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A case study on the educational evaluation and diagnosis process of children with autism spectrum disorder

Mehmet Kucukgoz [1*] 🆔, Latife Ozaydin [2] 🆔

[1] Yasar Golcu Elementary School, Kahramanmaras, TURKEY
[2] Department of Special Education Teacher, Faculty of Education, Hasan Kalyoncu University, Gaziantep, TURKEY
*Corresponding Author: mehmetkucukgoz@hotmail.com

ARTICLE INFO	ABSTRACT
	The aim of this study is to examine the educational evaluation and diagnosis process of individuals with autism spectrum disorder (ASD). This study, which was implemented in the Guidance and Research Center (GRC) in Dulkadiroglu District of Kahramanmaras in 2019, was carried out with participants consisting of two administrators, seven teachers and seven parents with children with ASD. The research adopts the phenomenological approach, which is one of the qualitative research methods. Interview techniques were used in accordance with this model. The findings obtained from the data analyzed with content analysis were explained with six themes as medical diagnosis, ambient, personnel competence, measurement tools, individuals with ASD and parents. Difficulties in the evaluation process of children with ASD in GRC are stated as evaluation based on medical diagnosis, lack of diagnostic authority of GRCs, not communicating with individuals with ASD before evaluation, uniform assessment environment, instant evaluation. In addition, it was stated that the inexperience of the staff about ASD and the insufficient knowledge of using measurement tools negatively affected the evaluation process. The suggestions of the participants to improve the process were not to make evaluations based on medical diagnosis, to communicate with individuals with ASD before the evaluation, to diversify the evaluation environments and to extend the time, and to enrich the observations with various environments. Increasing personnel competence with in-service training, planning in undergraduate programs, developing a measurement tool for individuals with ASD, shortening the waiting period for families and facilitating appointment were among the suggestions. **Keywords:** special education, autism spectrum disorder, educational assessment and diagnosis, guidance and research center, case study

INTRODUCTION

One of the main goals of education is to support all individuals to become self-sufficient. This situation is not different for individuals with disabilities. It is aimed for individuals with disabilities to be a part of life without the need for other people's support in the future and to fulfill their own needs independently. From the moment that the insufficiency results in a medical diagnosis, the educational evaluation and diagnosis process begins in order for individuals to benefit from special education services and the factors related to this process gain importance (Eldeniz-Cetin, 2017). Individuals with special education needs are expressed as "*individuals who show significant differences from their peers in terms of individual characteristics and educational competencies for different reasons*" (Ministry of National Education [MoNE], 2018). Individuals with special needs; mental disability, attention deficit and hyperactivity disorder, language and speech difficulties, emotional and behavioral disorders, visual impairment, hearing impairment, physical impairment, learning disability, autism spectrum disorder (ASD), and chronic disease (Camci Erdogan, 2021).

ASD is defined as a lifelong neurodevelopmental disability that occurs in the early development stage, manifested by deficiencies in social communication and interaction, limited and repetitive behavioral patterns, obsessions and interests, or activities (APA, 2013). Different levels of intelligence and speech disorders, ranging from mental retardation to above-average cognitive ability, may accompany the disorder (Aykan & Kalaycioglu, 2020). Numerically, the incidence of autism is large enough to be underlined. Between 2008 and 2020, this frequency increased from one child in 150 children to one child in 54 children (Amaral et al., 2008). In addition, as a result of the research conducted for the world, its worldwide prevalence was reported as 1% (Lai et al., 2014). Individuals with ASD, the prevalence of which is one of every 58 children worldwide, have also increased in our country in recent years (Macaroglu-Akgul & Mertoglu, 2020). Although there is no national screening system to determine the number of individuals with autism in Turkey, it is thought that there is an increase in the number of individuals with autism in our

Table 1. Demographic characteristics of administrator and teacher participants

Sequence	Participant	Gender	Age	Task	EB	PE	GRC-E	EED-TP	ASD-TP
1	Self-Guide	M	46	Principal	GRC	25	5	No	No
2	Sky	M	33	AD	HIT	9	9	No	Yes
3	Teacher 1	M	39	Teacher	GRC	17	17	Yes	Yes
4	Teacher 2	M	43	Teacher	EPI	20	14	Yes	Yes
5	Teacher 3	M	38	Teacher	MHE	14	6	Yes	Yes
6	Teacher 4	M	37	Teacher	VIT	12	2	No	No
7	Teacher 5	F	30	Teacher	GRC	8	4	Yes	Yes
8	Teacher 6	M	28	Teacher	HIT	6	6	No	No
9	Teacher 7	M	27	Teacher.	MHE	5	3	No	No

Note. AD: Asisstant director; EB: Education branch; PE: Professional experience; GRC-E: Guidance and Research Center-Experience; EED-TP: Educational evaluation and diagnostics-Training participation; & ASD-TP: ASD-Training participation

country in parallel with the increase in the whole world. In this context, the number of children with autism who receive their education in formal special education schools or inclusive classrooms is increasing day by day (Rakap, 2017). These results reveal the fact that individuals with ASD will be seen intensely at all levels from preschool to higher education.

The work and procedures related to the educational evaluation and diagnosis of individuals with special needs in Turkey are carried out by the special education evaluation board established in the Guidance and Research Centers (GRCs). In the stage before GRC, individuals with disabilities must be diagnosed (medical diagnosis) in health institutions before the educational evaluation and diagnosis process in order to be directed to the appropriate education environment and special education service. Educational evaluation process is a teamwork involving multiple disciplines. This team consisting of education experts, special education teachers, specialists working in health institutions, families and individuals with special needs evaluates the individual in line with legal bases, collects information from many sources and applies various diagnostic tests (MoNE, 2018).

The reasons of parents who apply to health boards for their children with special needs are generally to benefit from social educational rights (Kayhan & Ozturk, 2020). Some studies reveal the effects of ASD diagnosis on family relationships, social life, and work life. In such studies, the difficulties experienced by the child diagnosed with ASD and their parents in daily life, school life, and health care were determined (Zengin-Akkus et al., 2020). In some studies, it has been determined that teachers' self-efficacy about their students with ASD is an important determinant of their knowledge and awareness levels. It is thought that the self-efficacy levels of the classroom teachers towards the inclusion student with ASD encourage them to increase their awareness of the ASD knowledge levels and the methods used (Burak & Ahmetoglu, 2020).

The purpose of this study is to examine how the educational evaluation and diagnosis process of individuals with ASD in GRC is carried out. In the study, it is aimed to determine the difficulties experienced by teachers, administrators and parents who are experienced in the field and their suggestions for the improvement of the process. It is thought that determining the difficulties experienced in GRCs during the educational evaluation and diagnosis process of individuals with ASD can shed light on improvement studies and new legal regulations. It can be said that this research will fill an important gap in the literature, since there is no detailed study on the determination of the current situation and difficulties in the educational evaluation and diagnosis processes of individuals with ASD in Turkey.

METHODS OF THE STUDY

Research Model

In the research, one of the qualitative research methods, case study design was applied. The reason why qualitative research method is preferred is that it is appropriate to investigate the behaviors, perceptions and interpretations of people living this reality with a qualitative research approach (Yildirim & Simsek, 2018). Case study is a research design that deals with a current phenomenon in its natural environment and allows the use of multiple sources of evidence or data. (Creswell, 2019). In this study, the perceptions, and perspectives of children with ASD regarding the educational evaluation and diagnosis process from the perspective of administrators, teachers, and parents, who are the participants of the study, were tried to be understood through individual interviews. Therefore, this study is a case study based on qualitative data obtained through interviews.

Participants

Purposeful sampling method was preferred in the study. The maximum diversity method, one of the purposeful sampling methods, was used in determining the participants. Determining the sample with purposeful sampling method will provide researchers who adopt a qualitative approach to access rich, diverse, data sources about the facts, situations, and facts they focus on (Yildirim & Simsek, 2018). The participants of this study consisted of two administrators working in the GRC in Dulkadiroglu District, one of the two central districts of Kahramanmaras Province, seven teachers who carried out the educational evaluation process of children with ASD, and parents of children with ASD. The demographic characteristics of the administrator and teacher participants are given in **Table 1**.

When **Table 1** is examined, it is observed that both of the principal participants are male, while among the teacher participants, all of them are male except the participant code named "Teacher 5". All of the manager and teacher participants have a bachelor's degree. While three of them are graduates of GRC departments, four of them are graduates of special education (mentally

Table 2. Demographic characteristics of parent participants

Sequence	Code name	Parent	Age	Education level	Gender of child	Age of child	n-EED
1	Papatya	Mother	39	Master	F	10	7
2	Mavi	Father	41	Undergraduate	M	11	3
3	Umut	Father	42	Undergraduate	M	8	5
4	Savasci	Father	44	Master	M	5	2
5	Ege	Father	51	Undergraduate	M	11	5
6	Zafer	Father	51	Undergraduate	M	15	8

Note. EED: Educational evaluation and diagnostics & n-EED: Child's EED number of participations;

handicapped education, hearing impaired teaching, and visually impaired teaching); it has been observed that the teacher with the code named "Teacher 2" is a graduate of the education program and instruction (EPI). In the selection of the parent participants, care was taken to ensure that they were not homogeneous in terms of meeting the maximum diversity in gender, age, education level, ages of their children with ASD, and the number of EED participation. The demographic characteristics of the parent participants are given in **Table 2**.

When **Table 2** is examined, it is seen that the ages of the parent participants are over 39 and all of them are male except the parent code named "Daisy". In addition, in the study, two administrators were coded as Self-Guide and Sky, teachers as Teacher 1, Teacher 2, …, and parents as Papatya, Mavi, Umut, Savasci, Ege, and Zafer.

Data Collection Tools

Personal information form

Information such as age, gender, graduation, training on ASD, training on educational evaluation and diagnosis, duty, and experience periods in GRC were requested for teachers and administrators. Parents were asked for information such as age, gender, marital status, educational level, and educational assessment and diagnosis status. In addition, information such as the age of the child, the child's gender, the date of the child's first medical diagnosis, the first and last participation date and the number of times the child participated in the educational evaluation and diagnosis process in the GRC were requested from the parents.

Semi-structured interview form

Semi-structured interview forms used in collecting data in this study were developed at certain stages. The forms prepared by the researcher were presented to the opinions of three experts working in the special education department. In order to confirm the comprehensibility of the research questions and to examine whether the answers given were related to the question, a pre-application was conducted with a special education teacher and a mother with a child with ASD. The teacher and the mother stated that the questions were understandable, and it was observed that the answers given were related to the focus of the questions. Interview questions, each consisting of nine questions, were prepared for teachers, administrators, and parents in order to find answers to the purpose of the study and research questions. In this context, three different interview forms were prepared for three groups of participants. The interview questions are, as follows:

1. What are your general views on the educational evaluation and diagnosis process of children with ASD? Can you explain?
2. Can you explain the educational evaluation and diagnosis process of a child with ASD?
3. What do you think are the difficulties experienced in the educational evaluation and diagnosis process of children with ASD? Can you explain?
4. What are your views on the professional knowledge and skills of the teachers working in GRC regarding the educational evaluation and diagnosis process of children with ASD? Can you explain?
5. What are your views on the assessment and evaluation tools used in the educational evaluation and diagnosis process of children with ASD in GRC? Can you explain?
6. What are your views on the physical environment in which the educational evaluation and diagnosis process of children with ASD is carried out in GRC? Can you explain?
7. What do you think should be done to overcome the difficulties experienced in the educational evaluation and diagnosis process of children with ASD? Can you explain your opinions and suggestions?
8. What kind of support can be given to the staff working in the GRC in order to make the educational evaluation and diagnosis process of children with ASD more qualified? Can you explain?
9. Do you have any comments or suggestions that you would like to add apart from your answers to the questions above? Can you explain?

Collection and Analysis of Data

In this study, the data were collected through individual interviews with the participants in line with the data collection tools prepared by the researcher. Within the scope of the research, written permission was first requested from the Kahramanmaras Directorate of National Education. After the permission was obtained on August 6, 2019, the GRC was visited in the same year and interviews were made with two administrators and seven teachers through semi-structured interview forms. Kahramanmaras Umudum Autism Association was visited by the researcher in order to conduct interviews with parents who have children with ASD. The close and relevant stance of the association president and the families were informed about the interview, and interviews

Table 3. Themes and sub-themes

Themes	Medical diagnostics	Ambient	Personnel competencies	Measuring tools	Children with ASD	Parents
Sub-themes	COZGER	Assessment ambient features	Pre-service teacher competencies	Absence of ASD assessment battery	Waiting time	Appointment
	Primary step	Natural ambient	Teacher professional competencies	Forms used	People strangers	Family referral
	Requirement				Evaluation period	

were made between December 11, 2019 and January 17, 2020 by telephone for interviews with the families who returned. The data in these interview processes were recorded and preserved using voice recording devices. Relevant steps have been taken to ensure that the interview processes take place in a natural and sincere manner by sharing the principles regarding confidentiality.

In the analysis of the data in this study, which was carried out with the written and verbal consent of the participants; a two-step path, pre-analysis preparations and content analysis, was followed. At the stage where the preparations before analysis are evaluated; dumps of data, control of data dumps, transferring data dumps to the form, checking the form, index writing, and reliability studies were carried out. After the interview with each participant was completed by the researcher, the audio files recorded in MP3 format were listened to, and the data was converted into a Word document without any changes. It consists of 58 pages, 2,831 lines, and 26,583 words in total by transferring the audio files to Word file in computer environment. The audio files and written forms were sent to an expert from the field for control, in order to control the process of transcribing all the data, whose transcription process was completed in computer environment. At this stage, where the data is analyzed as the second stage, the data were analyzed with content analysis in order to explain the obtained data and to recognize the dimensions associated with the concepts. During the analysis process, stages such as determining the codes, shaping the themes and sub-themes with the codes, defining, and interpreting the findings were carried out. As a result of the content analysis carried out within the scope of the research, six themes were reached.

Validity and Reliability of Data

In this study a number of measures were taken to ensure the validity and reliability of the research during the data collection and analysis process. In line with internal validity, first of all, the confirmation of the interviews was carried out by obtaining the written and verbal consent of the participants in the study. The researcher visited the environments to be observed beforehand, met the participants, and spent some time. Subsequently, in order to collect depth-focused data, the researcher carried out the research by constantly examining the interview questions and the statements of the interviewers, trying to compare them with a critical eye and conceptualize them by interpreting them. The sound files were written in order to carry out the reliability study of the obtained data consisting of 58 pages, 2,831 lines, and 26,853 words, and the plain version of the data was read many times by the researcher in line with internal validity. In order to contribute to internal validity, the data was listened and read by an expert person, and the expert person checked the accuracy of the written data, corrected the deficiencies, and agreed on a consensus.

In the qualitative research process, apart from the voice recordings for internal validity in the dimension of providing validity and reliability studies called "data triangulation", written opinions of the participants in the interview process were also asked. Following the writing of the data, the coding of the created categories was carried out, and then the sub-themes and themes were completed by making detailed descriptions within the scope of external validity. These studies were carried out by two researchers at different times and in different places, contributing to internal validity. Afterwards, the consensus study was carried out by checking the unity and differences of opinion of the codes, themes and sub-themes created by the coming together of two researchers who completed the study.

FINDINGS

In this section, six themes and their sub-themes are included, which were created by the research's verbal and written answers to the interview questions of the participants. Six themes and sub-themes that make up the findings of the research are presented in **Table 3**.

As seen in **Table 3**, six themes were created according to the data obtained from the participants. It is seen that a total of fourteen sub-themes were created within these six themes.

Theme 1: Medical Diagnostics

Depending on the medical diagnosis theme, the Children with Special Needs Report (COZGER), first step and necessity subthemes were reached.

COZGER

All of the participants who answered the interview questions mentioned COZGER. In line with the opinions obtained from the expressions of the participants, it is understood that COZGER contributed to the establishment of the "special need" expression by preventing children from being labeled as disabled or inadequate. However, it was observed that COZGER did not facilitate the communication between the medical diagnosis and the educational evaluation and diagnosis process, and the difficulties of the parents who had the problem before continued. Teacher 3 said: "*Students receive COZGER for the educational evaluation and diagnosis process in the GRC and apply to us with this report*". Savasci, the father of a four-year-old boy, said, "*I think it is a very*

unnecessary and tiring process for families who are referred by the hospital with a COZGER report or who started this process." With this view, the warrior emphasized that he regards the COZGER process as unnecessary due to the participation of his children in the educational evaluation and diagnosis process in GRC and it is tiring to experience the same process twice.

First step

All administrators and teachers who gave their opinions and two fathers (Zafer and Savasci) from the parents mentioned the first step in the educational evaluation and examination of children with ASD in GRC. From the expressions of the participants, it is understood that COZGER has an important place in the educational evaluation process in GRC and is the first step in the functioning of the process. "*We, as GRC, are waiting for a child with ASD to come with COZGER after being diagnosed with a doctor report in order to be diagnosed here educationally,*" said Sky. Zafer, 51, said, "*The first diagnosis of autism for children is made in the hospital with COZGER*".

Obligation

All of the administrators and teachers who were interviewed, and the parents Savasci, mentioned the necessity of children with ASD. From the expressions of the participants, it is understood that the educational evaluation process in GRC cannot be carried out without COZGER, and it is a mandatory step for the process to start. Teacher 2 said, "*First of all, a child with ASD must be diagnosed with child psychiatry in order to be able to make educational evaluation and diagnosis. GRC is applied with the diagnosis of child psychiatry.*" "*First of all, we were told that we had to get a report from the hospital, and then we learned that our child has autism,*" said Savasci. With this view of the warrior, COZGER emphasized that it is a necessity to get a report and that they learned this diagnosis with the report.

Theme 2: Ambient

Depending on the ambient theme, assessment ambient characteristics and natural environment sub-themes were reached.

Assessment ambient features

All of the participants mentioned the characteristics of the assessment ambient related to the theme of the ambient. While the physical conditions of the places, where educational evaluation and diagnosis are made in GRC in line with the participant's opinions; it was emphasized that it was insufficient in terms of equipment and tools. It is seen that the educational evaluations of children with ASD are carried out in a uniform environment, the sound insulation of the environment is insufficient and there is a lack of material in the environment; in this respect, it is understood that the evaluation environment features are insufficient. Teacher 3, "*The physical environment is good in GRC, but unfortunately I think we should have a performance room for children with ASD.*" he said. One of the parents, Ege, said, "*Physical environment, a small room. There is a teacher. An evaluation is made with the student and their parents. These children need to be evaluated in play environments somehow.*"

Natural ambient

Responding to the interview questions, the participants mentioned the natural ambient sub-theme related to the theme of the ambient. From the expressions of the participants, it is seen that the educational evaluation in GRC is carried out instantaneously in a room like the classical classroom environment, and children are not evaluated in natural environments such as park, garden, playroom, and their own home environment. Teacher 2 said, "*I think it would be healthier if we could observe these children while communicating with other friends and playing games*". Papatya says, "*Even as a parent, we do not show something right away at the first time, but the person in charge expects it to show it the first time within 15-20 minutes. I believe it was not evaluated correctly.*" Umut said, "*There may be a game room in GRC, and I think it should be evaluated here as well.*"

Theme 3: Personnel Competence

Depending on the theme of personnel competence, pre-service teacher competence and teachers' professional competence sub-themes have been reached.

Pre-service teacher competence:

Participants talked about the pre-service teacher competence related to the theme of personnel competence in GRCs of children with ASD. From the expressions of the participants, it is stated that the competence of teachers who work in the educational evaluation process in GRC is not at the expected level; in this respect, it is understood that in-service trainings, courses, and seminars organized to increase pre-service teacher competence are insufficient. Ege, a language graduate father who participated in the educational evaluation and diagnosis process five times in GRC, said, "*The evaluation is made by friends who do not know what many parameters are, do not receive a good education at this point, do not undergo in-service training, have no experience.*"

Professional competencies of teachers

All of the participants mentioned the professional competencies of teachers related to the theme of personnel competence of children with ASD. From the expressions of the participants, it is seen that the professional competencies of the teachers who work in the educational evaluation process in GRC are not at the expected level. "*As a teacher for the hearing impaired, I have never encountered autism. As someone who saw a child with autism after being appointed to GRC, and recognized over time, I consider myself inadequate. I can say that other friends are no different from me,*" he said. Having participated in the educational evaluation and diagnosis process 7 times in GRC, Papatya said, "*I do not think they know much about autism. Because when looking for answers*

to some questions, can your child do this? he asks, and I say that my child cannot speak. Then he says "hmm ..." or something. This is the situation." With these views, Papatya stated that GRC teachers do not have detailed information about ASD.

Theme 4: Measuring Tools

Depending on the theme of measurement tools, the sub-themes of not having an ASD assessment battery and the forms used were reached.

Lack of ASD assessment battery

Participants mentioned that there is no ASD assessment battery related to the theme of assessment tools. From the expressions of the participants, it is understood that the forms and intelligence tests used in the evaluation process of children with ASD in the educational evaluation process in GRC are insufficient, and the necessity of developing the ASD evaluation battery. Principal of the Institution Self-Guide, "*We do not have a special diagnostic tool for children with ASD, which I have seen in this regard. Just as we need a battery for the diagnosis of special learning difficulties, we definitely need a tool that can make the diagnosis processes faster and more detailed for ASD.*" he said. Savasci said, "*The evaluation forms here contain standard items. All of the questions are a structured questionnaire and allow you to say yes or no to almost all questions. So, the gray areas in the middle are missing, there are no open-ended evaluation questions*." he said. Savasci, with his views; the forms used in GRCs are not suitable for evaluating individuals with ASD; he stated that because he could not evaluate the process with open-ended questions, updated new tools should be developed for individuals with ASD.

Forms used

All of the participants mentioned the forms used on the theme of measurement tools. From the expressions of the participants, it is understood that the forms and tests used in the educational evaluation process of children with ASD in GRC are insufficient. Teacher 6, "*Unfortunately, our measurement tools are insufficient. We need to create autism-related assessment tools. Just as we are doing intelligence tests, we are developing measurement tools for other types of disabilities, we need to develop measurement tools for them.*" he said. "*It is a bit of a problem to define autism with just one scale. It can be a video that examines their behavior, it can be an activity, they can evaluate them in the process, and they can play games outside.*" he said.

Theme 5: Children with ASD

Depending on the theme of children with ASD, the subthemes of waiting time, strangers and evaluation time were reached.

Waiting time

Seven parents who answered the interview questions stated that their children with ASD had great difficulty due to the waiting time in the educational evaluation and diagnosis process in GRC. It was observed that most of the parents thought that the long waiting period in the educational evaluation process was due to not having a functional appointment system. In addition, it was observed that they had to wait to be evaluated before the evaluation process, this time afterwards, to receive the educational evaluation report. It is observed that this situation negatively affects the evaluation process by causing individuals with ASD to get bored and experience behavioral problems. Umut, a mother of an eight-year-old boy with ASD, said, "*Since the waiting period is long and the environment is crowded, the child is psychologically worn out there and cannot find the opportunity to perform his real performance because he is worn out.*" Savasci, who is the father of a four-year-old boy with ASD, said, "*They give the appointment at 09.00, they give everyone who should come that day at 09.00. These children are already unable to focus, and socially, they may be distracted by being more interested in the events around. The appointment system, which started at 09.00, continues like this until 12.00.*" he said.

Unknown people

Participants mentioned people they do not know. From the expressions of the participants, it was determined that there was no communication and sharing activity with the individuals with ASD who participated in the educational evaluation process in GRC before the evaluation. It is observed that the first encounter of the child with the teacher who made the assessment takes place in the evaluation room. In this way, it is understood that taking individuals with ASD into the assessment without performing the pre-meeting and communication process causes problems in communicating. "*A child with ASD does not want to communicate with the first person he / she meets, this is very natural. The time must be long to reveal the child's potential. The teacher has to identify someone he meets first and the child's approach when he first sees it, a situation that reduces the effectiveness of the diagnosis.*" Teacher 6 said, "*The child comes from his peaceful home to a place he does not know. We cannot make an evaluation as we want in GRC when children have a social anxiety disorder when they enter an environment with people they do not know.*" Mavi said, "*These children are children who have difficulties in social communication. The child cannot perform his real performance because he does not know the other person.*"

Evaluation period

Participants mentioned the evaluation period regarding the theme of children with ASD. From the expressions of the participants, it is seen that the evaluation of children with ASD in the educational evaluation process in GRC is done instantaneously for a short time. In an evaluation carried out in a short time, it is understood that an individual with ASD will not feel comfortable and safe and will not be able to demonstrate his real performance. "*Our biggest limitation is the limited time spent with the child in diagnosis,*" said Sky, the deputy director. Teacher5 said, "*We make instant evaluation during the evaluation of the student. However, we know the child with ASD, his time may not fit the time, he may be affected by odor and heat. We make this*

decision with a single assessment for these children. However, a more holistic assessment is required". Papatya said, "*In line with the answers given by the parents, they give us 15-20 minutes, sometimes even less. This is of course wrong, because you only make up your mind in 15 minutes*." he said.

Theme 6: Parents

Depending on the parent theme, appointment and family guidance subthemes were reached.

Appointment

Participants mentioned the appointment regarding the parents' theme. From the expressions of the participants, it is understood that the appointment process required for children with ASD in GRC to participate in the educational evaluation process cannot be given quickly due to the intensity. Ege said, "*The process starts with making an appointment first, getting an appointment is a very difficult process, it is always full of appointments*." he said.

Family referral

Participants talked about family referral regarding the parents' theme. Teacher 1 said, "*So we have a performance determination form at hand, and we fill this form together with the parent. Our measuring tool becomes parents. The parents say and convey the directions to us*." he said. Zafer, a father with an undergraduate degree, said, "*Actually, I am telling the teacher about the child. He has to take the child in front of him and solve some things himself. But we direct it, it does not discover it. The more we say there is this and this, the more they try to get into the details of the work. In fact, the problem here is that they avoid going into details.*" he said.

DISCUSSION

With this study, which is carried out as a case study based on qualitative data, it was aimed to determine the opinions of two administrators, seven teachers and seven parents about the educational evaluation and diagnosis process of individuals with ASD. With the study, detailed data were obtained from the views of three participant groups (administrators, teachers, and parents) who had experience about the educational diagnosis and evaluation process of children with ASD. In the process of determining the participants, one of the purposeful sampling methods, the maximum diversity method was used. As a result of the interviews conducted individually with the participants in these three groups, the opinions of individuals with ASD on the educational evaluation and diagnosis process were expressed under six themes as medical diagnosis, ambient, staff competence, measurement tools, children with ASD and parents. Accordingly, many difficulties were expressed by the participants regarding the educational evaluation and diagnosis processes of individuals with ASD.

Difficulties related to medical diagnosis, which is the first theme; it is the lack of diagnostic authority of GRCs, and evaluation based on medical diagnosis. Parents mostly complained that medical diagnosis is an unnecessary and tiring process, and they are not given a referral for the stages to be followed after diagnosis. Selimoglu et al. (2013) explained that during the diagnostic process, experts diagnosed children in 10-15 minutes based entirely on the information provided by the families. In another study, it is revealed that it is important to first determine the characteristics such as the psychological state and structure of the family, and to determine the relationships and mediating variables between these two variables (Gonen et al., 2020).

As the second theme, the difficulties related to the ambient are the uniformity of the assessment ambient, short-term instantaneous evaluation and the absence of the evaluation in natural ambient. In studies, it is stated that individuals with ASD and other disabled individuals may experience serious limitations in initiating communication, social interaction, and self-expression, giving the desired reaction, focusing and areas of interest (Ozaydin, 2015). In this respect, it is stated that it is important to be able to evaluate individuals with ASD in the educational evaluation and diagnosis process in environments where they can feel comfortable and safe (Oner, 2020¸ Rakalp et al., 2017). In addition, it is stated in the literature that in order to successfully educate a student with ASD, a suitable environment must be arranged for him (Cherry, 2017), and even the educational institution must be autism-friendly (Yazici, 2021).

As the third theme, difficulties with staff competence; the personnel competence in recognizing the ASD is low, the personnel's knowledge about measurement tools is insufficient and the in-service training of the personnel is insufficient. In Kaplan-Sahin's (2016) study, it was stated that 31.9% of teachers working in GRCs were teachers who changed their field from classroom teaching and other branches to special education teaching staff. In the same study, it was emphasized that 22.7% of the teachers who graduated from special education teaching in GRC constitute a serious contradiction. It has been stated in the literature that teachers need professional development and training in the evaluation and diagnosis of autism (Rakap et al., 2018). A study examining how the process and execution of the process in a university-based autism research and application center was examined, focused on the importance of qualified experts with advanced professional competencies, counseling process, expert training, collaborative work, and cooperation with the family (Gulec-Aslan, 2018). Pre-teaching trainings (Koc, 2020) and activities (Koc et al., 2022) in the research contributed to all teacher candidates; it is also stated that in-service trainings contribute positively to and motivate the personnel about the development of children with special needs and the ways of communicating with them (Ozaydin, 2020). In another study, when young individuals with autism were asked about their needs for a better learning environment, 60% emphasized that they need a teacher who understands autism better (Vincent & Ralston, 2020).

As the fourth theme, difficulties with measurement tools; it is not a measurement tool for ASD and the forms used are insufficient. In the research findings of Aksoy and Diken (2017), it has been revealed that there is no specific measurement tool for individuals with ASD. In the study conducted by Kaplan-Sahin (2016), it was concluded that there was no specific test and method

for the educational evaluation and diagnosis of individuals diagnosed with ASD. In the study conducted by Aydos and Calis (2021), it is emphasized that an assessment tool developed specifically for Turkish children should be created. In another study, it is suggested that more measurement tools should be developed in Turkey, emphasizing that most of the measurement tools are developed abroad (Kilinc et al., 2019).

As the fifth theme, difficulties related to individuals with ASD; inability to communicate with individuals with ASD and the waiting period of individuals with ASD before and after evaluation is too long. In similar studies in the literature, it is stated that the main problem with the system is that the process of getting an appointment is troublesome and takes a long time. It is stated that the children have to wait in line at the hospital, the audible or silent negative reactions from the environment during this process, and the long and troublesome process of getting a committee report cause time loss and even misdiagnosis (Aydos & Calis, 2021). As the sixth theme, difficulties with parents; family guidance during the evaluation process and parents having difficulty in getting an appointment. In the literature, it is stated that parents' not having enough information about ASD or having wrong information has negative effects on the early diagnosis and treatment process of the disease (Turan et al., 2020).

CONCLUSIONS AND RECOMMENDATIONS

This research aimed to reflect a holistic perspective by providing diversity in the data in line with the views of RAM administrators, teachers, and parents, who are the primary witnesses of the educational evaluation and diagnosis process of individuals with ASD. In this study, which was carried out with this aspect, while discussing how the educational evaluation and diagnosis process of individuals with ASD is carried out in a GRC; in this process, it is aimed to determine the difficulties experienced by experienced teachers, administrators and parents and their suggestions for improving the process. In this study, which was designed as a qualitative case study, interviews were conducted with semi-structured forms in order to determine the views and suggestions of two administrators in GRC, seven teachers and seven parents with children with ASD. As a result of evaluating the opinions of the participants with content analysis, their views on the educational evaluation and diagnosis process were described with six themes. Findings of the study; medical diagnosis (COZGER, first step and necessity), ambient (assessment ambient characteristics and natural ambient), personnel competence (pre-service teacher competencies and teachers' professional competencies), measurement tools (no ASD evaluation battery and forms used), individuals with ASD (waiting time, people they do not know, and evaluation time), and parents (appointment and family referral). The following results were reached in the study:

It has been determined that COZGER is the first and compulsory step as medical diagnosis in the educational evaluation process of individuals with ASD, and educational evaluation and diagnosis is carried out in line with medical diagnosis. It has been observed that the educational evaluation environments of individuals with ASD are uniform. It was determined that there are material deficiencies in evaluation environments, their duration is limited, and individuals with ASD are not observed in natural environments such as playgrounds, gardens, and home environments, except for evaluation rooms. According to the findings obtained from the study, it has been observed that classroom teachers can pass to special education teaching by attending courses, they can work in GRC by gathering different branches such as teaching for the mentally handicapped, teaching for the hearing impaired, and teaching the visually impaired, and then the same performance is expected from all these branches. It has been observed that the teachers participating in the educational evaluation process of individuals with ASD have limited competencies to recognize and communicate with the ASD. It has been determined that the content of the evaluation of ASD in special education teaching programs is limited and the in-service trainings organized for teachers working in GRC are not sufficient.

It has been determined that individuals with ASD in GRCs do not have an evaluation battery that can be used in the educational evaluation process. For this reason, it was determined that "educational evaluation request form, parent interview form, pervasive developmental disorder performance determination form and academic evaluation form" and intelligence tests such as "WISC-R, LEITHER, Stand for Binet" were used. However, it was determined that these forms and tests used were not a special measurement tool for individuals with ASD, they were insufficient in evaluating individuals with ASD and the evaluation was based on family information. It was stated that in the educational evaluation process of individuals with ASD, multiple observations should be applied, for example, parents should be asked for video recordings, multiple observations, and observations in multiple environments.

It was determined that individuals with ASD were kept waiting for a long time before and after the educational evaluation process in order to receive the evaluation report of their parents and children, the individual with ASD encountered the assessor for the first time in the evaluation environment and the evaluation was carried out in a short time. It has been determined that making an appointment for the educational evaluation of individuals with ASD is a difficult process for parents and appointments are given for future dates.

Educational evaluation and diagnosis processes of individuals with ASD should be made with holistic evaluations independent of the shadow of medical diagnosis. The environments should be diversified in order for individuals with ASD in GRCs to feel comfortable and safe in their environment and accordingly to exhibit their real performances. Evaluation times should be increased, and multiple observations should be used, independent evaluations should be made without family guidance by using different sources such as video recording. Priority should be given to enriching the content of special education teaching programs at undergraduate level on ASD and for teachers to improve themselves by participating in intensive in-service training after they are assigned to GRC.

In order to determine the ASD levels of individuals, a special evaluation battery should be developed for the ASD. Waiting time before and after educational evaluation in GRCs should be shortened, teachers should communicate with individuals with ASD and share before evaluation. In order for individuals with ASD to start their education early, appointments should be made for a close date for educational evaluation in GRCs.

A scale or a battery specific to the ASD can be developed or adapted to be used in GRCs. Case studies of this study can be conducted for different provinces and different disability groups. Action research can be conducted to improve the educational evaluation and diagnosis process in GRCs.

REFERENCES

Aksoy, V., & Diken, I. H. (2017). Determining psychometric properties of educational assessment and prognosis of learning rate record forms for children with autism spectrum disorders. *Elementary Education Online, 16*(1), 60-77. https://doi.org/10.17051/io.2017.33950

Amaral, D. G., Schumann, C. M., & Nordahl, C. W. (2008). Neuroanatomy of autism. *Trends in Neurosciences, 31*(3), 137-145. https://doi.org/10.1016/j.tins.2007.12.005

APA. (2013). *Diagnostic and statistical manual of mental disorders*. American Psychiatric Association. https://doi.org/10.1176/appi.books.9780890425596

Aydos, S., & Caliskan, E. S. (2021). Otizm spektrum bozukluğu öncesi ve sonrasıyla tanı: Çocuk gelişimci bakış açısıyla bir inceleme [Diagnosis before and after autism spectrum disorder: A review from a child development perspective]. *Türkiye Sağlık Bilimleri ve Araştırmaları Dergisi* [*Turkish Journal of Health Sciences and Research*]*, 4*(1), 31-53. https://doi.org/10.51536/tusbad.779103

Aykan, S., & Kalaycioglu, C. (2020). Üniversite öğrencilerinde otizm spektrum anketi Türkçe formunun güvenirliğinin değerlendirilmesi [Evaluation of the reliability of the Turkish form of the autism spectrum questionnaire in university students]. *Kırıkkale Üniversitesi Tıp Fakültesi Dergisi* [*Journal of Kırıkkale University Faculty of Medicine*]*, 22*(3), 430-439. https://doi.org/10.24938/kutfd.809869

Burak, Y., & Ahmetoglu, E. (2020). Otizm spektrum bozukluğu olan çocukların kaynaştırılması ve bütünleştirilmesinde öğretmenlerle ilgili değişkenlerin incelenmesi [Examining the variables related to teachers in the inclusion and integration of children with autism spectrum disorder]. *Elektronik Sosyal Bilimler Dergisi* [*Electronic Journal of Social Sciences*]*, 19*(73), 478-503. https://doi.org/10.17755/esosder.598005

Camci Erdogan, S. (2021). Öğretmen adaylarının özel gereksinimli bireylerin eğitimine yönelik görüşleri [Opinions of prospective teachers on the education of individuals with special needs]. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi* [*Ankara University Faculty of Educational Sciences Journal of Special Education*]*, 22*(2), 283-306. https://doi.org/10.21565/ozelegitimdergisi.663271

Cherry, C. P. (2017). *Creating successful learning environments for children on the spectrum*. https://ibcces.org/blog/2014/05/12/creating-successful-learning-environments-children-spectrum/

Creswell, J. W. (2014). *A concise introduction to mixed methods research* SAGE.

Eldeniz-Cetin, M. (2017). Özel gereksinimli bireylerin tercihlerinin değerlendirilmesi [Evaluation of preferences of individuals with special needs]. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi* [*Ankara University Faculty of Educational Sciences Journal of Special Education*]*, 18*(2), 309-328. https://doi.org/10.21565/ozelegitimdergisi.293726

Gonen, A., Yikmis, A., & Diken, I. (2020). Otizm spektrum bozukluğu ile otizm spektrum bozukluğu tanısı olan bireylerin ebeveynlerinin depresyon düzeyleri arasındaki ilişkisi [The relationship between autism spectrum disorder and the depression levels of parents of individuals with autism spectrum disorder]. *PESA Uluslararası Sosyal Araştırmalar Dergisi* [*PESA International Journal of Social Studies*]*, 6*(3), 232-243. https://doi.org/10.25272/j.2149-8385.2020.6.3.03

Gulec-Aslan, Y. (2018). Üniversite-temelli bir otizm araştırma ve uygulama merkezinin incelenmesi [Investigation of a university-based autism research and practice center]. *Medeniyet Eğitim Araştırmaları Dergisi* [*Journal of Civilization Educational Research*]*, 1*(3), 1-11.

Kaplan-Sahin, B. (2016). *Rehberlik araştırma merkezlerinde görev yapan öğretmenlerin otizm spektrum bozukluğu olan çocukların eğitsel değerlendirme sürecine ilişkin yeterliliklerinin değerlendirilmesi* [*Evaluation of the competencies of teachers working in guidance research centers regarding the educational evaluation process of children with autism spectrum disorder*] [Master's thesis, Konya Necmettin Erbakan University].

Kayhan, M., & Ozturk, Y. (2020). Bir üniversite hastanesine çocuklar için özel gereksinim raporuna başvuran olguların klinik ve sosyodemografik özellikleri [Clinical and sociodemographic characteristics of cases who applied to a university hospital for a special needs report for children]. *Osmangazi Tıp Dergisi* [*Osmangazi Medical Journal*]*, 42*(2), 240-248. https://doi.org/10.20515/otd.661980

Kilinc, C., Baglama, B., & Akcamete, G. (2019). Otizm spektrum bozukluğunun erken çocukluk dönemi'nde tanılanma ve değerlendirilmesinde kullanılan ölçme araçlarının incelenmesi [Examination of measurement tools used in the diagnosis and evaluation of autism spectrum disorder in early childhood]. *Cyprus Turkish Journal of Psychiatry & Psychology, 1*(3), 200-205 https://doi.org/10.35365/ctjpp.19.1.26

Koc, A. (2020). COVID-19 salgını sürecinde iahiyat fakültesi öğretmenlik uygulaması dersinin uzaktan eğitim yoluyla yapılması: Örnek bir uygulama modeli [Conducting the theology faculty teaching practice course through distance education during the COVID-19 epidemic: A sample practice model]. *Milli Eğitim Dergisi* [*Journal of National Education*]*, 49*(1), 851-875. https://doi.org/10.37669/milliegitim.770561

Koc, A., Sekerci, A. E., & Koc, S. (2022). Investigating teacher candidates' levels of teacher readiness and usage of 21st century skills. *International Journal of Curriculum and Instruction, 14*(1), 679-692.

Lai, M.-C., Lombardo, M. V., & Baron-Cohen, S. (2014). Autism. *The Lancet, 383*(9920), 896-910. https://doi.org/10.1016/S0140-6736(13)61539-1

Macaroglu-Akgul, E., & Mertoglu, H. (2020). Autism awareness in teacher training programs: Science teaching example. *Journal of Individual Differences in Education, 2*(1), 31-41.

MoNE. (2018). Özel eğitim hizmetleri yönetmeliği [Special education services regulation]. *Özel Eğitim ve Rehberlik Hizmetleri Genel Müdürlüğü* [*General Directorate of Special Education and Guidance Services*]. https://orgm.meb.gov.tr/meb_iys_dosyalar/ 2018_07/09101900_ozel_egitim_hizmetleri_yonetmeligi_07072018.pdf

Oner, O. (2020). Otizm spektrum bozukluğunda değerlendirme ve tanı süreçleri [Evaluation and diagnosis processes in autism spectrum disorder]. *Tohum Otizm Vakfı* [*Tohum Autism Foundation*]. https://www.tohumotizm.org.tr/wp-content/uploads/2020/03/Değerlendirme-Raporu-III_CR10R_Baskı-sıkıştırıldı.pdf

Ozaydin, L. (2015). Teaching play skills to visually impaired preschool children: Its effect on social interaction. *Educational Sciences: Theory & Practice, 15*(4), 1021-1038. https://doi.org/10.12738/estp.2015.4.2746

Ozaydin, L. (2020). Kaynaştırma uygulamalarında öğretmen yardımcısının görevlerine ilişkin paydaş görüşleri: Karma yöntem çalışması [Stakeholder views on the duties of assistant teachers in inclusion practices: Mixed method study]. Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi [*Ankara University Faculty of Educational Sciences Journal of Special Education*]*, 21*(3), 561-587. https://doi.org/10.21565/ozelegitimdergisi.563242

Rakap, S. (2017). Türkiye'de otizm spektrum bozukluğu ve özel eğitim [Autism spectrum disorder and special education in Turkey]. *Tohum Otizm Vakfı* [*Tohum Autism Foundation*]. https://www.tohumotizm.org.tr/wp-content/uploads/2018/10/tosboe2017. pdf

Rakap, S., Balikci, S., & Kalkan, S. (2018). Teachers' knowledge about autism spectrum disorder: The case of Turkey. *Turkish Journal of Education, 7*(4), 169-185. https://doi.org/10.19128/turje.388398

Selimoglu, O. G., Ozdemir, S., Toret, G., & Ozkubat, G. (2013). An examination of the views of parents of children with autism about their experiences at the post-diagnosis period of autism. *International Journal of Early Childhood Special Education, 5*(2), 129-167. https://doi.org/10.20489/intjecse.107930

Turan, B., Esin, I. S., Abanoz, E., & Dursun, O. B. (2020). Şüpheden tedaviye otizm spektrum bozukluğunda ailelerin gözünden yaşanan sorunlar [Problems experienced from the perspective of families in autism spectrum disorder from doubt to treatment]. *Tıbbi Sosyal Hizmet Dergisi* [*Journal of Medical Social Work*]*, 15*, 35-49. https://doi.org/10.46218/tshd.718067

Vincent, J., & Ralston, K. (2020). Trainee teachers' knowledge of autism: Implications for understanding and inclusive practice. *Oxford Review of Education, 46*(2), 202-221. https://doi.org/10.1080/03054985.2019.1645651

Yazici, M. S. (2021). Kırsal bölgedeki bir okulun otizm spektrum bozukluğu tanılı öğrenciler için hazırbulunuşluğu [Readiness of a rural school for students with autism spectrum disorder]. *Trakya Eğitim Dergisi* [*Trakya Journal of Education*]*, 11*(1), 34-54. https://doi.org/10.24315/tred.643869

Yildirim, A., & Simsek, H. (2018). *Sosyal bilimlerde nitel araştırma yöntemleri* [*Qualitative research methods in the social sciences*]. Seckin Publishing.

Zengin-Akkus, P., Bahtiyar-Saygan, B., Ilter-Bahadur, E., Cak, T., & Ozmert, E. (2020). Otizm spektrum bozukluğu tanısı ile yaşamak: Ailelerin deneyimleri [Living with a diagnosis of autism spectrum disorder: Experiences of families]. *Türkiye Çocuk Hastalıkları Dergisi* [*Turkish Journal of Pediatrics*]*, 15*(4), 272-279. https://doi.org/10.12956/tchd.731752