INTERVENTION OPTIONS FOR PUPILS WITH ATTENTION DEFICIT AND BEHAVIORAL DISORDERS IN MAINSTREAM PRIMARY EDUCATION: A CASE STUDY

Barbora Lanková[1], Tereza Hajncová[1], Anežka Fousková[1], Kamila Bitalová[1,2], Ilona Pešatová,[3] Michal Vostrý[3,4]

[1] Department of pre-primary and primary education, Faculty of Education, J. E. Purkyně University in Ústí nad Labem, Czechia
[2] Department of specific medical disciplines, Faculty of Health Studies, J. E. Purkyně University in Ústí nad Labem, Czechia
[3] Department of special and social education, Faculty of Education, J. E. Purkyně University in Ústí nad Labem, Czechia
[4] Department of Occupational Therapy, Faculty of Health Studies J. E. Purkyně University in Ústí nad Labem, Czechia

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Abstract

This article focuses on the possibilities of pedagogical and special educational interventions for a pupil with attention and behavioural difficulties educated in a mainstream primary school. The aim of the study is to analyse, through a case study approach, the manifestations of the pupil's difficulties in the areas of attention, self-regulation, and social adaptation within the school environment, and to describe the support measures implemented in the context of inclusive education. The case study is based on long-term monitoring of the pupil and draws on the analysis of medical documentation, school records, teachers' reports, and collaboration between the school, counselling services, and healthcare professionals. Particular attention is paid to pedagogical and special educational strategies aimed at adapting educational conditions, structuring instruction, and supporting attention, behaviour, and school adjustment, including cooperation with the pupil's family. The article reflects the dynamic nature of the difficulties over time, the influence of environmental factors, and the importance of systematic and coordinated support among the key stakeholders in the educational process. The findings highlight the significance of early identification of difficulties, individualisation of pedagogical approaches, and interdisciplinary collaboration in stabilising the pupil's functioning in mainstream education. In conclusion, the article discusses the benefits and limitations of the case study approach in primary education and offers implications for educational practice in working with pupils with attention and behavioural difficulties in mainstream schools.

Keywords: attention and behavioural difficulties, pedagogical intervention, special education support, inclusive education, case study

INTRODUCTION

Difficulties in attention and behavior represent one of the most common challenges in mainstream primary schools and have a significant impact on pupils' adaptation within general education. These problems may manifest as a reduced ability to sustain attention, impulsive behavior, oppositional attitudes, or self-regulation difficulties, which negatively affects academic achievement, peer interactions, and pupils' emotional functioning (McDougal et al., 2022). Research also suggests that unaddressed attention and behavioral problems are associated with a higher risk of developing behavioral disorders and emotional difficulties later in life (Stern et al., 2020). Empirical studies confirm that ADHD symptoms in the school environment are manifested particularly in demanding situations that require sustained concentration, planning, and behavioral control (Staff et al., 2023). ADHD is characterized by persistent difficulties with attention, hyperactivity, and impulsivity. These difficulties are disproportionate to the child's developmental level and interfere with functioning both at school and at home. At the same time, it is emphasized that the manifestations of these difficulties are not constant and are strongly influenced, for example, by lesson structure, the teacher's management style, and the nature of instructional demands (Kates & LaFreniere, 2025).

Attention-deficit/hyperactivity disorder (ADHD) is among the most common neurodevelopmental disorders, with its worldwide prevalence among children and adolescents estimated at around 8 % (Ayano et al., 2023). A further 11–18 % of children exhibit symptoms that negatively affect their functioning even though they do not meet all criteria for a full ADHD diagnosis (so-called subthreshold ADHD) (Kirova et al., 2019). OCED (2020) reports that ADHD symptoms and impaired attention occur in 5–10 % of school-aged children; manifestations may vary in intensity and are often combined with oppositional behavior, learning disorders, or anxiety. This further complicates pupils' ability to adapt to the mainstream school environment.

Oppositional and defiant behavior in school-aged children is often associated with ADHD, low self-regulation, and frustration stemming from school failure (Kawas et al., 2021). Typical manifestations include frequent arguments with authority figures and failure to respect them, refusal to follow instructions, deliberate spiteful behavior, disruption during lessons, and impulsive reactions. Such behavior can adversely affect relationships with teachers and peers and increase the risk of social isolation. It may also lead to school failure (Greene et al., 2020). Educational support focuses on adjustments to everyday instruction that enable the pupil to concentrate better and participate more fully in learning. Evidence-based strategies include providing clear and structured instructions, using visual aids, breaking tasks into smaller parts, scheduling regular breaks, and actively monitoring attention during lessons (OECD, 2020). Positive motivation and reinforcement of desirable behavior also play an important role, reducing impulsive behavior and supporting active engagement. Studies show that even minor instructional adjustments can significantly influence the school performance and behavior of pupils with ADHD (Dahl et al., 2020). Interventions aimed at modifying the classroom environment and instructional management—implemented by the teacher—can substantially reduce disruptive behavior and increase on-task behavior among pupils with ADHD symptoms (Gaastra et al., 2016).

From an educational perspective, it is also important to focus on executive function impairments—such as working memory, inhibition, and planning—which play a crucial role in successfully managing school tasks and learning. Deficits in these areas are associated with lower academic outcomes, greater fatigue, and more frequent classroom disruptions (Soto et al., 2021). Rimm-Kaufman and Hamre (2020) likewise emphasize that attention-related and behavioral manifestations cannot be viewed in isolation from the environment: classroom climate, instructional organization, and positive teacher–pupil interactions significantly influence the level and intensity of these difficulties. Educational support for pupils with oppositional manifestations primarily targets clear structure, predictable routines, and consistent consequences for behavior. At the same time, it emphasizes positive motivation and rewarding desired behavior (Kawas et al., 2021). An important component of the general educational approach is also reflection on the teacher's role and their knowledge about ADHD. Research in primary schools shows that teachers often employ a wide range of strategies (from generally focused instructional adaptations to individualized approaches) and that their level of ADHD knowledge strongly affects the effectiveness of these strategies. Some studies indicate that while some teachers have sufficient awareness of ADHD, others show substantial gaps in knowledge that may negatively influence their pedagogical decision-making and approach to pupils with difficulties (McDougal et al., 2023). Special education support focuses on targeted work with the pupil's individual difficulties that require specific strategies and expert guidance (Kates & LaFreniere, 2025). This includes developing executive functions such as working memory, planning, and inhibitory control (Soto et al., 2021), therapies aimed at supporting self-regulation and social skills, and individual or small-group interventions to improve concentration and reduce impulsivity (Greene et al., 2020). Collaboration with psychological and health services is also important, including counseling services and, where appropriate, medical support (Kates & LaFreniere, 2025).

Special education support thus addresses specific difficulties that cannot be resolved solely through adjustments to the educational environment. Key elements include systematic monitoring of progress and adapting strategies based on the pupil's current needs (Richardson et al., 2015). Coordination with legal guardians is also essential; they must be informed about intervention strategies and methods so that the child's behavior can be influenced consistently at home as well. Studies show that combining school support with family collaboration reduces the frequency of defiant and impulsive behaviors and promotes better adaptation of the child in the classroom (Greene et al., 2020). In addition to instructional and behavioral strategies, social integration and relationships in the classroom are important. Research highlights that pupils with ADHD often experience negative evaluations or stigmatization by peers, which can worsen their social adaptation and self-esteem (McDougal et al., 2022). The present article adopts a case-study approach to analyze manifestations of difficulties in attention, self-regulation, and behavior in a pupil attending a mainstream primary school. At the same time, it describes specific educational and special education measures and underscores the importance of individualized approaches and multidisciplinary collaboration in supporting the pupil's functioning at school.

CASE STUDY

A seventh-grade pupil at a mainstream primary school underwent repeated assessments at a Child Psychiatry clinic, followed by psychological and phoniatric evaluations due to persistent difficulties associated with a negativistic attitude toward school, reduced attentional concentration, and delayed speech development. His developmental history is considered high-risk. The mother's pregnancy was complicated; she underwent amniocentesis to rule out or confirm genetic abnormalities. The delivery occurred at term and postnatal adaptation was good. In the area of motor development during the first year of life, the child received Vojta therapy; thereafter, development was within the norm. Independent walking began at 13 months of age. At the age of three, the boy underwent surgery after ingesting a battery. Enuresis was absent; however, in 2020 he experienced transient pollakiuria. This condition occurred after returning from a children's summer camp. School attendance was postponed by one year. After entering first grade, adaptation proceeded without difficulties. At the beginning of schooling, a period of more problematic behavior at school and in leisure-time activities was noted. Behavioral deterioration became evident in second grade.

Manifestations included making noises, engaging in spiteful behaviors, disrupting lessons, non-cooperation, and oppositional behavior. He is not very popular within the class group. Signs of anxiety at bedtime are observable; the boy requires sleeping together with his brother. The mother reports the boy's selective eating and a constant need to repeat instructions. Family history indicates the mother's oncological illness, which may affect the boy's behavior. The boy comes from a two-parent family. The parents prefer a calm approach, although they report persistent exhaustion. In relation to the family, the boy is often oppositional and demanding from an educational standpoint, which points to the guardians' fatigue. During the first psychological assessment in October 2019, the standardized WISC-III test was administered and revealed an uneven intellectual profile, i.e., performance ranging from low average to mildly above average (VIQ 92–95 points). In the verbal domain, the boy reached a below-average level of general knowledge and showed weaker overall orientation. Arithmetic performance was above average. Vocabulary was good relative to expressive abilities. In the nonverbal (performance) domain, he achieved a very good result, corresponding to the high average to mildly above-average range; he managed abstraction without difficulty. The conclusion indicated delayed speech development, currently with features of an expressive language disorder. Intellectual performance was uneven.

Immediate memory was in the low-average range, with reduced concentration and a slower work pace. The boy also performed at a below-average level in graphomotor skills (suspected specific disorder of writing). Finally, probable ADHD traits were noted—hypoactive presentation. A phoniatric examination in November 2019 further pointed to slow lexical retrieval, a tendency toward a faster speaking rate, and reduced clarity of articulation. Hearing was good; in speech he could produce sentences, but phoneme substitutions (L, R) and immature phonological analysis persisted. A comprehensive examination at Child Psychiatry in July 2021 confirmed the conclusion and diagnosed F 90.0—Disturbance of activity and attention, i.e., ADHD (at that time in the boy's younger school age). Lower emotional stability and a tendency toward oppositional behavior and conduct problems were also identified. The psychiatric assessment was preceded by an eighth visit to the Educational Care Centre (SVP), which the boy had been attending since August 2020. The impetus for initiating SVP attendance was negativistic behavior during the holidays that resulted in exclusion from a summer camp, as well as frequent urination and restlessness. Consultations focused on addressing the negativistic attitude toward school, psychosomatic symptoms, fear of sleeping alone, fluctuations in behavior, and the relationship with his brother. The boy holds a critical attitude toward school and believes that his teacher does not like him.

Conflictual relationships are also evident toward peers; he has only one friend. His behavior at school was discussed by the school's disciplinary/educational committee. The boy's interests include PC games and football, in which he respects the authority of coaches. The family was advised to consult psychiatric services to consider possible medication. During consultation, the boy was restless, fidgety, and frequently deviated from the topic; however, if a topic engaged him, he could sustain attention. When he decides not to work, he is difficult to redirect. In November 2024, the school set measures in response to failure to respect and comply with established rules, frequent forgetting of school supplies and insufficient and untimely preparation for lessons, frequent contempt for and refusal of assigned tasks (or completing tasks with an emphasis on quantity rather than quality), drawing classmates' attention through inappropriate behavior, and supporting and endorsing inappropriate behavior by other classmates, thereby encouraging boys who look up to him. In many cases, the pupil does not perceive anything negative in his undesirable behavior.

Examples of measures set by the family include a unified approach with the school, careful preparation for school linked to guiding the pupil toward personal responsibility, and consistent adherence to established rules, i.e., a firmly designated time for school preparation, sport, and rest. The school will continue regular homeroom lessons and maintain cooperation with an educational therapist (etoped). If behavior does not improve, the school will refer the matter to the SVP or OSPOD. In the same month and year, the pupil received a headteacher's reprimand for violating school regulations, i.e., using a mobile phone during lessons to take photographs, which he subsequently posted on social media, inappropriate behavior toward classmates, and frequent forgetting. A follow-up examination at Child Psychiatry took place in April 2024. Manifestations of restlessness, fatigue, lying on the desk, and frequent forgetting persisted. According to the father, the boy made greater efforts in the school setting during the first semester of fifth grade.

The boy is supported by an SPC. Tendencies toward opposition, higher tension, increased psychomotor tempo, low attention, and fatigability continued. Lower self-regulation, introverted traits, less stable affectivity, and insecurity in self-evaluation were also noted. In addition to the diagnosis F 90.0, a learning disorder was identified. Recommendations included cooperation with a PPP, tolerance of restlessness, an individualized approach, positive motivation, and, importantly, avoiding overburdening the boy. In the most recent psychiatric report from November 2024, increased anxiety was reported, together with impulsivity in behavior, a lower frustration tolerance, and neurotic symptomatology, i.e., signs suggesting the development of obsessive-compulsive symptoms, a tendency toward dysphoria, insecurity in social relationships, and difficulties with respecting rules and in thinking processes. No disturbances of perception, thought disorder, or self-harming tendencies were observed. The above characteristics remain current. According to the father, the boy's behavior in the school environment worsened since the previous follow-up, particularly in the form of frequent reprimands for disrupting lessons. Adaptation in sixth grade was more difficult. In the home environment, there are no major problems; the boy is manageable, but supervision is necessary for school preparation. The boy is supported by a PPP. In conclusion, several recommendations are summarized, including, for example, supporting self-evaluation, providing sufficient praise, an appropriate workload, and continued cooperation with the PPP regarding recommendations from the School Counseling Facility (ŠPZ) for the school. Other recommendations are consistent with the previous assessment. The legal guardians have not decided in favor of medication, which could be effective in addressing the boy's difficulties.

Tab. 1 Overview of important milestones

YEAR	EXAMINATION	CONLUSION
2019	Psychological examination	Standardized WISC-III test – uneven intelligence, i.e., below average to slightly above average (VIQ 92–95 points)
2019	Phoniatric examination	persistent confusion between sounds (L, R) and immature phonological analysis
2020	Educational Care Center	first visit due to negative behavior
2021	Comprehensive psychiatric examination	F 90.0 - ADHD-based activity and attention disorder, lower emotional stability, tendency toward opposition and behavioral disorders

2024	Psychiatric examination	F 90.0 - ADHD-based activity and attention disorder, F 81 - Specific developmental disorders of scholastic skills
2024	Psychiatric examination	Psychiatric examination increased anxiety, impulsive behavior, lower frustration threshold, neurotic symptoms

Case summary

The case study focuses on a seventh-grade pupil at a mainstream primary school. In 2019, a psychological assessment was conducted, concluding that the pupil had an uneven intellectual profile, i.e., ranging from low average to mildly above average (VIQ 92–95 points). In the verbal domain, the boy achieved a below-average level of general knowledge, whereas performance in the arithmetic domain was above average. The assessment also pointed to delayed speech development and features of an expressive language disorder. Since 2020, the pupil has been attending sessions at an Educational Care Centre (SVP); the impetus for initiating attendance was negativistic behavior that resulted in his exclusion from a children's summer camp, along with frequent urination and restlessness. A phoniatric examination did not demonstrate hearing impairment but indicated persistent phoneme substitutions (L, R) and immature phonological analysis. A comprehensive psychiatric assessment established the diagnosis F 90.0—Disturbance of activity and attention, i.e., ADHD, as well as a learning disorder, lower emotional stability, and a tendency toward opposition and conduct problems. A follow-up examination at Child Psychiatry took place in April 2024 and indicated persisting manifestations of restlessness, fatigue, frequent forgetting, increased anxiety, impulsivity, a lower frustration tolerance, and neurotic symptomatology, i.e., signs suggesting the development of obsessive-compulsive symptomatology, a tendency toward dysphoria, and insecurity in social relationships.

Based on these findings, we propose several possible recommendations to support the boy not only in the school setting. To introduce and, in particular, to ensure the effective functioning of these working principles, cooperation across the school, out-of-school, and home environments is desirable. The boy functions very well during football training, where he is able to respect the authority of coaches. Every sport activity has clearly set rules and boundaries that provide the child with a sense of safety and certainty. He can predict what a given behavior will bring about. We consider it highly desirable to establish firm rules to support the boy's optimal functioning. It is appropriate for the boy himself to participate in formulating the rules, which contributes to a sense that his opinion and ideas are heard. For clarity and transparency, the rules may be visualized (e.g., by supplementing the text with pictures). It is essential to analyze with the boy the source of his negativistic behavior toward school. The connection underlying negativistic behavior may be sought in delayed speech development and a slow work pace, in a context where peer acceptance is highly important for pupils. We believe that these deficits may lead peers to ridicule. The boy may experience feelings of being undervalued. Every pupil wants to excel and feel like the center of attention. These needs are often met through inappropriate behavior, such as shouting out, disrupting lessons, or making various sounds. Negativistic behavior may also be influenced by reduced graphomotor skills, which cause difficulties with writing. Here, it is important to respect the boy's slow work pace and reduced graphomotor level—for example, by allowing printed notes of the curriculum. It is also important to pay attention to hand loosening exercises, focus on the current level of graphomotor skills, and further develop them. Strong emphasis should be placed on improving the boy's relationship with school, for example by simplifying tasks, shortening working time, clearly setting time for work and relaxation, and evaluating effort rather than performance. Finally, it would be beneficial to focus on the teacher–pupil relationship and the overall classroom climate.

In relation to the diagnosis of ADHD (hypoactive presentation), we recommend providing short, specific, and clear instructions in partial steps, preferably supplemented in written or pictorial form. It is essential to check comprehension of the task. We use slow speech and provide sufficient time for responses. Before giving instructions, we further recommend addressing the boy by name and establishing eye contact to ensure that he is paying attention. It is desirable to create a clear and comprehensible daily routine and a visible schedule (color-coded), or a checklist that can be used to tick off the individual supplies needed for the next lesson. This can help prevent frequent forgetting of school supplies and insufficient and untimely preparation for instruction. Given rapid fatigue and difficulty sustaining attention, we propose dividing tasks into partial steps; after each step, praise should follow, along with encouragement to complete the task and a brief relaxation break. The task assignment can be broken down visually; the boy may tick off, circle, or highlight individual steps in color.

We strive to eliminate distracting stimuli that might divert the boy's attention elsewhere. It is essential to praise not only the result but especially the effort invested in completing the task. To strengthen self-confidence, it is appropriate to emphasize the boy's strengths and to compare the child only with his own previous performance, not with peers. Based on the findings of the follow-up psychiatric examination, we propose that the boy be allowed to use anti-stress aids, or, for example, an elastic band stretched across the front legs of the chair, which could help reduce manifestations of restlessness. It is also appropriate to incorporate short respite moments, for instance by having the boy hand out workbooks or worksheets or act as the teacher's helper.

INTERVENTION

The intervention focuses on strengthening self-regulation, emotional stability, and a positive self-concept. The pupil's ability to recognize his own emotions, work with frustration, and manage impulsive reactions is developed systematically. Elements of a cognitive-behavioral approach are used, along with relaxation techniques, breathing exercises, and brief calming strategies, such as the use of anti-stress aids. Given the increased anxiety and insecurity in social relationships, the intervention also targets the development of social skills, rehearsal of appropriate responses in conflict situations, and strengthening of positive relationships with classmates. An important component is creating situations in which the pupil can experience success and receive positive feedback, for example in the area of sports. In addition, the intervention includes the development of executive functions, especially planning, work organization, working memory, and inhibition of impulsive reactions. Regular individual work with the boy involves practicing the planning of school responsibilities (e.g., structuring school preparation), time management, and an individual motivational token system that reinforces desirable behavior and supports self-regulation. A clearly structured and predictable educational environment is key. Boys with ADHD and oppositional manifestations benefit from a fixed daily routine, comprehensible rules, an emphasis on positive motivation, and a consistent approach by educators. The number of classroom rules was reduced; they are now formulated and visualized in a positive manner and with the boy's active participation. In the area of learning disorders and graphomotor skills, hand loosening exercises, fine motor and coordination exercises, strengthening of reading skills, and memory training are included. The intervention also involves work on understanding task instructions, developing language skills, practicing the pronunciation of articulatorily more demanding words, strengthening phonemic awareness, and training memory and attention. A crucial part of the intervention is close cooperation with the legal guardians, who are invited to intervention meetings regularly once a month, where the established home and school measures are evaluated. Emphasis is placed on a unified approach by the school and the family, a firmly structured daily routine, and clearly defined time for school preparation, rest, and leisure-time activities. The aim of the intervention is to reduce problematic behavior, strengthen psychological well-being, and support the boy's positive relationship with school.

DISCUSSION

The presented case study reflects the profile of a pupil with a disturbance of activity and attention on the basis of ADHD, specific developmental disorders of school skills together with learning and speech disorders, anxiety, and impulsive behavior. Taken together, these factors constitute a significant risk for the child's social relationships and adaptation, and they also contribute to challenging cooperation in the course of education (Yegencik, Bell & Deniz, 2025). Ferretti et al. (2019) report that children with ADHD experience a substantially higher level of peer rejection and generally have fewer friends than children without this disorder. The reasons may vary—for example, difficulties sustaining attention during play, failure to take turns, not giving others space in conversation, limited emotion regulation, or disruptive and impulsive behavior (Faraone et al., 2021). In our case study, it is apparent that the boy likewise has more difficulty forming social bonds with classmates and has only one friend. n the case of pupils with behavioral disorders, it is necessary to ensure an appropriate pedagogical approach. Ayano et al. (2023) state that such difficulties are among the most frequent and most demanding situations for primary school teachers. In such cases, pedagogical and special educational intervention is essential, including behavioral techniques, clear structure, and support. A systematic meta-analysis of randomized controlled trials showed improvements in attention, school achievement, and social relationships; however, these interventions did not affect hyperactivity and impulsivity (Yegencik, Bell & Deniz, 2025). Another review, cited by Bussanich et al. (2025), emphasizes that programs targeting social skills have strong potential to support interpersonal functioning and relationships, although their effects may be variable.

An individualized approach within instruction is of key importance. Studies show that children with behavioral disorders benefit from clearly structured instructions and well-specified tasks (Kates & LaFreniere, 2025), which also underpins several of the recommendations presented in the case study. Individuals with ADHD often have difficulties with organizing tasks and managing time. Training such skills is a positive factor that can lead to improvement (Bikic et al., 2017). Training in self-directed strategies and organization also has positive effects on pupils' socio-emotional skills (Kates & LaFreniere, 2025). However, educational institutions are not the only factor shaping a pupil's development. Family involvement and the alignment of approaches are crucial for the child's improvement (Acri et al., 2017; Dahl et al., 2020). The case study thus confirms that the complex profile of a child with ADHD and comorbid difficulties requires an individualized, multidisciplinary approach that integrates school-based, family-based, and specialist (psychological and pedagogical) strategies. Measures should be grounded in evidence of the effectiveness of the selected approaches, integrating behavioral rules, visual support, and structured learning in order to promote the child's adaptive functioning across contexts. Difficulties in attention and behavior are among the most common and pedagogically demanding situations in mainstream schools; umbrella evidence suggests that the global prevalence of ADHD in children and adolescents is approximately 8 % (Ayano et al., 2023). At the same time, symptoms are heterogeneous and fluctuate over time, and they are often accompanied by emotional difficulties that may worsen school adjustment and have adverse long-term developmental consequences (Stern et al., 2020). In our case study of a seventh-grade student, this pattern is reflected in alternating periods of heightened tension, impulsivity, and oppositional reactions with episodes of fatigue, forgetfulness, and a low frustration tolerance, as well as in co-occurring learning and graphomotor difficulties that may secondarily reinforce a negative relationship with school and social insecurity. From an intervention perspective, research has long supported school-embedded, multi-tiered approaches (MTSS) that combine instructional adaptations, behavior management, and targeted support programs, including ongoing monitoring of effects (Richardson et al., 2015).

A meta-analytic review of classroom interventions indicates that teacher-implemented strategies can significantly reduce off-task and disruptive behavior, particularly when desirable behavior is reinforced consistently and when self-regulation is explicitly supported (Gaastra et al., 2016). This evidence aligns well with the recommendations in our case study: clear rules and routines, visual step-by-step guidance, checklists, breaking tasks into smaller units, reducing distracting stimuli, and frequent positive reinforcement. Psychoeducation and the alignment of practices between school and family are also important, because increasing understanding of the child's difficulties and harmonizing expectations promote consistency of interventions and reduce conflict situations (Dahl et al., 2020). In our student, it is also appropriate to consider the relationship between executive functions and academic skills, because handwriting and graphomotor difficulties may be linked to executive-function weaknesses (Soto et al., 2021) and therefore require adjustments in task demands, pacing, and output formats. A limitation of this study is the uniqueness of the case and the absence of standardized pre-post evaluation of the implemented measures. Further research should combine case studies with longitudinal measurement of academic and psychosocial indicators within clearly described intervention packages, so that it becomes possible to more precisely identify which components of support are most effective for similar student profiles. Attention-deficit/hyperactivity disorder (ADHD) is best understood as a neurodevelopmental condition with marked heterogeneity in symptom expression and functional impairment across settings. Current clinical guidelines emphasize that assessment should be multi-informant, confirm cross-situational impairment, and include systematic screening for co-occurring conditions, because comorbidity is common and substantially shapes prognosis and intervention response (Wolraich et al., 2019; NICE, 2018). This perspective is strongly reflected in our case study of a seventh-grade student with a confirmed ADHD diagnosis and prominent difficulties in sustained attention, task completion, organization of schoolwork, and time management, accompanied by episodes of affective dysregulation and impulsive behavior in the classroom and at home. In addition, the case description indicates clinically meaningful comorbid features (e.g., oppositionality/anxiety symptoms and learning-related difficulties), which aligns with recent meta-analytic evidence showing that a large proportion of children and adolescents with ADHD meet criteria for at least one additional psychiatric disorder. Notably, oppositional defiant disorder and anxiety disorders appear among the most frequent comorbidities, which is clinically important because they often intensify functional impairment and complicate intervention planning (Njardvik et al., 2025). Given this complexity, our findings support a multimodal, function-focused intervention aplying on symptom reduction alone. School-based monitoring and structured behavior supports are well positioned to address day-to-day impairment, especially when difficulties are most visible in classroom performance (homework completion, adherence to routines, and peer interactions). Daily Behavior Report Cards (DBRCs) represent one feasible, evidence-based tool for linking classroom goals with immediate feedback and consistent home–school communication.

Meta-analytic results suggest DBRCs can reduce teacher-rated ADHD symptoms and may also benefit co-occurring externalizing behaviors (Iznardo et al., 2020). For our student, whose profile includes inconsistent task completion and impulsive episodes, DBRCs could operationalize a small set of observable targets (e.g., "records homework," "brings required materials," "raises hand before speaking," "uses a coping step when upset") and thereby reduce ambiguity for both teachers and caregivers while enabling systematic progress monitoring. A second key implication concerns executive-function-related impairment, particularly organization, planning, and time management. These diffiin our case and are commonly reported in adolescents with ADHD, often persisting even when core symptoms fluctuate. Evidence from a meta-analysis of organizational skills interventions indicates that Organizational Skills Training (OST) can yield meaningful improvements in organizational functioning and modest improvements in inattention and academic outcomes (Bikic et al., 2017). This supports the clinical rationale for embedding explicit organizational instruction into the student's support plan (e.g., structured binder systems, homework logging routines, chunking, and guided planning), ideally coordinated with teachers and parents to promote generalization across contexts. While the school environment provides natural opportunities for skill rehearsal, consistent caregiver involvement can strengthen maintenance and transfer of newly learned routines. Importantly, our case also highlights socio-emotional vulnerability and peer-related challenges that can amplify symptom trajectories. Longitudinal evidence suggests that peer functioning difficulties may exacerbate ADHD symptoms and irritability over time, indicating bidirectional pathways between social stress and behavioral dysregulation (Bellaert et al., 2023).

Study limitations

The article is based on a single case study, and its main limitation is therefore the restricted generalizability of the findings to other pupils and school contexts. In addition, the case design does not allow causal conclusions about the effectiveness of specific measures (interventions were implemented over time and in parallel), and it lacks a standardized pre–post evaluation and a consistent set of objective outcome indicators (e.g., systematic rating-scale assessments of attention/behavior or academic performance). Interpretation may also be influenced by differences between informants and by the variability of the pupil's manifestations across situations.

CONLUSION

The case study indicates that for a pupil with ADHD and comorbid difficulties, early identification and individualized, long-term, coordinated support are essential—combining structured instructional strategies, targeted special educational measures, systematic strengthening of self-regulation, and ongoing monitoring of change. The findings also underscore the importance of a unified school–family approach and multidisciplinary collaboration (school–counseling services–healthcare), as only the integration of these components can stabilize the pupil's functioning and support successful adaptation in mainstream education. This reinforces the need to treat peer context not merely as an outcome but also as a potential mechanism that sustains impairment. In practice, this can mean combining individualized self-regulation supports (e.g., brief in-the-moment coping scripts, predictable de-escalation routines) with classroom-level strategies that reduce negative peer feedback loops (clear rules, proactive reinforcement, and structured cooperative learning roles). At the same time, our synthesis cautions against assuming that generic social skills training will reliably reduce impairment in youth with ADHD. A recent systematic review and meta-analysis focusing on school-based social skills interventions found that pooled effects were negligible overall, despite variability across programs and study designs (Bussanich et al., 2025). Therefore, in our case, "social skills" support should be tailored and functionally linked to the student's real situations (e.g., conflict triggers, group-work participation, repair strategies after impulsive behavior) rather than delivered as a broad, decontextualized curriculum. This is consistent with the broader conclusion that interventions tend to be more effective when they are embedded in authentic school routines and combined with reinforcement systems and adult coaching. Finally, findings from a meta-analysis of school-based randomized controlled trials indicate that school interventions can produce small-to-moderate improvements in inattention, overall ADHD symptoms, academic performance, and social skills, although effects are heterogeneous and may depend on intervention focus, implementation quality, and reporter differences (Yegencik et al., 2025). This underscores implementation as a core issue: even evidence-based components (DBRC, organizational skills routines, reinforcement, and self-regulation supports) require feasible delivery, shared expectations among staff, and ongoing monitoring.

In our case, the practical recommendation is a coordinated package: (1) brief, measurable targets monitored via DBRC; (2) structured organizational supports aligned with OST principles; (3) predictable de-escalation steps and antecedent management for affective episodes; and (4) selective, context-specific peer support strategies. Such a plan is also aligned with guideline recommendations emphasizing multi-informant follow-up, functional outcomes, and stepped-care decision-making (Wolraich et al., 2019; NICE, 2018).

Source

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