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## **Emotional Dysregulation as an Aspect of ADHD: How to support the well-being of students with ADHD in schools**

### **Abstract**

Emotional dysregulation, or the inability of children with ADHD to regulate their emotions, is one of the aspects of this disorder that is not officially considered its symptom. Interventions at schools are mostly targeted at alleviating symptoms of inattention, impulsivity and/or hyperactivity; however, it is often also the area of emotional instability that deserves professional attention. This paper introduces case studies from the practice of school psychologists and discusses practical interventions suitable for support of students with ADHD through cooperation of teachers, school psychologists and parents. These interventions target the overall well-being of students and address various aspects of this disorder, including emotional dysregulation. Prerequisites for successful support of students with ADHD at school are a positive, humane and consistent approach to the student within the school, as well as a school environment that does not perceive the disorder as a burden, but as a piece of information that can be dealt with in a constructive way.

**Keywords:** ADHD, student, school, psychologist, intervention

Emotion regulation is one of the most important social and developmental skills that children acquire in their preschool years (Bariola, Gullone, Hughes, 2011; Grolnick, McMenamy, Kurowski, 2006). It develops over time as a set of “extrinsic and intrinsic processes responsible for monitoring, evaluating and modifying emotional reactions, especially their intensive and temporal features, to accomplish one’s goals” (Thompson, 1994, pp. 27–28). Good emotion regulation in preschool predicts successful functioning in a variety of developmental domains, including overall emotional and social competence (Bariola, Gullone, Hughes, 2011; Calkins, 1994; Dollar, Stifter, 2012; Feng a. oth., 2008). On the other hand, poor emotion regulation contributes to a range of externalizing and internalizing behavioral problems (Gartstein, Putnam, Rothbart, 2012;

Karreman a. oth., 2010), poor adjustment and later psychopathology (Gilliom a. oth., 2002; Kim, Cichetti, 2010), and it is included in most of the Axis I and all the Axis II disorders, according to the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013; Bariola, Gullone, Hughes, 2011).

## **Emotion regulation and ADHD**

A number of mental disorders are characterized by an altered ability to regulate the processing of information either of emotional or non-emotional character. Attention-deficit/hyperactivity disorder (ADHD) is defined on the basis of dysfunctional processing of information of non-emotional character in three dimensions: attention, impulsivity and hyperactivity. This is on the contrary to oppositional defiant disorder (ODD), the symptoms of which reflect dysfunctional regulation of emotional processes, including aggression, moodiness and negativity — symptoms which are also often present in ADHD (American Psychiatric Association, 2013; Petrovic, Castellanos, 2016). Although diagnostic criteria do not take into account the emotional aspect of ADHD, a minimum of 40% of children diagnosed with ADHD meet the diagnostic criteria of ODD (Hoogman a. oth., 2017).

Recent research findings suggest that ADHD has a specific emotional component. Moreover, research has indicated that apart from deficits in executive functioning, some individuals with ADHD do not experience sufficient levels of emotional satisfaction in completing daily tasks (Hoogman a. oth., 2017; Poulton, Nanan, 2014). This insufficient emotional reward may pose a problem due to the fact that this type of students may perceive school tasks as too challenging or less rewarding, which may negatively affect their motivation. Decreased motivation may in turn result in moodiness or inappropriate behavior in class.

The study with the largest dataset to date on structural brain differences in children and adults with ADHD determined that ADHD is a neurodevelopmental disorder which is manifested in several brain centers (Hoogman a. oth., 2017). In comparison to controls, brains of individuals with ADHD are smaller in volume and the differences have been confirmed in five brain regions. These are more pronounced in children than adults due to the fact that brain maturation is delayed by one to three years on average in individuals with ADHD, with a chance that they will never reach the maturity of an intact brain. Apart from the prefrontal cortex, responsible for executive functioning (planning, organization, working memory, inhibition, problem-solving), differences in volume were most pronounced in the amygdala and hippocampus, which are brain

regions that had previously not been considered to be related to ADHD. The largest differences were found in the amygdala, part of the limbic system, which is responsible for emotion regulation and motivation. The hippocampus plays a role in long-term memory, learning and emotion regulation. These findings suggest that children with ADHD process information and emotions differently than controls. According to Shaw a. oth. (2014), emotional dysregulation is present in individuals with ADHD throughout the whole lifespan and it is one of the most prominent manifestations of this disorder. Barkley (2015) has named emotional dysregulation as a central feature of this disorder that significantly affects daily functioning in all areas of life. Clinical manifestations in individuals with ADHD may vary significantly; in some, emotion regulation may be affected less than in others.

Although in the school context emotional dysregulation may not be perceived to be such a negative factor influencing the educational process when compared to inattention, impulsivity or hyperactivity, it is indeed one of the most prevalent sources of disability negatively affecting the mental health of students with ADHD.

### **Well-being in schools**

Well-being or subjective well-being is a term used in literature often as a synonym to happiness. It was defined as a “cognitive and affective evaluation of one’s life” (Diener, 1994). Subjective well-being consists of three components: emotional reactions (presence of positive affect or absence of negative affect), life satisfaction in various areas of life (school, family, etc.) and overall life satisfaction or quality of life (Diener a. oth., 1999).

According to research, well-being plays an important role in the school context since it is associated not only with academic success but also with social competences, improved relationships with teachers, peers and parents as well as with the physical health of students (Gilman, Huebner, 2006; Shoshani, Steinmetz, 2013).

Well-being in schools is composed of several domains, each of which contributes to the general sense of well-being of students: academic success, social competences, relationships with peers, teachers and parents, physical health, mental health and social-emotional health. If a student is not doing well even in one of these domains, her overall well-being has been temporarily affected.

Students with ADHD may find themselves in a vicious cycle at school with a direct negative impact on their well-being. Fidgeting, tiredness or misunderstanding of a task may result in inappropriate behavior, which is often followed by a form of punishment. Students may feel frustrated, misunderstood or an-

gry on one hand, and on the other hand they may experience fear, anxiety, sadness or hopelessness. Low self-esteem, anxiety, depression, aggression or other mental or psychosomatic symptoms may manifest as consequences.

### **How to support well-being of students with ADHD in schools**

The first prerequisite for successfully supporting students with ADHD in schools is an open and professional approach to the fact that the diagnosis is present. The key is communication and collaboration between parents and school. Within the school, ideally a team composed of a school psychologist or occupational therapist (depending who is on the school staff), the class teacher and other teachers of the student is established to develop and maintain a common set of strategies that work for the individual student.

Potential academic problems are to be addressed as soon as possible since learning disorders are often present together with ADHD. Once addressed and diagnosed, individual and targeted learning support for the student is established within the school. Moreover, the student receives regular counselling from the school psychologist to address social and emotional issues and needs, including emotion regulation skills training. This support should not be isolated from the classroom. Regular communication between the psychologist and/or therapist and the teachers of the student is the key to success. In class, the student has opportunities to practice new skills and receive instant feedback from the teacher.

Teachers are the most important adults in a student's school life. A student with ADHD is often considered extra workload for the teacher, placing a lot of demands on time and energy. However, a shift in perspective may be very powerful in helping the teacher manage the class effectively. Viewing the student as curious instead of disruptive, as creative instead of messy, as energetic instead of loud or as entertaining instead of inappropriate may help the teacher find ways of engaging the student in class activities effectively. Successful teachers are flexible and consistent, follow clear routines and provide a range of activities. The aim is to provide a stimulating yet transparent class environment which provides limited opportunities for the student to act disruptively or inappropriately.

Next, two case studies are presented to illustrate two different forms of support of students with ADHD in primary schools:

F. was a student in the 1<sup>st</sup> grade of primary school and his teacher notified his parents of his inappropriate behavior early in the school year. The diagnosis of ADHD was confirmed at an official assessment a few months later. F. was attending a class of 22 children without the sup-

port of an assistant teacher. He was labelled as impolite, disruptive and non-manageable during school hours as well as in afternoon school clubs. Despite her effort, the teacher was not always able to attend to F. individually when needed due to the size of the class. Problems were piling up and F. was called to see the school principal on numerous occasions. He started to experience stomach aches and headaches and started to skip school. The parents blamed the teacher and the school, although school conditions did not allow for additional support within the class. Despite the efforts made by the school including the teacher, principal and school psychologist, the frustrated parents decided to enrol F. in a new school for the next school year.

In this case, the teacher was regularly consulting with the school psychologist and the student had regular counselling sessions with the psychologist. The teacher regularly provided feedback on the student's behavior in the most positive manner possible, with smileys on a sticker chart, in order to motivate the child and provide some form of positive reinforcement. Moreover, the whole class attended a social-emotional learning program led by the school psychologist. Nevertheless, this form of support was not sufficient as the student was in need of individual support within the class, which could not have been provided. The student always ended up as the one to blame and started to experience psychosomatic problems towards the end of the school year.

V. was a student in the 1<sup>st</sup> grade of primary school and the diagnosis of ADHD had been confirmed at an official assessment within a few months from the beginning of the school year. V. attended a class of 18 students with an assistant teacher. The teacher established a transparent form of behavior management for the class and paid individual attention to V. After an incident, he took the time to discuss with him, e.g. spending a lunch break to have a chat about how the situation could have been handled differently. V. respected his teacher and his behavior started to improve; however, problems persisted in specialist lessons and in school clubs. Teachers were informed and started to apply a consistent approach throughout the lessons. V. also started to attend intensive learning support with an occupational therapist as well as counselling sessions with the school psychologist. He was banned from two clubs where he repeatedly misbehaved. When being too disruptive, he was taken out of the class by the assistant teacher. The assistant teacher was also helpful with providing visual cues, breaks and extra help to V. when he needed it. At the end of every school day V. got constructive feedback from his teacher.

In this case, the student received multidisciplinary support throughout the school day, which turned out to be very positive. He was reinforced with positive feedback whenever possible, but at the same time was made aware of the consequences of his unacceptable behavior. He had his good and bad days, but overall his behavior improved over time.

## School-specific strategies

In order to manage the symptoms of ADHD, including emotional dysregulation at school, a number of school-specific strategies are discussed. This is not meant to be an exhaustive list of all strategies available, but rather a list of those that have proven useful in the practice of school psychologists. These strategies may be applied by teachers in class and reinforced in cooperation with a school psychologist.

**Organization of teaching and learning:** clear rules and expectations are key. Students with ADHD require regular reminding of class and school rules. A helpful tool is a written agreement with the student where she states she will adhere to the rules. Also providing a breakdown of class activities at the beginning of the class may prove helpful.

**Strategic praise:** the power of positive attention is often underestimated. Catching the student being “good” as often as possible significantly boosts their self-esteem and motivation.

**Corrective feedback:** corrective feedback provided right after negative behavior is the most effective form of feedback. Is it to be phrased clearly and concisely, outlining a clear consequence.

**Individual support in class:** providing one-to-one instructions and checking on them, giving the child a checklist for what needs to be done, assigning the students a class buddy who she gets along with and who is helpful are all very good tools to enhance a student’s performance and behavior within the class.

**Reducing over-activity and fatigue:** offer breaks, ideally a 5-minute break for 30 minutes of activity with some brief fun activities, get children to move or dance as an alternative to longer periods of academic activity.

**Self-esteem:** focus attention on the good parts of the student’s work, congratulate verbally or in the form of a certificate, set goals that are achievable so that the student experiences success, use the student’s strengths and interests and have her present them in front of the class, review what has been accomplished in the day (this may be done in short notes so that the student has a visual list of things in which she has succeeded).

**Social skills:** create small groups in class and recognize appropriate behavior within the group such as sharing or cooperating. Teaching social skills to the whole class and providing opportunities to practice them in role-plays or groups is a fantastic way how to involve the other children in support of a student with ADHD, e.g. learning how make friends, how to react to others’ emotions, what to do when they feel provoked, etc. Make sure the student un-

derstands the consequences of her actions for herself as well as for others. Use visual reminders such as a traffic light — Stop, Think, Go.

**Emotions and emotion regulation:** teach the student and ideally the whole class about emotions and ways of managing them effectively. Help them develop a list of strategies to deal with negative emotions appropriately, e.g. when I am angry, I count to five, I think before I act; when I am anxious, I take five deep breaths; when I am sad, I talk to someone, etc. Hold a whole class discussion on individual differences, let students talk about their experiences and identify what or who helps them and let them draw their experience. Let the student with ADHD practice new ideas and skills individually with a school counselor and then reward the student in the class when she puts a new strategy into practice.

**Communication between school and parents:** establish a form of regular communication with parents and agree that although both positive and negative behaviors will be communicated, it is a good practice to always find something positive to be shared.

## **Conclusion**

This article introduces the concept of emotion regulation and dysregulation in students with ADHD in school. Emotional dysregulation is an officially unrecognized symptom of this disorder with a direct negative impact on the student's well-being. Well-being in school is composed of several domains, and students with ADHD deserve extra support in all of them, with a special focus on the domain of social-emotional health. This long-term support process requires the involvement of a multidisciplinary team within the school, parents as well as outside mental health professionals. Most importantly, the key to successfully supporting a student with ADHD in school is a positive, humane and consistent approach, as well as a school environment that does not perceive the disorder as a burden, but as a piece of information that can be dealt with in a constructive way.

The following is a brief summary of the interventions covered in this article which are targeted towards the well-being of students with ADHD in schools:

- address potential academic problems as soon as possible;
- provide counselling support with social competences and emotional needs of the student;
- help the student establish functional patterns of behavior and provide breaks when needed;
- catch the student being good, motivate with every little success;

- apply consistent behavior management, set consistent home and classroom strategies;
- understand the individuality of the student, get to know her as a unique person;
- focus on the student’s strengths, positive traits, abilities and hobbies to help the student succeed in class;
- provide the student with multidisciplinary support in school (class teacher and other teachers, assistant teacher, school psychologist, occupational therapist);
- cooperate and communicate with parents on a regular basis as well as with outside mental health professionals who may be involved.

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