



## ANALYSIS OF COMMUNICATIONAL DIFFERENCES OF PRIMARY SCHOOL STUDENTS WITH SPEECH AND LANGUAGE DISABILITY

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### Abstract

The communicational differences of primary school students with language and speech disabilities were examined in this study. In the study where a nested single case design was used, interviews were conducted with 28 teacher and 35 students. The open-ended questionnaire form and semi-structured interview form developed by the researcher were used in the study. The open-ended questionnaire form was applied to the students, and the semi-structured interview form was applied to the teachers. The data obtained in the study was subjected to content analysis. As a result of the research, it was seen that primary school children encounter different problems (delayed speech, voice disorders, articulation, etc.) depending on their grade level. Students mostly use written communication in their communication processes. Students often feel alone in the communication process. They solve communication problems by getting support from teachers and families. The teacher also tries to solve the communication problems of the student's language and speech disabilities by using various activities in the learning process.

**Keywords:** Communication, communicative differences, disability, language barrier, speech barrier.

### INTRODUCTION

Humans, as social beings, constantly communicate with their environment. Communication serves as the fundamental mechanism through which humans evolve from a biological entity into a socially integrated beings. It is the production, transfer and interpretation of information. For humans, understanding others and having information that prepares them for the society is achieved through communication from a young age. In this process, individuals use many channels and try to learn sometimes verbally, sometimes non-verbally and sometimes using body language with their individual differences (Tuna, 2012). However, in the learning process, individuals encounter some obstacles due to hereditary, congenital and later (disease, accident etc.) events (Doğru et al., 2013). Such a situation reveals the importance of the concept of disability. Disability occurs in individuals who, unlike other individuals, have long-term physical, mental, intellectual or perceptual disorders. Disabled individuals have been defined as people who are excluded and unwanted in society throughout the historical process. As a result, individuals with disabilities are expressed as disadvantaged groups of society (Orhan and Özkan, 2020). Although they are considered disadvantaged individuals, they constitute a significant part of the world's population. For example, there are approximately 15% of disabled people in the world and 39 million in Europe. According to the Eurostat study (2012) presenting statistical data of the European Union, the rates of disabled people over the age of 15 are 21.4% in Bulgaria, 21% in Germany, 20.1% in Denmark, 19.7% in the USA, 18% in Greece, 16.7% in Spain, 15% in Cyprus, 14.5% in Italy and 13.6% in France. In terms of the disabled population, 5.9% of disabled individuals live in Japan, 10.5% in Cameroon, 12.2% in India, 18.5% in Australia and 13.7% in Canada. In a study conducted in the USA in 2012, 7.7% of children aged 3-17 had communication disorders. The most common communication disorder was speech disorder (speech sound disorder, stuttering) at 5%. The research also revealed that one third of the language and speech problems of children between the ages of 3 and 10 were accompanied by additional problems, speech problems occurring alone were 41.8%, language problems were 13.6%, voice problems were 6.3% and swallowing problems were 4.3%. In



the study conducted in the United Kingdom, it was concluded that there was a receptive language delay/disorder in children aged 7 and under between 2.63% and 3.59%, the prevalence of expressive language delay/disorder was between 2.81% and 16%, and the prevalence of both receptive and expressive language delay/disorder varied between 2.02% and 3.0%. According to the World Health Organization, taking the broader Turkish population into consideration, 3.5% of individuals have language and speech problems (Konca, 2021).

The 2002 data of the Turkey Disability Survey shows that 12.3% of the population is disabled. 1.3% of disabled individuals in Turkey are orthopedically disabled, 0.6% are visually impaired, 0.4% are hearing impaired, 0.4% are language and speech impaired, and 0.5% are visually impaired. It is stated that 0.2% of individuals registered in the National Disability Database in 2010 had language and speech impairments (Yanikkerem & Esmeray, 2017). In the research, approximately 30% of individuals experience stuttering and other speech disorders, 46% have ‘complete’ and 26% have "partial language-speech disability (Kirman & Yıldım Sarı, 2011).

Communication constitutes a complex process encompassing an individual's linguistic competencies and verbal articulation capabilities. Language is a dynamic and complex structure consisting of symbols that emerge from transferring ideas and communicating, and that are agreed upon with common rules (Aslan, 2023). Through language, the individual provides feedback to incoming stimuli using communication channels (Otagburuagu, 2009). In this process, language and speech interact and are affected by each other. Otherwise, the failure of sounds to perform their duties with motor, cognitive and linguistic processes (respiration, vocalization, resonance and articulation) negatively affects both communication channels and causes the individual to encounter language and speech disorders. Language disorders are the difficulties experienced by the individual with expressive language, receptive language or pragmatic language. Speech disorders are the individual's voice, fluency or pronunciation attracting the attention of the other individual. As a result of the individual's speech disability, communicative actions such as understanding, naming, writing, and reading do not work actively (Sharp & Hillenbrand, 2008; Tanrıdağ, 2009; Aydın Uysal & Tura, 2018). In other words, language and speech disabilities make it difficult to understand sound and language functions.

**Table 1.** Classification of language and speech difficulties (Ateş, 2024, p.20).

A) Speech Disorders	B) Language Disorders
<b>I. Articulation Disorder</b> 1. Omission (Lowering the Voice) 2. Substitution (Changing the Voice) 3. Addition of Voice 4. Distortion of Voice  <b>II. Voice Disorders</b> 1. Pitch Disorder 2. Loudness Disorder 3. Voice Quality Disorder  <b>III. Disorders in the Flow of Speech</b> 1. Rushed-Complex Speech 2. Stuttering	1. Specific Language Disorder 2. Aphasia 3. Delayed Speech  <b>C) Language and Speech Disorders Due to Different Causes</b> 1. Language and Speech Disorders Due to Hearing Problems 2. Speech Disorders Related to Cleft Lip and Palate 3. Language and Speech Disorders Due to Learning Disorders (Dyslexia) 4. Language and Speech Disorders Due to Autism 5. Language and Speech Disorders Due to Mental Retardation 6. Language and Speech Disorders Due to Traumatic Brain Injury 7. Bilingualism - Foreign Language and Regional Speech Differences

Individuals' disabilities hinder their communication processes. Their inability to hear the voices around them causes them to have difficulty in communicating (Oktekin & Çavuş, 2019) because communication is a process that involves the individual's language and speaking skills. Language and speech disorders are categorized as “speech disorders (articulation/pronunciation disorders, voice disorders, speech flow disorders); language disorders and other language and speech disorders” (Yanikkerem & Esmeray, 2017). These disabilities are widely seen in the world. For example, in the United States, approximately 1.3 million students are provided with special education services under the primary diagnosis of speech disorder and/or language disorder. This disability is defined as the second most common disability service category in the US public education system. These disabilities



in children cause their writing and many other skills to be underutilized as children expand their vocabulary via speaking (Werfel et al., 2021). As Lev Vygotsk stated in 1968, language is an effective tool in human communication. It shapes children's cognitive knowledge and social communication at school and thus children build knowledge by gaining experience (Akpan et al., 2020).

### **Current Study**

Children gain experience in many ways. These experiences are a determining factor in the status of disability. In research, these factors are considered with various variables (such as age and school levels). For example, there are language and speech disabilities observed in preschool children (Finneran, Leonard, Miller, 2009; Cunningham et al., 2017) and first-grade primary school children (Werfel et al., 2021), difficulties experienced by stuttering students (Pistav Akmese, Kayhan, & Akmese, 2024), teacher attitudes towards stuttering (St Louis et al., 2016; Elrefaie, El Ella, El Halim, & Gobran, 2022), literature studies (Robinson, 1991; Sharp & Hillenbrand, 2008; Tohidast, et al., 2020), variables that cause speech and language disorders (Fox, Dodd, & Howard, 2002). In this regard, the literature and studies conducted on preschool children are more intense. However, there are not many studies on primary school-age children who constitute basic education, and the teacher factor is not examined in detail in this age group.

As Chomsky stated, the relationship established between language and mental structure affects the individual's speech structure (Başaran, 2024). This effect is more prominent at the primary school level with the concrete period. Language skills such as reading, writing, speaking, and listening become meaningful in the mental structure with the education given in primary schools. On the other hand, some children cannot use their language skills sufficiently in the formal education given in this period. The most basic reasons for this include the parents's resistance in accepting their child's disability. Another reason is that the physical disability of the child not being fully determined when taken to the doctor. An effective diagnosis is made only when the family's complaints and observations are shared with experts. Both the family and teachers ignore the child's language and speech disabilities, and when one of the family members experiences similar problems, he / she adopts the belief that "he/she will talk anyway". Considering that these and similar reasons are based on genetic, emotional, neuropsychiatric, idiopathic reasons, children are expected to be checked under the supervision of a specialist and receive training in this regard (Konca, 2021). This study aims to examine language and speech difficulties in primary school students, investigate how these difficulties affect communication patterns, and explore teachers' perspectives on children's language and speech development through a review of relevant literature. The reason for considering the student and teacher dimensions together is that it is very unlikely for primary school children to express themselves and have general information about their disabilities, but the most detailed information about children's language and speech disabilities will come from teachers. In other words, information about language and speech disabilities was obtained from teachers who know children as well as their families. Thus, the research is considered important in terms of providing insights on the training and suggestions carried out by teachers in the teaching-learning process for students with this disability for future studies, other teachers who are the implementers of the curriculum, and families who educate the child informally. Based on these considerations, this study jointly examines primary school children's language and speech challenges and their teachers' perspectives on these issues.

The following questions were sought in the study:

1. What are the effects of primary school students' language and speech disabilities on communication differences?
2. What are the opinions of primary school teachers about language and speech disabilities of primary school students?



## METHOD

### Research Model

The research employed an embedded multiple case study design, which incorporates several distinct cases within the framework of investigation. These cases in the studies are addressed with more than one unit of analysis and different data sources are used to reveal the situation (Yin, 2017). In the study, language and speech were addressed and examined as separate units in 1st, 2nd, 3rd, and 4th grade students. In other words, the language and speech disabilities of the students in the 1st, 2nd, 3rd and 4th grades included in the scope of the research were examined by dividing them into various subunits depending on their own conditions. For example, the language and speech disabilities of children were addressed with subunits such as articulation disorder, delayed speech, voice disorder, stuttering in the case of their effects on communication differences. Similarly, teachers hold perspectives regarding various factors affecting children's speech development, including cognitive ability, auditory function, neuromuscular health and coordination, emotional well-being, and oral-structural elements such as jaw formation and dental alignment.

When using the embedded multiple case design in the study, firstly data sources based on the questions of “why?” and “how?” were used. Situations that cause students’ language and speech disabilities and events related to how they happen were examined. The study also aimed to identify the instructional approaches teachers implement in educational settings when addressing these communication challenges. Then, the research problem was determined, the study group was decided, and data were collected with an open-ended questionnaire and semi-structured interview form. Finally, the data were analyzed and reported.

### Participants

The sample population of the study comprised 35 students and 28 primary school teachers from educational institutions located in Siirt City Center. The participants are 21 female students and 14 male students. 10 of the students are in the 1st grade, 15 in the 2nd grade, 5 in the 3rd grade, and 5 in the 4th grade. 18 of the primary school teachers are female and 10 are male. In terms of seniority, one teacher has 3 years, 6 teachers have 11-15 years, and 21 teachers have 16 years or more seniority. The participants in the study were determined through criterion sampling. Criterion sampling is carried out according to a set of predetermined criteria (Baltacı, 2018). The research criteria must definitely be suitable for the purpose of the research (Creswell & Clark, 2016). In this study, the criteria are primary school students with speech and language disabilities and their teachers. In determining these students and teachers, the Ministry of National Education Siirt Provincial Directorate of National Education was contacted and the necessary permissions were obtained, and within the framework of the permissions, communication was established with school administrators and students with language and speech disabilities in schools were tried to be determined. After the students were determined, information was obtained from the class teachers of these children about their disabilities. Later, interviews were conducted with the children in the room of the Psychological Counselor and Guidance Teacher with guidance support.

### Data Collection Tools

A semi-structured interview form developed by the researcher, an open-ended survey, and document analysis were used as data collection tools in the study. Interviews that examine individuals' feelings and thoughts in detail (Braun & Clarke, 2013) are used in different types depending on the purpose of use in research. One of these types is the semi-structured interview. In a semi-structured interview, the researcher has prior knowledge about the general framework of the subject and has a flexible feature (Büyükoztürk et al., 2020). The semi-structured interview form applied to teachers initially consisted of six questions, and was reduced to five questions with criticism and suggestions from experts. Experts have expressed their views on determining the causes of speech disability in children and what kind of educational activities should be carried out in children with language and speech disabilities.



The open-ended survey was applied to students. Five questions of the survey form were optional, and the sixth question consisted of an open-ended question to obtain students' thoughts on communication. Expert validation was first obtained for the survey instrument. The open-ended questionnaire incorporated specialist perspectives regarding the etiology of children's language and speech difficulties, as well as the impact of these communication challenges on interpersonal interactions.

For the semi-structured interview and open-ended survey form, face-to-face interviews were conducted. The interview form was given to the teachers in writing and the teachers and the researcher exchanged views on the subject in a conversational manner. Throughout the data collection phase, the researcher systematically gathered comprehensive information about the student participants. Individual interviews were conducted with each respondent to ensure depth and authenticity of the qualitative data. The interviews were conducted for 20-25 minutes. At the same time, the researcher conducted interviews on different days and times to obtain more in-depth information from the participants. The interviews with the students were conducted under the supervision of the Psychological Counselor and Guidance Teacher and sometimes with the accompaniment of the class teacher and guidance teacher. The researcher and experts worked together in the guidance service to make the students feel comfortable and not experience anxiety. The data obtained from the last question were directly quoted through document analysis and interpreted in the findings section. As it is known, documents can be written documents and pictures obtained without the intervention of the researcher (Kıral, 2020). They can be documents in the form of primary and secondary sources (Balci, 2006). Since the drawings made by the student himself/herself were used in the findings section in the research, data were obtained from primary sources. Here, in the open-ended survey form prepared for the students, they drew the classroom of their dreams and the student drawings were used to support other views in the survey form.

### **Data Analysis**

MAXQDA, a qualitative research program, was used in the analysis of the data. While conducting content analysis in the program, the interview data conducted with teachers and students were first transferred to the computer environment. The researcher read the opinions in detail and reached various codes from each opinion read. These codes were then transferred to the computer and a code list was created. The words and expressions in the interviews were recorded in the code list. The researcher prepared a code list on the computer and recorded the words and expressions in the interviews into this list. Another expert's opinion was consulted for the reliability of the codes. The reliability between the opinions of the two experts was calculated. The reliability of the research was calculated as .89 by calculating with the consistency coefficient calculation formula developed by Miles and Huberman (1994).

After the researcher carefully examines the units of analysis, the comments and explanations of the participants are noted. In the interviews, the researcher codes the sections he/she understands with three or four words and after the coding process, the codes are grouped according to their similarities and differences. In creating the themes, literature and participants' opinions were used. In all these processes, MAXQDA was used as a qualitative program. The themes and relationships between codes were visualized using the Code-Subcode-Sections Model with the MAXQDA program. The visuals were presented as figures in the findings section. The frequency of repetition of codes was indicated in the figures.

### **Validity and Reliability**

There are some ways to ensure validity and reliability in qualitative research. One of these ways is credibility, others are transferability, durability and confirmability (Patton, 2021). Credibility (internal validity) is the use of the best expressions about the accuracy and falsity of inferences obtained from a concept. Credibility is established through long-term interaction, continuous observation, and diversification (Arslan 2022). In this research, the data were diversified and associated through open-ended questionnaire form, semi-structured interview form and document analysis. Transferability (external validity) is related to the application and generalization of research results in similar situations (Miles, Huberman, & Saldaña, 2014). The study implemented a thorough participant briefing, wherein



students received comprehensive explanations regarding the instrumentation and data collection procedures. This approach aligns with the methodological principle of thick description, enhancing the transferability of the research findings. Another way to ensure transferability is purposeful sampling. Criterion sampling, one of the purposeful sampling types, was used in the research.

In the study, consistency and confirmability were examined for reliability. According to Yıldırım and Şimşek (2021), consistency is examined for compliance between the mentioned data. In confirmability, the results obtained are supported by previously collected data. In this study, consistency between coders was examined and the participant opinions were transferred to the text without any changes. In addition, the findings obtained by analyzing the data were shown in tables and direct quotes were included. When quoting from the interviews, T code was used for teachers and S code was used for students.

## RESULTS

### **The effects of primary school students' language and speech disabilities on communication differences**

74.29% of students use written, 11.43% use visual, and 14.28% use nonverbal communication. 42.87% of the students' source of disability is articulation disorder, 22.86% delayed speech, 11.43% voice disorder, 14.28% stuttering, 5.73% speech disorder due to hearing impairment, and 2.83% speech disorder due to cleft palate brain disability. Non-verbal communication is mostly used by 1st-grade students, and written and visual communication is used by 2nd, 3rd and 4th-grade students.

Students' language and speech difficulties have demonstrable adverse effects on their communicative competence and interpersonal interactions. 80% of students stated that they felt lonely, 11.43% stated that this situation did not affect them much, and 8.57% stated that they felt excluded. The common view of 1st and 2nd grade students was that they felt lonely, but for 3rd and 4th grade students, this situation did not affect them. 22.86% of the students (3rd and 4th grade students) stated that they solve the problems they encounter in the communication process themselves, 57.14% of the students (1st, 2nd, 3rd, 4th grade students) receive support from their families, 20% of the students (1st, 2nd, 3rd, 4th grade students) receive support from teachers. The best ways these students learn are 62.86% (1st, 2nd, 3rd, 4th grade students) by listening, 22.86% (2nd, 3rd, 4th grade students) by writing, 8.57% (3rd, 4th grade students) by using gestures and facial expressions and 5.71% (1st, 2nd, 3rd, 4th grade students) by seeing. The views of primary school children regarding the classroom environment they want to receive education in, depending on their communicative differences, and the drawings related to these views are given below.



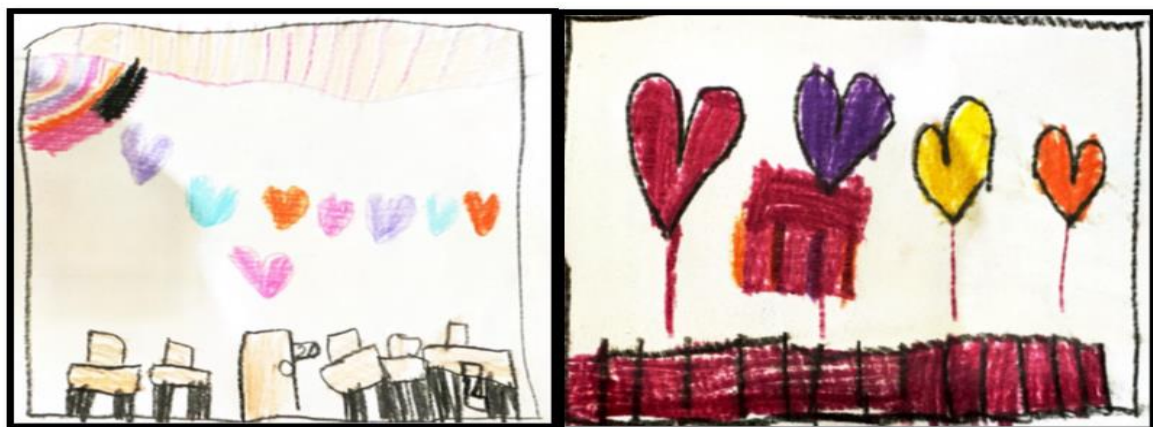
**Picture 1.** S1 and S30 students' perspective on the concept of communication.



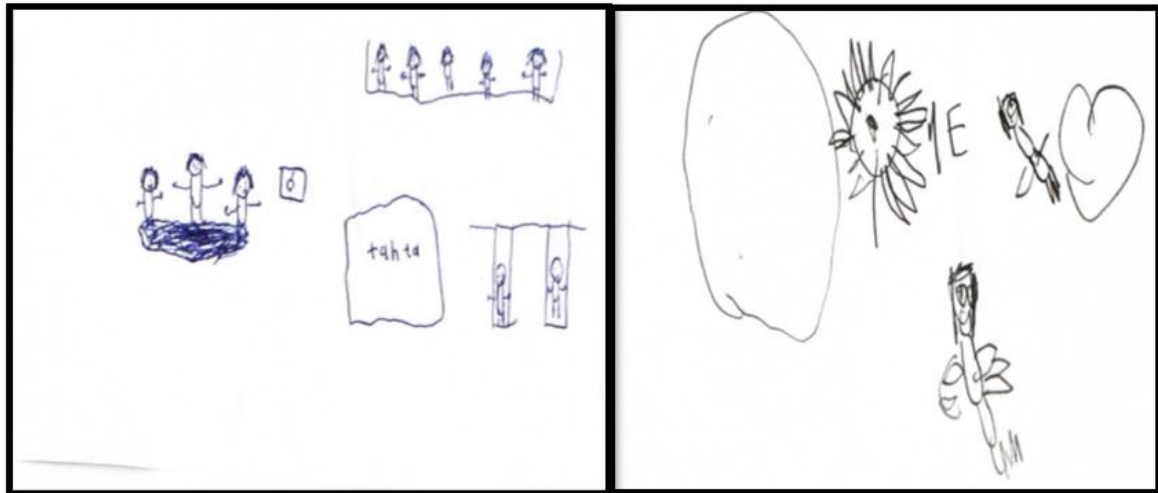
Picture 2. S9 and S22 student's perspective on the concept of communication.



Picture 3. S5 student's perspective on the concept of communication.



Picture 4. S14 and S18 student's perspective on the concept of communication.



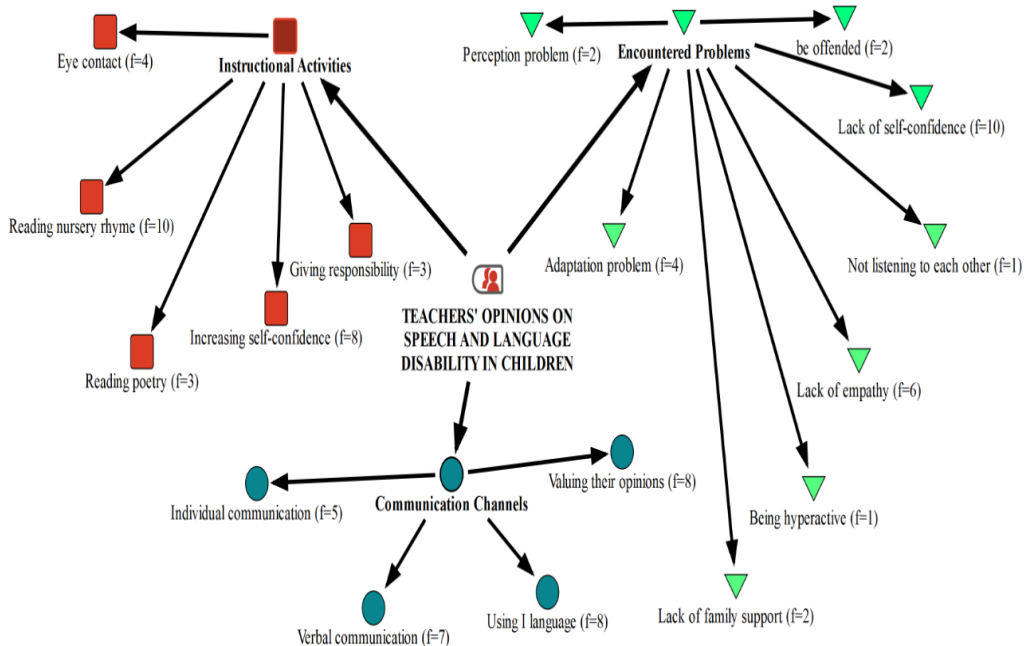
**Picture 5.** S16 and S29 student's perspective on the concept of communication.

As illustrated in the picture 1 and picture 2, children explained communication by associating it sometimes with their classmates, sometimes with their neighbors, and sometimes with the images in their dreams. In the process of associating, as in the pictures drawn, the age factor is an effective factor. In other words, there is a difference between the communicative images used by first-grade students and the images used by fourth-grade students in drawings. These differences become apparent with muscle-mind coordination.

**Primary school teachers' views on primary school students' language and speech disabilities**

According to teachers, children's speech disabilities include 7.14% intelligence, 21.43% hearing, 35.71% neuromuscular health and coordination between them, 25% emotional state, 10.72% jaw structure and teeth disorders.

The majority of children have delayed speech, voice disorders, articulation disorders, and stuttering disabilities. Teachers' views on language and speech disabilities are listed below at figure 1:



**Figure 1.** Teachers' views on language and speech disabilities in children - Code-Theory Model.





T1: I do a lot of tongue twisters for students. I do activities with pictures. ...The most common problem encountered in these children is lack of self-confidence.

T5: I make eye contact with students. I use my gestures and facial expressions a lot. These students get upset very easily.

T8: I give a lot of space to listening and speaking activities. Storytelling, listening, theatre, sports activities...

T9: One-on-one activities are done... I tell jokes.

T10: I have them memorize tongue twisters and counting. I use my gestures and facial expressions and make eye contact. There are usually perception problems, comprehension problems, forced listening, body language, and facial expression problems.

T12: I have them do tongue twisters. We do activities that develop self-confidence skills. I show that I care about the student. I encounter the problem of not speaking a lot.

T13: I do letter and word formation activities for children with language and speech disabilities. I give importance to tongue, lip and jaw movements. I make them repeat a lot. The communication channels that students use the most are verbal and visual communication. I make eye contact. I read facial expressions. The most common problem I encounter during the teaching process is developing listening skills.

T14: Children generally have similar problems in their family history. They often have articulation disorders. I do tongue twister activities a lot. I give them tasks in the classroom so that their reading skills are similar to other students. I am especially careful to make eye contact with the child. ...I have the biggest problem with not listening in the classroom.... For this reason, I give them responsibilities.

T15: My student stutters. I do lots of reading activities for this student of mine. I have the most confidence problems with this student. He is a very introverted child. I try to include him in group activities as much as possible.

T16 : There are a few students in my class. Some have voice disorders and some have stuttering. They have just started school. They are very shy and have problems expressing themselves... Their motivation is low... I try to include them in class activities with games.

T18: My student has a disorder related to nerve and muscle health. He has a delayed speech and stuttering. I have this student do tongue twisters. I make more eye contact than other students. This student has a perception problem. He has difficulty listening. He cannot use his gestures and facial expressions sufficiently. I include him in the learning process with game-based activities.

T19: Our class is very crowded. Sometimes we cannot do enough educational activities. When we have time, we work on making sounds correctly. I use verbal, visual and auditory channels. Sometimes I also get support from technological means. ....The families of such children do not accept this situation easily. ...When the classes are very crowded, we do not know how to teach such students. However, we try to take individual differences into account, but the room is not enough.

T22: My student with nervous and muscular health stutters. ....I am trying to communicate verbally with these students. I make them play games. ..they have a lot of lack of self-confidence. ....they also have problems with adaptation....I chat with them so that they feel safe.

T24: I have them read simple syllables out loud. I do face-to-face individual activities. I communicate verbally. I give feedback immediately. I try to make the messages concrete but still have a lack of self-confidence.....I try to get support from the family.

T25: My student has an emotional disability. He has a delayed speech and articulation disorder. He was taken to a language education therapist by his family. I communicate with this student face to face. I ensure his participation in the lesson by answering questions throughout the lesson. ...not understanding



the instructions given due to lack of attention, not taking it personally...understanding the instructions given after one-on-one warnings...hyperactivity. He is constantly busy with something...

T26: Language and speech difficulties...She has a delayed speech impediment. She cannot read clearly when reading aloud. She also has problems expressing. ...I communicate one-on-one. ...I have her tell jokes in class. I encourage her to sing.

T27: He has an emotional disability. He has a delayed speech due to speech impediment...we do listening and speaking exercises. Sometimes we do sports activities. I tell stories. ...I use techniques such as arranging an environment where the child can be interested and active in auditory stimuli, and dramatization. ...delays in the child's language and speech development can cause some inadequacies and lack of self-confidence in the student.

T28: He has an articulation disorder. I have him describe the objects around him and make predictions. ..when communicating with children, I communicate with them by making eye contact and giving notifications. I have encountered problems such as students getting bored and sulked easily during the communication process. We overcame the problem by encouraging the student and giving feedback.

## **DISCUSSION, CONCLUSION, and SUGGESTIONS**

Communication established between two or more people is the ability to talk, converse and maintain good relationships. Communication, which goes beyond understanding what is said, is the set of elements that enable appropriate reactions to be presented. Individuals transfer the information they have internalized from generation to generation through communication, which varies from individual to individual (Tuna, 2012). Findings indicate that participants demonstrated a preference for written communication modalities. This tendency can be contextualized within developmental frameworks wherein individuals, from early cognitive development through maturation, acquire understanding of neurological functioning, social constructs, and native language acquisition through various communicative channels. They do this sometimes by listening, sometimes by writing and most importantly by speaking (Girgin, 2006). In the study, it was seen that the sources of obstacles for children are mostly articulation disorders, delayed speech, voice disorders and stuttering. In a study conducted by Thapa, Okalidou and Anastasiadou (2016) in Nepal, the rate of speech and language disorders seen in the primary school period is 8.11%. In particular, general speech problems are 4.68% and language problems are 8%. Again, in the study, the prevalence of speech-language disorders according to their subtypes was reported as 2.95% for articulation/phonological problems, 2.09% for stuttering, 3.42% for voice problems, 4.97% for receptive language problems, and 7.74% for expressive language problems. In Turkey, the number of hearing and speech impaired individuals is determined as 377,000, and the population of hearing and speech impaired who are of reading age and studying is determined as 135,000. The education of such disabled individuals is seen as important in society. For this reason, there are 48 primary schools for the hearing and speech impaired and 8 multi-program high schools (vocational schools) for the hearing and speech impaired in Turkey (Öztürk, 2012). It seems that heredity, as well as other disabilities, have an impact on the developmental characteristics of such individuals with language and speech disabilities. Pregnancy, premature birth and miscarriage risks, prolonged bottle use, sucking habits, and ear problems have negative effects on speech and language development (Fox, Dodd, & Howard, 2002). According to Robinson (1991), the gender variable is effective in this process. Half of the study conducted on 38 boys and one girl had a history of hereditary speech-language disorders. Similar problems were encountered in the siblings of the children. Aetiological factors were encountered in 26%, 11% before birth, 3% during birth, and 12% after birth. 21% of children had a seizure, 7% had a seizure after age eight, and 22% walked for the first time after 18 months (Robinson, 1991). Beitchman's (1986) study found that children with speech and language disorders were more stressed, had increased attention deficits, and had various psychiatric problems, with these problems being more common in girls. Similar results can be seen in the studies by Fox, Dodd, and Howard (2002). The study emphasized that between 28% and 60% of children with speech and language disabilities had a sibling and/or parent with speech and language difficulties. When this rate was examined in terms of gender, it was higher in females.



The developmental period of the student is important in terms of language and speech. Especially primary school children use writing, listening and speaking skills along with reading skills. These children also perceive the world concretely and their language development develops rapidly. When looked at worldwide, age ranges for language and speech disorders may differ from each other. In 2012, 8% of children between the ages of 3 and 17 in the USA had voice, speech, language or swallowing disorders. In particular, one third of children between the ages of 3 and 10 and one quarter of children between the ages of 11 and 17 had these disorders (Black, Vahratian, & Hoffman, 2015). In the United Kingdom, 6% of children have speech and language delays. At the same time, 29% of children have minor speech and language problems by the age of 4 and 8% by the age of 7 (Law et al., 2000). Similar problems are seen in approximately 6%-9% of children in South Africa. In Australian children, these rates vary from 1% to 21%, and the prevalence of speech and language is more common in young children (Langbecker et al., 2020). Young children also face obstacles in producing certain sounds. In their study on preschool children in Ontario, Canada, Cunningham et al. (2017) stated that children with speech and language disorders have changes in their skills such as the pronunciation of consonants, the use of grammatical markers and speech fluency. Thus, children with language disorders experience greater difficulty in vocabulary acquisition and learning new words compared to their typically developing peers (McGregor et al., 2002).

According to teachers, students have physical, intelligence, neuromuscular health and coordination between them, emotional state, hearing, jaw structure, dental disorders, language and speech difficulties, and language and speech disabilities originating from heredity. Articulation disorders, stuttering, cleft palate and brain disabilities and speech disorders are the most common disabilities. Teachers mostly establish eye contact, assign in-class tasks and responsibilities, listen to students, make them feel valued, direct them to language education therapy, do tongue twister activities, and provide individual education for students with language and speech disorders. The teacher's attitude is considered extremely important in the problems experienced by children with language and speech disabilities. The teacher's gestures-facial expressions, attitudes, and stance have an effect on the child's stuttering (Guitar, 2013). Stuttering is not limited to this; it reduces the individual's social and individual quality of life (Kathard et al., 2014). For example, in a study conducted in Cairo, it was stated that positive attitudes of teachers were effective on students with this type of disability (Elrefaie, El Ella, El Halim, & Gobran, 2022). Stuttering disability encountered in preschool and primary school children is a very determining factor on socialization and communication. Because children who are bullied by their peers in the school environment exhibit introverted behavior due to their disability (Mallick, et al., 2018). For this reason, teachers should prepare various plans-programs for children who have language and speech problems in all kinds of classroom environments. If necessary, they should receive support from the family (Le, et al., 2020). According to Pistav Akmese, Kayhan, and Akmese (2024), it should be decided how to communicate with children and a strong communication network should be created.

As a result of the research, students have physical disabilities, intelligence, neuromuscular health and coordination between them, emotional state, hearing, jaw structure, dental disorders, language and speech difficulties, and language and speech disabilities due to heredity. Articulation disorders and speech disorders are mostly included among the disabilities. In addition, it was concluded that there are speech disorders due to stuttering, cleft palate and brain disabilities. Teachers apply practices such as establishing eye contact, developing self-confidence skills by giving tasks and responsibilities in the classroom, creating the feeling that the student is listened to and valued, directing them to language education therapy, doing tongue twister activities, and providing individual education for students with language and speech disorders. The students stated that they use written and visual communication a lot, that they are mostly affected when their friends do not communicate with them, and that they receive support from their families and teachers in such a situation. In their study by Maviş et al. (2005), teachers emphasized genetic, psychological and mental disabilities among children's language and speech disabilities. Teachers who encounter these disabilities are expected to be knowledgeable above all else. However, according to Konca (2024), teachers do not have sufficient knowledge and experience regarding the diagnosis and evaluation of language and speech disabilities. The absence of specialized



training for teachers on diagnostic and evaluative methodologies, coupled with limited awareness of available professional development programs, impedes effective educational interventions for students with language and speech difficulties. Thus, teachers who do not have sufficient equipment for individuals with language and speech disabilities do not know which technological tools and materials to use in the classroom.

### **Limitations and Future Research**

The research examined the language and speech disabilities of primary school children. Studies can be conducted for other grade levels. In particular, the language and speech disabilities of preschool children can be determined. The problems experienced by children with language and speech disabilities can be determined. These problems can be investigated in terms of gender, class level, teacher and parent. At the same time, the learning preferences of children with language and speech disabilities can be determined and their successes related to this learning can be examined.

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### **Ethics and Conflict of Interest**

Research permissions were obtained from two institutions. The first permission was obtained from the Ethics Committee of Siirt University Rectorate with session number 950. The other permission was obtained from the Research Application Permissions Application and Evaluation Module of the Ministry of National Education of the Republic of Turkey with the application number MEB.TT.2024.003806. The author declares that they have no conflict of interest.

### **Data availability**

The data that support the findings of this study are available on request from the corresponding author.

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