

# A single-subject case study of twice exceptionality

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## Abstract

Twice exceptional (2e) individuals are defined as exceptionally talented persons in one or more areas including academic skills, creativity, leadership, and visual arts accompanied by challenges in one or more areas such as reading, writing, and mathematics. This study aimed to present the views on the academic and social-emotional development of a gifted student with learning disabilities. This research was conducted as a case study by using qualitative research methods. The authors conducted semi-structured interviews with the mother, elementary school teacher, special education teacher, and the 2e student himself. The study concluded that the participants emphasized the adaptations that were made in schools for 2e students and the need for support from parents, peers, and teachers for 2e students as well as the necessity for cooperation between school and family.

## Keywords

Twice exceptional, 2e, gifted students, specific learning disabilities, Turkey, case study

Education is recognized as a fundamental human right, and many countries have realized the value of providing special education (SPED) to children with special needs (SEN). As a

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developing country, Turkey has been making great investments in SPED (Melekoglu et al., 2009). SEN refers to children who differ significantly from their peers in terms of their educational competence and personal characteristics, and SPED is defined as an instructional program developed to meet the educational and social needs of SEN and provide an appropriate environment for them with specially trained staff (Ministry of National Education [MoNE], 2018). According to the official statistics published by the MoNE in the 2014–2015 school year, the number of SEN receiving formal education in Turkey was 259,282 (MoNE, 2015), and this number increased to 425,774 in the 2019–2020 school year (MoNE, 2020). These statistics indicate that the number of SEN in formal education has increased by approximately 50% over the last 5 years in Turkey. In recent years, the number of students diagnosed with specific learning disabilities (SLD) among SEN has been increasing rapidly.

The SLD category is among the emerging categories of SPED in Turkey. Since the 1980s, there have been major advances in SLD in Turkey which led to changes in regards to the number of diagnosed students and diagnostic procedures (Cakiroglu, 2017). Following the changes made by the American Psychiatric Association (APA) in the diagnostic criteria in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) in 2013, basic academic skills are listed as (a) word reading accuracy and fluency, (b) reading comprehension, (c) written expression, (d) mathematics calculation, and (e) mathematical reasoning. According to DSM-5, SLD is defined as a developmental and neurobiological disorder that occurs in one or more areas such as “reading, writing, mathematics, listening, speaking, and reasoning,” which causes functional impairments. The prevalence of SLD is reported to be between 5 and 15% by DSM-5 (American Psychiatric Association [APA], 2013). The statistical data of the MoNE for 2013 demonstrate that 3% of the individuals with special educational needs were officially diagnosed with a specific learning disability (Melekoglu, 2017). Standardized intelligence tests are used in the diagnostic process of SEN in Turkey. However, there is no standard measurement tool that measures academic achievement (Yenioglu et al., 2019). The most important characteristic of individuals with SLD is that they have normal and above normal intelligence capacities, but they have significant difficulties in academic fields, especially in reading, writing, and mathematics (Ilker & Melekoglu, 2017). Therefore, giftedness can be observed among individuals with SLD, especially depending on their above-average intelligence capacity.

Individuals who perform higher than their peers in intelligence, creativity, leadership capacity, art or academic fields are defined as gifted individuals (MoNE, 2018). Science and Art Centers (SAC) were established in Turkey to explore and reveal the potential of gifted individuals and to prepare an appropriate educational program for them (MoNE, 2018). Playing a fundamental role in this process, elementary school teachers (EST) refer potentially gifted students in their classrooms to SACs to be diagnosed (Bianco et al., 2011). In some cases, students who are diagnosed as gifted may have difficulties in reading and writing. These gifted students can be diagnosed with SLD as well. In literature, this condition is referred to as twice exceptionality.

The term *twice exceptional* was first used by James J. Gallagher in 2004 (Ilker, 2017). Twice exceptional (2e) students are defined as students with exceptional talent in one or more specific areas such as academic skills, creativity, leadership, and visual arts, but with accompanying difficulties in one or more areas such as reading, writing, and mathematics

(Boothe, 2010; Kaufman, 2018). It is difficult to identify twice exceptional students as they show characteristics of both SLD and giftedness (Trail, 2011). It is generally thought that individuals who have difficulty in reading or writing skills cannot be gifted (Baum & Reis, 2004). However, SLD and giftedness can be observed together in individuals in different forms.

Twice exceptional students are divided into three groups: (a) gifted students identified as low achievers, (b) gifted students with SLD and diagnosed with SLD, and (c) students whose SLD and giftedness mask each other. Students in the first group have mild learning difficulties, are successful in primary school, and can benefit from specific talent programs. However, they may have problems as their expectations and responsibilities increase. While the learning difficulties of the students in the second group are more severe, they can excel in one or more academic or intellectual fields. These individuals' specific ability to learn is often masked by their disability and hence, they are rarely diagnosed as gifted. Students in the third group can be described as average students, generally with no difference between their intelligence scores and performances (Buică-Belciu and Popovici, 2014; Ilker, 2017).

Diagnostic criteria for 2e individuals are not included in the International Classification of Diseases (ICD) 11 and DSM-5. Twice exceptional students are regarded as individuals who have different interests and specializations in specific subjects, who are productive, who have vivid imaginations, and who are able to show excellence in fields such as mathematics and geometry although they have been diagnosed with SLD (Ilker, 2017). In addition, 2e individuals have an aptitude for visual and auditory comprehension, are skillful in using computers, and possess problem-solving, reasoning and metacognitive skills (Buică-Belciu and Popovici, 2014). Apart from all these strengths, 2e individuals also have some weaknesses (Sansom, 2015). These individuals may not want to participate in classroom activities as they usually perform below their grade levels. Twice exceptional individuals may have shortcomings in following the instructions and in long- and short-term memory (Nielsen, 2002). Twice exceptional individuals can also experience social-emotional problems which negatively affect their academic achievement (Reis et al., 2014). When they fail to perform at high levels as expected from them based on their intelligence levels, they may experience anger and abhor school (Sansom, 2015). Their motivation may be low due to learned helplessness (Reis et al., 2014; Sansom, 2015).

The literature indicates that the studies on how to meet the needs of 2e individuals are very limited and recent (Olenchak, 2009; Omur, 2019). The case study conducted by Hua and Coleman (2002) on the development of career self-efficacy of a gifted high school student with SLD underlined the importance of recognizing the potential of the 2e students earlier, offering opportunities to develop their abilities, and ensuring the social-emotional support of their families. In their case study, Wormald et al. (2015) attempted to present the difficulties experienced by families of 2e students and concluded that (a) 2e students need support to develop their metacognitive skills, (b) there is a negative relationship between their level of intelligence and achievement in school, (c) 2e students need student-centered education programs that emphasize their exceptionality and offer resource room opportunities and (d) the family plays a significant role.

There is only a single study in the national literature related to gifted students with SLD (Yilmaz Yenioglu & Melekoglu, 2020) in which the researchers conducted a systematic literature review in general. However, there are no studies which present the situation for 2e individuals in Turkey. Therefore, being the first study that demonstrates the situation of gifted individuals with SLD, this study will significantly contribute to Turkish literature. This study aimed to present the views regarding the academic and social-emotional development of a gifted individual with SLD in line with the information obtained from the student himself, his family, and his teachers. At the same time, the study provided information on how to organize appropriate strategies and settings in training these individuals based on the participants' views. In line with this purpose, the study sought answers to the following questions:

1. What are the views of the 2e student himself, his family, and his teachers about the academic development of the 2e student?
2. What are the views of the 2e student himself, his family, and his teachers about the social-emotional development of the 2e student?
3. What are the 2e student's views on his school, his classroom, and his teacher?

## Method

### *Participants*

The first participant in this study was an eighth-grade student diagnosed both with SLD and as gifted. The student, who was born in 2004, was diagnosed with SLD in the third grade. He was diagnosed as gifted with the Wechsler Intelligence Scale for Children-Revised (WISC-R) applied by a specialist during the diagnostic process. The student's WISC-R intelligence score was 154. In addition, the student got a score of 141 from the Anadolu-Sak Intelligence Scale (ASIS), Turkey's first national intelligence scale, in 2017. The student has been receiving support education from special education and rehabilitation centers since he was diagnosed.

The mother of the 2e student was the second participant in the study. The 35-year old mother had a bachelor's degree but was not employed. EST of the 2e student who worked with the 2e student from the first grade to the end of the fourth grade was the third participant. She has been retired since 2019. The last participant of this study was the special education teacher (SET) working in a special education and rehabilitation center, where the 2e student attended in 2019.

### *Data collection*

Semi-structured interviews were used as the data collection technique in this study. The interview technique, the most common data collection tool in qualitative research, is defined as a mutual and interactive communication process based on asking and answering questions for a specific purpose (Ekiz, 2009; Yildirim & Simsek, 2013). The researchers prepared the questions in the data collection tool and then sought expert

**Table 1.** Main Themes and Sub-Dimensions.

Main Theme	Sub-Dimension
Academic development	How do you evaluate the student academically?
	What kind of problems did you experience in regards to academic development?
	How did you support the student in regards to his academic development?
Social-emotional development	How do you evaluate the student in social-emotional areas?
	What kind of problems did you experience in regards to social-emotional development?
	How did you support the student in regards to his social-emotional development?

opinions from three specialists with a doctoral degree in the field of SPED and expertise in qualitative research. Required revisions were made in the interview questions in line with the opinions of the experts, and the data collection tool was finalized.

The questions in the data collection tool were collected under two main themes as “academic skills” and “social-emotional skills.” These main themes were supported by questions as follows: “How do you evaluate the student academically/socially-emotionally?” and “What problems did you experience in regards to academic areas/social and emotional situation?” and “How did you support the student in the academic areas/social and emotional situations?” Apart from these main themes, the participating 2e student was asked questions to identify his views on “ideal school,” “ideal classroom,” “ideal teacher,” and “things loved/disliked and easy/difficult in school.”

The meeting was held one-on-one in different places (class, cafeteria) and during the period that suited the participants. Interviews with all participants were recorded with a voice recorder, except for the SET who was interviewed by telephone and recorded. Before the interview, the researcher provided a detailed explanation about the study and informed the participants that they could interrupt or end the interview at any time. The interviews lasted 18 min on average (minimum: 13 min 15 s, maximum: 23 min 52 s).

### *Data analysis*

Content analysis technique was used to analyze the data obtained in the study. Content analysis is the process of defining, encoding, and placing the data in certain categories to draw conclusions (Patton, 2014). No software was used for data analysis. The audio recordings of the interviews were transcribed by the researchers. The sub-dimensions prepared by the researchers were taken into consideration in analyzing the interview texts. Table 1 presents the themes and sub-dimensions identified by the researchers.

Coding is a mandatory process for analysis to identify the content in qualitative analysis (Punch, 2005). The obtained data were read and reviewed by the researchers, and the code list was created after writing down the codes. Then the codes were put together according to their common features and categorized. The codes representing these

**Table 2.** Views on the 2e Student's Academic and Social-Emotional Development.

Main Theme	Sub-Dimension	f
Academic state	Successful	4
	Not experiencing problems with teachers	4
	Problems in regards to reading and reading comprehension	4
	Problems in regards to writing	4
	Problems in regards to concentration	2
	Problems in regards to English	1
Social-emotional state	Existence of a circle of friends	4
	Ability to make friends	3
	Leadership	3
	Being able to express oneself	3
	Learned helplessness	3
	Displaying problem behavior when unable to express oneself	3
	Not accepting defeat	1
Academic support	Use of materials	3
	Use of the internet	2
	Homework adaptation	2
	Cooperation with the university	2
Social support	Guidance toward social activities	4
	Guidance toward sports	3
	Receiving psychological support	2
	Being allowed to express himself	2

categories were explained and interpreted, and conclusions were drawn by associating them with one another. The obtained findings were explained in relation to the findings of the relevant studies in the literature. In addition, the obtained data were tabulated and the participants' views were included.

Ensuring validity and reliability in qualitative research is an important factor in increasing the quality of the study. For this purpose, the following method commonly used in qualitative research was selected to ensure the validity and reliability of the study: "spending a long time in the working environment and presenting the data, analysis, and comments to the experts" (Ekiz, 2009). Transcripts were sent to the participants to be checked for accuracy. Additionally, attention was paid to report the obtained data in detail and to explain how the researchers achieved the results. The researchers discussed and agreed on the matters in areas where they could not reach a consensus in the study.

## Findings

This section provides the findings obtained from the point of view of 2e student and his mother and teachers. Table 2 presents the findings about the academic and social-emotional development of the 2e student under three main themes as academic development, social-emotional development, and 2e student's views and suggestions. The academic development theme provides the findings regarding the academic status of the

student and the academic support provided to the student. The social-emotional development theme provides the findings regarding the student's social-emotional state and social-emotional support given to the student. The heading titled student views and suggestions presents the views of the 2e student in regards to the school, classroom, teacher, and lessons that he would like as well as the views and suggestions of his family and teachers.

### *Findings for academic development*

The participating 2e student was described as a successful student based on the answers provided by his family and teachers to the following question: "How would you evaluate the student academically?" The student was among the most successful students in his class, especially in mathematics and science classes. According to the findings, the participating 2e student also considered himself successful. The views of the mother, EST, SET, and the student on this issue are as follows, respectively:

He is an academically successful student, but his achievement is somewhat hindered by his dyslexia. He was a very successful student. He always came up with different answers to the questions asked in the classroom. All the students usually ended up forsaking their own answers and embracing his ideas. A successful student in general. I am sure he will be very successful when he compensates for his shortcomings. I consider myself successful in courses such as mathematics and science. I feel very happy in these classes.

The second question directed to the participants was "Did the student experience any problems with his teachers?" All participants stated that the student had no problems with his teachers. The views on this issue are as follows, respectively:

No problems with the teachers. The teacher, who noticed his situation and helped us internalize it, was his elementary school teacher. He was a very nice boy in regards to behaviors. I had no problems with him. We had no problems during the period we worked together. I have never experienced problems with any of my teachers.

The third question directed to the participants was "What were the circumstances/lessons in which you regarded the student academically different or thought he experienced problems?" All of the participants stated that the student experienced problems in reading, comprehension, and writing. The 2e student's mother and Set also stated that he had problems in regards to concentration. In addition, the 2e student reported having difficulty in English lessons as well.

He has no trouble understanding what he hears, but he does have difficulties with reading and writing. He has difficulty in reading comprehension. When he doesn't care for and doesn't like what he is doing at a specific moment, he has problems in concentration. But on the contrary, when he is interested in something, he can make an effort for hours.

We were having problems if he was to read, understand, and answer a text on his own. Someone had to read for him at all times. We were very relieved when the regulation was issued that teachers were to read the written questions for students with special needs in inclusive classrooms.

He was making mistakes in regards to reading fluency and reading comprehension. He also had difficulty with writing accuracy and did not like writing at all.

I am bored while reading lengthy texts. English and Turkish lessons are difficult. I can't memorize pronunciations, especially in English. I have to make sense of the text on my own when there is a lot of writing so I am having trouble there, but I hope I will overcome it. I do not like these lessons because I experience problems.

Another question directed to the participants was "How do you support the student academically?" While three participants stated that they offered supplies/materials, two participants reported using internet resources. Both of the participating teachers stated that they cooperated with the university and made adaptations in homework. The views are as follows, respectively:

Since he doesn't like doing homework, I tried to make it fun. I bought a lot of books. I had him take private lessons. I did research on the internet. I supported him with different materials. I also supported him morally. I explained that this situation is not something to be ashamed of.

I included materials and experiments in lessons. I became a member of dyslexia groups on the internet and received information from the people there. I also met with an academician from Anadolu University. I gained knowledge about the issue and passed it on to the family. When the student was diagnosed as gifted, I went to the SAC. I was insulted by the director of SAC and I was very upset. I cried a lot that day. He said that I could not handle the 2e student and questioned my teaching. While giving homework, I always targeted a higher skill.

I found texts to attract attention in reading and writing activities and supported them with visuals and materials as much as possible. I also received support from my university teacher working in this field. I made sure that the assignments I gave would not be boring for him.

### *Findings for social-emotional development*

All the participants agreed that the student had no problems in his social-emotional development. The participating 2e student was described as a child with a circle of friends based on the answers provided by his family and teachers to the following question about social-emotional development: "How do you evaluate the student socially and emotionally?" In addition, three participants stated that the student could make friends very easily and express himself well. The student also defines himself as someone with a circle of friends. The views on this issue are as follows, respectively:

He has not experienced much trouble making friends. He always has a social circle. He has been a very social child.

When his condition came to light, the other students in the class tried to integrate him. Hence, the student made a circle of friends very easily.

As far as I could observe, he can make friends easily. There is also a group of friends he hangs out with. They attend events with him.

We have a group of six friends. We play, have fun, and chat together. So I'm not having trouble finding friends.

When asked "How did you support the student in his social-emotional development?," all the participants responded by stating that they "guided the student to social activities." The 2e student was directed to social activities by his family and teachers while he initiated his social activities as well. In addition, the 2e student was guided to sports activities by the family and his SET. The views on this issue are as follows, respectively:

Since primary school, he has always been involved in social activities. He is also very interested in sports. He has medals in every sports branch he has been attending. For example, he is very successful in chess. He also has a medal from swimming contests. He's into baseball now. He did many sports like basketball and kickbox, which contributed to his socialization. I let him go out on his own. He rides his bike to the gym. This increased his self-confidence.

I directed him to social activities. I attended seminars and guided the family as well. I empathized with him and listened to him all the time.

He always had an interest in sports. He was interested in many sports at once. I informed and guided the family about the seminars or panels held in the province.

My mom always asked me to do sports. She wanted me to study my lessons and also to take an interest in a sport. She always wanted me to participate in social activities.

The question "What are the characteristics that separate this student from other students?" was answered both by the teachers and the mother by referring to the leadership characteristics of the 2e student. In addition, his teachers cited being a good learner, curiosity about scientific subjects and high achievement in lessons that require numeracy among the characteristics of the 2e student. The Set also reported not accepting defeat among his characteristics. The views on this issue are as follows, respectively:

The leader pressure was excessive in his group of friends. Everyone was trying to stand out on their own, but the 2e student was leading. He was crying when he could not express himself. Sometimes he sulked. He was unable to fully express himself. He didn't know what to do. His brain was working very fast.

He leads his friends. This was evident from his demeanour, his talk. When he heard about scientific subjects, he would brighten up and he immediately got ideas. He did research and learned about the subject. When he was defeated when we played a game like chess or mangala [a Turkish strategy game], he did not accept it and wanted to start again.

The mother and the teachers stated that the 2e student experienced “learned helplessness.” According to the mother and the teachers, the student felt that he could not succeed anyway especially in the areas of reading, reading comprehension, and writing. The views on this issue are as follows, respectively:

He didn't like doing homework at all. When he had a lot of homework, he said he was unable to do it all. I always had to stay close while he was doing his homework.

The child was regarding himself as incapable of doing certain things. I was very scared that he would keep having the thoughts that “I can't, I'm unsuccessful, I can't do anything.” I had a general policy in the classroom to beat his presupposition. You don't have to like anyone, but you will all respect each other.

When I assigned a text appropriate for his level but little lengthy, he usually commented by saying, ‘It looks pretty hard. It will take me a long time to read this’. without even looking at the text first. He experienced learned helplessness. His mind changed when he started reading.

### *Findings in regards to student views and suggestions*

When asked the question “What are the things that you like or dislike at school, and what are the things that are easy or difficult?,” the 2e student stated that he liked lessons focusing on numeracy but did not like or succeed in lessons which focused on verbal skills. Stating that the most difficult thing about school was to wake up early, the student added that the duration of the lessons was long and that he was bored toward the end.

“Math and science classes are easy. I am also good in these classes. I am happy in science classes. I get bored with long texts while decoding in Turkish. Math is so much fun. I think daily lecture hours are usually too long. Seven hours a day is too much. Exams also create stress.”

When asked the question “What is your ideal school, classroom, and teacher like?,” the student defined the ideal school as a school with a lower number of students, comfortable classrooms, a gym, and a nice canteen. He defined the ideal class as a classroom with few students, a large space, suitable resources and adaptations in the classroom, and comfortable desks. Additionally, the 2e student defined the ideal teacher as the person who does not dwell on the subject, does not assign much homework unnecessarily, learns and teaches new things, and works in a planned manner. The 2e student's views on this subject are as follows:

The number of students in school should not exceed 1000. The gym is also very important to me. I would also like the canteen to be big. The class should have fewer students. There should be cabinets in the classrooms. The class should contribute to our learning, for example, in a biology lesson, there should be a skeleton model. This contributes to our learning a lot. Also, the desks are very important. We spend 6 hours at school and sit on wood. It is not comfortable at all. The teacher I would like must be someone who will not dwell on a specific topic for a long time. A teacher who constantly learns and teaches new things would be very good for me. And there are teachers who assign lengthy, unnecessary writing assignments. That's where I'm having trouble.

The question "Is there anything you want to add or suggest?" was answered by the participants by focusing on different aspects. The mother stated that there should be an interest in specific talents and that training should be given according to capacity. She emphasized that the talents of such students should be respected and it would be better if they were educated in private classes. In addition to these, she said that it was necessary to increase support education, implement adaptations to school placement and exams, and open talent classes. The EST, on the other hand, expressed the need for SACs to work more effectively. She stated that it would be better to increase cooperation with the university and to guide the families with the help of experts. The SET stated that it would be better to increase the duration of support education by adding that the adaptations to be made in the lessons and exams will directly affect students' achievement and it would be more beneficial to provide audio-visual support. The mother's feelings on this subject are as follows:

I know there are other children like my son. I know that the teachers look at my child like he is retarded. Families are not informed. We have always talked about his dyslexia, but another special condition is that he is a gifted child. This should be emphasized as well. Gifted children should be educated according to their capacities. Those kids should be taught in private classrooms. They removed the literacy part in SAC exams, the exam is built just on talent now. My child won SAC with a very high score this time, but he had been at very low levels before. For example, now there will be lengthy text questions in front of him and this child will not be able to do them in the exam, but this does not mean that he is a mediocre student. But he will be held in the same status as other children in the exam. Children with dyslexia may need an adaptation regarding the new exam system.

The mother was asked the following question: "What did you experience during the diagnosis?" The mother described the diagnosis process as follows:

The elementary school teacher noticed his condition first. He was a child who did everything very early. The elementary school teacher observed him and said "There is something different in this child." in the first semester of the first grade. Then we bought books and tried to support him ourselves. When we realized it was not working, we first went to the Guidance and Research Center (GRC). We were referred to the medical faculty and we obtained a medical report. The diagnosis was both gifted and specific learning disabilities. Then we went

back to GRC. There we were told that we needed assistance in regards to rehabilitation. Since he needs to continue his education, he has been going to the rehabilitation center since the third grade. He is mainstreamed at school now, not in inclusive classroom.”

## Discussion, conclusion, and suggestions

This study aimed to present the views on the academic and social-emotional development of 2e individuals based on the information obtained from a gifted individual with a learning disability, his family and teachers. The study also included information about the appropriate strategies and settings in training 2e individuals based on participant views.

All participants reported that they regarded the student as academically successful in the first theme of the study. This finding is consistent with the superior performance of students with specific talents toward mathematics and science (Gentry et al., 2000; Ilker, 2017). However, participants stated that the student had problems in reading, reading comprehension, and writing. In their case study conducted with a 2e student who was both gifted and had a learning difficulty, Wormald et al. (2015) reported that the participating 2e student experienced problems, especially in reading and writing. The findings obtained from the first theme of this study are consistent with this result. In addition, the mother of the 2e student emphasized that the 2e student's SLD masked his talent, and therefore, the student has achieved lower than expected. This finding is similar to the findings of the study conducted by Wormald et al. (2015) in which the researchers also stated that 2e student's SLD masked his/her talent. Students with specific abilities are expected to have higher level achievement in subjects such as mathematics and science. However, gifted students with learning disabilities experience difficulties especially in reading, reading comprehension, and writing skills. Reading and writing interventions offered at an early age are expected to improve both literacy and reading comprehension skills in 2e students. It is thought that achievement will increase in other courses thanks to the reading and writing skills that develop with early intervention.

In the second theme of this study, the 2e student, his mother, and teachers stated that the student could easily make friends, he had a large circle of friends, and was involved in many social activities. This finding contradicts the general social-emotional characteristics of 2e students. These students have difficulties in communicating with their peers and can generalize their academic failures in the social-emotional area (Sansom, 2015). However, according to Terman and Oden (1947), gifted students experience fewer problems in the social-emotional field compared to their typically developing peers. Moreover, the researchers stated that gifted students have better adaptation skills. Similarly, Wormald et al. (2015) indicated that 2e students were loved and supported by their classmates. The 2e student's EST, SET, and mother emphasized that the student displayed leadership in academic and social fields. This finding of the study is similar to the finding of another study that emphasizes the leadership characteristics of 2e students (Boothe, 2010). The participants also stated that the student experienced learned helplessness in the Turkish lesson and that he had some problem behaviors when he was unable to express himself. This finding of the study is in line with the characteristics of 2e students and gifted students (Nielsen, 2002; Reis & Colbert, 2004; Sansom, 2015).

Within the scope of the study findings, the 2e student's EST, SET, and mother reported using various materials and the internet to support the student academically in relation to this theme. This finding of the study demonstrated that teachers of the 2e student and his family utilized "enrichment and acceleration" strategies, which are frequently used in the education of gifted students (Davashgil & Zeana, 2004; VanTassel-Baska, 1986). In addition, 2e student's EST and SET reported making various adaptations in teaching by using the "individualization" principle used in the education of students with SLD in order to support the student's learning difficulties (Foley-Nicpon, 2013; Willard-Holt et al., 2013; Wormald et al., 2015). It is thought that the students will better exhibit their current potential when learning disabilities are prevented from masking their specific abilities. For this reason, for 2e students, it is recommended to use reading and writing strategies that are used with students with learning difficulties along with various learning strategies that are used with gifted students.

In the findings obtained from the fourth and final theme of the study, the 2e student's EST, SET, and mother stated that they directed the student to social activities and sports. Similarly, in a study by Neumeister et al. (2013) on twice exceptionality, mothers quickly realized their children's shortcomings and specific abilities and undertook the responsibility of seeking alternative support to overcome their children's deficiencies and reveal their strengths. Studies revealed that 2e students should be supported by their families, teachers, and peers to be successful in the school environment (Dare & Nowicki, 2015; Foley-Nicpon & Assouline, 2015; Foley-Nicpon & Assouline, 2015; Lo & Yuen, 2014; Wang & Neihart, 2015; Wormald et al., 2015). It is stated that when educators implement comprehensive programs to identify and develop students' abilities, 2e students' social skills improve (Baum & Owen, 2004). In other words, as educators focus on strengths and gifts and overlook shortcomings, 2e students become more engaged in school and succeed in creative activities based on their personal preferences and interests.

In addition to the findings of the research, the views and suggestions of the 2e student, his mother, and his teachers were obtained. The 2e student stated that he wanted shorter lessons, less crowded classes, less or no homework, and having classes with teachers who are open to new things. The mother of the 2e student stated that people should focus on the strengths instead of weaknesses of 2e students and that those students should receive education accordingly. In addition, she emphasized that support education should be increased, they should be educated in a private class, and adaptations should be made in central exams. She also stated that it is important to raise awareness of families on this issue and to provide them with the necessary support. The EST of the 2e student emphasized that it is necessary to increase cooperation with the experts and institutions and to support the families in this regard. In addition, she stated that SACs should work more efficiently. Finally, the SET emphasized that audiovisual support should be provided for 2e students, adaptations should be made in lessons and exams, and support education should be increased.

In conclusion, this research is a case study about a Turkish 2e student's experiences. The authors interviewed the mother of the 2e student, the EST, the SET, and the 2e student himself and presented their views on the academic and social-emotional development of

the 2e student. This research is expected to contribute to the literature in several ways. First of all, this research is the first study that demonstrated the experiences of 2e individuals who are gifted and have SLD in Turkey. Second, this research is expected to raise awareness of the families and other individuals working with 2e students. Finally, this research will shed light on further studies to be carried out for the 2e individuals living in Turkey.

Although this study includes the experiences of a 2e student, the researchers offer some suggestions for 2e individuals in general. First, it is recommended that the academic and social-emotional development characteristics of 2e individuals should be well known and they should receive education in line with these characteristics. Focusing on the strengths of 2e individuals rather than their weaknesses is important. Therefore, it is recommended to provide more education about these individuals during teacher training. In addition, it is recommended to make adaptations in these individuals' homework and exams. Second, it is suggested that the family and the schools where the 2e students are educated should cooperate. In addition, it is recommended to cooperate with specialists when necessary and obtain the necessary professional assistance. Finally, family training is recommended by experts to raise awareness among families. This study has some limitations. The fact that the study was conducted only with one 2e student, the student's mother, and teachers was the most important limitation due to the study design. Also, using only the interview data in the research is another limitation of this research.

For future research, it is recommended to use both quantitative and qualitative research methods to reach generalizable results. Furthermore, more in-depth information on 2e can be obtained by collecting data from different stakeholders, such as 2e individuals' peers and other school staff. In addition, further studies can evaluate the effects of guidance and instructional support provided to families and/or teachers on the academic and/or social-emotional development of 2e individuals. Finally, the effectiveness of systematic academic and/or social-emotional development interventions that support both the weaknesses and the development of the gifted areas of 2e students can be tested according to the characteristics of 2e individuals.

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