dyslexia and where that knowledge originated;
- (2) whether the participants could identify the areas where dyslexic pupils encounter most difficulty in FLL;
- (3) whether the participants would be willing to engage in additional specialist training and to what extent.

3.2. Methodology

In order to answer these three questions, a survey was designed that gathered descriptive and causal, non-experimental data.

3.3. Participants

The study included a non-random sample of (1) German and/or English students studying during the academic year 2017/2018 (pre-service teachers), and (2) teachers of German and/or English and foreign language teachers (in-service teachers), enrolled in a one-year early language teaching (English or German) specialist postgraduate study programme.

The survey sample included a total of 96 participants (81 females and 15 males). Of those, 53 (54.6%) were pre-service teachers (41 females and 12 males) enrolled in a 2nd Bologna cycle - MA postgraduate Linguistics and Humanities programme, preparing to be FL teachers of German or English. All pre-service teachers included in the sample were FL students (German or English students or students enrolled in a two-discipline (one lan-

guage-oriented and one non-language-oriented) postgraduate study programme). Pre-service teachers enrolled in Bologna study programmes are obligated to complete a compulsory course focused on pupils with special needs, where they learn about the special needs and characteristics of dyslexic pupils and are trained in at least some basic theoretical approaches to observing and adapting to the learning challenges encountered by dyslexic pupils.

Forty-three (40 female and 3 male) participants were FL or primary school teachers (in-service teachers) engaged in early FL teaching, while 59.1% of in-service teachers included in the sample were FL teachers and 40.9% were primary school teachers. Female participants represented the majority in both subgroups. The sample includes more female than male participants, which reflects the overall gender distribution in foreign language teaching.

The average age of in-service teachers participating in the study was 33.82 years ($SD=5.62$), while the average age of pre-service FL teachers was 25.26 ($SD=3.01$). More than half the in-service teachers (54.5%) had over 5 years' work experience; 12 (27.3%) had between 6 and 10 years of work experience, and 8 (18.2%) had between 11 and 20 years of work experience.

The study participants were sorted according to profile and surveyed individually without monitoring.

3.4. Measurement instrument

The questionnaire was based on relevant sources and specialist literature (Crombie, 2000; Crombie & McColl, 2001; Kormos, 2012). The questionnaire utilized was validated, and it is an original design created for the present paper by the researchers. There was a pilot stage before the actual sample was scrutinized, which required only a minor revision of the questionnaire. The questionnaire contained five questions, of which four were closed-type and one semi-open. The first section of the questionnaire gathered general background information about the participants (gender, study orientation, professional profile, and the number of years of experience). The first relevant study question inquired about the participants' knowledge about dyslexia (whether they had ever heard about it and where they heard about it, whether they knew anybody with dyslexia). Based on a Likert scale (from 1-no difficulty to 5-extreme difficulty), the second question asked participants to assess areas that they felt would be the source of most difficulty for dyslexic pupils when learning a foreign language (learning new words, learning and using grammar and language rules, listening and reading comprehension, reading and pronouncing words etc.); the third question asked participants to select from the previously listed areas three important areas where teachers could provide assistance, according to their opinion. In the fourth question, the participants were asked about their willingness to engage in additional specialised training and what kind of specialist training they would be prepared to complete. They chose from four options (from 1 – no, they don't need this to 4 – one-year specialist training).

3.5. Data analysis

The results are presented in the form of frequency distribution tables (f, f%). We used the Pearson Chi-square test (χ^2) or Likelihood Ratio χ^2 test (χ^2 -L.R.) and the Mann-Whitney U test to compare the differences between participant profiles (pre-service teachers or

in-service teachers), regarding their knowledge about dyslexia, their experience with dyslexia and the extent of their specialist training. The answers to the semi-open question about the participants' experience with dyslexia were categorized for the pre-service teachers and then applied in the questionnaire intended for in-service teachers.

3.6. Results and interpretation

3.6.1 Knowledge about dyslexia among the participants

The base for our research was to ascertain whether pre-service and in-service teachers felt that they knew about dyslexia.

Table 1: Answers of the participants about dyslexia based on their profiles

Group	Do you know about dyslexia?		Total	
	No	Yes		
In-service	f	1	43	44
	f %	2.3%	97.7%	100.0%
Pre-service	f	5	48	53
	f %	9.4%	90.6%	100.0%
Total	f	6	91	97
	f %	6.2%	93.8%	100.0%
Chi-square Test result: χ^2 -Likelihood Ratio=2.350; df=1; p=0.125				

A Chi-square test was used to determine statistically significant differences between groups of teachers. Concerning knowledge about dyslexia (see Table 1), no significant differences could be ascertained (χ^2 -L.R.=2.350; df=1; p=0.125) between the in-service teachers and the pre-service teachers participating in the study. The vast majority of both in-service (97.7%) and pre-service teachers (90.6%) stated that they did have knowledge about dyslexia or had at least heard about it during lectures. We asked those participants who stated that they knew about dyslexia, where they first learned about it (multiple answers were possible). The majority of in-service (41.0%) and pre-service (67.6%) teachers who knew about dyslexia had first heard about dyslexia in their lectures, while 34.4% of in-service teachers had encountered dyslexic pupils during practical work, and 21.4% of in-service teachers stated that they knew someone with dyslexia. Fewer pre-service teachers than in-service teachers had encountered dyslexia while working with pupils (16.2%), and fewer (13.5%) stated that they knew someone with dyslexia. One (1) in-service teacher and one (1) pre-service teacher stated that they had dyslexia themselves.

3.6.2 Assessment of potential problem areas for dyslexic pupils engaged in early FLL

Because a large number of the participants, regardless of profile, stated that they either knew about dyslexia or had at least heard about it, we wanted to determine their levels of knowledge about the particular areas specific to and important for language teaching and learning with dyslexic pupils.

Table 2: Participants' opinion on the areas that cause the most difficulty for dyslexic students

	Group/profile	N	Mean Rank	U	p
Learning new words	In-service	44	42.19	866.500	0.032
	Pre-service	52	53.84		
Pronunciation of new words	In-service	44	40.53	793.500	0.005
	Pre-service	53	56.03		
Writing new words	In-service	44	50.14	1,116.000	0.680
	Pre-service	53	48.06		
Reading words	In-service	44	45.16	997.000	0.165
	Pre-service	53	52.19		
Learning grammar	In-service	44	52.81	998.500	0.203
	Pre-service	53	45.84		
Grammar use (writing)	In-service	44	51.34	1,063.000	0.429
	Pre-service	53	47.06		
Grammar use (speaking)	In-service	44	41.76	847.500	0.015
	Pre-service	53	55.01		
Listening (speech) comprehension	In-service	44	48.15	1,128.500	0.777
	Pre-service	53	49.71		
Listening comprehension while reading	In-service	44	52.72	1,002.500	0.220
	Pre-service	53	45.92		
Reading comprehension	In-service	44	52.67	1,004.500	0.216
	Pre-service	53	45.95		

Statistically significant differences were noted in three areas between the average marks assigned by pre-service teachers and in-service teachers to those areas that they felt would pose the most difficulty for dyslexic pupils during FLL, provided their classes included dyslexic pupils (e.g., Table 2). These areas were as follows: *Learning new words* ($U = 866.500$; $p = 0.032$), where a significantly higher share of pre-service teachers (Mean rank = 53.84) thought that dyslexic pupils would encounter severe difficulties, compared to in-service

teachers (Mean rank=56.03); *Pronunciation of new words* ($U=793.500$; $p=0.005$), where a significantly higher share of pre-service teachers (Mean rank=40.53) felt that dyslexic pupils would encounter severe difficulties, compared to in-service teachers (Mean rank=42.19); and *Grammar use in speaking* ($U=847.500$; $p=0.015$), where a significantly higher share of pre-service teachers (Mean rank=55,01) estimated that dyslexic pupils would encounter severe difficulties, compared to in-service teachers (Mean rank=41.76). No statistically significant differences were noted concerning other observed areas. The results also show that both pre-service and in-service teachers assigned similar rankings to the areas that were assumed to pose the greatest challenge for dyslexic pupils.

Discrepancies were observed in the cases of the areas *Pronunciation of new words*, which pre-service teachers ranked higher (Mean rank=6) than in-service teachers (Mean rank=9), and *Learning Grammar*, where, in contrast, in-service teachers assigned higher rankings than pre-service teachers (Mean rank_(in-service) = 6; (Mean rank_(pre-service) = 9).

Table 3: Areas where dyslexic pupils require the most assistance, ranked by all participants

	In-service Teachers		Pre-service Teachers
	1. Answer		1. Answer
Writing new words	14 (31.8%)	Writing new words	21 (40.4%)
Reading words	11 (25.0%)	Reading words	10 (19.3%)
Pronunciation of new words	7 (15.9%)	Pronunciation of new words	9 (17.3%)
Reading comprehension	7 (15.9%)	Learning new words	6 (11.5%)
Learning new words	3 (6.8%)	Reading comprehension	5 (9.6%)
Learning grammar	1 (2.3%)	Listening (speech) comprehension	1 (1.9%)
Listening (speech) comprehension	1 (2.3%)	Learning grammar	0
Grammar use (speaking)	0	Grammar use (speaking)	0
Listening comprehension while reading	0	Grammar use (writing)	0
Grammar use (writing)	0	Listening comprehension while reading	0
Total	44 (100.0%)	Total	52 (100.0%)

The participants were also asked to select three areas where, in their opinion, teachers could provide the most assistance to dyslexic pupils. The area identified as such in most cases by both in-service teachers (31.8%) and pre-service teachers (40.4%) was *Writing new words*. The second most often selected area among in-service teachers was *Reading words* (25.0%), while *Pronunciation of new words* (15.9%) and *Reading comprehension* (15.9%) jointly ranked third. The areas selected by in-service teachers in the fewest cases were *Learning new words* (6.8%), *Learning grammar* (2.3%), and *Listening comprehension of texts* (2.3%). The second most often selected area among pre-service teachers, was *Reading words* (19.3%), followed by *Pronunciation of new words* (17.3%), *Learning new words* (11.5%), *Reading comprehension* (9.6%) and *Listening comprehension of text* (1.9%).

3.6.3. Assessment of the need for specialist training in teaching a foreign language to dyslexic pupils

The analysis of rankings of individual-specific areas related to FL teaching and dyslexic pupils shows that the majority of participants are aware of dyslexia, which is why they were able to identify the critical areas of FL teaching when dyslexic pupils are involved. For that reason, we also sought to ascertain whether the participants thought that they required additional knowledge and skills, accessible through formal specialist training.

The results of Chi-square test, which has been used to determine statistically significant differences between groups of teachers, do show statistically significant differences between pre-service teachers and in-service teachers regarding their willingness to engage in additional training to obtain the appropriate skills for working with dyslexic pupils ($\chi^2=8.912$, $g=1$, $p=0.003$).

Table 4: The willingness of participants for additional training

Group		Yes	No	Total
In-service teachers	f	31	12	43
	f %	72.1%	27.9%	100.0%
Pre-service teachers	f	50	3	53
	f %	94.3%	5.7%	100.0%
Total	f	81	15	96
	f %	84.4%	15.6%	100.0%
Chi-square Test result: $\chi^2=8.912$, $g=1$, $p=0.003$				

The vast majority of pre-service teachers (94.3%) (Table 4) stated that they would be willing to take additional training, while the share of in-service teachers that answered affirmatively to this question was significantly lower (72.1%). Among the in-service teachers (Table 5), only 57.7% of FL teachers ($f=16$) stated that they would be willing to take

additional training to obtain the appropriate skills for working with dyslexic pupils, while the share of primary school teachers inclined towards taking additional specialist training measures was significantly higher (f=16; 94.1%).

Table 5: The willingness of all groups of in-service teachers for additional training

			Yes	No	Total
Completed education	Primary school teacher	f	15	1	16
		f %	93.8%	6.3%	100.0%
	FL teacher	f	15	11	26
		f %	57.7%	42.3%	100.0%
	Preschool teacher	f	1	0	1
		f %	100.0%	0.0%	100.0%
Total		f	31	12	43
		f %	72.1%	27.9%	100.0%
Chi-square Test result: χ^2 - Likelihood Ratio=8.011, g=2, p=0.18					

Finally, we ascertained the extent of additional specialist training envisioned by those participants who stated that they either required or would be willing to take additional specialist training measures.

Table 6: Opinions of participants about the envisioned extent of additional training

		No, direct experience suffices	Yes, seminar (2 days)	Yes, seminar (5 days)	Yes, one-year specialist training	Total
In-service Teachers	f	1	28	11	4	44
	f %	2.3%	63.6%	25.0%	9.1%	100.0%
Pre-service Teachers	f	3	21	23	5	52
	f %	5.8%	40.4%	44.2%	9.6%	100.0%
Total	f	4	49	34	9	96
	f %	4.2%	51.0%	35.4%	9.4%	100.0%
Chi-square Test result: χ^2 - Likelihood Ratio=5.822, g=3, p=0.121						

Between the answers of pre-service teachers and in-service teachers, there are no statistically significant differences regarding their opinions about the extent of additional specialist training that they would consider necessary for working with dyslexic pupils

(χ^2 -L.R.=5.822, $g=3$, $p=0.121$). Among the participants, only one in-service teacher (2.3%) stated she did not need any additional training since she deemed direct experience to be sufficient for her practical work, while the same answer was given by three (3) pre-service teachers (5.8%). The majority of in-service teachers (63.6%) stated that they would consider two days as the appropriate extent of additional specialist training, while 40.4% of the pre-service teachers provided the same answer. Additionally, 25.0% of in-service teachers and 44.2% of pre-service teachers stated that they would consider five days as the appropriate extent of additional specialist training. One-year specialist training would be the optimum choice for 9.1% of the in-service teachers and 9.6% of the pre-service teacher taking part in the study.

3.7. Discussion

Data related to research question number one indicated that the vast majority of the participants displayed some knowledge about dyslexia. More precisely, the data obtained show that knowledge about dyslexia among the participants manifests as an awareness of the theoretical concepts of dyslexia and that few participants had direct experience with teaching a foreign language to dyslexic students, despite the regular share of dyslexic pupils among the general population (Cortiella & Horowitz, 2014; International Dyslexia Association, 2002; Kormos & Smith, 2012; Schneider & Crombie, 2003). This means that this finding could be a consequence of changes introduced at the national level in Slovenia in 2007, with the adoption of a Response to Intervention, a multi-tier approach named the Concept of Working with Pupils with Learning Disabilities. This concept includes a five-step model proposing more effective forms of support for pupils with learning disabilities (Magajna, Kavkler, Čačinovič Vogrinčič, Pečjak, & Bregar Golobič, 2008).

Data regarding research question number two – whether the participants could identify the areas where dyslexic pupils encounter most difficulty in FLL – shows that the participants all shared the opinion that learning and pronouncing new words, along with grammar use would be the most difficult challenge for dyslexic pupils who are learning FL. The data obtained show that pre-service teachers considered these areas to be more critical compared to the opinion of the in-service teachers, who must complete a compulsory course focused on pupils with special needs. We were able to ascertain that both in-service teachers and pre-service teachers showed awareness of the difficulties encountered by dyslexic pupils in various areas of FLL (e.g., vocabulary acquisition and use, reading, and writing) and identified the most critical areas in FLL. These findings support the need for any teacher (primary or FL) to receive specific training in appropriate and effective teaching, language, and cognitive strategies that meet the needs of all pupils (Crombie, 2000) and the need to implement specific instruction and assessment adjustments for dyslexic pupils. As indicated in the specialist literature, dyslexic pupils encounter the most difficulty, because the disorder causes problems with the language and cognitive processes that are crucial in language acquisition. Dyslexic pupils have different ability profiles, which are also reflected in their language learning capabilities (Kormos & Smith, 2012).

As part of research question two, the participants were asked to identify three important areas where, in their opinion, teachers could provide the most assistance. Both in-service and pre-service teachers identified the areas of writing, reading, and pronouncing new words as most prominent. These empirical data are in congruence with the theoretical bases (e.g.,

Kormos & Smith, 2012; Nijakowska, 2010; Schneider & Crombie, 2003; Snowling, 2006). These difficulties are connected with the linguistic problems encountered by dyslexic pupils, such as segmentation of words into phonological units, problems with phoneme-grapheme correspondence, problems in word-recognition, and slow reading speed (Kormos & Smith, 2012). Readers who learn to read in less transparent or more complex languages are required to learn beforehand a string of irregular patterns between graphemes and phonemes. In addition, they must rely on simple correspondence links (Youman, 2011), as are characteristic of more transparent languages, such as Slovenian. Such correspondence links pose an additional challenge, which is particular to Slovenian learners learning less transparent languages. Transforming individual letters of less transparent foreign language words into sounds leads to improper phonetic pronunciation of these words.

However, it was surprising to find that both in-service and pre-service teachers assessed that dyslexic pupils would need the least amount of assistance with learning words (vocabulary), learning grammar, and listening (speech) comprehension. These areas are also considered problematic for dyslexic pupils. The learning of new words requires knowledge of their meaning, spelling, and pronunciation, as well as grammatical information linked to them (Nation, 1990), and thus represents a difficult task for dyslexic pupils, who have problems with learning grammar because they find it difficult to comprehend grammatical concepts, to acquire word order rules, to acquire rules implicitly, and to apply grammatical rules (procedural knowledge) (Kormos & Smith, 2012). Dyslexia is linked to a reduced attention span in phonological, short-term memory capacity, which leads to diminished listening (speech) comprehension capabilities (Kormos & Smith, 2012).

These findings indicate that teachers' lack of specific, in-depth knowledge about how to adapt instruction and assessment led them to consider the least intense learning support as sufficient. Implications of these findings offer further consideration for adapted instruction and dynamic assessment of knowledge and progress among dyslexic pupils, and they indicate the need for research, based on instructional practices given to teachers to allow them to provide meaningful assistance to dyslexic pupils, especially in FLL.

Given these findings, it appears that additional teacher training is necessary. Specifically, the responses to research question number two reveal a critical need for specialized training in the field of teaching FL to dyslexic pupils. However, according to data regarding research question number three, whether the participants would be willing to engage in additional specialist training and to what extent, it was interesting to find that far fewer in-service FL teachers would be willing to undertake additional specialist training measures compared to the in-service primary school teachers. The participants who were not inclined towards additional training measures did not specifically state their reasons; thus, we can only assume that in-service primary school teachers have more and deeper insight into a pupil's functioning in a range of school subjects, even those where success is not as dependent on language ability as it is in (foreign) language learning. In-service primary school teachers become acquainted with each pupil they support in a variety of situations. They spend more time with each pupil daily, compared to in-service FL teachers. Therefore, in-service primary school teachers may feel a greater need to provide assistance and to monitor the success of the individual pupils they teach.

Furthermore, they may also feel greater responsibility towards the pupils. The majority of pre-service teachers thought they needed more instruction and saw a need for further learning about pupils with dyslexia. The basic information about dyslexia and instruction of children with dyslexia that is included in the study subject is insufficient for pre-service teachers (especially FL teachers) who perceive the need to gain deeper knowledge about this topic.

The teaching approach also constitutes one of the main causes behind the problems facing children with dyslexia during FLL. Slovenian (in-service) foreign language teachers apply a communicative approach that emphasizes communication, the functionality of communication, etc. This approach de-emphasizes the direct approach towards teaching sounds, towards teaching links between sounds and symbols, and towards teaching the grammatical rule system crucial for teaching children with dyslexia (Nijakowska, 2010). Therefore, pre-service teachers are not receiving adequate instruction, and in-service teachers are not prepared to meet the specific needs of dyslexic pupils in FLL settings. In-service teachers engaged in early FL teaching observe that the teaching methods they apply in class that are effective with most pupils appear to be highly inefficient with dyslexic pupils. Despite this statement, the majority of these in-service teachers engaged in early FL teaching thought that two-day specialist training courses would be sufficient for them to be able to work successfully. A significantly lower share would be willing to engage in five-day specialist training courses, while less than 10% of these in-service teachers, regardless of their profile, would consider one-year specialist training (which would yield the most appropriate results, in our opinion) to be the appropriate measure. One reason for in-service and pre-service teachers not seeing a need for more detailed instruction at this early stage could be the lack of awareness of all there is to learn to provide proper instruction and assessment of learning outcomes for dyslexic pupils in FLL. Moreover, early childhood education promotes hands-on and exploratory learning and not necessarily explicit instruction in language patterns. That difference in teaching philosophy could be another reason for in-service teachers and pre-service teachers failing to see a need for more extensive instruction.

For dyslexic pupils as well as for FL teachers, learning and teaching represent a particular challenge because of low-level language skills, such as phonological awareness, word decoding, and orthographic skills, which are often used as predictors of dyslexia (Kormos et al., 2019). The success rate of early FLL and the teaching process is directly proportional to the level of knowledge about the complexity of dyslexia expressed by teachers and to the provision of adequate, crucial didactic procedures, which give dyslexic pupils the support necessary to acquire a foreign language. In this regard, it is also important that dyslexic pupils are not just present in FL classes and merely exposed to the language taught. It is crucial that dyslexic pupils feel accepted and consider FLL to be beneficial to them, regardless of the skill level they are capable of achieving (Crombie, 1997).

4. CONCLUSION

The results of this study generally show that (in-service) teachers engaged in early FLL teaching consider dyslexia an important topic. According to the Slovenian education legislation (Elementary School Act, 1996; Magajna et al., 2008), teachers are obligated to pay attention to the special educational needs of dyslexic pupils. Their practical experience

with early FL teaching is mainly bound to theoretical knowledge about the functioning of dyslexic pupils and less to specific specialist knowledge and skills linked to the effects of dyslexia during FLL (e.g., vocabulary learning, acquisition of grammar, understanding oral texts). This is why the findings of our research are all the more significant, showing that teachers, whether they are pre-service or in-service teachers or regardless of their prior education (primary school teachers, EF teachers or preschool teachers), they need more training that focuses on teaching dyslexic students in a foreign language. One of the objectives related to participant willingness to engage in additional specialist training showed that far fewer in-service FL teachers would be willing to undertake additional specialist training measures compared to the in-service primary school teachers. However, according to our results, we find that all three groups of in-service teachers should be included in appropriate practical didactic training measures focused on providing support and assistance to dyslexic pupils engaged in (early foreign) language learning. Qualified (in-service) teachers would thus gradually become more successful at helping dyslexic pupils to master all levels of a foreign language and fulfill their special educational needs by acquiring specialist knowledge and skills. Teachers would also become proficient in more effective teaching methods, become versed in adapting the teaching and assessment process, at implementing proper teaching approaches in the classroom, and in organizing supplementary classes as well as target-oriented individual and group treatment.

Our objective concerned the areas where dyslexic pupils encounter most difficulty in FLL. All participants shared the opinion that learning and pronouncing new words, along with grammar use, would be the most difficult challenge for dyslexic pupils who are learning FL. According to the findings of the other researchers (Kormos & Smith, 2012; Nijakowska, 2010; Schneider & Crombie, 2003; Snowling, 2006), these problems are connected with linguistic problems such as segmentation of words into phonological units, problems with phoneme-grapheme correspondence, problems in word-recognition, and slow reading speed. To improve future outcomes in the domain of early FLL teaching to dyslexic pupils, further measures need to be taken to improve teachers' knowledge about the effects of dyslexia on (early) FLL and the cognitive and language-related deficits connected to it.

It is, of course, important to acknowledge the limitation of the present study. As in any research, the results of our study should be taken with caution, since the sample of our research is limited, and involves only quantitative research; moreover, it concerns only one country. Therefore, it would be interesting to explore a representative sample from several countries. Prospective research may include longitudinal studies, and qualitative research analysing the narratives of both pre-service teachers and in-service teachers through in-depth interviews. Qualitative studies with dyslexic pupils who are learning a foreign language are particularly important and necessary. It would also be interesting to establish which foreign language is more appropriate for learning by a dyslexic child, whether the choice of foreign language depends on the characteristics of the foreign language or those of the first language of the dyslexic child. The findings reveal that other questions need to be researched in the future, such as why in-service teachers are hesitant to learn more about dyslexia and teaching strategies for dyslexic pupils, or how to effectively stimulate the progress of all pupils in the class, how to provide assessment of dyslexic pupils' knowledge and how teachers in other countries confront such challenges.

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