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TEACHERS AND SPEECH-LANGUAGE DISORDERS IN STUDENTS: ATTITUDES AND CHALLENGES IN PRIMARY SCHOOLS IN SPLIT

Abstract: *In contemporary educational practice, emphasis is placed on the inclusion of children with speech and language disorders as a prerequisite for their more successful socialisation, with the aim of preparing them for independent life. This study aimed to investigate whether primary school teachers consider themselves adequately trained to work with students with speech and language disorders in mainstream education. It also explored their attitudes toward their own competencies and perceived level of professional expertise. The study included 62 teachers from two primary schools in Split: Ravne njive – Neslanovac and Pojišan. The study showed that a significant number of teachers are familiar with the symptoms of speech and language disorders. However, teachers' attitudes were considerably less favourable when it came to their own confidence and competencies in working with children who have speech and language disorders, as well as regarding the availability of literature and training in this field. The second aim of the study was to examine whether there is a statistically significant relationship between self-assessed competence in working with such children, years of teaching experience, and the adequacy of educational preparation during university studies. The results indicated a negative correlation between years of work experience and the perceived adequacy of educational preparation during studies.*

Keywords: *speech, language, speech and language disorders, teaching, teachers' attitudes*

INTRODUCTION

Communication is used to express personal desires, ideas, and emotions, as well as various physical, emotional, and psychological needs, and it can take place in both spoken and written modalities of the Croatian language. From birth, a child attempts to establish contact with the environment by producing sounds that imitate those in their surroundings. It is in human nature to communicate on a daily basis, both to achieve intended goals (i.e., the transmission of messages) and to form social relationships. In communication, a distinction is made between language and speech. Language represents a rich, complex, and adaptable system that enables the expression of thoughts and the understanding of the environment through sounds, words, signs, and sentences (Apel & Masterson, 2004, pp. 14–15). Language consists of several levels or subsystems: phonological, morphological, syntactic, semantic, and pragmatic; these represent rules that must be followed for communication to be understood (Apel & Masterson, 2004, p. 21). Language can exist independently of speech, which is only one of its manifestations. However, in typical development, language and speech are interconnected and intertwined systems. According to Škarić (1991, p. 75), speech is an optimal, auditory form of human communication shaped by the rhythm of sentences, words, and syllables. As such, speech is unique to humans, that is, to beings capable of speech. The acquisition of speech can be understood as a lifelong process. It develops from birth, beginning in the prenatal period, through interaction with parents, peers, and close individuals, as well as in preschool institutions and schools where children are raised and educated (Apel & Masterson, 2004, p. 7). Speech acquisition is a complex process that involves learning language (its syntax, semantics, and phonology) as well as the speech code that connects meaning and sound, and the motor skills required to control the speech organs in producing rapid and precise movements. Jukić and Elez (2013) emphasise the importance of speech for an individual's successful life and for achieving effective communication and interaction with the environment. Environmental factors also play a significant role, which inevitably includes the substantial influence of family, peers, and educational professionals in fostering children's language development, especially in cases where a child has speech difficulties that hinder or prevent successful socialisation (Jukić & Elez, 2013, p. 136). Despite the natural development of language, speech, and communication, some children face challenges and difficulties in these areas. Speech and language disorders represent a diverse group of difficulties that may include articulation disorders, pronunciation disorders, difficulties in language comprehension, impaired syntax and semantics, or challenges in social communication.

In the context of education, working with children with speech and language disorders requires the collaboration of various professionals; however, teachers play a key role in identifying, supporting, and adapting instruction for these students. Teachers' attitudes toward this issue are crucial for the successful implementation of approaches to working with children with speech and language disorders (Dulčić & Bakota, 2008, p. 31). Speech-language therapists are key professionals in overcoming speech and language difficulties, but teachers must also be well acquainted with the types and characteristics of these difficulties. Dulčić and Bakota (2008) emphasise that the role of the teacher in students' education is extremely important, as the teacher is not only a transmitter of knowledge but also shapes students' personalities through their moral and ethical values. Through their attitudes, teachers can positively or negatively influence the attitudes of students, parents, and colleagues. Knowledge of speech and language difficulties is essential for teachers in order to provide appropriate support to such children, develop a positive attitude towards them, and foster positive relationships between children with difficulties and their peers. Such an approach contributes to creating a positive classroom atmosphere, strengthens the child's self-confidence, and facilitates their social integration, which is important for their cognitive, emotional, and social development. Previous domestic and international research indicates that the social status of children with difficulties in mainstream classrooms is generally unfavourable, and that children with learning difficulties often face social and emotional challenges (Igrić et al., 2009; Sekulić-Majurec, 1997; Yuker, 1994). Karamatić Brčić (2011) views inclusion as a form of social equality and acceptance, representing an approach to education that is oriented toward the needs and demands of all individuals, children and adults, with particular emphasis on those at risk of social exclusion, marginalisation, and vulnerability (Karamatić Brčić, 2011, pp. 39–40).

SPEECH AND LANGUAGE DISORDERS

Speech and language disorders encompass difficulties in understanding and producing sounds, which result in an inability to communicate normally in everyday life (Kuvač Kraljević, 2015, p. 67). Most speech and language disorders emerge in childhood and, over time, can hinder a child's normal functioning. It is not uncommon for a child to withdraw socially due to awareness of their difficulties and inability to communicate effectively with others. If not addressed promptly, the problem can become more deeply ingrained and harder to remediate. A healthy psycho-physical condition before and during pregnancy is of critical importance in preventing speech and language difficulties (Apel & Masterson, 2004).

According to Kologranić Belić et al. (2015), speech and language disorders can be divided into three categories: speech disorders, language disorders, and communication disorders. Speech disorders include articulation disorders, fluency disorders, and childhood apraxia of speech. Language disorders encompass delayed language development, dyslexia, and specific language impairments. Communication disorders include those within the autism spectrum, as well as pragmatic (social) communication disorders. Pronunciation disorders, also called articulation disorders, belong to the group of *dyslalia*. Dyslalia is a disorder of sound production, manifesting as omissions, substitutions, and distortions of sounds and words in the form of omissions, substitutions, additions, and metathesis of sounds and syllables, regardless of the speaker's articulatory abilities, while sentence structure remains age-appropriate (Vuletić, 1987, p. 26).

Vuletić (1987) notes that various terms, such as dyslalia, pronunciation disorders, articulation disorders, and delayed speech development, often refer to the same condition. Authors focusing on quantitative rather than qualitative analysis have divided this condition into underdeveloped or delayed speech and dyslalia, the latter encompassing disorders of pronunciation or articulation.

It should be noted that, according to Benc-Štuka (2010), nearly all speech and language disorders are accompanied by pronunciation difficulties. Pronunciation disorders are most commonly observed in preschool and school-age children, but can also occur, to a lesser extent, in adults (Benc-Štuka, 2010, p. 19).

Every child may exhibit one or more of these disorders, and symptoms can vary in severity. Early diagnosis and intervention by speech and language specialists can be crucial for improving children's communication skills and supporting their social integration.

Previous research

Research on teachers' preparedness and attitudes toward inclusive education, particularly regarding students with speech and language difficulties, remains relatively limited, often fragmented, and focused only on specific aspects of the problem. While individual studies provide valuable insights, it can generally be concluded that a systematic and comprehensive approach to this topic is lacking. The studies presented below were selected because they offer complementary perspectives on the inclusion of students with speech and communication difficulties. They are especially important as they address areas that have often been overlooked or insufficiently studied in Croatia, such as the needs of students with speech difficulties and the preparation of teachers for working in inclusive settings.

Dulčić and Bakota (2008) found that most history teachers agree that the educational integration of students with developmental difficulties, especially those with hearing and/or speech impairments, speech-voice communication disorders, and specific learning difficulties, is useful and can be successful. However, the authors caution that successful integration requires adequate objective, subjective, and material conditions, which are often lacking in practice. Their findings indicate that teachers frequently work in inadequate and insufficiently prepared conditions, particularly when teaching students with developmental difficulties (Dulčić & Bakota, 2008, p. 47).

Jukić and Elez (2013) conducted research among students in teacher education programmes and emphasised that self-assessed preparedness for working with children with speech difficulties is significantly higher among students who have attended courses in teaching competencies compared to those who have not. Overall, students recognise more advantages than disadvantages in integrating children with speech difficulties (e.g., they believe that joint education improves social interactions, strengthens self-esteem among children with difficulties, and contributes to the development of all children), and the study found no statistically significant differences in attitudes based on the type of programme attended (Jukić & Elez, 2013, p. 144).

Batarelo Kokić et al. (2016) highlight that teacher education programmes in Croatia facilitate the development of various aspects of information literacy, the use of information and communication technology (ICT), and competencies needed to work in inclusive schools in technology-rich environments. Their results indicate that teacher education students who are information-literate and have access to technology demonstrate a high degree of support for students with difficulties and for social inclusion. Although the findings show a positive attitude among future teachers toward inclusion, the authors emphasise the importance of ongoing support for the development of inclusive schools to ensure that every child has the opportunity to reach their full potential (Batarelo Kokić et al., 2016, pp. 7–8).

Daniel and McLeod (2017) concluded that teachers often experience frustration in their efforts to provide equitable and high-quality educational experiences in line with the goals of educational inclusion (Daniel & McLeod, 2017, p. 94).

Kranjčec Mlinarić, Žic Ralić, and Lisak (2016) note that their findings provide insight into teachers' attitudes toward inclusive education, revealing a generally positive stance on inclusion and its benefits. At the same time, they emphasise that teachers face numerous challenges, including a lack of systematic support, absence of professional teams and classroom assistants, and unfavourable organisational conditions. Furthermore, the study highlights the need for adequate evaluation of teachers' individualised work, as well as the provision of material and spatial resources necessary for the effective

implementation of inclusive education (Kranjčec Mlinarić, Žic Ralić, & Lisak, 2016, p. 244). Topić-Beus (2024) emphasises that educational professionals often assess their own competencies as insufficient and stresses the importance of continuous professional development, strengthened collaboration between teachers, specialists, and parents, and the provision of adequate staffing and material conditions. Inclusion is viewed as a complex and long-term process requiring systematic support from educational policies and all stakeholders in the education system, with particular emphasis on the development of inclusive values from an early age (Topić-Beus, 2024, p. 187).

Sakowicz-Boboryko (2019) concludes that some teachers express doubt regarding new approaches to educating students with difficulties, and that vague or negative attitudes toward inclusive education reflect a sense of insufficient preparedness to work with these students. The study underscores the importance of collaboration among all participants in the educational process, students, teachers, parents, and rehabilitation specialists, as a key area that needs improvement (Sakowicz-Boboryko, 2019, p. 121).

Kovačević, Barbir, and Bodrožić (2024) highlight, based on their research, that educators face challenges in implementing quality inclusive practices and ensuring individualised approaches for each child. Key challenges include insufficient training for working with children with developmental difficulties, a lack of support from professional teams, and unfavourable working conditions, such as large class sizes. The authors stress that creating an inclusive environment requires appropriate conditions and fostering collaboration among educators, specialists, and the wider community, viewing inclusion as a long-term and complex process aimed at ensuring the optimal development of each child (Kovačević, Barbir, & Bodrožić, 2024, p. 275).

Research aim and hypotheses

In line with current knowledge, the general aim of this study was to examine primary school teachers' attitudes toward their own competencies for working with children with speech and language disorders, as well as to identify factors related to the assessment of these competencies. From this general aim, the following specific objectives were derived:

1. to examine teachers' attitudes towards the role of the teacher in working with children with speech and language disorders,

2. to examine teachers' attitudes regarding education and the level of competencies for working with students with speech and language disorders,

3. to examine teachers' attitudes towards collaboration with professional teams and the parents of children with speech and language disorders,

4. to investigate whether there is a statistically significant relationship between teachers' years of work experience and their self-assessment of competencies in working with children with speech and language disorders.

Based on these objectives, the following hypotheses were formulated:

H1 – Primary school teachers' attitudes toward their own role in working with children with speech and language disorders are predominantly positive.

H2 – A lack of knowledge acquired during education is associated with a predominantly unfavourable self-assessment of teachers' abilities and readiness to work with children with speech and language disorders.

H3 – Teachers assess collaboration with professional teams and parents as underdeveloped or insufficiently effective.

H4 – Longer teaching experience is associated with higher self-assessed competence in working with children with speech and language disorders.

Research methodology

The study was conducted from June 5 to June 15, 2023. The participants were teachers from Ravne Njive – Neslanovac Primary School and Pojišan Primary School. It should be noted that this is a preliminary study aimed at gaining an initial insight into teachers' attitudes toward speech and language disorders, their perceived competence in working with children affected by these disorders, the need for additional training, and the importance of an individualised approach in teaching.

Instrument

The study was conducted using a *Google Forms* survey. The questionnaire was divided into two parts. The first part collected general information about the participants (gender, years of teaching experience, level of knowledge about speech and language disorders, and prior encounters with students with speech and language disorders in the classroom). The second part consisted of 14 items addressing teachers' experiences and attitudes toward speech and language disorders in their educational practice. Participants responded to each statement using a 5-point Likert-type scale:

1 − strongly disagree
2 − mostly disagree
3 − neutral (cannot decide)
4 − mostly agree
5 − strongly agree

The response options were arranged so that the first option (1) always indicated the most negative attitude, and the fifth option (5) indicated the most positive attitude of teachers toward the statement. The final section of the questionnaire provided participants with an opportunity to express their own

views on what could contribute to better inclusion of children with speech and language difficulties in the classroom.

Respondents

The study included 62 participants – teachers. Of these, 80.6% were female, and 19.4% were male.

Teaching experience was categorised in five-year intervals. Less than 5 years of experience was reported by 33% of participants, 5–10 years by 31%, 11–15 years by 11%, 16–20 years by 8%, 21–25 years by 7%, and more than 30 years by 5% of participants.

Regarding the teaching assignment, 83.9% of participants were subject teachers, while 16.1% were class teachers.

When asked, *"Have you encountered a child with speech and language communication disorders in your teaching practice?"* 83.9% of participants reported having experience with some form of speech-voice communication disorder, while 16.1% had no such experience. None of the participants selected the response "not sure." Furthermore, 82.3% had worked with children with speech and language disorders, while 17.7% had not encountered such children in a regular classroom setting.

The obtained data were statistically analysed, specifically calculating the correlation between two variables: years of teaching experience and self-assessed competence.

ANALYSIS AND DISCUSSION OF ACHIEVED RESULTS

The analysis begins by presenting the individual results for the entire sample, after which the participants' attitudes are categorised into three groups based on similarities: the role of the teacher in working with children with speech and language disorders, the level of teachers' education and professional competence, and collaboration with professional teams and parents. This categorisation allows for a better understanding of the different perspectives in teaching practice within the context of working with children with speech and language disorders. In the examination of the results, both absolute and relative frequencies were calculated to present the distribution of participants' responses. Absolute frequencies indicate the number of times each response occurred, while relative frequencies represent their share expressed as percentages. Following the descriptive analysis, the relationships between certain variables are further examined in order to address the fourth research objective – determining the association between self-assessed competence and both years of teaching experience and adequacy of educational preparation. The final section presents responses to the open-ended question in the questionnaire, where participants were given the opportunity to share their

perspectives on what, based on their experience, could enhance the inclusion of children with speech and language difficulties in the classroom.

Presentation of results and categorisation of teachers' attitudes

Table 1 shows the frequency of responses for the examined variables across the entire sample. The statements to which the teachers from primary schools in Split indicated their level of agreement are listed on the left side of the table. Next to each statement, a 5-point scale is provided, ranging from 1 (strongly disagree) to 5 (strongly agree).

Table 1.
Response frequencies on variables for the total sample

	Variable/statement	1	2	3	4	5	Total
1	Teachers play an important role in the inclusion of children with speech and language disorders in the classroom.			3	17	42	62
	%			4,8 %	27,4 %	67,7 %	100 %
2	During their education, teachers do not have the opportunity to acquire sufficient knowledge about speech and language disorders.	2	3	10	16	31	62
	%	3,2 %	4,8 %	16,1 %	25,8 %	50 %	100 %
3	It is necessary to seek advice from the professional team when irregularities in a child's speech are observed.			1	9	52	62
	%			1,6 %	14,5 %	83,9 %	100 %
4	The professional team provides support in the prevention and identification of speech and language disorders.	1	4	10	9	38	62
	%	1,6 %	6,5 %	16,1 %	14,5 %	61,3 %	100 %
5	There is sufficient literature on speech and language disorders that is easy to understand.	2	11	37	9	3	62
	%	3,2 %	17,7 %	59,7 %	14,5 %	4,8 %	100 %
6	I discuss my students' speech and language disorders with their parents.	2	3	22	15	20	62
	%	3,2 %	4,8 %	35,5 %	24,2 %	32,3 %	100 %

Table 1. *(continued)*

7	I strive to speak correctly according to linguistic and phonetic norms.			4	14	44	62
	%			6,5 %	22,6 %	71 %	100 %
8	I use the internet to research speech and language disorders.	4	3	13	19	23	62
	%	6,5 %	4,8 %	21 %	30,6 %	37,1 %	100 %
9	Children with speech and language disorders encounter difficulties in social interaction.		2	20	18	22	62
	%		3,2 %	32,3 %	29 %	35,5 %	100 %
10	Children with speech and language disorders achieve lower results in oral examinations.	2	7	27	17	9	62
	%	3,2 %	11,3 %	43,5 %	27,4 %	14,5 %	100 %
11	Additional preparation of materials is necessary for effective work with students with speech and language disorders.	1	2	10	21	28	62
	%	1,6 %	3,2 %	16,1 %	33,9 %	45,2 %	100 %
12	Teachers should be more lenient toward students with speech and language disorders.	5	6	26	21	4	62
	%	8,1 %	9,7 %	41,9 %	33,9 %	6,5 %	100 %
13	My level of education is not sufficient for working with children with speech and language disorders.	5	8	22	15	12	62
	%	8,1 %	12,9 %	35,5 %	24,2 %	19,4 %	100 %
14	I am willing to attend additional training to improve techniques for working with children with speech and language disorders.		1	6	12	43	62
	%		1,6 %	9,7 %	19,4 %	69,4 %	100 %

The results showed that teachers are uncertain about assessing their own abilities and readiness to work with children with speech and language disorders. Most respondents are not confident in their competencies, which may indicate a need for further professional development to ensure adequate support and a tailored approach for these students. Furthermore, most respondents recognise the importance of the role of a professional team in supporting and preventing speech and language disorders in children. The study also showed that teachers generally evaluate working conditions and the implementation of educational integration negatively, suggesting that the prerequisites for its successful realisation are not sufficiently met. Likewise, the uncertainty among respondents regarding the availability of literature on this disorder points to the need for better access to and clarity in the literature used in the context of speech and language disorders in order to ensure better understanding and support for professionals and teachers working with children with these disorders.

Teachers' attitudes towards the role of teachers in working with children with speech and language disorders

The results of the conducted research indicate that most teachers recognise the importance of their role in the process of including children with speech and language disorders in regular classes (see Table 1, Statement 1). The largest number of respondents (67.7%) fully agree with the statement that teachers play a key role in this process, while an additional 27.4% also express agreement. Only 4.8% of respondents reported being unsure of their stance. These data clearly show that there is strong awareness among teachers of the need to provide appropriate support and use adapted teaching methods to ensure quality conditions for the growth and development of children with speech and language communication disorders.

A larger number of respondents (45.2%) fully agree with the statement that additional preparation of materials is necessary for effective work with students with speech and language disorders (see Table 1, Statement 11), while 33.9% agree with this statement. A neutral stance is taken by 16.1% of respondents; a small percentage (3.2%) disagree, and only 1.6% completely disagree. This indicates recognition of the need for further adaptation of teaching content to more effectively address the specific needs of students with speech and language difficulties. The support of the majority of teachers emphasises the importance of a professional and individualised approach in the education of these students.

Regarding the statement that teachers should be gentler toward students with speech and language disorders (see Table 1, Statement 12), the largest number of respondents (41.9%) hold a neutral position. Nevertheless, 6.5%

fully agree, and 33.9% agree with the statement. Conversely, 9.7% disagree, while 8.1% express complete disagreement. These results show divided attitudes among teachers, which may be due to different experiences and opinions regarding the needs of, and approaches to, children with speech and language disorders. While some believe that a gentler approach can help create a positive and supportive environment, others emphasise the importance of maintaining equal standards and rules for all students.

Most respondents show a positive attitude toward correct language use in accordance with linguistic and phonetic norms (see Table 1, Statement 7). As many as 71% of teachers fully agree with the statement that they strive to speak according to linguistic and phonetic models, and an additional 22.6% also agree. Only 6.5% of respondents take a neutral stance, indicating an almost unanimous awareness of the importance of correct speech in teaching practice. The results point to a strong orientation among teachers toward speech accuracy and the use of language as a pedagogical tool. Teachers' speech in the classroom serves as the primary model for students and therefore plays a key role in shaping their language skills. The neutral stance of a small number of respondents may indicate some uncertainty about their own language competence or a lack of clear understanding of what speaking according to linguistic and phonetic norms entails. For this reason, additional training focused on developing teachers' language awareness could contribute to a higher-quality language environment for students.

Teachers' attitudes towards training and professional competence in supporting students with speech and language disorders

The results of the research show that a significant number of teachers believe that during their education, they did not have the opportunity to gain sufficient knowledge about speech and language disorders (see Table 1, Statement 2). Specifically, 50% of respondents fully agree with this statement, and an additional 25.8% also agree. A neutral stance is taken by 16.1% of respondents; 4.8% disagree, and only 3.2% completely reject this statement. This clearly emphasises the need for further training and strengthening of teachers' competencies in order to ensure inclusive and high-quality teaching.

Regarding the statement that teachers' level of education is insufficient to work with children with speech and language disorders (see Table 1, Statement 13), most respondents (35.5%) remain neutral and do not take a clear position. Nineteen point four per cent fully agree with the statement, while 24.2% agree. In contrast, 12.9% of teachers disagree, and 8.1% completely reject the statement. These results indicate a certain division in the perception of their own competencies. While some teachers express uncertainty or the need for further professional development, others feel that they already possess adequate

knowledge and skills to work with this group of students. This diversity of attitudes highlights the importance of continuous professional development, experience sharing, and collaboration with specialists in order to enable all teachers to provide appropriate support to students with speech and language difficulties.

The availability of literature on speech and language disorders (see Table 1, Statement 5) appears limited: only 4.8% of respondents fully agree that there is enough easily understandable material. However, 17.7% disagree, and as many as 59.7% of respondents take a neutral stance. These data indicate significant uncertainty and possible deficiencies in the accessibility or comprehension of professional resources, which pose an additional challenge in training teachers and providing quality support to students with disorders.

A larger number of respondents show a tendency to use the internet as a source of information on speech and language disorders (see Table 1, Statement 8). Specifically, 67.7% of teachers agree that they use the internet to explore this topic. On the other hand, 21% of respondents take a neutral stance. A smaller number of respondents (11.3%) disagree and do not use the internet for this purpose. Overall, the data indicate that most teachers recognise the value of the internet as a tool for their professional development in the field of speech and language disorders. However, a smaller portion of respondents still do not use this resource, which may indicate the need for additional guidance and education in digital literacy.

Most respondents show a high level of willingness for further professional development in working with children with speech and language disorders (see Table 1, Statement 14). As many as 69.4% of respondents fully agree with the statement: *"I am willing to attend additional training to improve techniques for working with children with speech and language disorders."* A neutral stance is taken by 9.7% of respondents, while only one respondent (1.6%) disagrees. The results indicate a predominantly positive attitude among teachers toward professional development and education in the area of students' specific needs. These results clearly reflect the willingness of the majority of respondents to improve their competencies in order to provide quality, professional, and tailored support to students with speech and language disorders in the educational process. It is important to emphasise that continuous professional development plays a key role in strengthening teachers' competencies and enables an individualised approach in working with students. Such expressed willingness among teachers represents an important step toward enhancing the quality of inclusive practices in schools.

Teachers' attitudes towards collaboration with the professional team and parents of children with speech and language disorders

Collaboration with the professional team (see Table 1, Statement 3) is viewed very positively by teachers. The statement that it is necessary to seek advice from the professional team when irregularities in a child's speech are observed is fully supported by 83.9% of respondents, while an additional 14.5% also agree. Only one respondent maintained a neutral stance. These results indicate a high level of awareness of the importance of professional assistance and a willingness among teachers to collaborate with speech therapists, psychologists, and other members of the professional team to promote the optimal development of children.

Regarding the statement that the professional team provides support in the prevention and identification of speech and language disorders (see Table 1, Statement 4), attitudes were somewhat more divided. While 61.3% of respondents fully agree, 14.5% agree, and 16.1% take a neutral stance. Three respondents expressed disagreement. Although most teachers recognise the importance of early intervention and professional support, a certain degree of uncertainty exists among a smaller number of respondents. This suggests the need for further training and increased awareness about the role and significance of professional teams in working with children with speech and language disorders.

In the investigation of teacher communication with parents about speech and language disorders (see Table 1, Statement 6), 32.3% of respondents fully agree that they discuss this issue with parents. The largest portion (35.5%) takes a neutral stance, while 3% disagree. These results indicate that most teachers actively communicate with parents, though the neutral and disagreeing responses show variations in approach and awareness. This highlights the need to improve collaboration and open communication between teachers and parents.

Examining the relationship between teachers' self-assessment of competence, years of work experience, and adequacy of educational preparation during university studies

To investigate whether there is a relationship between years of work experience and teachers' self-assessment of their competencies in working with children with speech and language disorders, and to address the fourth research objective, Spearman's correlation coefficient was calculated (see Table 2) between the length of work experience and the self-assessment of these competencies.

Table 2.
Spearman's correlation coefficients in assessing the relationship between self-assessed competencies, years of work experience, and adequacy of educational preparation[1]

VARIABLE		years of work experience (experience)	self-assessment of inadequacy of educational preparation (education)
Self-assessment of competencies in working with children with SLD	r	-0,11	-0,57
	p	0,393	< 0,001

Although a negative correlation between years of work experience and self-assessment of competencies was expected, no statistically significant relationship was found between them ($\rho = -0.11$; $p = 0.393$). This result indicates that the length of work experience does not contribute to a sense of competence in this specific area. In other words, teachers with longer work experience do not rate their competencies higher compared to colleagues with shorter experience.

Since the hypothesis was not confirmed, an additional analysis was conducted to examine the relationship between self-assessed competencies and the perception of adequacy of one's own educational preparation. The results show a statistically significant negative correlation between self-assessed competencies and perceived adequacy of educational preparation ($\rho = -0.57$; $p < 0.001$). Respondents who rate themselves as more competent in working with children with speech and language disorders tend to express less agreement with the statement that their level of education was insufficient for such work.

These results suggest that accumulated experience alone, without additional training, does not significantly contribute to the development of expertise in this field. In this context, continuous professional development, additional education, and specialised training are key factors in developing professional competencies. In other words, confidence in practice does not depend solely on years of experience but on the quality of education and the opportunity to apply it through practical work. In complex areas, such as working with children with speech and language disorders in mainstream schools, specific knowledge and practical skills are acquired through targeted education, not just years spent in practice.

[1] r – Spearman's correlation coefficient, p – probability of error, SLD – speech-language disorders

Verification of hypotheses

H1 – confirmed

Based on the questionnaire items related to the role of teachers (see Table 1, Statements 1, 7, 11, and 12), it can be concluded that teachers generally evaluate their role in working with children with speech and language disorders positively.

H2 – confirmed

Based on the results related to the assessment of knowledge acquired during education (see Table 1, Statements 2, 5, 8, and 14), it was found that most teachers believe they did not acquire sufficient knowledge about speech and language disorders during their education.

H3 – partially confirmed

Based on the statements related to collaboration with the professional team and parents (see Table 1, Statements 3, 4, and 6), the results indicate generally positive but somewhat inconsistent attitudes among teachers, suggesting partial confirmation of the hypothesis.

H4 – not confirmed

Based on Spearman's correlation coefficient between years of work experience and self-assessed competencies (see Table 2), it was determined that there is no statistically significant relationship between these variables, and the hypothesis is rejected. It is concluded that the length of work experience does not contribute to higher self-assessed competencies in working with children with speech and language disorders. Additionally, a statistically significant negative correlation was found between self-assessed competencies and the perception of adequacy of educational preparation ($\rho = -0.57$; $p < 0.001$). Teachers who rate their competencies higher are less likely to perceive their educational preparation as insufficient. This indicates that accumulated work experience without additional training does not significantly contribute to the development of expertise in this area, highlighting the importance of the quality and content of education during studies, as well as the need for its improvement in this field.

Qualitative insights: recommendations for enhancing inclusive practice

The final part of the study provided respondents with the opportunity to express their own views on improving the inclusion of children with speech and language disorders in the classroom. For this purpose, they were given the prompt: *"In your opinion, what could contribute to better inclusion of children*

with speech and language difficulties in the classroom?" This section of the questionnaire was not mandatory, yet a significant number of respondents (N = 59) provided answers. Participants offered numerous opinions and suggestions regarding better approaches and support for students with speech and language disorders. In their responses, they emphasised the importance of diverse strategies and solutions to improve work with such children. Many respondents highlighted the need for better teacher education to successfully address the challenges posed by the needs of students with speech and language difficulties. The involvement of professional development services, active parental engagement, and approaches tailored to the needs of students with difficulties were also identified as key factors for progress. Improving collaboration with the school's professional team and other specialists was likewise emphasised as essential to ensure adequate support. Below are some of the respondents' suggestions regarding additional teacher training:

- *Education for teaching staff, individualised approaches, adequate conditions for better inclusion of children with speech and language difficulties in the classroom, high-quality speech therapy and psychological rehabilitation, and collaboration between parents, teachers, and specialist staff.*
- *A larger number of professional team members in the school. A speech therapist would be essential for such cases. In the school where I work, we have 850 children but no employed speech therapist. The professional team consists of a pedagogue, a social pedagogue, and a psychologist. My colleagues work diligently and responsibly, but they cannot provide regular interventions to all children who need their help. A speech therapist would certainly be a valuable team member, and their advice and recommendations would also be useful to teachers when planning and preparing for children with speech difficulties.*
- *Better collaboration with the school's professional team and other specialists who could assist us with their guidance in working with children. Unfortunately, most teachers are not sufficiently trained to work with children with speech difficulties, and we are largely left to rely on our own instincts in our work.*
- *Collaboration at all levels, rather than leaving these children exclusively to subject teachers who often have limited knowledge of certain disorders and the methods and approaches needed to work with such students.*
- *Additional training for teachers, semi-individualised programmes for these students, various workshops, and better teacher education.*

The suggestions also focus on adapting materials, raising awareness among all students about speech and language difficulties, and creating a positive and

supportive environment. Some respondents propose separate seminars and training sessions, while others emphasise the need for educational workshops. Here are the suggestions:

- *Educating parents, school staff, and students about speech and language difficulties, raising awareness of these challenges, and fostering acceptance and understanding of children with difficulties in speech and language, as well as in any other area.*
- *Better access to information in terms of concrete solutions, since we are mostly left to rely on our own instincts in practice. Joint student workshops during which children could gain a better understanding of the difficulties their peers face.*
- *Workshops aimed at connecting and including children with speech disorders.*

Some respondents emphasise the importance of increasing the number of professional team members in schools, particularly speech therapists, in order to respond to students' needs in a timely and effective manner. They identify key factors such as raising awareness of speech and language disorders, educating children and adults from an early age, ensuring a stimulating physical and material environment, and the necessity of systematic reforms in the education system. The following are respondents' suggestions:

- *Timely involvement of the school's professional team and specialist teams, reporting parents who refuse to take their child to speech therapy, increasing the number of speech therapy clinics since waiting times for a speech therapist can exceed a year, working with other students on preventing teasing and aggressive behaviour toward children with speech difficulties, and teacher patience.*
- *Educating peers about the challenges, increasing teacher-student communication, insisting on a relaxed classroom atmosphere, understanding, and support for each student individually, including children with speech and language difficulties… the less stress around speaking and exaggerating their problem, the less severe the difficulties. I believe that better preparation of teachers for such situations and insisting on creating strong, supportive cohesion in the classroom can resolve most similar issues.*
- *Educating children from an early age and including children with speech and language difficulties from the earliest years (e.g., in kindergartens). Also, better education for parents (workshops) and teachers. Additionally, greater societal engagement, particularly from the media, is needed to remove the stigma often associated with people with speech and language difficulties.*

- *Augmentative communication and appropriate exercises are arranged with parents so that the child can practise them at home in addition to school. Better teacher education, greater involvement of the professional development team and parents, and individualised work with students who have difficulties.*

CONCLUSION

The results of the conducted research show that the majority of teachers (see Table 1, Statement 1) recognise their key role in the inclusion process of children with speech and language disorders and demonstrate a high level of willingness for additional professional development (see Table 1, Statement 14). Respondents largely express the need for additional preparation of teaching materials, as well as the application of individualised teaching methods in accordance with the specific needs of students (see Table 1, Statement 11).

Furthermore, the results indicate that the length of teaching experience is not associated with higher self-assessed competence in working with children with speech and language disorders. Instead, the perception of the quality of educational preparation (see Table 2) emerges as a crucial factor, highlighting the importance of systematic training in this area. In other words, experience alone is not sufficient for the development of expertise; professional competence requires targeted knowledge, practical skills, and continuous professional development.

In the context of inclusive education, schools expect teachers to have the ability to adapt and work with students with diverse difficulties, including speech and language disorders. However, existing teacher education programmes still do not provide enough content to prepare students for this type of work (Jukić & Elez, 2013). The introduction of mandatory courses on children with special educational needs, with a particular emphasis on communication disorders, should be a fundamental step in preparing future teachers. This would enable a better understanding of students' specific needs and promote their successful integration into regular classrooms. Kelić (2015, p. 27) states in this regard: "While the professional team prepares the child for school by strengthening their speech and language skills, the parent should become familiar with the disorder's symptoms, difficulties in specific language skills, and the impact of these difficulties on the learning process and curriculum acquisition."

The results show that most teachers (see Table 1, Statement 3) recognise the importance of collaboration with the professional team and are highly willing to seek expert assistance when they notice difficulties in students. In the area of collaboration with parents, attitudes are predominantly neutral (see Table 1, Statement 6). These findings indicate inconsistent practices and varying levels of involvement in communication with parents, pointing to the need for more

systematic encouragement and improvement of collaboration. The importance of correct understanding and communication among all participants in the educational process becomes an imperative of modern inclusive schooling.

This research has the potential to empower the educational system to better address the challenges of speech and language disorders and to provide an optimal environment for all children, promoting their successful academic and social development. The findings contribute to a better understanding of the factors influencing teachers' professional readiness to work with students with speech and language disorders. Additionally, the study contributes to expanding the understanding of the relationship between education, professional self-assessment, and inclusive practice, confirming the importance of an interdisciplinary approach and the role of professional teams. It should be noted that further research with a larger number of respondents across Croatia is recommended. Additional training, better communication among all participants in the process, and access to relevant information are key steps toward achieving more effective and higher-quality education for all students, regardless of their speech and language challenges.

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