Opinions of Primary School Teachers on Determination and Referral of Students with Learning Disabilities

Öğrenme Güçlüğü Olan Öğrencilerin Belirlenmesine ve Yönlendirilmesine İlişkin Sınıf Öğretmenlerinin Görüşleri

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ABSTRACT: The aim of this study is to examine the opinions of primary school teachers about what they pay attention to in determining students with learning disabilities and the ways they follow when they encounter with the students who are thought to be learning disabilities. Participants were 23 female and 26 male primary school teachers. Data were gathered using a semi-structured interview form consisting of two open-ended questions. In the analysis of the data, codes and categories were created by using content analysis technique. Four different themes (developmental features, academic features, personal characteristics and communication-based behaviors) were obtained in accordance with the teachers' opinions on identifying students with learning disabilities. In terms of teachers' opinions on what they do when they meet with students who are thought to be learning disabilities, the themes "social activity", "teaching methods", "directing to the relevant individual or organization", "cooperation" and ten different categories related to these themes were obtained. These results were discussed with regard to literature and implementations. Prospective primary school teachers should receive hands-on training on learning disabilities at university level and activities aimed at increasing the knowledge of in-service teachers on this subject through in-service training should be diversified.

Keywords: student with learning disabilities, primary school teachers, determination and referral.

ÖZ: Bu çalışmada, sınıf öğretmenlerinin öğrenme güçlüğü olan öğrencilerin belirlenmesinde nelere dikkat ettikleri ve öğrenme güçlüğü olduğunu düşündükleri öğrenci ile karşılaştıklarında izledikleri yolların belirlenmesine ilişkin görüşleri incelenmiştir. Çalışma, 23 kadın ve 26 erkek öğretmenin katılımıyla gerçekleştirilmiştir. Araştırmanın verileri, iki açık uçlu sorudan oluşan yarı-yapılandırılmış görüşme formu kullanılarak toplanmıştır. Verilerin analizinde içerik analizi tekniği kullanılarak kod ve kategoriler oluşturulmuştur. Öğretmenlerin öğrenme güçlüğü olan öğrencileri belirleme ile ilgili görüşleri doğrultusunda dört farklı tema (gelişimsel özellikler, akademik özellikler, kişisel özellikler ve iletişim temelli davranışlar) elde edilmiştir. Öğretmenlerin öğrenme güçlüğü olduğu düşünülen öğrenci ile karşılaştıklarında yaptıklarına ilişkin görüşlerinden ise sosyal aktivite, öğretim yöntemleri, ilgili kişi veya kuruma yönlendirme ve işbirliği temaları ve bu temalara bağlı on farklı kategori elde edilmiştir. Elde edilen bu veriler ilgili literatür ve uygulamalar açısından değerlendirilmiştir. Sınıf öğretmeni adayları üniversite düzeyinde öğrenme güçlüğüyle ilgili uygulamalı eğitimler almalı ve görev yapan öğretmenlerin ise hizmetiçi eğitimler yoluyla bu konu hakkındaki bilgilerin arttırılmasına dönük etkinlikler çeşitlendirilmelidir.

Anahtar kelimeler: öğrenme güçlüğü olan öğrenciler, sınıf öğretmenleri, belirleme ve yönlendirme.

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Learning disability continues to be a popular topic in special education for researchers, teachers and families. The main reasons for this intense interest are that students with learning disabilities (LD) form the largest group among children with special needs (Bender, 2004; Kavale & Forness, 2006) and their number increases rapidly (Graham & Ballert, 2005; Kılıç-Tüylü & Ergül, 2016). Although students with LD make up the largest group among students with special needs (Kavale & Forness, 2006), the process for determining and identifying these students is still a matter of debate. Various models are used for identifying LD which is encountered at significant levels among students. According to one of these models known as the IQ-Achievement Discrepancy Model, the discrepancy between the mental capacity and academic performance of the student is the main criterion for identifying LD (Vaughn & Fuchs, 2003). Based on this model, the student must be lagging significantly behind other students in order to benefit from special education services (Lyon et al., 2001). Thus, it can be said that this model is unsuccessful in supporting early intervention as nothing is done with the student until he/she has an academic failure (Fletcher, Coulter, Reschly, & Vaughn, 2004; Vaughn & Fuchs, 2003).

The most frequently used model for identifying LD in recent years is Response to Intervention (RTI) model. This model enables researchers to distinguish between students with LD and students with a low academic success by offering supports focusing on students with LD (Fuchs, Mock, Morgan, & Young, 2003). RTI examines the difference between, before and after the intervention (Gresham, 2005). All students (in nursery school or between the first, second or third grades) are surveyed for potential problems in academic and behavioral fields in this model. The students defined as "under risk" are effectively educated (for example language, reading, arithmetic/ maths, behavior) in order to decrease their risks in specified fields (Vaughn & Fuchs, 2003). Hereby, students with LD are identified and supported with suitable approaches without allowing them to fail during school education (IDEA, 2004). The number of students with LD has decreased in educational environment in the USA thanks to implementations providing the identification of students with LD before they progress within the educational system as well as the use of intervention programs within the scope of this approach. On the other hand, students identified with LD comprise 42% of students with special needs in the USA even if this number has been decreased. This ratio is 3% in Turkey (Çakıroğlu, 2017). This ratio is quite low given the fact that Turkey does not commonly take place in such early intervention programs. The ratio is low in Turkey because students with LD are not identified accurately or they are not identified at all (Fırat, 2018).

It can be observed when identification process of students with LD is investigated in Turkey that identifying students with LD is more difficult and complex than other fields of special education (Kargın & Güldenoğlu, 2016). Students with LD are not different from normal students in terms of physical appearance and they form a heterogeneous group (Melekoğlu, 2017). These factors prevent the easy and early realization of their problem. The hesitation of the parents who are aware of the situation of their children but who prefer to wait for requesting help, or who don't have any idea about where to apply to or whom they should contact for help is a significant problem for early identification in Turkey (Kargın & Güldenoğlu, 2016). In other respects, the lack of a standard screening tool developed in Turkey to measure pre-primary and

primary school children in terms of learning disabilities is also a major factor with regard to the inability to identify children with LD at early stages (Kançeşme, 2015).

About the identification of student with LD, Sakız (2018) demonstrated that: (a) school staff do not take into account the possible causes of failure of these children and do not take measures to prevent these reasons, (b) that the diagnosis is based on the difference between IQ and success; (c) obtaining inadequate information from the family and other stakeholders when making the diagnosis is another obstacle to the identification of these children. It is duly seen based on all the aforementioned reasons that students with LD are diagnosed during the primary school stage in Turkey when formal education begins (Diken, 2010). Intervention to students with LD is thus late and primary school teachers who shall play an important role for making the first determination with regard to the identification of students with LD due to the factors indicated earlier (Aladwani & Al Shaye, 2012). Primary school teachers have to plan, follow and monitor the evaluation process well (Kargın & Güldenoğlu, 2016).

Teachers must have knowledge on students with LD in order to follow this process. On the other hand, limited knowledge of teachers may result in forcing them to make erroneous evaluations with regard to students with LD (Scruggs & Mastropieri, 2002) and may also impact their perceptions of students with LD as well as the assistance they provide to such children (Brook, Watemberg, & Geva 2000; Kirby, Davies, & Bryant, 2005; Kocsis, 2016; Lingeswaran, 2013; Moothedath & Vranda, 2015; Wright, 2008). For instance, Kirby et al. (2005) determined that teachers do not have sufficient knowledge on how LD affects the individuals, the personal characteristics of students with LD and the educational strategies that should be applied for these students. Aladwani and Al Shaye (2012) reported in their study that majority of the teachers do not have enough knowledge on what LD is, the detection of the symptoms of LD as well as the proper education process that should be applied for students with LD. It was also observed in this study that teachers are not qualified on what the characteristic features of students with LD are and under which situations LD risk may occur. Similarly, Altun and Uzuner (2016) put forth that primary school teachers have limited information on LD; that they can recognize LD or various problems that students are going through; but that they do not have sufficient knowledge on the issue. It has been indicated in various other studies that teachers have insufficient knowledge on LD and that they must be trained to be well-informed on LD (Alkhateeb, 2014; Chideridou–Mandari, Padeliadu, Karamatsouki, Sandravelis, & Karagiannidis, 2016; DeSimone & Parmar, 2006; Ghimire, 2017; Kamala & Ramganesh, 2013; Kirby at. al., 2005; Moothedath & Vranda, 2015; Saravanabhavan & Saravanabhavan, 2010; Wright, 2008). Although there are few studies focusing on the opinions of Turkish teachers on LD (Altuntaş, 2010; Çakıroğlu, 2015; Doyran & Canca, 2013; Fırat & Koçak, 2018; Özabacı & Ergün-Başak, 2013; Polat, 2013; Yangın, Yangın, Önder, & Şavlığ, 2016), the number of studies focusing on the opinions of primary school treachers on LD and what they would do when they encounter a student with LD is limited.

Primary school teachers in Turkey obtain information on the education of the children with special needs from the special education lecture which they take during their undergraduate education as well as from the in-service courses they participate in throughout their professional lives. It can be said that education on LD provided by way

of the aforementioned processes may be inadequate for determining students with LD and for taking the necessary actions that should be carried out after identifying these students. On the other hand, early and accurate identification of students with LD will help them to receive an appropriate education and therefore to have fewer problems in school and daily life in the future. Thus, it is important to determine the knowledge of the primary school teachers with regard to the behaviors related to LD and the actions they should take when they encounter students with learning disabilities. Therefore, the present study aims at examining the opinions of primary school teachers about what they pay attention to in determining students with learning disabilities and the ways they follow when they encounter with the students who are thought to have learning disabilities.

Method

"Case study" which is one of the qualitative research designs was used in this study in which the opinions of the primary school teachers about the way they will follow for the determination of the students with LD are examined. A case study has been described as an intensive, systematic investigation of a single individual, group, community or some other unit in which the researcher examines in-depth data relating to several variables (Woods & Calanzaro, 1980).

Participants

Maximum variation sampling method was benefitted in order to determine the participants of the study. In order to provide data diversity, it was aimed to interview teachers with different characteristics. Maximum variation sampling is a purposeful sampling method and the purpose is to reflect the variation of the individuals who can be a party to the problem in a maximum level (Yin, 2011). Participants varied in accordance with the variable of gender, professional experience, faculty and department at which they studied, whether they had or have any students with LD. The study was conducted with 49 primary teachers working in eight different schools in Adıyaman. Table 1 presents the distribution of teachers who participated in the study in accordance with these variables.

Table 1

Features of Participants

		Gender		
		Female	Male	Total
Professional experience (year)	1-9	10	9	19
	10-19	7	12	19
	20-29	5	3	8
	30 and over	1	2	3
Graduated from	Faculty of Education	17	18	35
	Education Institute	4	5	9
	Faculty of Science and Literature	2	3	5
Whether he/she had a student with LD	Yes	12	10	22
	No	11	16	27
Whether he/she has a student with LD now	Yes	6	8	14
	No	17	18	35

During the study, opinions were collected from 49 teachers in total with 23 female and 26 male teachers working at schools within the body of Ministry of National Education.

Data Collection

Semi-structured interview form was used for gathering the data. A literature survey was carried out during the process of developing the semi-structured interview form and two questions were prepared as a result. The two main questions were: "How do you determine the students you think have learning disabilities?" and "What do you do when you have students with learning disabilities?". Other questions were asked during the interview when necessary. Interviews were conducted with the participants in a quiet room in the school. Semi-structured face to face individual interviews were carried out with the teachers who took part in the research with each interview lasting about 15-20 minutes which were recorded after taking the consent of the participants. Coding was used for reportage in order to keep the identities of the prospective teachers with whom the confidential interviews were conducted. Abbreviations in the coding used in the reportage are as F3 (Third female teacher), M3 (Third male teacher).

Ethical Procedures

The permission was obtained from the school principals to carry out this study within the framework of ethical rules. It was also taken into account whether the teachers volunteered to participate in the study. It was seen that the participants felt eager and tried to participate in the study.

Data Analysis

The data obtained during the study were analyzed by way of "content analysis" technique comprised of basic patterns determination, coding and sorting into categories procedures (Yin, 2011). The audio recordings obtained from the interviews were first converted to text. Both researchers then read the texts. The coding rules were determined by the researchers and the texts were coded. The coding rules are: (1) to determine what the teacher focuses on as a problem or indicator of LD (2) to understand what the teacher wants to say on example case. The coding was done individually according to the rules. The categories and themes were then created individually by researchers. More than one researcher were used for forming the categories and for coding; with the content analysis process separately realized by two different researchers; and categories and themes were put forth after the results were compared and discussed. The relation between the coding results obtained by two different coders during the analysis process in accordance with coding rules was examined with the reliability between the researchers determined as 82%. The situation that one of the coders coded the data at different times in accordance with the same coding rules and the relation between the results were examined and the reliability in terms of time was found as 89%. The fact that reliability between the researchers and in terms of time is higher than 70% proves the reliability of the research (Miles & Huberman, 1994; Tavşancıl & Aslan, 2001).

Results

Research findings and comments are presented in this section. Table 2 presents the findings on the behaviors or features of the students that make the teachers think that the students have LD.

Table 2

Determination of Student with LD by the Teachers

Theme	Category	Participants	*f*
Developmental Features	Being unable to conform to norms	F8, F19, F20, F21, M1, M2, M3, M15	8
	Cannot distinguishing right-left	M11	1
Academic Features	Inadequate literacy	F1, F3, F4, F6, M4, M11, M18, M22, M25	9
	Not answering the questions	F11, F12, F14, F16, F18, M8, M7, M9, M17	9
	Learning late	F3, F8, F9, F10, F11, F13, F14, F6, F16, F17, F19, M6, M9, M10, M13, M14, M15, M17, M19, M24	20
	General academic failure	F5, F15, F23, M11	4
Personal Characteristics	Lack of interest	F2, F5, F10, F11, M4, M7, M12, M13, M14, M20, M21, M23, M26	13
	Carelessness	F2, F6, F7, F11, M16, M23	6
	Lack of self-confidence	F3	1

	Forgetfulness	F6, F7, F14, F22, M14, M25	6
	Shyness	M10	1
Communication based Behaviors	Speech defect	F4	1
	Not joining the games	M5	1
	Incompatible behavior	F15, F20	2

Table 2 presents four different themes obtained in line with the opinions of the teachers on the identification of students with LD; which are developmental features, academic features, personal characteristics and communication based behaviors; in addition to fourteen categories obtained under these themes. Findings and comments are presented below with which have been supported by examples on the opinions that are expressed respectively under each theme and category.

Developmental Features

Categories of being unable to conform to norms and failure to distinguishing right-left are included as part of the developmental features theme. Developmental features theme comprises the opinions that the student being unable to conform to norms his/her peers in terms of physical and cognitive skills shall indicate that the aforementioned student suffers from LD.

Being unable to conform to norms: According to being unable to conform to norms category students with LD have lower levels of cognitive and physical (psychomotor) skills in comparison with other students resulting in doubts in the teachers that these students have LD. Some exemplary statements are as follows:

"… lags way behind his/her classmates who are in the same position with him/her." [M2].

Cannot distinguish right-left: When providing opinions on the failure of distinguishing right-left, the teacher indicated that she/he thinks students who cannot distinguish right-left directions may have LD.

"These students cannot distinguish right-left." [M11].

Academic Features

The opinions mentioned in the academic features theme expressed issues related with the student as not being able to learn the learning outcomes included in education program, not being able to perceive them, having a low learning level equivalent to academic failure, not being able to answer the questions about the lesson in the class, having problems in reading and writing all of which are related to learning and refer to LD. In this theme it was generally expressed that problems about failure in acquiring the target behaviours of a lesson or lessons refer to LD. Inadequate literacy, not answering the questions, late learning and general academic failure categories were specified under this theme. Each category has been explained below with examples.

Inadequate literacy: it was expressed in the inadequate literacy category that they will have doubts related with the student having LD when they cannot recognize the letters, misread the words, cannot combine the syllables, cannot read fluently, forget some letters while writing, miswrite words, do not obey the orthographic rules; since all of the aforementioned issues are actually features of students with LD.

"There is a problem in writing and reading of the students who have LD. For instance, they write letters deficiently and misread the words." [M18].

Not answering the questions: According to this category, students with LD cannot answer the questions about the lessons directed at; thus it was indicated that they will have doubts that students who cannot answer even easy questions on the lessons have LD.

"They cannot answer even the very easy questions about the lessons." [F12].

Learning late: According to the opinions specified under this category, students who cannot learn the target behaviours of the lesson, who learn late and with frequent repetitions or who can never learn may have LD. It was expressed that they will have doubts that the students who display the above mentioned features may have LD.

"They have a disability in understanding a lesson. He/she can learn it in no way even if it is very easy." [F3].

General academic failure: According to the opinions classified under the general academic failure of students with LD category, students have a low level of success in almost every lesson; thus it was expressed that they will have doubts that students who are unsuccessful in all lessons or in a few lessons may have LD.

"A normal student can be unsuccessful in one or two lessons; but, students with LD are unsuccessful in more lessons, they cannot be successful even if they endeavor." [M11].

Personal Characteristics

According to the opinions under the category of personal characteristics, students who get bored quickly during the lesson or during the lesson activities, who lose their attention and forget the things they learned, their duties and their belongings, who do not participate in activities, lack self-confidence may have LD. Lack of interest, carelessness, lack of self-confidence, shyness and forgetfulness categories were specified under this theme. Each category has been explained below with examples.

Lack of Interest. According to the opinions classified under the lack of interest category, students with LD are easily bored with the lesson, lesson activities, their personal stuff or they never show interest in any of the above.

"They are not interested in the lesson or in the book." [M20].

Carelessness. Opinions included under the carelessness category indicate that students with LD are easily distracted; and thus have deficiencies in their homework, problem solving process and activities and that they have a short attention span during the lesson.

"They have a short attention span; so they cannot learn." [M16].

Lack of Self-Confidence. According to the opinions in this category, students with LD do not strongly believe they can be successful in the lesson, learn what is taught and complete the homeworks or duties successfully.

"He/she is over diffident. He/she does not believe he/she can do and he/she cannot be convinced." [F3].

Forgetfulness. According to this category, students with LD forget their homework, belongings and the things they have to do.

"… he/she always forgets his/her stuff and loses them." [M25].

Shyness. When statements mentioned in the shyness category were examined, it was observed that students with LD shy away from making friends and conversing and that they abstain from expressing their ideas.

"These children show timid behaviors; they abstain from saying or doing something." [M10].

Communication Based Behaviors

It was expressed under the communication based behaviors theme that individuals who avoid communication and socialization may have LD. Speech defects, not joining the games and incompatible behavior categories were specified under this theme.

Speech Defects. Teachers who expressed opinions under the category of speech defects mentioned that the pronunciations of students they think have LD are worse than those of other students and that sometimes their speech cannot be understood.

"These students have a speech defect so people have difficulty in understanding what they are saying. We want them to repeat several times to understand what they are saying." [F4].

Not Joining the Games. It was observed when statements mentioned under the category of not joining the games were examined that students with LD do not join group games and/or cannot understand the game rules.

"He/She spends time alone during the breaks, does not play with other students. Sometimes he/she cannot even understand how the game is played." [M5].

Incompatible Behavior. It was observed when statements indicated under the incompatible behavior category were examined that students with LD display maladaptive and aggressive behaviors.

"They do not adapt to other students; he/she does not have many close friends." [F15].

It was concluded upon examining the opinions of the participants that teachers look for a few indicators when they consider if a student has LD or not; and that they think a student has learning disability if he/she displays more than one behavior. For instance, it is seen that the teacher coded as F6 doubts that students who display inadequate literacy, carelessness and forgetfulness and who cannot perceive what is taught may have LD. Findings on what teachers do when they think a student has LD are presented in Table 3.

Table 3

Actions Taken by Teachers when They Encounter Students with LD

Theme	Category	Participants	*f*
Social Activity	Directing to social activity	F4, F14, M18, M21	4
Teaching Methods	Making Repetition	F2, F17, M5, M26	4
	Explanation special to the person and providing additional time to him/her	F1, F5, F9, F10, F11, F12, F14, F18, F20, F22, M3, M4, M5, M6, M10, M11, M13, M22	18
		F3, F4, F6, F7, F8, F10, F11, F12, F13,	35

Directing to relevant a person or organization	Guidance Research Centers (GRCs)	F15, F16, F17, F18, F19, F20, F21, F22, F23, M4, M7, M8, M9, M10, M11, M12, M14, M15, M16, M17, M19, M20, M21, M24, M25, M26	
	Expert assistance	F4, F13, M17, M25	4
	Psychiatry	F4, M3, M11	3
Cooperation	Cooperation with family	F4, F6, F7, F8, F12, F18, F19, F16, M3, M15, M19, M23, M25, M26	14
	Cooperation with teacher	F7, F11, F21, M4, M10, M11	6
	Cooperation with counselling service	F5, F7, F8, F9, F10, F12, F13, F16, F17, F19, F23, M1, M2, M4, M7, M9, M10, M11, M13, M20, M24, M26	22
	Cooperation with school administration	E4, E19, E25	3

The themes and categories put forth in accordance with the opinions of teachers on the Actions Taken by Teachers when They Encounter Students with LD they take when they encounter students with LD are presented below. These themes and categories are explained below with examples.

Social Activity

The category of directing students towards social activities was formed under the social activity theme in accordance with the opinions indicated by the teachers. Opinions within the social activity theme put forth that teachers try to make the student to socialize by directing him/her to activities such as dance, art, music, sports when they suspect a student has LD.

Directing to Social Activities. It was specified that teachers direct students with LD to activities such as school clubs, sports activities, art and music activities which may draw their interest. Exemplary statements are presented below.

"I direct the student to hobbies such as sports or playing a musical instrument." [F14].

"I send him/her to the places where he/she can socialize." [M21].

Teaching Methods

It was determined when the opinions classified under this theme were examined that when teachers encounter a student with LD they use methods such as repeating the lecture on the subjects which the student has not understood, choosing subjects which are suitable to the level of the student and then lecturing the student on these subjects outside of class hours in the times other than lessons. Categories under this theme have been explained below separately.

Making Repetition. It was determined that when teachers encounter with students with LD, they repeat the lectures to the student again and again as they think the student shall grasp the learning outcomes included in the curriculum later than the other students or with frequent repetitions.

"I have to repeat several times the things which I normally lecture once as he/she can not learn forthright." [F2].

Explanation Special to the Person and Providing Additional Time. Teachers stated that when they encounter students with LD, they do not apply the current curriculum but plan and apply an educational program which they think is suitable to the level of the student; and they allocate additional time to the student outside of the lessons.

"These students cannot learn as the normal students, it is very difficult for them to learn the lesson completely in class or to be successful. …I pay attention to him/her during the breaks. Allocating time to these students outside of the regular lesson hours is a must." [F9]

Directing to Relevant a Person or Organization

It was observed when the opinions of teachers classified under directing to relevant a person or organization theme were examined that when they encounter students whom they think have LD, they direct the student to another person, institution or organization.

GRCs. According to the opinions classified under the GRCs category, it was determined that teachers shall send the student to GRCs if they encounter students who they think have LD.

"I direct the student to GRCs or have the counselling service direct him/her to GRCs." [M15].

Expert Assistance. When opinions classified under expert assistance category were examined, it was determined that teachers who presented opinions in this category direct the student they suspect has LD in order to get expert assistance. It was also explained that the expert mentioned here is a special education expert.

"Getting assistance from a special education expert shall be more beneficial for the student; I direct the student by taking this into consideration as well and also recommend this to his/her parents." [M17].

Psychiatry. Teachers presented opinions classified under psychiatry category expressed that when they encounter students with LD, they direct him/her to psychiatry.

"I call his/her parents and tell them to take their child to psychiatry." [F4].

Cooperation

It was observed when the opinions classified under the cooperation theme were examined teachers who presented opinions within the scope of this theme prefer cooperation when they encounter students who they assume has LD. Accordingly, teachers exchange ideas and keep company with people who they believe are related to the education of the students as well as the actions that should be taken. Categories obtained under this theme are explained below.

Cooperation with Family. It was specified that if teachers encounter students with LD, they inform the family and include them in the education of the student by acting in unison with them. Teachers who put forth this opinion expressed that they think it is important for the education of the child that his/her family accepts the student's situation.

"It is difficult for the family to accept their child's situation, so it is necessary to persuade the family and to get them pay attention to their child at home, too." [F19].

Cooperation with Teacher. According to the opinions classified under the cooperation with teacher category, teachers are of the opinion that children shall talk on their situation with other teachers and shall act in unison with them during the education process of the student if they encounter students with LD.

"I talk with other teachers especially class guidance teachers about the student and act in unison with them." [M4].

Cooperation with the Counselling Service. According to the opinions included under the under cooperation with counselling service category, teachers expressed that if they encounter students who they think have LD, they shall cooperate with school counselling service with regard to the student's situation, education and the actions to be taken; and shall ask their opinion.

"… I certainly consult to counselling. As such, that student also needs guidance and counselling. They also provide information on what activities I should be doing." [F23].

Cooperation with School Administration. Teachers expressed within cooperation with school administration category that if they encounter a student who they think has LD, they shall inform the school administration about this situation and shall exchange ideas with them upon what must be done. However, teachers see informing the school administration about these students as an obligation.

"I inform administrators at school, director and vice-directors about the student. I take their guidance into consideration, too." [E4].

Discussion and Conclusions

In this study, it was aimed to find out what primary school teachers pay attention to while determining the students who are thought they have disabilities, and how the teachers follow a path for the students.

According to the findings of the research, some of the teachers doubted that students may have LD by recognizing the developmental features of students with LD. It is seen that teachers do not give many details about the developmental features of students with LD and that the answers are generally focused on being behind their peers. Only one of the teachers answered about not distinguishing right-left and one of them answered about showing itself during speech. Similarly, Balcı (2019) found that if primary teachers encounter a student with dyslexia; they do not have the necessary knowledge and professional skills to recognize and identify to student with dyslexia. On the other hand, when literature is examined, it is expressed that in terms of developmental features these students experience various disabilities/ deficiencies in developmental areas such as using written and verbal language (IDEA, 2004), psychomotor skills (Pieters, Desoete, Roeyers, Vanderswalmen, & Van Waelvelde, 2012; Westendorp, Hartman, Houwen, Smith, & Visscher, 2011), distinguishing right-left (Landerl, Bevan, & Butterworth, 2004; Stein, 2001), social skills (Grolnick & Ryan, 1990; Kavale & Mostert, 2004), attention and memory (Swanson & Berninger, 1995; Swanson, Howard, & Saez, 2006).

Another result inferred from the research is that majority of the teachers have used a general concept as failure for acquiring perceptions on the academic features of students with LD. Teachers did not provide any information about the field of the variable and how it occurs. This result supports the research results expressing that primary school teachers do not have enough information about the features of the students with LD (Aladwani & Al Shaye, 2012; Altun & Uzuner, 2016; Balcı, 2019; Doğan, 2013; Fırat & Koçak, 2018; Lingeswaran, 2013). For example, Başar and Göncü (2018) found that primary school teachers had misconceptions about learning disabilities. Besides, it was determined that a small number of teachers with information about learning disabilities had obtained their knowledge from the films they watched and the in-service training they attended. When the literature is investigated, it is mentioned that students with LD form a heterogeneous group and therefore the disability areas they suffer differ, too. Mainly these areas are viewed as speaking, listening, reading, reading comprehension, and arithmetic, mathematic and written expression (Lyon et al., 2001). Inadequacy in organizing and study skills may be added to these (Sakız, Sart, & Ekinci, 2016). Learning disability may occur in one or more of these areas. The fact that teachers do not exactly know what the disability the student goes through has negative impacts on the support services they shall provide them; thus it also negatively affects the increase of their success.

Knowledge of teachers on students with LD may affect their attitude towards these students. If it is thought that majority of the students with LD receive inclusive education, teachers' getting knowledge upon the features and needs of these students bear a key role for a successful inclusive education (Campbell, Gilmore, & Cuskelly, 2003). Researches have shown that teachers'experience and contact with the students with LD have increased and they have presented more positive attitudes towards these students thanks to their knowledge and education (Avramidis & Norwich, 2002; Avramidis, Bayliss, & Burden, 2000; Sharma, Forlin, Loreman, & Earle, 2006). On the other hand, insufficient knowledge of teachers on LD poses an obstacle for the inclusion of these students. For instance, Doğan (2013) indicated that students with LD get lonely in the class by being alienated due to the fact that teachers do not know which method they have to apply to these students. Similarly, teachers in Çakıroğlu's (2015) study were asked a question about increasing the reading success of students with disability in reading in their class; and it was determined in line with the answers that half of the teachers did not find themselves sufficient. Saravanabhavan and Saravanabhavan (2010) specified in their study that teachers cannot get adequate education on learning disability which makes them insufficient about students with LD and their education.

Another result of the study is that majority of the teachers shall direct students who they think have LD to GRCs. Similarly, Sakız (2018) determined that teachers acted hastily to refer these students without taking any precautions or implementing an intervention program in the school. Kargın (2007), defined that evaluation process of the with LD, it is observed that primary school teachers recognize the students in their classes who have disability in reading, writing and mathematics, apply intervention program by providing adaptations and support in areas in which these students have disability; and the student shall be directed to GRCs if he/she does not respond to applied intervention program. In addition, small group education, evidence-based interventions and differentiated education are important in this process for students

whom teachers think have learning disabilities before referring these students (Fuchs & Fuchs, 2006). Therefore, it can be said that teachers who participated in the research do not have much information on the necessity of intervention program applications. Whereas, it is important for teachers to identify the situations where the students have problems. For example, it should be determined via error analysis whether students have problems in reading and what their special problem is (for example to not recognise caracters) if they have problems in reading. For example, methods to improve reading fluency can be used if the student is having problems on fluent reading. The main purpose of this process is to provide the student with the necessary opportunities and support for learning. Since such supports are not provided, this situation causes a problem resulting in confusing students with LD with students who have mild mental deficiency and who have academic failure (Gresham, 2002). LD can occur due to either the reasons related with the individual or as a result of environmental factors. In order identify the effects of these, if any; it is important to apply the pre-sending process to the student before directing him/her to GRCs.

The cooperation of teachers with the family, other teachers, the counselling service and school administration is also significant for identifying students with LD and for supporting them in their respective areas of disability. Nearly half of the teachers who took part in the research accept to cooperate with the counselling service; however, they are less willing to cooperate with family, other teachers and school administration. Even though primary school teachers are the most responsible ones for determining and training the students with LD, other parties have important responsibilities for multidimensional evaluation of the student and for supporting him/her during the education process. It is inevitable that primary school teachers need support in subjects such as familiarizing with the child, adapting lesson content and materials, evaluating the child's success when he/she encounters students with different features and needs (Kargın, Acarlar, & Sucuoğlu, 2003). Thus, teachers need to involve family, other teachers, counselling service and school administration into this process.

The results of this study indicate that Turkish primary school teachers are not equipped with sufficient knowledge and training to recognize the characteristics of students with LD. They are also not equipped sufficiently with regard to the procedures that should be followed when they encounter such students. As such, pre-service teachers should receive training related to LD at college level and in-service teachers should receive these trainings through certificate programs.

Limitations and Implications

Various limitations can be identified for this study. (1) This study was conducted with 49 primary school teachers in only one city. This situation limits the generalization of the results. In this context, studies with larger samples are needed. (2) In the study, qualitative data were interpreted by taking only the opinions of primary school teachers. Participation of parents and other stakeholders in the data collection process is considered to be the collection of detailed qualitative data in these processes and it may play an important role in solving problems in the identification of these children. (3) In addition, in order to identify and support students with LD, primary school teachers should work in coordination with many people and institutions such as school management, guidance service, family, GRCs. and hospital. (4) Primary school teachers

should first implement more support, differentiated education and evidence-based interventions within the school for students who are thought to have learning disabilities. It will be important to start the referral process if the results are not positive.

Statement of Responsibility

Tahsin Fırat; conceptualization, investigation, resources, data curation, writing original draft, reviewing & editing, visualization, and project administration. Duygu Koçak; methodology, software, validation, formal analysis, and supervision.

References

Aladwani, A. M., & Al Shaye, S. S. (2012). Primary school teachers' knowledge and awareness of dyslexia in Kuwaiti students. *Education, 132*(3), 499–516.

Alkhateeb, N. A. (2014). *Female general educatıon teachers' knowledge of and perceived skills related to learning disabilities in the Qassim Region, Kingdom of Saudi Arabia* (Doctoral Dissertation). Available from ProQuest Dissertations and Theses Data Base. (UMI No.3684647)

Altun, T., & Uzuner, F. G. (2016). Sınıf öğretmenlerinin özel öğrenme güçlüğü olan öğrencilerin eğitimine yönelik görüşleri. *The Journal of Academic Social Science Studies*, *44*, 33-49.

Altuntaş, F. (2010). *Sınıf öğretmenlerinin disleksiye ilişkin bilgileri ve dislektik öğrencilere yönelik çalışmaları* (Yayımlanmamış Yüksek Lisans Tezi). Hacettepe Üniversitesi, Ankara.

Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education, 17*(2), 129-147.

Avramidis, E., Bayliss, P., & Burden, R. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in on elocal education authority. *Educational Psychology, 20*(2), 191-211.

Balcı, E. (2019). Disleksi hakkında öğretmen görüşleri ve karşılaştıkları sorunlar. *Ege Eğitim Dergisi*, *20*(1), 162-179.

Başar, M., & Göncü, A. (2018). Sınıf öğretmenlerinin öğrenme güçlüğüyle ilgili kavram yanılgılarının giderilmesi ve öğretmen görüşlerinin değerlendirilmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, *33*, 185-206.

Bender, W. N. (2004). *Learning disabilities: Characteristics, identification and teaching strategies* (5th ed.). Boston: Pearson.

Brook, U., Watemberg, N., & Geva, D. (2000). Attitude and knowledge of attention deficit hyperactivity disorder and learning disability among high school teachers. *Patient Education and Counseling, 40*(3), 247-252.

Campbell, J., Gilmore, L., & Cuskelly, M. (2003). Changing student teachers' attitudes towards disability and inclusion. *Journal of Intellectual and Developmental Disability, 28*(4), 369-379.

Chideridou–Mandari, A., Padeliadu, S., Karamatsouki, A., Sandravelis, A., & Karagiannidis, C. (2016). Secondary mathematics teachers: What they know and

don't know about dyscalculia. *International Journal of Learning, Teachingand Educational Research, 15*(9), 84-98.

Çakıroğlu, O. (2015). İlkokul öğrencilerinin düşük okuma başarısının nedenlerinin ve öğretmenlerin kullandığı etkinliklerin değerlendirilmesi. *Journal of Human Sciences, 12*(1), 1082-1094.

Çakıroğlu, O. (2017). Özel öğrenme güçlüğüne giriş. In M. A. Melekoğlu, U. Sak (Ed.). *Özel Öğrenme Güçlüğü ve Özel Yetenek* (pp.1-22). Ankara: Pegem Akademi.

DeSimone, J. R., & Parmar, R. S. (2006). Middle school mathematics teachers' beliefs about inclusion of students with learning disabilities. *Learning Disabilities Research & Practice, 21*(2), 98-110.

Diken, İ. (2010). *Erken çocukluk eğitimi.* Ankara, Turkey: PegemA Yayıncılık.

Doğan, B. (2013). Türkçe ve sınıf öğretmenlerinin okuma güçlüğüne ilişkin bilgileri ve okuma güçlüğü olan öğrencileri belirleyebilme düzeyleri. *Okuma Yazma Eğitimi Araştırmaları*, *1*(1), 20-33.

Doyran, F., & Canca, I. (2013). Sorunlu öğrenci mi? Öğrenme güçlüğü olan öğrenci mi? Öğretmenler öğrenme güçlüğü hakkında ne biliyorlar? *Journal of Academic Social Science Studies (JASSS), 6*(4), 371-389.

Fırat, T. (2018). Öğrenme güçlükleri. Ü. Şahbaz (Ed.). *Özel Eğitim ve Kaynaştırma* (pp.288-318). Ankara: Anı Yayıncılık.

Fırat, T., & Koçak, D. (2018). Sınıf öğretmenlerinin öğrenme güçlüğünün tanımına ilişkin görüşleri. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, 18*(2), 915-931.

Fletcher, J. M., Coulter, W. A., Reschly, D. J., & Vaughn, S. (2004). Alternative approaches to the definition and identification of learning disabilities: Some questions and answers. *Annals of Dyslexia, 54*(2), 304-331.

Fuchs, D., & Fuchs, L. S. (2006). Introduction to response to intervention: What, why, and how valid is it? *Reading Research Quarterly, 41,* 93-99.

Fuchs, D., Mock, D., Morgan, P. L., & Young, C. L. (2003). Responsiveness to intervention: Definitions, evidence, and implications for the learning disabilities construct. *Learning Disabilities Research & Practice, 18*(3), 157-171.

Ghimire, S. (2017). Knowledge of primary school teacher regarding learning disabilities in school children. *Journal of Nobel Medical College, 6*(1), 29-35.

Graham, L., & Bellert, A. (2005). Reading comprehension difficulties experienced by students with learning disabilities. *Australian Journal of Learning Disabilities, 10*(2), 71-78.

Gresham, F. M. (2002). Responsiveness to intervention: An alternative approach to the identification of learning disabilities. In R. Bradley, L. Danielson, & D. P. Hallahan (Eds.), *Identification of learning disabilities: Research to practice* (pp. 467–519). Mahwah, N. J.: Erlbaum.

Gresham, F. M. (2005). Response to intervention: An alternative means of identifying students as emotionally disturbed. *Education and Treatment of Children, 28*(4), 328-344.

Grolnick, W. S., & Ryan, R. M. (1990). Self-Perceptions, motivation, andadjustment in children with learning disabilities a multiple group comparison study. *Journal of Learning Disabilities, 23*(3), 177-184.

Individuals with Disabilities Education Act of (IDEA) 2004. 20 U. S. C. *§1400 et seq*. (2004).

Kamala, R., & Ramganesh, E. (2013). Knowledge of specific learning disabilities among teacher educators in puducherry, union territory in India. *International Review of Social Sciences and Humanities, 6*(1), 168-175.

Kançeşme, C. (2015). *Özel öğrenme güçlüğü olan öğrencilere sayıların İngilizce yazımının öğretiminde eşzamanlı ipucu ile kapat - kopyala - karşılaştır öğretim yöntemlerinin etkililiklerinin karşılaştırılması* (Yayımlanmamış Yüksek Lisans Tezi). Abant İzzet Baysal Universitesi, Bolu.

Kargın, T. (2007). Eğitsel değerlendirme ve bireyselleştirilmiş eğitim programı hazırlama süreci. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi, 8*(1), 1-16.

Kargın, T., & Güldenoğlu, B. (2016). Learning disabilities research and practice in Turkey. *Learning Disabilities--A Contemporary Journal, 14*(1), 71-78.

Kargın, T., Acarlar, F., & Sucuoğlu, B. (2003). Öğretmen, yönetici ve anne-babaların kaynaştırma uygulamalarına ilişkin görüşlerinin belirlenmesi. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi, 4*(2), 55-76.

Kavale, K. A., & Forness, S. R. (2006). Learning disability as a discipline. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (pp. 76–93). New York: Guilford Press.

Kavale, K. A., & Mostert, P. M.. (2004). Social skills interventions for individuals with learning disabilities. *Learning Disability Quarterly, 27*(1), 31-43.

Kılıç-Tülü, B., & Ergül, C. (2016). Öğrenme güçlüğü olan çocukların duyguları tanıma becerileri. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel eğitim Dergisi*, *17*(3), 207-229.

Kirby, A., Davies, R., & Bryant, A. (2005). Do teachers know more about specific learning difficulties than general practitioners? *British Journal of Special Education, 32*(3), 122– 126.

Kocsis, J. (2016). *Primary teachers' knowledge about learning disabilities* (Master Thesis). Available from ProQuest Dissertations and Theses Data Base. (UMI No. 10103255)

Landerl, K., Bevan, A., & Butterworth, B. (2004). Developmental dyscalculia and basic numerical capacities: A study of 8–9-year-old students. *Cognition, 93*(2), 99-125.

Lingeswaran, A. (2013). Assessing knowledge of primary school teachers on specific learning disabilities in two schools in India. *Journal of Education and Health Promotion, 2*(30), 1-5.

Lyon, G. R., Fletcher, J. M., Shaywitz, S. E., Shaywitz, B. A., Torgesen, J. K., Wood, F. B., & Olson, R. (2001). Rethinking learning disabilities. In C.E. Finn, R.A.J. Rotherham, & C.R. Hokanson (Eds.), *Rethinking special education for a new century* (pp. 259–287). Washington, DC: Thomas B. Fordham Foundation and Progressive Policy Institute.

Melekoğlu, M. (2017). Özel öğrenme güçlüğünün nedenleri ve özellikleri. M. A. Melekoğlu, U. Sak (Ed.). *Özel Öğrenme Güçlüğü ve Özel Yetenek* (pp.24-52). Ankara: Pegem Akademi.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: A sourcebook of new methods*. California: SAGE Publications.

Moothedath, S., & Vranda, M. N. (2015). Knowledge of primary school teachers in ıdentifying children with learning disabilities. *Disability, CBR & Inclusive Development, 26*(3), 68-76.

Özabacı, N., & Ergün-Başak, B. (2013). Öğretmenlerin öğrenme yetersizliği olan öğrencileri ile ilgili algılarının metafor analizi yoluyla incelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 28*, 269-280.

Pieters, S., Desoete, A., Roeyers, H., Vanderswalmen, R., & Van Waelvelde, H. (2012). Behind mathematical learning disabilities: What about visual perception and motor skills? *Learning and Individual Differences, 22*(4), 498-504.

Polat, E. (2013). *Özel öğrenme güçlüğü yaşayan öğrenciler için web destekli uyarlanabilir öğretim sistemi tasarımı* (Yayımlanmamış Yüksek Lisans Tezi). Sakarya Üniversitesi, Sakarya.

Sakız, H. (2018). Students with learning disabilities within the context of inclusive education: issues of identification and school management. *International Journal of Inclusive Education, 22*(3), 285-305.

Sakız, H., Sart, Z. H., & Ekinci, A. (2016). Öğrenme güçlüğünde yaşanan zorlukların eğitsel çerçevede incelenmesi. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 1*(40), 240-256.

Saravanabhavan, S., & Saravanabhavan, R. C. (2010). Knowledge of learning disability among pre-and in-service teachers in india. *International Journal of Special Education, 25*(3), 132-138.

Scruggs, T. E., & Mastropieri, M. A. (2002). On babies and bath water: Addressing the problems of identification of learning disabilities. *Learning Disability Quarterly, 25*(3), 155-168.

Sharma, U., Forlin, C., Loreman, T., & Earle, C. (2006). Pre-Service teachers' attitudes, concerns and sentiments about inclusive education: An international comparison of novicepre-service teachers. *International Journal of Special Education, 21*(2), 80-93.

Stein, J. (2001). Thema gnocellular theory of developmental dyslexia. *Dyslexia, 7*(1), 12-36.

Swanson, H. L., & Berninger, V. (1995). The role of working memory in skilled and less skilled readers' comprehension. *Intelligence, 21*(1), 83-108.

Swanson, H. L., Howard, C. B., & Sáez, L. (2006). Do different components of working memory underlie different subgroups of reading disabilities? *Journal of Learning Disabilities, 39*(3), 252–269.

Tavşancıl, E., & Aslan, A. E. (2001). *Sözel, yazılı ve diğer materyaller için içerik analizi ve uygulama örnekleri*. İstanbul: Epsilon Yayıncılık.

Vaughn, S., & Fuchs, L. S. (2003). Redefining learning disabilities as inadequate response to instruction: The promise and potential problems. *Learning Disabilities Research & Practice, 18*(3), 137-146.

Westendorp, M., Hartman, E., Houwen, S., Smith, J., & Visscher, C. (2011). The relationship between gross motor skills and academic achievement in children with learning disabilities. *Research in Developmental Disabilities, 32*(6), 2773-2779.

Woods, N. F., & Calanzaro M. (1980). *Nursing research: Theory and practice.* St Louis: Mosby.

Wright, D. C. (2008*). Nonverbal learning disability in the classroom: An assessment of teachers' knowledge* (Doctoral Dissertation). Available from ProQuest Dissertations and Theses Data Base. (UMI No. 3312913.)

Yangın, S., Yangın, N., Önder, V., & Şavlığ, A. (2016). Sınıf öğretmeni adaylarının ve öğretim elemanlarının çeşitli öğrenme güçlüklerine yönelik farkındalıkları. *Education Sciences, 11*(5), 243-266.

Yin, R. K. (2011). *Qualitative research from start to finish.* New York: The Guilford Press.