Commentary
Volume 9:2, 2023

Abnormal and Behavioural Psychology

ISSN: 2472-0496 Open Access

Neurological Mechanisms of ADHD Diagnosis and Therapy in School-Aged Children in Poland

Kinga Nermend*

Department of Psychology, University of Szczecin, 71-017 Szczecin, Poland

Introduction

The purpose of this paper is to present a comprehensive picture of attention deficit hyperactivity disorder in its pedagogical, psychological, legal, and social dimensions in Polish schools. The authors discuss the advantages of neurofeedback therapy for elementary school students. The paper compares the concordance of a medical diagnosis confirming ADHD syndrome with the occurrence of abnormal electrical brain function recording and abnormalities therein, as well as the effectiveness of neurofeedback therapy, to verify the validity. The study confirms that pupils' reported problems with emotional functioning are reflected in their EEG records [1].

Description

Many factors can be observed in the modern era that impede the process of education in schools. Among them are childhood mental disorders such as autism, attention deficit hyperactivity disorder, and depression. These disorders are caused by a variety of factors, including genetic, environmental, civilizational, and individual characteristics. According to research conducted as part of the project "Implementing Mental Health Promotion Action" by Eva Jané-Llopis and Peter Anderson, psychiatric diseases contribute to high mortality rates among children and adolescents more frequently than other medical conditions. There is a significant increase in the number of students in Polish schools who have developmental disorders and difficulties, and attention deficit hyperactivity disorder is one of the most common childhood psychiatric disorders [2].

As a result, finding appropriate modern practises to counteract this phenomenon is an important issue, as it affects a young person's future life. Attention deficit hyperactivity disorder, also known as hyperkinetic syndrome, can cause serious problems in school functioning, manifesting as disobedience, aggression, stubbornness, poor learning results, problems with counting and reading, and problems with relationships with peers. A student with ADHD (attention deficit hyperactivity disorder) performs poorly in school due to inattention, poor planning ability, and impulsivity. This leads to a decline in the child's functioning, which worsens as external demands increase, causing several changes in personal, school, and social performance [3].

A young student, whose personality and identity are still developing, develops erroneous interactions with other people, resulting in conflicts with their immediate environment, i.e., their parents, teachers, and friends. The result of such undesirable behaviour can be social marginalisation. Students who struggle with failure on a regular basis and who lack understanding and acceptance from their peers are at risk of developing depression. As a result, early intervention in young students is critical to reducing the consequences during adolescence and adulthood. As a result, many interventions are made in educational settings to support students' proper functioning. This range from classroom observation, pedagogical diagnosis, and individualised teaching and approach to appropriately targeted measures based on the advice of psychological-pedagogical and medical clinics.

ADHD symptoms are divided into three categories: attention deficit disorder, hyperactivity, and impulsivity. The diagnostic criteria for these disorders are detailed in the DSM-5 and ICD-10. DSM-5 and ICD-10 are disease classifications. DSM-5 was issued by the American Psychiatric Association and pertains to mental disorders, whereas ICD-10 pertains to all diseases. There is the most recent version of ICD, ICD-11, which is not yet in use in Poland. The DSM-5 diagnostic criteria include inattention, hyperactivity, impulsivity, and the appearance of symptoms no later than the fifth year of life, whereas ICD-10 emphasises inattention, hyperactivity, and impulsivity. ADHD does not manifest in children in the same way; thus, different subtypes of ADHD are listed [4,5].

Conclusion

The therapist-teacher can observe the student's progress not only during therapy but also in everyday life, which is not possible when the therapy is conducted outside of the educational institution. As a result, depending on the student's needs, the teacher can decide whether to modify or continue the therapy. Another significant advantage is that the therapy is free because it can be provided as part of the school's psychological-educational support. The authors demonstrated that EEG testing can be used to confirm medical diagnoses and effectively apply neurofeedback therapy. Neurofeedback based on standard protocols can be used as a viable treatment option for attention deficit hyperactivity disorder.

However, it can effectively support it because the programme for mapping the electrical activity of the brain can detect the source of abnormalities. The undeniable advantage of neurofeedback is that it is a completely safe method with no side effects. The school has a significant impact on the educational and emotional development of children and adolescents, but it is also the environment most concerned with mental health problems and the location where they can be diagnosed and treated early for the benefit of children. Students' mental health issues can contribute to poor academic performance, classroom problems, and antisocial or health-risk behaviours. A holistic school approach to mental health can help reduce the risk of mental health disorders by using neurofeedback to support children's functioning in mental health care.

Acknowledgement

None.

Conflict of Interest

There are no conflicts of interest by author.

References

1. Harrell, Kathryn M., Stacy S. Wilkins, Megan K. Connor and Joshua Chodosh, et al. "Telemedicine and the evaluation of cognitive impairment: The additive value of neuropsychological assessment." *J Am Med Dir Assoc* 15 (2014): 600-606.
2. Turkstra, Lyn S., Maura Quinn-Padron, Jacqueline E. Johnsonn and Marilyn S. Workinger, et al. "In-person *vs.* telehealth assessment of discourse ability in

***Address for Correspondence:** Kinga Nermend, Department of Psychology, University of Szczecin, 71-017 Szczecin, Poland, E-mail: kinganermend@gmail.com*

Received: 03 March, 2023, Manuscript No. abp-23-99928; **Editor Assigned:** 04 March, 2023, PreQC No. P-99928; **Reviewed:** 16 March, 2023, QC No.Q-99928; **Revised:** 21 March, 2023, Manuscript No. R-99928; **Published:** 28 March, 2023, DOI: 10.37421/2472-0496.2023.9.196

adults with traumatic brain injury." *J Head Trauma Rehabil* 27 (2012): 424.

3. World Medical Association. "World medical association declaration of helsinki: Ethical principles for medical research involving human subjects." JAMA 310 (2013): 2191-2194.

4. Martins, Ana Maria, Eugenia Ribeiro Valadares, Gilda Porta and Janice Coelho, et al. "Recommendations on diagnosis, treatment, and monitoring for gaucher disease." *J Pediatr* 155 (2009): S10-S18.

5. Sidransky, Ellen. "Gaucher disease: Complexity in a “simple” disorder." *Mol Genet Metab* 83 (2004): 6-15.

How to cite this article: Nermend, Kinga. “Neurological Mechanisms of ADHD Diagnosis and Therapy in School-Aged Children in Poland." *Abnorm Behav Psychol* 9 (2023): 196.