



## EXPLORING TEACHERS' OPINIONS ABOUT PROBLEM BEHAVIOUR IN STUDENTS DIAGNOSED WITH ADHD

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### Abstract:

The purpose of this study is to explore teachers' views of the problem behaviours of students diagnosed with Attention Deficit Hyperactivity Disorder (ADHD). Data were reported using descriptive analysis, a qualitative research method. Data were collected from teachers using a semi-structured interview form to explore the problem behaviours of students diagnosed with ADHD. Demographic information was collected during the interviews, and in addition, approximately 40-minute interviews were conducted using reminders within the framework of the question "What are your views on the problem behaviours of students diagnosed with ADHD?". The data were analysed using descriptive analysis. As a result of the analysis of the research findings, the majority of teachers stated that more than one problem behaviour was observed in special needs students diagnosed with ADHD. A small number of participants mentioned that this situation was different for students taking medication. According to the research findings, another finding is that teachers' views on the increase in problem behaviours in classroom practice with students diagnosed with ADHD. In this context, it was concluded that teachers' students diagnosed with ADHD displayed problematic behaviour and that this situation negatively affected the classroom climate.

**Keywords:** attention deficit hyperactivity disorder, problem behaviour, teachers' opinions, classroom climate

### 1. Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is a common childhood psychiatric disorder with symptoms of attention deficit, hyperactivity, and impulse control problems. Although its etiology is not fully understood, holistic approaches and long-term treatment methods positively influence the course of ADHD (Özbay and Kayhan,

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2024). This disorder is a neurodevelopmental disorder that manifests itself with baseline findings and may be accompanied by other cognitive and behavioral symptoms. ADHD, which begins in childhood, can continue throughout an individual's life (Çingil and Karaaziz, 2024). ADHD begins in childhood, and the number of symptoms that must be present before the age of 12 indicates an important clinical finding in childhood (DSM-5, 2013).

In children's developmental processes, the strengthening of their cognitive abilities with age also supports the internalization of moral values such as social adaptation, accuracy, self-control, and reasoning. However, executive dysfunctions observed in individuals diagnosed with ADHD have been shown in various studies to lead to a significant weakening of high-level moral cognitive functions, such as the construction of normative thought processes, healthy and accurate thinking, accurate decision-making, cognitive flexibility, the development of conscientious reasoning, and the ability to establish empathic relationships (Çakıcı, 2021). In children with ADHD, behaviors such as being easily distracted by environmental stimuli, difficulty maintaining order, frequently losing tools and equipment, inability to remember assigned responsibilities and tasks, and forgetfulness are symptoms of attention problems (Doğangün & Yavuz, 2011). The DSM-5 Diagnostic Criteria Reference Manual defines the ADHD pattern, characterized by inattention, hyperactivity, and impulsivity, as a disorder that impairs functioning or development (American Psychiatric Association [APA], 2013).

As a neurodevelopmental disorder, ADHD is associated with a number of differences, particularly in brain development. These differences can lead to multidimensional problems such as delayed development of executive functions, poor attention control, impulsive behaviour, emotional regulation problems and inadequacy in social interactions. Therefore, children with ADHD may experience difficulties not only in academic areas but also in many areas of life such as social relationships, emotional balance and self-regulation (Barkley, 2015; Karabekiroğlu, 2014; Zelazo & Carlson, 2012). In this context, holistic solutions that focus not only on an individual's behavioural symptoms, but also on the biological, psychological and social roots of the difficulties they experience, have the potential to provide more enduring and holistic solutions (Corey, 2017). Behaviours such as difficulty waiting in line, rushing, not deferring requests, answering without knowing the question, and interrupting others' words affect the child's functionality. These behaviours are symptoms of impulsivity problems (Doğangün & Yavuz, 2011). According to Çakıcı (2021), a child diagnosed with ADHD who shows more childish and self-centred behaviours compared to his or her peers should be expected to be at a lower stage of development than he or she would be when considering the stages of moral development.

A child's mobility in daily activities such as play, preschool and school can be considered excessive mobility when compared to his or her peers. Differentiating the mobility of normal children from children with ADHD is the most difficult part of the preschool period (Doğangün and Yavuz, 2011). Although ADHD is more commonly

accepted as a hereditary disorder, the genetic factor does not account for the entire risk. Among the environmental factors, there is interest in the role of the prenatal environment in the development of ADHD (Sciberras, 2017).

Studies conducted to date have suggested that the genetic effect of ADHD is around 80%, and the remaining percentage is due to environmental biological factors (Özbay and Kayhan, 2024). It is thought that almost 50% of children diagnosed with ADHD have various comorbidities. Conduct disorder, oppositional defiant disorder, learning disorder, depression, bipolar disorder, anxiety disorder, speech disorder, and enuresis are associated conditions (Tuğlu and Şahin, 2010). Healthy personality development; first, the individual lives a happy life and satisfies all his needs, and then creates positive reflections towards his immediate environment and society (Aslan, 1992). For healthy personality development, the individual is in communication with those around them. When babies influence the behaviour of those around them by producing sounds and making gestures, they switch to purposeful communication of sounds (Yılmaz, 2023). Unlike typically developing children, children with ADHD may experience some difficulties in communication. These differences are often due to their short attention spans, impulsivity, and difficulty picking up on social cues. People with ADHD have difficulty sustaining their attention for long periods of time, so they are distracted in social interactions. As a result, they may not perceive social cues accurately enough, which can lead to problems in both peer relationships and family communication (Barkley, 2015; Polanczyk *et al.*, 2007; Zentall, 2006).

Problem behaviours that have a negative impact on children's development are widespread and important social issues. These behaviours, which are not identified at an early age and for which the necessary interventions are not made, will return in the future as an increasing workload and economic burden for society. If the necessary precautions are not taken against children's problem behaviours, which can cause problems for parents, preschool educational institutions and employees, it is possible that these negative attitudes will become permanent and will be reinforced over time (Işık, 2021). Problem behaviours can be defined as harmful, dysfunctional behaviours that negatively affect the child during the developmental period and prevent the child from adapting to the social environment (Barkley, 2015). According to Özbey (2010), these problem behaviours can be observed in students in schools. Problem behaviours that negatively affect learning also negatively affect the classroom climate, teachers and other students. Externalised and internalised problem behaviours observed in preschool children show significant differences depending on the age of the children (Işık, 2021). When teachers' opinions were examined, girls were rated as more problematic than boys in the group of externalising problem behaviours (Kargı and Erkan, 2004). It takes more time for parents to notice internalized problem behaviors (e.g., shyness, introversion, depression) than externalizing problems (e.g., shouting, biting, hitting), which are more easily noticed (Weist *et al.*, 2017). While some children reflect their reactions to the events they encounter, others may repeat problem behaviours when they are introverted and tend to be alone (Işık, 2021). It is clear that the types of aggression in girls and boys are different

from each other, or that their anger-revealing behaviours may differ in terms of gender (Öneren and Şendil, 2010). There are differences in the social skills and problem behaviors of children from families who participate in the activity studies of preschool educational institutions and those who do not (Yaşar, Ekici, 2017).

Parent education programs are examined in two sections, based on relational and behavioral approaches. The aim of these programs is to understand the feelings and thoughts of children with problem behaviors, to know their thinking styles, and to evaluate the family's responses to the children (Arkan and Üstün, 2009). ADHD has a negative impact on students' success and behavior at school. It is known that teachers need sufficient information and support to manage ADHD (Altherr, 2006). The fact that families and teachers feel helpless in the face of children's problem behavior increases the duration of studies on ADHD (Kaymak, Özmen, 2010). It is known that the importance given to the educational process and related research on these students who need special education has increased in the world and in Turkey (Deniz, 2019).

When considering the behaviors and effects of students with ADHD, a holistic assessment should be made, and interventions should be individualized, covering not only the symptoms but also the whole area that affects their lives. In this way, the well-being of both the individual and their environment is enhanced in multifaceted conditions such as ADHD (Barkley, 2015; Corey, 2017). When considering the impact of problem behaviors on the individual's developmental process, the importance of holistic approaches to interventions for these behaviors is often emphasized. However, it can be seen that studies on the importance of collective interventions in the treatment of problem behaviors within a holistic perspective are not sufficiently included in the current literature (Karakoç and Atbaşı, 2020).

Given the impact of problem behaviours on the developmental process of the individual, the importance of holistic approaches to interventions for these behaviours is often emphasised. However, it can be seen that studies on the importance of collective intervention in the treatment of problem behaviours within a holistic perspective are not sufficiently included in the current literature (Karakoç and Atbaşı, 2020). Investigating the situations that teachers need in relation to ADHD and what can be done in the face of these situations can make a significant contribution to the literature. The research was conducted by collecting demographic information from teachers. The aim of the research is to explore teachers' views on the problematic behaviour of students diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) and to identify ways of making the classroom climate productive. As part of this problem, answers were sought to a number of general questions. The answers were sought according to the opinions of the teachers in the context of the questions listed below:

- 1) How do teachers view their ADHD students' hyperactive behaviour in the classroom?
- 2) How do teachers rate their ADHD students' ability to concentrate in class?
- 3) What are the teachers' views on the participation of their ADHD students in class?

- 4) What are the teachers' views on the completion of homework and tasks given to students with ADHD?
- 5) What are the teachers' views on anger management and anger behaviour of their students with ADHD?
- 6) What are the teachers' views on the involuntary movements of their students with ADHD?
- 7) What are the teachers' views on the compatibility of their students with ADHD with their peers?
- 8) What are the teachers' views on the kinesthetic (tactile) behaviour of their ADHD pupils?

The answers to these questions will help to understand the experiences of teachers of children with special needs when faced with problems.

## **2. Material and Methods**

The study aimed to examine teachers' views on problem behaviors displayed by students diagnosed with ADHD. In order to reveal teachers' experiences with students diagnosed with ADHD and their perceptions of these situations, a qualitative research method was adopted. Data were collected using a semi-structured interview form with fifty-two teachers with students diagnosed with ADHD. The form includes questions about problem behaviors teachers observe in students diagnosed with ADHD, ways to intervene in the behaviors displayed, and life experiences.

Qualitative research aims to understand individuals' experiences, awareness, and opinions in depth (Yıldırım and Şimşek, 2021). According to Sönmez and Alacapınar (2018), it is a scientific process in which events are examined by participants in their natural environments, from their perspective, and interpreted by making in-depth descriptions.

In these types of research, the participants' views and experiences are presented directly in their own words and in their natural environments. In this context, the study was conducted with a phenomenological design. Merriam (2009) defines it as a multi-faceted and detailed examination of a specific phenomenon in its natural environment.

In the study, data obtained from teachers were collected using a semi-structured interview form to deeply examine the problematic behaviors of students diagnosed with ADHD. Interviews were presented with flexible questions through this form, allowing participants to express their thoughts more comprehensively. The difficulties experienced by teachers in the face of problematic behaviors in students with ADHD, the obstacles encountered, the classroom climate they created, and their experiences were analyzed comprehensively through the interviews. The descriptive analysis technique was used to analyze the interview data. In the descriptive analysis technique, it ensures that the data collected in the qualitative research is systematically presented within the scope of previously determined concepts. Transparency and reliability are ensured by

strengthening it with the quotations of the participants (Yıldırım and Şimşek, 2021; Braun and Clarke, 2006).

## 2.1 Participants

Fifty-three teachers from different sectors with students diagnosed with ADHD formed the study group. In order to form the participant group, easily accessible case sampling was chosen, which is one of the purposive sampling methods according to the qualitative research design. For this purpose, the researcher worked with teachers who were willing to participate and who had students diagnosed with ADHD. The demographic characteristics of the study group are shown in the table below.

**Table 1:** Demographic Information of Teachers

Variants (n = 53)		f	%
Gender	Female	45	90
	Male	5	10
Branch	Special education	20	40
	Other branch	30	60
Operating time	1-5 years	14	28
	6-10 years	14	28
	11-15 years	9	18
	16-20 years	7	14
	21 years and more	6	12
Education	Status licence	45	90
	Postgraduate	6	10

The participants in the study group consisted of forty-five female teachers and five male teachers. Three participants did not provide demographic information. The demographic information of the participants varied in terms of age, gender, sector and educational status. Fourteen of the participants had 1-5 years of experience, fourteen had 6-10 years, nine had 11-15 years, seven had 16-20 years, and six had 21 years or more. Thirty were teachers from different sectors, and twenty were from special education. The majority of teachers had undergraduate qualifications, and five had postgraduate qualifications. The diversity in the demographic information of the participants reflected their experiences and thoughts. This increased the generalisability of the findings of the study.

## 2.2 Data Collection Instrument and Development

In the study, the interview technique was preferred to reveal the importance of teachers' experiences in intervening in the problem behaviour of students diagnosed with ADHD and their opinions on its implementation. A semi-structured interview form and a demographic information form were also designed for this technique. During the preparation phase of the form, relevant literature studies were reviewed, and questions appropriate to the research questions were created. Before starting the application in terms of scope and face validity of the data collection tools, the prepared draft forms were presented to 3 experts in the field and their opinions and suggestions were obtained. For

this purpose, the forms were arranged within the framework of the feedback received from the experts. Prior to use, the data collection tools were administered to 3 teachers to ensure the clarity of the forms to be used in the study and to avoid possible errors. The data obtained in this way were not included in the study. The forms were finalised as part of the feedback on the data from the 3 teachers who were not included in the study. The feedback given on the data instruments in the study focused on components such as the comprehensibility of the prepared form, the clarity of the questions, their consistency with the aims of the study and how the teachers interpreted the behaviour of the students with ADHD. According to the participants' suggestions, some questions were made clearer and more precise, and the language was simplified. In this context, the final form of the data collection tool was created as a result of the observations that emerged during the applications.

A semi-structured interview form was prepared to elicit the opinions of the participating teachers. Demographic information such as 'gender, sector, educational status, years of experience' of the teachers was collected in the interviews. In addition, eight open-ended questions were asked to explore the teachers' opinions about the problem behaviours of their students diagnosed with ADHD:

- 1) What are the teachers' opinions about the hyperactive behaviours of their students with ADHD in the classroom?
- 2) What are the teachers' opinions about the concentration of their students with ADHD in class?
- 3) What are the teachers' opinions about the participation of their students with ADHD in class?
- 4) What is the teachers' opinion about the completion of homework and tasks given to their students with ADHD?
- 5) What are the teachers' opinions about anger management and angry behaviour in students with ADHD?
- 6) What are the teachers' opinions about the involuntary movements of their students with ADHD?
- 7) What are the teachers' opinions about the adaptation of their students with ADHD to their peers?
- 8) What are the teachers' opinions about the kinesthetic (tactile) behaviour of their students with ADHD?

The data collected was used to better understand the demographic information of the teachers and the teachers' views on the problem behaviour of their students with ADHD in accordance with the aim of the research.

### **2.3 Data Collection and Analysis**

As part of the research, data on teachers' opinions regarding the problem behaviours of students diagnosed with ADHD were obtained by conducting semi-structured interviews with 53 teachers. Data saturation was taken into account when determining

the teachers in the study group. Individual interviews of approximately 32 to 46 minutes were conducted with each of the teachers. The research was conducted in an ethical manner during the interviews with the teachers. The necessary permissions were obtained from the teachers, and the interviews were recorded with a voice recorder to establish the validity of the interviews.

During the research process, the transcripts of the interviews conducted with the teachers were examined in detail by two researchers before proceeding to the coding phase. During this examination, a descriptive analysis of the interview data was carried out. Patton (2002) suggested several strategies in qualitative data analysis to increase reliability. It is important to use techniques such as using different data collection methods together (triangulation) to increase the accuracy of the data and to feed the data back to the participants (participant verification). From the beginning of the study process, the researchers were informed that they would adopt a reflexive approach and prevent personal biases from influencing the data analysis. Reliability procedures were used to increase the reliability and validity of the study results.

Teachers' statements about their students diagnosed with ADHD were examined in detail, and repeated meaningful statements were coded. The codes generated were grouped according to their similarities and the degree of relationship between them, and were identified as themes. In this qualitative research, the data were coded using the open coding method during the coding process, and these codes were brought together under the themes identified, taking into account their similarities and relationships. The themes were structured to reflect the common experiences and observations expressed by the teachers. In order to increase the reliability of the codes, a comparative evaluation was carried out with another researcher and consensus was reached on the codes. The results of the coding were presented with the support of scientific studies. The original views and context of the teachers were preserved. The findings were presented within the framework of the themes identified.

### **3. Findings**

Within the framework of the research, the answers given by the teachers in the interviews were analysed in order to create themes. The opinions obtained through the answers given by the teachers to the questions are presented below.

#### **Theme 1: Hyperactive Behaviour in the Classroom**

Teachers reported their observations of problematic classroom behaviour by pupils with hyperactive behaviour. Attention deficits, poor impulse control, motor restlessness and interaction difficulties are prominent in teachers' reports. It was stated that hyperactive pupils are constantly moving around the classroom, have difficulty staying in one place and that certain behaviours are often not directed towards movement. They have emphasised that hyperactive pupils often have difficulty following classroom rules and



display sudden, impulsive behaviour. Some of the teachers' responses to these views are presented below:

*"Pupils who display hyperactive behaviour in the classroom show behavioural problems such as limited ability to concentrate, disorganisation, difficulty listening to what is being said, disorganisation, forgetfulness, motor restlessness, inadequate impulse control, excessive talking, inability to wait their turn and difficulty following rules".*

*"The person with ADHD may show changes in the classroom. Being overly active, acting without thinking, being restless, having a very short attention span, and a lack of attention are prominent".*

Some of the teachers explained that their situation was different. They stated that pupils' responsibility in the classroom should be increased and that this responsibility would be better for them. Different views and comments on this issue are given below:

*"Lack of motivation and genetic factors are important for ADHD".*

*"If we think they need it because of their neurological structure, they can be better supported. If individualised calming techniques are used, they can cause fewer problems in the classroom, and if the child feels understood, they may be more inclined to cooperate".*

## **Theme 2: Pupils' Focusing Processes in the Classroom**

The majority of teachers who reported that pupils' attention spans were very short stated that this situation had a negative impact on their class participation, listening skills and learning. It was stated that students with attention deficit could only focus for a short time at the beginning of the lesson, and that their attention was lost in a short time. Some responses to these views of the teachers are given below:

*"Their concentration problem is very serious; they cannot concentrate for more than 5 minutes."*

*"Because their attention span is very short, they have a lot of trouble participating in class, listening and understanding."*

A few teachers stated that the classroom rules for their students with ADHD should be clear, simple, consistent and easy to apply in order for them to understand and implement them. It was stated that complex, frequently changing rules could increase the student's attention deficit:

*"There should be consistent rules that ADHD students can easily understand and follow."*

*"It should focus on positive behaviour, not negative. There should be frequent feedback and rewards."*

### **Theme 3: Classroom Participation Processes and Pupils' Attitudes**

When teachers were asked about the positive or negative effects of ADHD on the classroom climate, more than half of the teachers stated that children with ADHD exhibit problematic behaviours and that their negative effects can have a negative impact on the learning process in the classroom. In this context, teachers expressed individual characteristics that make it difficult for pupils to participate in class. Some of the teachers' responses to these views are given below:

*"The decrease in class participation due to lack of attention is an increase in disinterest in the classroom."*

*"As we observe shyness and timidity in some students, it is difficult for them to participate in the lesson."*

Some of the participating teachers emphasised the importance of materials that primarily increase pupils' interest in the lesson when working with pupils with attention problems. Similarly, teachers mentioned that they had carried out educational activities to increase attention to the lesson. Some of the teachers' responses to these views are given below:

*"First of all, the student should be calmed down and his attention should be focused on materials that increase his interest in the lesson."*

*"Educational games and exercises help students to develop their attention and concentration skills."*

*"It should focus on positive behaviour, not negative. There should be frequent feedback and rewards"*

### **Theme 4: Lack of Interest and Participation in Homework**

The majority of teachers stated that students are slow and unmotivated in doing homework due to distractions, and that this situation causes students to drift away from homework over time. They stated that, despite parental support, they had difficulties and that, despite working hard, they were unable to be productive in their homework. Some responses to these views of teachers are given below:

*"They do their homework incompletely or not at all."*

*"They are slow and unwilling to do their homework. When they fail, they completely lose interest in learning and find it difficult to do their homework when their parents react. Or they try to do their homework with a lot of effort and support"*

Some teachers stated that there should be no expectation that pupils with ADHD will complete their homework and responsibilities, and that reinforcement should definitely be used with homework. There should be medication support to help with homework and responsibilities. Views on this issue are expressed below:

*"We cannot expect people with ADHD to do all their homework and chores. We should reward them with reinforcements when they do complete their homework and tasks, and use these reinforcements to encourage them to complete their homework and tasks."*

*"It is not possible for them to do their homework without medication and without help."*

#### **Theme 5: Anger Management and Angry Behaviour**

Although there is some variation in teachers' views on the management of anger in students with ADHD, the majority of teachers stated that students cannot control their anger, that they exhibit more problematic behaviours when they do not get what they want, and that they negatively affect the classroom climate. Some of the teachers' responses to these views are given below:

*"Since the student is impulsive in anger management, he acts without thinking and has difficulty controlling his anger. He shows impatient behaviour and can get angry if he does not get what he wants."*

*"He has tantrums and aggressive behaviour. Especially when he does not get what he wants, when he is told no, behaviours such as hitting the wall, pushing and biting his friend have been observed."*

Some teachers have stated that medication is important for pupils to control their anger and angry behaviour, and that the situation can be controlled through holistic cooperation and guidance towards their favourite activities. The views and comments shared on this issue are as follows.

*"Medication is very important for ADHD people to control their anger and angry behaviour, family and teacher cooperation should be maintained, communication should be maintained, feelings, situations and states should be shared, and a solution should be sought."*

*"It is important to calm children who show anger by directing their attention to something more interesting, without forcing them to learn. Co-operation with home, school and*

*guidance is necessary and important. Talking to the child and increasing the activities he or she likes can also help."*

### **Theme 6: Involuntary Movements**

Teachers mentioned that involuntary movements are common among students, that different behaviours are observed due to restlessness in their bodies, and that they have excessive physical movements, such as touching something and standing up. The teachers' responses to these comments were as follows:

*"Involuntary motor control difficulties that I often observe, such as not being able to stay in one's seat, the need to touch something and restlessness, shaking one's foot."*

*"Because their sense of time and space is weak, they have difficulty behaving appropriately in the environment. As they cannot exercise self-control, they also have difficulty in suppressing their impulsiveness and behave involuntarily."*

Some of the teachers stated that cooperation would be effective in reducing involuntary movements and that the use of medication would reduce these behaviours in students with ADHD. In line with this view, some of the teachers' responses regarding involuntary movements are given below:

*"I have observed that they behave in a more controlled way when they use medication."*

*"With cooperation, it is possible to reduce such problems that occur in the child. In the case of movements that occur during lessons, with a more understanding approach and simple studies, involuntary movements can be reduced gradually, without forcing, with different methods of behaviour modification."*

### **Theme 7: Peer Adaptation**

The teachers' explanations regarding the problems in students' peer adaptation, especially regarding the fact that they experience adaptation problems and that as a result of these behaviors, they cannot get along with most of their friends and are excluded, are given below:

*"Not waiting their turn, giving sudden reactions, teasing their friends, touching behaviors, etc., cause their negative behaviors to be unwanted among their friends."*

*"They usually make friends with those who show similar characteristics and because they disrupt the games and programs of other friends, they can be excluded very often."*

Some of the teachers emphasized that peer communication will increase by integrating education for their students diagnosed with ADHD, and that activities should be organized for the students to be in such environments. These views are given below:

*"In order for them to socialize and focus their attention, they should be included in the environment of children at different levels and given games, activities and responsibilities that they can have fun in, and an environment for cooperation should be prepared."*

*"Students' frequent presence in social environments can help them adapt to their peers over time."*

### **Theme 8: Kinesthetic (Tactile) Behaviors**

In the opinions of the teachers who stated that the pupils showed kinesthetic (tactile) behaviours more in social settings, they also explained that these pupils' tactile contacts were more in the direction of problem behaviours. The responses of the teachers who reported that the students showed these behaviours with acquaintances and strangers are given below:

*"My student often shows tactile behaviours where he cannot control himself. He does this mostly in social settings. By making tactile contact, he either pushes his friends or shows the behaviour of hugging, smiling older people (teachers, parents, someone he does not know, etc.) who look at him."*

*"They experience behaviours such as constant touching, hitting, kicking, etc. Intensively."*

In the responses of some teachers, students' tactile behaviours increase more when they are not taking medication, and the reasons for these tactile behaviours definitely need to be known. Some teachers commented as follows in the responses below:

*"Tactile behaviour is a situation that makes it very difficult when he is not taking medication. It can cause confusion, such as disturbing the environment and not being understood."*

*"If a student touches frequently, it is important to find the underlying reason for this. This behaviour can be managed by looking at reasons such as impulsivity, sensory needs or a desire to communicate."*

## **4. Results and Discussion**

This section will address the discussion, conclusion and recommendations sections based on the data obtained from the literature and findings.

### **4.1 Discussion**

In the findings obtained from the semi-structured interviews conducted with teachers, it was observed that the majority of teachers stated that students with special needs, ADHD had more than one problem behaviour, that hyperactive behaviours were not appropriate

for the purpose and that they acted without thinking in interactions. In addition, teachers reported that making their pupils more responsible for their hyperactive behaviours had a positive effect on them in most cases and reduced problem behaviours. The incidence of ADHD diagnosis in early childhood has increased recently and has a negative impact on children's academic and social interactions. The possible aetiology and treatment processes of ADHD were considered holistically and supported by literature reviews (Özbay and Kayhan, 2024). Hyperactivity, excessive motor activity or excessive fidgeting and clicking movements cause problem behaviour in children (DSM-5, 2013).

Studies in the literature on the problems experienced by teachers in providing instructional support to students with special needs support these findings. Özbay and Kayhan (2024) state that the problems experienced by teachers working with students diagnosed with ADHD lead to many behavioural problems such as difficulty in directing attention or inattentive work, low self-esteem and adjustment problems. Pınar *et al.* (2022) drew attention to the importance of the evidence that ADHD is a neurodevelopmental disorder characterised by ADHD symptoms that are incompatible with the developmental level and that this disorder leads to a deterioration or a decrease in the quality of functioning in social, school or other areas of functioning. Tunç and Melekoğlu (2024) stated that more comprehensive studies are needed to develop effective intervention programmes that can be implemented by teachers and parents in school and home environments, taking into account the learning characteristics of students. In the interviews conducted with teachers, the responses of teachers with ADHD students regarding the positive and negative effects of students' participation processes and attitudes on the classroom climate focused on the fact that students' lack of attention negatively affects the participation process. The majority of teachers stated that this situation had a negative effect on students' attitudes in the classroom. This finding is supported by the literature. Kaçamak Ögüt *et al.* (2020) found that the executive functioning skills of individuals with ADHD are lower compared to their typically developing peers, especially in the areas of inhibition and working memory. These deficits lead them to experience significant difficulties in social relationships, academic success and self-regulation processes, highlighting that serious adjustment problems occur. Studies conducted by Martel (2009) have shown that students with ADHD have serious deficits in problem-solving skills, difficulties in evaluating alternative behavioural options, and problems in regulating emotional arousal.

According to teachers' observations, another finding in the literature is that students diagnosed with ADHD are disinterested in homework and do not participate sufficiently in classroom activities. It is stated that the short attention span and impulsive behaviour of students with ADHD prevent participation in classroom activities and lead to a lack of motivation for course-related tasks. It is emphasised that short-term interventions that focus only on symptoms are not sufficient in the management of ADHD; a holistic approach should also be adopted (Antshel & Barkley, 2020). It is believed that prolonging the treatment process of ADHD with a holistic approach in the long term plays a crucial role in maintaining the lasting positive effects of

pharmacological interventions, reducing difficulties in daily life due to ADHD, and increasing the functional level of individuals (Pınar *et al.*, 2022). Another finding reported by teachers is that students with ADHD have difficulty controlling their anger and exhibit angry behaviours. It is increasingly accepted that ADHD is associated with the basic symptoms of impulsivity and hyperactivity, as well as deficits in emotional regulation processes (Barkley, 2015). Angry reactions in students with ADHD are usually characterised by immediate, intense and uncontrolled emotional outbursts. Due to deficits in emotional regulation, they develop a low tolerance for intense emotions such as anger and often express these emotions impulsively (Shaw *et al.*, 2014). Angry behaviours often manifest as contextually inappropriate violent outbursts, verbal or physical aggression, and deterioration in interpersonal relationships (Seymour *et al.*, 2012).

Teachers have noted that pupils with ADHD often have involuntary movements. These difficulties include restlessness in their bodies, excessive physical movements such as touching places and getting up and walking around. In reviewing the literature, Barkley (2015) identifies motor hyperactivity as one of the most prominent characteristics of students with ADHD, a characteristic that occurs alongside distractibility and impulsivity. These movements can also have a negative impact on students' learning processes. This situation can lead to difficulties in the functioning of social and academic aspects. While students with ADHD attract the attention of teachers and other students, they may also have difficulty concentrating, which affects their own learning processes. Another observation made by teachers is the problem of peer adjustment of students diagnosed with ADHD. In this regard, the teachers' statements emphasise that students with ADHD often have problems with their friends and, as a result, are excluded from their circle of friends. In the literature, Kaçamak Öğüt *et al.* (2020) reported that children diagnosed with ADHD are more likely to be exposed to negative experiences such as rejection in peer relationships and failure in academic performance; they are also targets of various social labels.

There are several studies in the literature that suggest that students with ADHD exhibit more involuntary kinesthetic (tactile) behaviours. Barkley (1997) stated that children with ADHD cannot adequately control their motor activity levels and, therefore, involuntary motor behaviours (touching objects, fidgeting, changing places) occur much more frequently than in their typically developing peers. Murray (2010) noted that these children are constantly moving in the school environment, interrupting other children's play. They have difficulty sitting quietly and orderly in group activities, especially in situations such as listening to stories.

## 5. Conclusion

The findings of this study provide valuable insights into the experiences of teachers of pupils diagnosed with ADHD and their perceptions of the characteristics of these pupils.

### **5.1 Hyperactive Behaviour in the Classroom**

Teachers working with pupils diagnosed with ADHD stated that the problematic behaviour of these pupils and their difficulties in complying with classroom rules have a negative impact on the classroom climate. According to the teachers, the intensity of the motor movements of pupils with ADHD in the classroom and other negative developments that result from them make classroom management difficult and require a holistic approach in this context. The findings show that teachers tend to develop different coping strategies to make the classroom climate more positive. In addition, it was concluded that teachers' positive expectations of their pupils' development potential allow them to adopt a more patient, resistant and supportive attitude towards their pupils and to develop more effective coping mechanisms in the face of the problems they encounter.

### **5.2 Students' Processes of Focusing on the Course**

Teachers who participated in the study stated that due to the short attention span of students diagnosed with ADHD, these students have significant difficulties in actively participating in the course and making sense of the course content. In this context, it was concluded that positive student behaviour should be reinforced and that simple, clear instructions appropriate to the developmental level of the students should be given during the teaching process. It was also found that creating a positive atmosphere in the classroom facilitates regular monitoring of students' focus on the lesson and has a positive impact on learning outcomes.

### **5.3 Class Participation Processes and Student Attitudes**

It shows that the impact of students diagnosed with ADHD on classroom learning processes has important consequences both individually and for the class as a whole. According to the participating teachers, symptoms such as attention deficit, hyperactivity and impulsivity in these students make the classroom climate difficult to learn in and can reduce overall motivation in class. They emphasised the need to develop different strategies in the classroom to increase pupils' attention and interest in the lesson. In this context, methods such as using interesting materials, organising educational games and activities were found to improve students' attention and concentration skills. Flexible and student-centred classroom practices lead to changes both in terms of improving the classroom climate and making the learning process more efficient and inclusive for all students.

### **5.4 Lack of Interest and Participation in Homework**

Students with ADHD demonstrate difficulties such as distraction, slowness and reluctance to complete homework. It has been observed that students are not productive in their homework, and this situation leads to inefficient homework and incomplete completion. It was found that the difficulties these students experience in the homework process should be better understood by teachers, and the necessary support should be



provided in this direction. It was found that it is unrealistic to expect students with ADHD to complete their homework and assignments on time, and the need to use reinforcement in homework is important.

### **5.5 Anger Management and Angry Behaviour**

It has been found that students with ADHD have difficulty in controlling their anger, that this situation negatively affects the classroom environment, that they tend to act without thinking, such as impatient, aggressive, angry behaviour, and that it may be more related to impulsivity levels. In this context, it has been found that drug support plays an important role, that family-school cooperation, establishing communication with the student and directing them to attention-grabbing activities are effective in anger management. In this context, it has been found that students with ADHD experience severe anger management difficulties, that this situation is related to both individual and environmental factors, and that it affects classroom dynamics.

### **5.6 Involuntary Movements**

It has been observed that teachers with students with ADHD experience restlessness in their students' bodies, and that as a result of this restlessness, the students exhibit motor behaviours such as constant movement, touching places, inability to sit still, and foot shaking as involuntary movements. It has been found that these involuntary movements are caused by the weakness of time and space perception and a lack of self-control in some students with ADHD. The situation revealed that the students had difficulty in behaving according to social rules and had difficulty in controlling their impulsivity. It was found that involuntary motor movements were common and that these behaviours resulted from the interaction of individual neurological characteristics and environmental factors.

### **5.7 Peer Adjustment**

This study found that students with ADHD experience significant adjustment problems in peer relationships. It was found that students exhibited behaviours such as not waiting their turn, showing sudden reactions, making physical contact with their friends and teasing; and that these negative behaviours led to their exclusion by their peers. It was shown that students with ADHD tend to form relationships with groups of friends who have similar behavioural patterns, but they are often not accepted because they prevent games and activities in larger social groups. It was concluded that inclusive educational environments and social activities aimed at peer interaction are important in developing students' peer adjustment. In this context, it was found that students experience social adjustment difficulties in peer relationships and that these difficulties arise from both individual behavioural characteristics and interaction styles in the social environment.

### 5.8 Kinesthetic (tactile) Behaviour

According to the findings of the study, it was found that students with ADHD may have intense, uncontrolled tactile behaviours and that they manifest themselves in actions such as wanting to touch something, pushing their friends and teasing. It has been noted that students' tactile behaviours may be related to various reasons such as impulsivity, sensory exploration or a desire to communicate. It has also been found that the intensity of these tactile behaviours decreases with the use of medication. It has been found that kinesthetic behaviours are highly prevalent in students with ADHD and that these behaviours are related to both individual neurological characteristics and social interaction dynamics.

## 6. Recommendations

The following recommendations can be made as a result of this study:

- 1) **Classroom Arrangements:** Structural arrangements in the classroom should be made taking into account the behavioural characteristics of students diagnosed with ADHD, such as hyperactivity, impulsivity, attention deficit and social adjustment problems. As their attention spans are short, planning lessons with activities divided into sections will facilitate their more effective participation in the learning process. In addition, learning environments can be made more functional with clear rules, consistent routines and structured lesson plans.
- 2) **Teacher Training:** In-service training programmes should be organised to increase teachers' knowledge of ADHD as a neurodevelopmental disorder. These programmes should support teachers in correctly interpreting the symptoms of attention, impulsivity and hyperactivity, establishing effective communication and developing appropriate intervention and management strategies.
- 3) **Individualised Education Plans (IEP):** It is recommended that individualised education plans based on individual needs, flexible and supportive teaching methods, are implemented for students diagnosed with ADHD and that these plans are continually reviewed and updated. Lesson plans should consist of structured activities with clear objectives. The IEP can help students increase their attention span and develop their social skills. The IEP process should be supported not only by the school but also by the parents.
- 4) **Management of Motor Behaviours:** Management of kinesthetic behaviours and involuntary movements should include short physical activity breaks, structured activities and safe areas where students can meet their movement needs. In particular, activities that target tactile and proprioceptive sensory stimuli can improve students' body awareness and motor control. These needs can be addressed pedagogically by incorporating movement tasks into course activities.
- 5) **Development of Social Skills:** Effective results can be achieved through structured programmes that take into account the developmental characteristics, developmental levels and social difficulties of students with ADHD. To reduce

adjustment problems in peer relationships, social skills training, empathy development studies, and peer-supported learning methods should be incorporated into classroom practice. In this context, individual and group counselling services for social skills deficits should be provided to support the student's social-emotional development.

- 6) **Emotional Regulation Skills:** Social-emotional learning programmes that support the ability to recognise, express and regulate emotions should be implemented in the classroom for students who have difficulty managing their emotional responses. Families should be informed about emotional regulation strategies and actively involved in the process.
- 7) **Motivation and Task Management:** Given the reluctance and low motivation to complete homework and tasks, it is recommended that these tasks be broken down into small and manageable pieces that are appropriate to the student's characteristics; and their success should be reinforced with verbal or symbolic rewards.
- 8) **Multidisciplinary Collaboration:** In supporting students' behavioral and academic development, a continuous and effective communication and collaboration mechanism should be established between teachers, families and health professionals. Regular information sharing will increase the consistency and success of interventions. Structured team meetings should be planned to support interdisciplinary interactions, and monitoring should be carried out regarding implementation processes.
- 9) **Integrated Use of Pharmacological and Educational Interventions:** Although it has been found that drug treatment has a regulating effect on behavioral symptoms in some students, pharmacological interventions alone should not be relied upon; holistic approaches integrating behavioral, academic and social supports should be adopted.
- 10) **Supporting Executive Functions:** In order to reduce long-term psychosocial risks, it is of great importance to systematically support executive function skills, especially from early childhood. Teachers should be supported with in-service training and seminars in recognizing executive function difficulties and using appropriate intervention strategies.
- 11) **Future Research:** The effects of various classroom intervention programs implemented with students diagnosed with ADHD should be monitored in the long term; not only the academic success of these students but also their social-emotional development processes should be evaluated.

These suggestions may allow for the expansion of the scope of the research and enable more holistic and detailed results to be obtained.

### **Conflict of Interest Statement**

The authors declare no conflicts of interest.

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