

Specific Learning Disability from the Perspective of Preschool Teachers: Symptoms and What to Do

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ABSTRACT

Specific Learning Disability (SLD) is a type of special need that can be diagnosed in the primary school period. However, research shows that there are some symptoms in the preschool period as well. It is thought that it is important for preschool teachers to be aware of these symptoms and inform primary school teachers and parents. From this point of view, this study aimed to determine the views of preschool teachers on SLD. The research was designed using basic qualitative research from qualitative research methods. Snowball sampling, one of the purposeful sampling methods, was used to determine the study group. Demographic information form and semi-structured interview questions developed by the researchers were used as data collection tools. Content analysis was used to analyse the data. As a result of the study, it was determined that preschool teachers generally focused on reading, writing, speaking and listening skills; that they would mostly interview parents and communicate with the school guidance service regarding a child with suspected SLD; and that they thought that symptoms with SLD could occur in the preschool period. The findings are similar to the related literature.

Keywords: Perspective, preschool, specific learning disability, teacher

Introduction

Samuel Kirk first proposed Specific Learning Disability (SLD) in 1962. A conference held in 1963 focused on students who had significant difficulties in school despite having normal or above-normal intelligence levels. This term began to be accepted by parents and experts (Kirk, et al., 2014). Kirk stated that children with SLD are a heterogeneous group with only one thing in common. This common feature is that they have a neurological-based problem that affects their learning in various ways (Bender, 2012).

There is a distinct difference between the academic achievement and performance of children with SLD. This difference shows itself primarily in areas such as writing, reading comprehension, reading, and mathematics (Kılıç-Tülü & Ergül, 2016). Accordingly, SLD is divided into four in the literature. These are reading disorder (dyslexia), math disorder (dyscalculia), written expression disorder (dysgraphia), and learning disorders not otherwise specified (Özçivit-Asfuroğlu & Fidan, 2016; NCLD, 2014). In

addition, it is stated that problems such as self-management, social interaction, and social perception can be seen together with learning difficulties (Yığıter, 2005).

If we look at the historical development of learning disability, we can see that it is divided into six stages. The first stage, the clinical stage, coincides with the 1920s. In this period, children with learning disabilities began to be diagnosed differently from children with mental retardation. The studies carried out during this period are the studies that define the existence of learning disabilities in hospitals and institutions. In the 1940s and 50s, the transition phase focused on the idea of the classroom and new educational ideas were developed. In the unification phase, from 1962 to 1975, learning disabilities were defined for the first time, and political factors encouraged different groups to unite in one field. Between 1975 and 1988, defined as the development phase, the provision of services for many children diagnosed with learning disabilities was secured by legislation. The decline phase covers the years 1988-2001. In this phase, proposals for inclusion classes were made due to the lack of an adequate

definition and the increase in the number of diagnosed children. The last phase, the restructuring phase, covers the years from 2002 to the present and focuses on changes in policy (Bender, 2012). The diagnosis of children with SLD focuses on the inconsistency between intellectual abilities and achievement (Kirk et al., 2014). Therefore, the diagnosis of these children coincides with primary school years. However, it is also possible to catch the symptoms of children with SLD in early childhood. Below, the definition of SLD is given, and then the symptoms in early childhood are presented.

SLD and Its Symptoms in Early Childhood

The diagnosis is made by focusing on the difference between the abilities (intelligence) and achievements of children with SLD. Therefore, the majority of children with SLD can be diagnosed during the school period (Kuzgun, 2019). Although there are many symptoms of SLD in early childhood, it is not thought that the child may have SLD due to the lack of information about this process (Okur, 2019). However, many symptoms related to learning difficulties can be observed in early childhood. According to studies, these symptoms include disorders in spatial semantic processes, visual and tactile processes, auditory and balance, and motor control in early childhood. There are symptoms such as not speaking in sequence with the correct word structure expected for acoustic memory problems, difficulty in understanding the stories read aloud, confusing essential words (such as running, giving, eating), and loss of interest in sound (such as repetition and spelling) games. Visual memory impairment is a sign of visual memory problems in symptoms such as difficulty in drawing geometric shapes.

Communication and language characteristics are more evident in the pre-school years. Problems such as learning to speak late, inability to pronounce the pronunciation of words, frequent articulation problems, confusing words containing sounds close to each other while speaking, and changing the location of syllables are encountered. Difficulty in distinguishing the shape and number drawn on the palm of the hand when the eyes are closed, discrimination problems by touch, delay in language development, often babyish speech, and difficulty in rhyming words are other signs of language problems. Difficulties in learning concepts such as wearing shoes backwards, holding the book upside down, front-back; orientation problems; symptoms such as liability of emotions, weak body image, communication problems with peers, introverted, aggressive, anxious behaviors and inability to adapt to rules are the symptoms of social,

emotional behavior problems (Aslan, 2015; Commodari, 2013; Okur, 2019; Snowling, 2005). In addition, it has been observed that many children with reading difficulties due to SLD have language deficiencies that can be detected before they start reading (Lely & Marshall, 2010).

All these symptoms show that children at risk for SLD can be recognized in early childhood. Early detection of SLD can prevent many difficulties that the child may experience both academically and socially. Early diagnosis is very important for eliminating the obstacles that the child may encounter and for an independent life where he can contribute to society (Cortiella & Horowitz, 2014). Early provision of additional educational support after diagnosis will bring positive results for the child (Bailet et al., 2011). Today, research on catching the early signs of SLD in early childhood attracts attention (Nind et al., 2010; Timbó et al., 2019).

Purpose of the Study

When the literature is examined, it is seen that there are studies on different subjects related to SLD with teachers. The first of these issues is the intervention studies for preschool children who are at risk for reading difficulties (Al Otaiba et al., 2005; Bailet et al., 2013; Piasta et al., 2023). In these studies, intervention programs developed by the researchers are applied to children in the preschool period. When the literature is examined, the other subject that is emphasized about SLD is the examination of the opinions of teachers working at different levels on this subject and the studies on the determination of SLD (Firat & Koçak, 2018; Flores et al., 2022; Kakabaraee et al., 2021; Krischler et al. 2019; Sousa et al., 2016; Sideris et al. 2008; Wight & Chapparo, 2008; Yaşa & Çiyiltepe, 2024). However, very few studies have been found examining preschool teachers' views and knowledge levels about SLD (Ertaş, 2022; Mullikin et al., 2021; Ramli et al., 2019). However, these studies only focus on dyslexia. However, as mentioned above, there are four subtypes of SLD. It is extremely important for preschool teachers to notice early symptoms to inform parents and primary school teachers. As it is known, preschool children are not diagnosed with SLD. However, as mentioned above, intervention programmes can be applied to preschool children with symptoms of learning difficulties. Apart from intervention programmes, teachers can make individual teaching by noticing the signs of SLD in children. In addition, the following article is included in the Twelfth Development Plan: 'An e-student file will be created in which each student's record of academic and social activities will be kept, and the learning process will be monitored across levels.' By recognising the

early signs of SLD, preschool teachers can write informative messages in these files and ensure that primary school teachers take the necessary precautions. For this reason, this study, it was aimed to examine the views of preschool teachers about the characteristics of SLD, what to do when a child is suspected of SLD, and whether SLD can be diagnosed in early childhood. For this purpose, answers to the following questions were sought:

- What characteristics do preschool teachers think children with learning disabilities have?
- What do preschool teachers do when they suspect a child has a learning disability?
- What do preschool teachers think about detecting learning difficulties in early childhood?

Methods

Research model

This research was carried out with a qualitative research design to examine preschool teachers' views about learning disabilities. Qualitative research design is a research approach in which qualitative data collection methods such as interview, observation, and document analysis are used, the detailed and realistic aspects of the research problem and phenomena are revealed in their natural environments, and the subject is analyzed in depth (Yıldırım & Şimşek, 2018). This research was designed with the basic qualitative research model, which is one of the qualitative research methods. The aim of basic qualitative research is to understand how individuals interpret their lives and experiences (Merriam, 2018). The purpose of selecting the basic qualitative research in this study is to analyse teachers' knowledge and opinions about the symptoms of learning disabilities in depth.

Study Group

The study group of this research consists of 19 preschool teachers. Snowball sampling, one of the purposeful sampling methods, was used to determine the teachers to participate in the research. Purposeful sampling methods have emerged within the tradition of purely qualitative research, and this method allows for the in-depth study of situations that are thought to have rich information. For this reason, purposive sampling was preferred in this study. Most of the teachers participating in the research are female (f; 17). 6 of the teachers work in an independent kindergarten, 7 in a kindergarten attached to a primary school, 3 in a kindergarten affiliated with a secondary school, and 3 in a private kindergarten. Fifteen of the teachers took special education courses, and 11 took the inclusive course. None of the teachers participated in training on learning disability separately. Eight of the teachers suspect that there are children with learning

disabilities in their class. Teachers stated that the reasons for suspicion were difficulties in understanding the instructions, difficulty in learning numbers, writing numbers backwards, insufficient socialization, forgetting quickly, short focus, and late learning.

Data Collection Tool

In the research, structured interview questions prepared by the researcher were used as a data collection tool. While preparing the structured interview questions, first, the relevant literature was scanned, and William Bender's book named "Individuals with Learning Disabilities and Their Education" was used. Open-ended questions were prepared by the purpose of the research. The prepared questions were presented to an expert academician in the preschool department, and expert opinion was taken. Necessary corrections were made to the questions in line with the expert opinion.

Demographic Information Form

In the prepared paper, the teacher's gender, age, professional seniority, last level of education he graduated from, the type of school he works, whether he has taken special education and inclusion courses, whether he has attended training on learning disabilities, whether there is a child in his class who suspects that he has a learning disability, if there is such a child, the child There are questions about their characteristics and whether there is a child with a diagnosis of learning disability in their class.

Interview Form

In the interview form, there are structured interview questions in which teachers can explain their views on the definition of learning disability and their approach to children with learning disabilities, and who are at risk.

The ethical process in the study was as follows:

- Ethics committee approval was obtained from Ondokuz Mayıs University Social Sciences and Humanities Research Ethics Committee (Date: 25.02.2022, Number2022-125)
- Informed consent has been obtained from the participants.

Data Collection and Analysis

The interview took place in environments where preschool teachers could express themselves effectively and comfortably. Due to the pandemic process, the interviews were held online or face-to-face at schools, depending on the teachers' wishes. Before the interviews with the teachers, the purpose of the research was explained to the teachers, they were informed about the research, and with the consent of the participants, the interviews were audio

recorded. The researchers transcribed the audio recordings taken. After the data were transcribed, the analysis was started.

The content analysis method was preferred in qualitative data analysis of the data obtained within the scope of the research. The main purpose of content analysis is to reach concepts and relationships that can explain the collected data. While data are summarised and interpreted in descriptive analysis, in content analysis, data are subjected to deeper processing and concepts and themes that cannot be noticed with a descriptive approach are identified (Yıldırım & Şimşek, 2018).

Validity and Reliability

The credibility of the results in research is among the essential criteria of scientific research. Validity and reliability are the most common criteria used in research. In qualitative research, validity and reliability are ensured by the realization of credibility, transferability, confirmability, and consistency criteria (Yıldırım & Şimşek, 2018). In this direction, detailed description, purposive sampling, and consistency methods were used in the research to increase the transferability. Direct quotations from the views of the participants were frequently used for a detailed description. Thus, it is aimed to ensure that the research results can be examined in more detail. By choosing the maximum diversity case sampling, a study group was reached that would better reflect the research problem. In order to ensure consistency, the researcher read the raw data at two separate times, and codes were created. Then, he compared the codes he created separately. As a result of this comparison, it was concluded that all of the codes, except for two, express similar things and the final codes were determined.

In the research, it was aimed to increase the internal validity with credibility. In order to increase credibility, the method of diversification and expert examination was used. In the diversification method, the researcher paid attention to the fact that the teachers with whom he would interview were held in different school types and that there were differences in their professional seniority. In the expert review method, the researcher had a person who is an expert in the field systematically examined what he had done during the research and gave the final form to the research questions, interview questions and other dimensions of the research with the feedback he received

Results

In this study, the views of preschool teachers on the characteristics of SLD were examined under three headings: what they will do when there is a suspicion of SLD about a child and their views on the detection of learning disabilities in early childhood. Detailed findings on this subject are presented below.

Preschool Teachers' Opinions on the Characteristics of SLD

When the answers given by the teachers participating in the research regarding the characteristics of SLD are examined, it is seen that they are divided into two categories: literacy skills and developmental characteristics. These categories are presented in Figure 1.

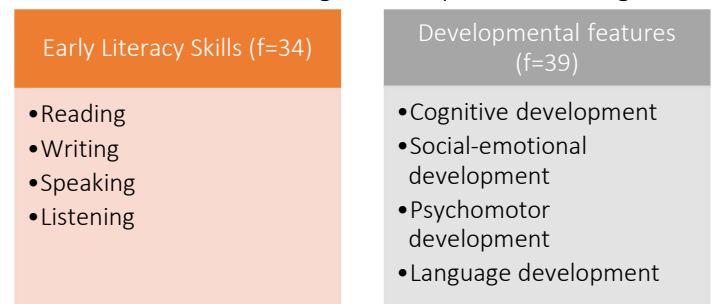


Figure 1.

Preschool Teachers' views on the Characteristics of SLD

When Figure 1 is examined, it is seen that teachers focus on all of the reading, writing, speaking, and listening skills under literacy skills. When the answers given are examined, it is seen that preschool teachers generally focus on difficulties in reading, writing, speaking, and listening.

Regarding this issue, T.15 stated his opinion: "*Children with learning difficulties have difficulty in speaking, listening, reading-writing and math operations and cannot fully acquire these skills.*" In addition, it was determined that the teachers focused on reading backward, writing incorrectly, writing numbers backwards, and having difficulties in expressing themselves. T.10 related to this issue "...*Some children read backwards, mixed up the words and read. Some children write wrong...*" stated her opinion. T.8, on the other hand, focused on "...*Write letters and numbers backwards...*" in a similar way. Some teachers focused on these children's difficulties in expressing themselves." Regarding this issue, T.9 "...*Inadequacy in socialization and difficulty in self-expression can be seen.*" She expressed himself.

When the answers given by the teachers regarding the

developmental characteristics are examined, it is seen that there are four categories: cognitive development, social-emotional development, psychomotor development and language development. When the answers given by the teachers about cognitive development were examined, it was seen that they generally focused on having difficulties in mathematical skills. Regarding this issue, T.18 "... *Then it could be that he couldn't match symbols in math.*" She has expressed her views. T.9 says: "... *They lag behind their peers in math activities.*" She expressed her opinion. Apart from mathematical skills, teachers focused on late learning and difficulties in problem-solving about cognitive development. Regarding this issue, T.2. "... *problem-solving, reasoning, etc. They have difficulties in using skills in these areas.*" she has expressed her views. T.5 said, "*Not all areas of development are problematic. Not has specific problems in learning. I even remember that some of them are clearly more talented in other areas.*" expressed her views.

Another development area that teachers focus on is social-emotional development. Teachers stated that children with SLD are shy about this area. T.12 said, "*Children with learning disabilities are socially shy. They often play separate games from their friends. They avoid communicating with them.*" she said. In addition, teachers emphasized that children with SLD are insufficient in socialization. T.9 on this subject "... *low self-esteem, inadequacy in socialization, difficulty in expressing oneself can be seen.*" she expressed his views.

The focus of preschool teachers regarding psychomotor development is difficulties in these skills. T.1 is related to this subject as "...*There is also weakness in psychomotor skills.*" she has expressed his views. *In terms of language development, teachers generally focused on language development, apart from literacy skills.*" T.19 expressed her views on this subject as "... *their language development is behind their peers...*".

What Teachers Do/Will Do in SLD Doubts

The behaviors of the teachers participating in the research when they have a child suspected of having SLD in their classroom are divided into two categories as classroom practices and interviews. These categories are presented in Figure 2.

In-class practices (f=15)	Meetings (f=22)
<ul style="list-style-type: none"> • Observation • Adapting activities • Enabling the child to discover what he/she is good at • Using different methods and techniques • Individual attention • Keeping track of the child's progress 	<ul style="list-style-type: none"> • Interview with family • Referral to the guidance service • Asking for help from the guidance service • Consultation with a special education specialist

Figure 2.
What Teachers Do/Will Do in SLD Doubts

When Figure 2 is examined, it is seen that the answers of the teachers participating in the research are divided into two categories as classroom practices and interviews. In classroom practices, it has been determined that teachers will use observation, adapting activities, enabling the child to discover their best aspects, using different methods and techniques, individual attention, and following the child's progress; in the interviews, they will meet with the family, direct them to the guidance service, ask for help from the guidance service and consult a special education specialist. Some of the teachers included in the study stated that observation should be a priority when there is a child in their classroom who they suspect has SLD. T.15 said, "*First of all, I observe for a long time. At least 3.5-4 months. If I remember correctly, there was an observation period of 6 months. If I see a risky situation in my first observations, I ask for help from the school counsellor...*" Teachers also emphasized the necessity of adapting the activities in addition to observation. T. 19 is about this subject: "*I prepare appropriate instructions for the child in the classroom so that he can understand me, understand the activities, and actively participate, and I try to adapt the activities I have planned for them.*" She has expressed her views. Teachers also stated that they would help the child discover their strengths, use different methods and techniques to ensure active participation of the child, take individual interest and follow the child's progress. T.17 "*First of all, I use different methods and techniques. After finding which method and technique suited them, I would keep the things taught during the day less, but the time more.*" T.19 stated her views as "*I would regularly observe the child and see how far he/she has progressed and whether the adaptations and individual activities I made for him were working.*" expressed her views.

When the answers to the interviews were examined, it was determined that all teachers would interview the parents. T.15 "...*I also get information from the family after the first*

observation process, but I do not express my doubts. Finally, due to the information I received from the family and the observations I made with the guidance teacher, I reach a common decision and inform the school administration and the family. Then the Guidance Research Center process begins." T.9 "I start to make detailed observations, and if my doubts have increased, I will interview the family so that I can learn the situation better from them." expressed her views. In addition, teachers stated that they would get help from the guidance service in this process." T.15 said, "...If I see a risky situation in my first observations, I ask the school counselor for help. This aid is not to send it to Guidance Research Center immediately, but rather to intervene early in risky situations by making a joint and quicker decision...". T.2 says, "I send it to the guidance service and follow the scanning and diagnostic processes. If my diagnosis is correct, I will prepare an IEP and train the child accordingly." she has expressed her views.

Teachers' Opinions on Identifying Learning Disabilities in Early Childhood

While most teachers participating in the research thought that learning disability can be identified in early childhood, few teachers were undecided on this issue. T.10, one of the teachers who think that learning disability can be determined in early childhood, "It can be detected. We provide basic information such as addition, subtraction, or problem-solving in mathematical operations. Some children can write or read their names, so we can be suspicious. But I think the rest of the literacy processes will emerge more clearly in primary education." T.18, one of the teachers who were undecided while expressing their opinions in the following way, said, "So it can be detected? Actually, I think it's a process. For example, at the beginning of the year, children often come back as unable to do these skills. For example, using scissors, counting and writing. But at the end of the term, after receiving a certain education, it may be if he still cannot do these skills and there is no development in the child. Actually, I think the teacher and family are important here. If the teacher and the family are excellent observers and work in cooperation, but there is no improvement in the child, I think the diagnosis can be made in the pre-school period. I'm not sure, but that strengthens the possibility." T.6 "It depends on the age group of the child. Children start from the age of 3. Three yes may be a very early age. I would say maybe 4. But it is common to notice such a situation in a 6-year-old child. Because there is only a month difference between them and primary school, it can be detected at the age of 5,5-6, especially by an expert".

Discussion

Specific learning disorders are characterized by difficulty learning key academic skills. In a study conducted by Bozatlı et al. (2024), 515 children were screened and SLD risk was found in 5.7% of these children. Children at risk of having SLD may exhibit some preliminary symptoms in earlier periods. The symptoms that may be observed in early childhood can be seen in areas such as reading, speaking, motor skills, and predicting skills (Okur, 2019). For this reason, it aims to examine preschool teachers' views on learning disabilities.

As a result of the research, preschool teachers' views on the symptoms of learning disabilities are divided into two categories: literacy skills and developmental characteristics. Literacy skills include reading, writing, speaking, and listening. In a study conducted by Kocsis (2016), it was determined that classroom teachers had sufficient knowledge in the classification of reading, writing, mathematics, and verbal communication of learning disabilities. Developmental features include cognitive, social-emotional, psychomotor, and language development. When the literature is examined, it is seen that the symptoms of learning disabilities have problems in language development, reading area, written language, mathematics, social-emotional development, and psychomotor development. For this reason, it can be said that teachers generally have an idea about the symptoms of learning disabilities. However, during the research process, it was observed that teachers generally focused on the reading, writing process, and cognitive development. In the study conducted by Şentürk-Gülhan (2023), it was determined that as the symptoms of learning disability increased in preschool children, early literacy and executive functions decreased. Therefore, it is normal for the teachers participating in this study to focus primarily on skills related to early literacy. Because it primarily manifests itself in these areas. However, it is seen that the teachers participating in the study did not focus on symptoms in all developmental areas. However, other literacy and developmental areas also have an essential place in recognizing the early signs of learning disabilities. In the study, it was determined that teachers focused least on psychomotor development. However, the inability to acquire some skills in psychomotor development may be a symptom of learning difficulties (Flores et al., 2022). When the literature was examined, it was determined that children diagnosed with SLD showed different developmental characteristics in early childhood compared to their typically developing peers (Firat & Bildiren, 2024).

For this reason, it is important for teachers to evaluate children in all developmental areas and notice their symptoms rather than focusing only on cognitive skills and difficulties in reading/writing. In addition, teachers did not mention the connection between SLD and other disabilities. For example, in the study conducted by Yaşa and Çiyiltepe (2024), it was determined that the likelihood of SLD in children with DLD was higher than in children with typical development.

When the teachers participating in the research are examined, it is seen that there are two categories when the child/children are suspected of having a learning disability: In-class practices and interviews. When the answers they gave about the in-class practices were examined, it was determined that the following items were/will be done. Observation, adapting activities, enabling the child to discover their good points, using different methods and techniques, individual attention and following the child's progress. When the literature is examined, it is not recommended that children should be evaluated with different assessment techniques for a certain period before they are diagnosed and that different teaching strategies should be used. At this stage, which is called the pre-submission process, it is aimed to ensure the active participation of children in the class before the detailed evaluation process (Yazıcı et al., 2020). In a study conducted by Yazıcı et al., it was tried to determine the stages that preschool teachers and pre-service teachers will take in the pre-posting process. As a result of this research, it was seen that preschool teachers and teacher candidates primarily focused on observation. Then, it was determined that they would try to increase the active participation of children with different instructional strategies. In this study, it was determined that teachers focused primarily on observation and then on instructional adaptations. Similarly, in the study conducted by Morningstar et al. (2015), it was determined that teachers would apply different methods. The second theme that teachers' focus meetings. It has been determined that teachers are/will be in contact with parents and guidance services. Similarly, similar results were obtained in the studies conducted by Mulholland and O'Connor (2016), Nonis et al. (2016), and Yazıcı et al. (2020).

Finally, it was determined that all of the teachers included in the study thought that learning disability could be diagnosed in early childhood, either definitely or partially. Teachers think that it will be difficult to determine at the age of 3-4, but they think it can be determined at the age of 5-6. However, the difference between achievement and ability tests should be cleared in the diagnosis of learning disability. In Turkey, achievement tests are not applied

because literacy teaching is not done in preschool education. For this reason, the diagnostic process does not seem possible. However, there are screening tools for recognizing the early signs of learning disability. By using these tools, it is thought that the areas that the child needs to be supported can be determined.

Conclusion and Recommendations

As it is known, learning disability is a developmental disability diagnosed in primary school years. However, signs of learning disabilities may appear in early childhood. For this reason, it is extremely important for preschool teachers to be aware of the early signs of learning disabilities. In this study, it was aimed to examine the views of preschool teachers about learning disabilities. For this purpose, the research was designed with the qualitative research method. However, only interviews were used in the research due to the ongoing effect of the pandemic and data were collected from one province. In future research, interviews can be made more comprehensive by adding observations.

As a result of the research, it was determined that some teachers had children in their classrooms whom they suspected of learning difficulties. In future research, a survey can be conducted with parents and teachers of children whose teachers suspect a learning disability.

Surveys can be conducted throughout the country.

Türkiye's XI. In the Development Plan, it is envisaged that screening will be carried out in childhood. In early childhood, screening for learning disabilities can also be performed with other developmental disabilities.

In the Twelfth Development Plan, e-learner files are mentioned. If this plan can be realised as soon as possible, cooperation between levels can be ensured. Thus, when children with SLD risk enter primary school, their teachers can have an idea.

Ethics Committee Approval: Ethics committee approval was obtained from Ondokuz Mayıs University Social Sciences and Humanities Research Ethics Committee (Date: 25.02.2022, No: 2022-125)

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