

## Metaphoric Perceptions of Pre-service Primary School Teachers on Reading and Reading Disability

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### ABSTRACT

Reading plays a vital role in keeping up with the requirements of the age beyond primary education. It is inevitable for individuals who have difficulty gaining reading skills to encounter difficulties both in school life and in society. Students with these disabilities should be identified as soon as possible and the disabilities should be eliminated in order to remove the obstacles to human existence in academic and daily life. The proficiency of primary school pre-service teachers regarding the concepts of “reading” and “reading difficulty” gives clues for identifying and correcting individuals with reading disabilities. It is aimed to determine the metaphorical perceptions of primary school pre-service teachers towards the concepts of “reading” and “reading disability” in order to help address this issue. The study group of the research consists of 89 4<sup>th</sup> grade primary school pre-service teachers who continue their education at a state university in the Black Sea Region in Turkey in the fall semester of the 2017-2018 academic year. The model of this research is phenomenology which is one of the qualitative research methods. A questionnaire developed by the researchers was used as a data collection tool. Content analysis method was used in the analysis of the data. Five different categories related to reading skills and reading disabilities emerged as a result of the analysis of the data. Categories related to the concept of reading skills are “Discovering Something New”, “Fun Source”, “Embarking on Adventure”, “Decoding” and “Other”. The categories related to the concept of reading disability are “Difficulty”, “A problem in itself”, “Visual disorders”, “Deficiencies” and “An insurmountable problem”.

**Key words:** Primary School Teaching, Primary School Pre-service Teachers, Reading Skills, Reading Disability, Metaphor

### INTRODUCTION

Reading is a meaning-making process based on effective communication between the author and the reader (Akyol, 2014). According to the Turkish Language Association, the word reading means “voicing the letters that make up a text and understanding the emerging thought” (TDK, 2015). Reading is a significant skill. Reading coordinates the diversity of many skills, abilities, strategies and knowledge. It may be difficult for individuals with underdeveloped reading skills to appreciate the number and type of factors involved in reading and their impact on the process. However, reading is a skill that can be produced easily and effortlessly for individuals with advanced reading skills (Cain, 2010). Harris and Sipay (1990) added to the literature the situation of having difficulty in reading by describing the concepts such as “reading difficulty”, “reading disorder” and “reading disability”. They state that these concepts are used to describe each other. They describe reading disability as follows: “The student’s reading success is that it is below what is expected from both age level and learning potential and that the

student’s cultural, linguistic and educational experiences are not similar to each other.” A similar definition of reading disability is also included in the diagnostic classifications of the American Psychological Association (APA, 1994). The quality of reading and comprehension skills gained in primary school years may affect the academic success of students in the following years. Therefore, it is necessary to attach great importance to reading skills in the first years of student life. It is very important for teachers and pre-service teachers to know the factors affecting this skill in order for children to gain reading skills effectively (Bloom, 1995) In order for students to reach the intended reading and reading comprehension skills:

- Word recognition and vocalization,
- Reading fluently,
- Explaining the meaning of the words,
- Bringing prior knowledge and experiences about the text,
- Using strategies that support the comprehension of the text,

- The ability to control the comprehension process (Carlisle & Rice, 2002; National Reading Panel (NRP), 2000).

The most prominent feature of reading disability is mixing letters and words and not being able to read correctly (MEGEP, 2007). Students with reading disabilities; they do not want to participate in reading activities, they hesitate to read aloud in the classroom, their reading speed is quite slow, they cannot emphasize and intonation at the desired level by paying attention to punctuation while reading, and they have difficulties in understanding the text they read (Cain, 2010). According to Doyle (1983), 83 per cent of educational activities at school are structured with activities based on reading. If students with reading disabilities are identified and not intervened, it can cause them to experience failure in school, form individuals with low self-confidence, and be isolated from both themselves and society. Although reading disability is common in schools, when we look at the sources (Bingöl, 2003; Doğan, 2012; Gür, 2013), it is seen that the diagnosis and improvement processes are insufficient (Royer & Sinatra, 1994). Identifying and intervening with students with reading disabilities from the first years of primary school (Sidekli & Yangın, 2005) is considered extremely important in preventing future problems. For this reason, the majority of research focuses on first-reading experiences. According to the results of the research, early reading disabilities are the basis of school failure. Ignoring these failures forms negative attitudes towards reading. For this reason, children with reading disabilities develop negative attitudes towards school. As a consequence, teachers should strive to eliminate students' reading inadequacies in the first years of school and efforts should be made to have positive attitudes towards reading (Hogsten & Peregoy, 1999). Experts in the education of children with reading disabilities should first know the basic causes of reading disabilities in children. Then, they need to prepare a program to overcome children's reading disabilities. While creating this program, it is considered important that the family, the child and the expert work together (Razon, 1982). The competencies of pre-service primary school teachers regarding the concepts of "reading skills" and "reading disability" provide clues for the identification and elimination of individuals who have disabilities in reading. Therefore, it is very important to reveal the perceptions of pre-service primary school teachers about reading and reading disabilities. Although there are many studies examining the metaphorical perceptions of primary school teacher candidates on many subjects, there is no research examining their metaphorical perceptions of reading difficulties. Therefore, in this study, it is aimed to determine the metaphorical perceptions of primary school pre-service teachers towards the concepts of "reading" and "reading disability" starting from this basic point. In this study, answers were sought to the following questions:

1. What are the metaphors of pre-service primary school teachers regarding reading skills?
2. What are the metaphors of pre-service primary school teachers about reading disabilities?

## METHOD

### Research Model

The model of this research is phenomenology which is one of the qualitative research methods. The phenomenological method allows us to examine the cases that we are aware of but do not have in-depth knowledge of. Phenomena consist of events, concepts and perceptions that occur in the world we live in. We encounter these phenomena in our daily life. However, in order to understand these phenomena, we need to use phenomenological studies that use an in-depth perspective (Yıldırım & Şimşek, 2018). Metaphor is to understand and describe a concept, fact or event in connection with another concept, fact or event (Lakoff & Johson, 1980; Saban & Eid, 2017).

### Participants

The participants of the research consists of 89 (70 female and 19 male) primary pre-service teachers studying in the 4<sup>th</sup> grade of a state university in the Black Sea Region in Turkey in the fall semester of the 2017-2018 academic year (see Table 1). During the research process, the study group was formed with the convenience sampling method.

### Data Collection and Analysis

To reveal the thoughts of the pre-service primary school teachers participating in the study on the concepts of "Reading" and "Reading Disability", "Reading... is similar, because..." and "Reading Disability... is similar, because..." is obtained by completing the sentence. The explanations of the pre-service teachers constitute the data source of the study.

After the data collection tool to be used for the research was created, those who participated in the study voluntarily were asked to answer the questions sincerely and honestly. The preparation and implementation of the data collection tool and data collection was completed in 2 weeks. After the data collection phase was completed, the data obtained were analyzed and the findings of the research were composed.

The metaphorical images expressed in the obtained data were analyzed with the "content analysis method". Content analysis envisages developing certain categories by analyzing the data in detail and defining the characteristics of each category in order to reveal the relationships between the categories (Yıldırım & Şimşek, 2018).

### Validity and Reliability

It is extremely important to explain in detail how the data were collected and how the researcher reached the results to ensure validity and reliability in qualitative research

**Table 1.** Demographic characteristics of the participants

		f	%
Gender	Female	70	78.65
	Male	19	21.35
Total		89	100

(Yıldırım, 2010; Yıldırım & Şimşek, 2018). In order to ensure reliability in qualitative data analysis, it can be obtained by dividing the number of data that researchers agree with and the number of data they disagree with in coding the data obtained (Miles & Huberman, 1994, as cited in O'Connor & Joffe, 2020). The probability of obtaining the percentage values obtained at the end of this reliability study by chance is expressed by many methodologists, and therefore, it is stated that the percentage-based reliability study is appropriate (Cohen, 1960; Hallgren, 2012; Lombard et al., 2002, as cited in O'Connor & Joffe, 2020).

Therefore, in order to increase the validity and reliability of the research; The participants were informed in detail about the purpose and process of the research, data collection was ensured on a voluntary basis, expert opinions were obtained for the category and inter-category compatibility created from the collected data, and all stages of the research were explained in details and transparently. In order to increase the quality of the research, the answers given by the participants were presented as they were written in the results section.

## RESULTS

39 metaphors related to the concept of reading were produced by the pre-service primary school teachers. Some metaphors were developed by more than one participant. These metaphors are grouped under five different conceptual categories in terms of their common features (see Table 2).

### *Metaphors of the Pre-service Primary School Teachers Regarding Reading Skills*

Table 2 shows the metaphor categories that pre-service primary school teachers have for the concept of "reading".

The metaphors developed by the pre-service primary school teachers participating in the research were grouped under five (5) categories in terms of their common characteristics. Categories were created in line with the metaphors created by the pre-service primary school teachers.

#### **Category 1: Discovering Something New**

As stated in Table 2, it consisted of 28 metaphors (24.92%). Frequency distributions of metaphors in this category;

Discovering (8), different worlds (5), bookworm (4), being born (3), the effort to find oneself (2), understanding (2), ocean (2), learning (1), ladder (1). Some examples of these metaphors are as follows:

*"Reading is like discovering because it is what we take to the center of our lives by getting to know, discovering and making sense of it."*

*"Reading is like different worlds because as people read, they discover new lives and people."*

*"Reading is like a bookworm because reading is everything and one sentence can change your life."*

*"Reading is like being born because it is to make sense of where you come from by reading."*

*"Reading is like finding yourself because while reading, it is to live different lives by combining your own thoughts and dreams."*

#### **Category 2: Source of Entertainment**

As stated in Table 2, it consisted of 23 metaphors (20.47%). Frequency distributions of metaphors in this category; Swimming (6), delicious meal (6), painting (4), watching movie (2), theatre (2), seven wonders of the world (1), skiing in the snow (1), dreaming (1). Some examples of these metaphors are as follows:

*"Reading is like swimming because as long as you can swim, it is to see the beauties of the sea."*

*"Reading is like delicious food because the things we read feed our souls by entertaining them."*

*"Reading is like a painting because painting makes us happy."*

*"Reading is like dreaming because reading is like a beautiful dream, we don't want to wake up."*

*"Reading is like the seven wonders of the world because it contains happiness and excitement."*

#### **Category 3: Embarking on an Adventure**

As stated in Table 2, it consisted of 16 metaphors (14.24%). Frequency distributions of metaphors in this category; Journey (6), treasure (2), adventure (2), a lost map (1), pirate (1), shipmaster (1), underground resources (1), running (1), being free (1). Some examples of these metaphors are as follows:

**Table 2.** Categories belonging to the concept of reading and the metaphors they represent by the pre-service primary school teachers

Categories	Metaphors	f	%
Discovering something new	Discovering (8), Different worlds (5), Bookworm (4), Being born (3), The effort to find oneself (2), Understanding (2), Ocean (2), Learning (1), Ladder (1)	28	24.92
Source of entertainment	Swimming (6), Delicious meal (6), Painting (4), Watching Movie (2), Theatre (2), Seven wonders of the world (1), Skiing in the snow (1), Dreaming (1)	23	20.47
Embarking on an adventure	Journey (6), Treasure (2), Adventure (2), A lost map (1), Pirate (1), Shipmaster (1), Underground sources (1), Running (1), Being free (1),	16	14.24
Deciphering	Key (3), Jigsaw puzzle (2), Symbol (2), Equation (1), Deciphering (1), Computer (1), Chess (1), Construction (1)	12	10.68
Other	Sun (3), Parterre (2), Living (2), Breathing (2), Tree (1)	10	8.9
	Total	89	100



*“Reading is like a journey because when we read, we make an endless journey.”*

*“Reading is like a treasure because reading is our most valuable asset.”*

*“Reading is like adventure because it is joining adventures to learn something new.”*

*“Reading is like pirate because like a pirate, our route is always to sail to discover new places.”*

*“Reading is like a shipmaster because as we read, our horizons expand and we improve ourselves.”*

#### **Category 4: Deciphering**

As stated in Table 2, it consisted of 12 metaphors (10.68%). Frequency distributions of metaphors in this category; Key (3), jigsaw puzzle (2), symbol (2), equation (1), decipher (1), computer (1), chess (1), construction (1). Some examples of these metaphors are as follows:

*“Reading is like a key because it is a key used to access vast information.”*

*“Reading is like a jigsaw puzzle because when sounds, syllables and words come together, the pieces of the puzzle are completed.”*

*“Reading is like a symbol because it is the process of combining letters to form a meaningful whole.”*

*“Reading is like decoding because it is combining symbols, making sense of them and deciphering them.”*

#### **Category 5: Other**

As stated in Table 2, it consisted of 10 metaphors (8.9%). Frequency distributions of metaphors in this category are; Sun (3), parterre (2), living (2), breathing (2), tree (1). Some examples of these metaphors are as follows:

*“Reading is like the sun because it illuminates us when we fall into the darkest moment.”*

*“Reading is like a parterre because every book we read gives us different beauties.”*

*“Reading is like living because as you start living, you learn everything.”*

*“Reading is like breathing because reading is a new breath and life.”*

Pre-service primary school teachers produced 38 metaphors related to the concept of reading disabilities. Some metaphors were developed by more than one participant. These metaphors are grouped under five different conceptual categories in terms of their common features (see Table 3).

#### **Metaphors of Pre-service Primary School Teachers Regarding Reading Disability**

Table 3 shows the metaphor categories that pre-service primary school teachers have for the concept of “reading disability”.

The metaphors developed by the pre-service primary school teachers participating in the research were grouped under five (5) categories in terms of their common characteristics. Categories were created in line with the metaphors created by the pre-service primary school teachers.

#### **Category 1: Hardship**

As stated in Table 3, it consisted of 26 metaphors (23.14%). Frequency distributions of metaphors in this category; Barrier (5), Baby (4), Thorns of a rose (3), Walking (3), Repetitive record (3), Running (1), Catching a ferry by a boat (1), Messy room (1), Going uphill on an icy road (1), Treadmill (1), Knotted rope (1), Cooking for the first time (1), Being hungry, Being out of breath (1). Some examples of these metaphors are as follows:

*“Reading disability is like a barrier because it prevents us from reaching the information we want to learn.”*

*“Reading disability is like a baby because he cannot achieve anything alone.”*

*“Reading disability is like thorns of a rose because it is the thorns that cause difficulties among the beauties.”*

*“Reading disability is like walking with a broken leg because as he walks, he finds it difficult.”*

*“Reading disability is like a repetitive record because it is the fact that he cannot record the information he receives in his mind in a planned way.”*

#### **Category 2: A Problem in Itself**

As stated in Table 3, it consisted of 25 metaphors (23.25%). Frequency distributions of metaphors in this category;

A car with a flat tire (6), ladder (5), faulty program codes (4), a bird with a broken wing (3), a lost child (2), unhappy person (2), rough road (1), a misdome construction (1) priority case (1).

Some examples of these metaphors are as follows:

*“Reading disability is like a car with a flat tire because the car with a flat tire cannot go where it wants to go.”*

*“Reading disability is like a ladder because getting stuck on the broken step while climbing the steps step by step.”*

*“Reading disability is like faulty program codes because the incorrectly coded program does not work properly.”*

*“Reading disability is like a bird with a broken wing because in order for the bird to fly, the wings must heal.”*

*“Reading disability is like an unhappy person because even though his intelligence is normal, he/she can't read.”*

#### **Category 3: Visual Disturbances**

As stated in Table 3, it consisted of 17 metaphors (15.13%). Frequency distributions of metaphors in this category;

Visual disturbances (10), Staying in the dark (3), No signal TV (1), Looking from the other side of the mirror (1), Silent, black and white films (1), A foggy glass (1). Some examples of these metaphors are as follows:

*“Reading disability is like visual disturbances because although he/she can see the letters, he/she cannot combine them.”*

*“Reading disability is like staying in the dark because he/she can't see anything.”*

*“Reading disability is like a no signal TV because when the television shows tingling no signal screen, we cannot understand what we see.”*

*“Reading disability is like a foggy glass because the things we want to see are not clearly visible.”*

**Table 3.** Categories belonging to the concept of reading disability and the metaphors they represent by the pre-service primary school teachers

Categories	Metaphors	f	%
Hardship	Barrier (5), Baby (4), Thorns of a rose (3), Walking (3), Repetitive record (3), Running (1), Catching a ferry by a boat (1), Messy room (1), Going uphill on an icy road (1), Treadmill (1), Knotted rope (1), Cooking for the first time (1), Being hungry (1), Being out of breath (1)	26	23.14
A problem in itself	A car with a flat tire (6), Ladder (5), Faulty program codes (4), A bird with a broken wing (3), A lost child (2), Unhappy person (2), Rough road (1), A misdome construction (1), Priority case (1)	25	22.25
Visual disturbances	Visual disturbances (10), Staying in the dark (3), No signal tv (1), Looking from the other side of the mirror (1), Silent, black and white movies (1), A foggy glass (1)	17	15.13
Deficiency	Unable to swim (6), A city that he/she can't speak its language (4), A playpen (4), Staying in the rain without an umbrella (1)	15	13.35
An insurmountable problem	Window blocking the sea view (2), Missing the flight (1), Inability to add gold to the treasury (1), Being a captive (1), A passenger on the train who does not know at which stop to get off (1)	6	5.34
	Total	89	100

#### Category 4: Deficiency

As stated in Table 3, it consisted of 15 metaphors (13.35%). Frequency distributions of metaphors in this category; unable to swim (6), a city that he/she does not speak its language (4), a playpen (4), staying in the rain without an umbrella (1). Some examples of these metaphors are as follows:

*“Reading disability is like unable to swim because a person who cannot swim will drown in the sea.”*

*“Reading disability is like a city where he/she can't speak its language because when he/she wants to understand and know, he experiences failure.”*

*“Reading disability is like a playpen because the turn of the game never comes to the child.”*

*“Reading disability is like staying in the rain without an umbrella because he/she cannot protect himself from the rain.”*

#### Category 5: An Insurmountable Problem

As stated in Table 3, it consisted of 6 metaphors (5.34%). Frequency distributions of metaphors in this category; The window blocking the sea view (2), missing the flight (1), inability to add gold to the treasury (1), being a captive (1), a passenger on the train who does not know at which stop to get off (1). Some examples of these metaphors are as follows:

*“Reading disability is like window blocking the sea view because you can't see that beautiful view even though you want to.”*

*“Reading disability is like missing a plane because missing the opportunity to discover new places.”*

*“Reading disability is like not being able to add gold to the treasury because even though he has the capacity, he cannot read due to some obstacles.”*

*“Reading disability is like being a captive because not being able to learn even though there are many things to learn.”*

## DISCUSSION AND CONCLUSION

According to the results of the research, the metaphorical perceptions of the pre-service primary school teachers about

the concept of "reading" consist of 39 metaphors from five (5) conceptual categories. These categories are; "Discovering something new", "Source of entertainment", "Embarking on an adventure", "Deciphering" and "Other". As a result of the research, the category in which the pre-service primary school teachers developed the most metaphors was determined as "Discovering something new" (24.92%). It was designated as "Source of Entertainment" (20.47%), "Embarking on an adventure" (14.24%), "Deciphering" (10.68%) and "Other" (8.9%), respectively. Pre-service primary school teachers described the concept of "reading" in a positive way. They stated that people discover something new through reading, see it as a source of entertainment and embark on adventures. In the deciphering category, reading is defined as the matching of sounds and letters, forming and giving meaning to syllables and words. The metaphorical perceptions of pre-service primary school teachers about the concept of "reading difficulty" consist of 38 metaphors from five (5) conceptual categories. These categories are; "Hardship", "A problem in itself", "Visual disturbances", "Deficiency" and "An insurmountable problem". As a result of the research, the category in which the pre-service primary school teachers developed the most metaphors was determined as "Hardship" (26%). It was determined as "A problem in itself" (22.25%), "Visual disturbances" (15.13%), "Deficiency" (13.35%) and "An insurmountable problem" (5.34%), respectively.

The proficiency levels of the pre-service primary school teachers regarding reading disability are very important. When these pre-service teachers are appointed and start to work, their level of knowledge is significant so that they can identify the students who have reading problems in the institutions where they work and solve these problems. In general, the cognitive levels of the pre-service primary school teachers about the concept of reading disability are sufficient. However, the pre-service primary school teachers perceive reading disability as a visual impairment (15.13%). The research is not consistent with the fact that reading is a mental process (Akyol, 2014) and that there are special stereotyped mechanisms in the brain for the recognition of written words (Dehaene, 2014). Reading disabilities can

be detected, corrected and even prevented in the early stages. Research has shown that the earlier the diagnosis is made, the better the results are (Shaywitz, 2003; Torgesen, 2002). For this reason, the perception of the pre-service primary school teachers that reading disability is an insurmountable problem (5.34%) should be eliminated.

Ateş et al. (2010) stated that pre-service primary school teachers and primary school teachers do not have correct information about reading and writing disabilities. They also emphasized that the training they received was not sufficient to identify and eliminate reading disabilities. Altun et al. (2011) stated in their research that primary school teachers generally do not find themselves equipped about reading disabilities. Teachers do not find the support of parents at the intended level in eliminating reading disabilities. Doğan (2013) found that the teachers did not have this information at a sufficient level in his research on the level of knowledge of primary school and Turkish teachers about reading disabilities and the level of identifying students with reading disabilities. It has been determined that primary school teachers have theoretical knowledge about reading disability, but their knowledge level is not sufficient in identifying students with reading disability and in the methods-techniques to be used for these students (Yurdakul, 2014; Yurdakul & Kırmızı, 2019). Similarly, in another study, although pre-service primary school teachers have knowledge about reading and math disabilities, they feel inadequate in identifying students with reading disabilities and overcoming these disabilities (Kuruyer et al., 2019).

According to the results of this research, it is seen that the knowledge of pre-service primary teachers about reading disabilities is not sufficient. Considering the insufficient opportunities and curriculum content of courses, it is hard to say that pre-service teachers graduate with necessary knowledge and skills to develop students' literacy skills and overcome reading disabilities (Uyar et al., 2011). For this reason, it is in line with the results of the research of Yangın et al. (2016) that the "Special Education" and "Inclusive Education" courses in the Primary School Teaching Programme Curriculum are not sufficient. More field-specific courses such as reading disability should be included in the undergraduate curriculum, especially not only as theoretical but also as applied courses.

Regarding the education of students with reading disabilities in Turkey, reading experts should be trained and employed by universities through graduate programs consisting of practical and theoretical courses among primary school teacher graduates. According to Uyar et al. (2011), people who are reading experts can be effective in producing solutions to the reading disabilities that students may encounter by conducting this process with teachers, students and parents. According to the research findings of Erkuş and Baştuğ (2014), academicians and primary school teachers gave positive opinions on the training of

reading experts. In their study, Turan et al. (2015) supported the reading expertise of primary school teachers regarding the education of students with reading disabilities. The Ministry of National Education ought to carve out the legal infrastructure that will procure the training and employment of reading experts as soon as possible and prepare postgraduate education programs in order to train reading specialists in accordance with world standards in this process (Akyol & Yıldız, 2013).

Reading disabilities and reading strategies training were given to pre-service teachers in order to teach appropriate reading strategies to overcome reading disabilities. It has been stated that reading strategies are important in eliminating reading disabilities (Sönmez, 2020). Therefore, seminars on the identification and elimination of reading disabilities for teachers who are on duty through in-service training should be organized by the Ministry of National Education. In addition, research on the determination and elimination of reading disabilities in the domestic literature should be transformed into modular programs by the Ministry of National Education, and the use of pre-service teachers and teachers should be encouraged (Yıldız & Aydoğmuş, 2021).

#### Limitations of the Study and Suggestions for Future Research

Pre-service primary school teachers were informed about the research process and purpose. In order to increase the reliability of the research, participation in the research was structured on a voluntary basis. The data collection tool used in the research was created by consulting expert opinions. In the analysis of the data, expert opinions were taken for the categories created by the researchers and the compatibility between the categories. The research is limited to only pre-service primary school teachers regarding reading disabilities. Reading disabilities are not only seen at the primary school level of basic education but are also common at other levels. For this reason, research can be conducted to determine the cognitive levels of reading disabilities for different branches.

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