**Child Development Evidence-Based Paper Review**

Name

Institution

Course

Instructor

Date

**Child Development Evidence-Based Paper Review**

**Introduction**

Attention deficit hyperactivity disorder (ADHD refers to the neurodevelopmental disorder associated with a pattern of persistent hyperactive, impulsive, and inattention behavior (Singh et al., 2021). The pattern has a negative impact on an individual’s development and psychosocial functioning. Specific learning disorder (SLD) is also a neurodevelopmental disorder associated with limited calculation, reading, and writing skills (Crisci et al., 2021). According to Faedda et al. (2019), SLD also has biological origins, suggesting that biological factors contribute to its development. In children and adolescents with ADHD and SLD, it is essential to follow evidence-based guidelines and best practices to ensure optimal care and outcomes. Evidence-based practice (EBP) integrates the highest quality research evidence with clinical expertise, patient values, and preferences to guide healthcare decision-making (Abu-Baker et al., 2021).

National clinical guidelines serve as valuable resources for healthcare practitioners to implement EBP (Shah et al., 2019). These guidelines are based on a rigorous evaluation of research evidence to provide recommendations that enhance the quality and efficacy of care given to children and adolescents. Wolraich et al. (2019) examined the American Academy of Pediatrics’ clinical practice guidelines for the assessment, identification, and treatment of ADHD in children and teenagers. Clinicians are expected to follow the updated clinical practice guidelines and best practices to deliver quality and safe care to pediatric patients with ADHD. Similarly, Shah et al. (2019) focused on the clinical practice guidelines that pediatric clinicians should consider to assess and manage patients with SLD. These guidelines recommended the use of evidence-based approaches for the assessment, diagnosis, and management of ADHD) and SLD in children and adolescents. This paper aims to summarize an article on a child development issue, rate and grade the evidence, and examine the application, perspective, and discussion by a psychiatric mental health nurse.

**Summary**

The selected article explores the executive and intellectual capacities of children and adolescents with ADHD and SLD (Faedda et al., 2019). It highlights the importance of EBP in child and adolescent care, noting the need for a comprehensive understanding of cognitive functioning in individuals with ADHD and SLD. The purpose of the study was to investigate the distinctive cognitive profiles connected to these two disorders. The researchers conducted a comprehensive assessment that comprised tests of intellectual ability and other executive function domains, including cognitive inhibition, working memory, and cognitive flexibility (Faedda et al., 2019). In both groups, intellectual ability was measured using the “Wechsler Intelligence Scale for Children Fourth Edition (WISC-IV)” and the cognitive executive functions were measured using the NEPSY-II tool (Faedda et al., 2019, p.441).

The researchers conducted a study involving a sample of children and adolescents diagnosed with ADHD and SLD, with two groups of participants in a total of 72 children and adolescents were included (Faedda et al., 2019). 36 children and adolescents with ADHD were in the first group, while 36 children and teenagers with SLD were in the second group. The findings showed a clear distinction in cognitive functioning between the ADHD and SLD groups (Faedda et al., 2019). In terms of intellectual functioning, perceptual reasoning, verbal comprehension, and processing speed were all impaired in ADHD patients (Faedda et al., 2019). These results suggest that people with ADHD have a general intellectual deficit. The study findings also showed that children and adolescents with ADHD had deficiencies in both intellectual performance and executive functioning when compared to people who are typically developing (Faedda et al., 2019). On the other hand, while their processing speed was mostly unaffected, participants with SLD showed specific intellectual impairments, particularly in verbal comprehension and perceptual reasoning (Faedda et al., 2019).

Regarding executive functions, participants with ADHD demonstrated deficiencies in working memory, inhibition, and cognitive flexibility when compared to typically developing individuals (Faedda et al., 2019). These results imply that people with ADHD have problems with self-regulation, attention management, and cognitive flexibility. In contrast, children and adolescents with SLD did not exhibit appreciable impairments in executive processes, showing relative cognitive strengths in these domains when compared to normally developing individuals (Faedda et al., 2019). While the scores were largely lower in the intellectual functioning domain in the SLD group, the findings showed that the executive functions remained essentially unaltered (Faedda et al., 2019).

The study offers insightful information about the cognitive characteristics of children and teens with ADHD and SLD. The findings emphasize the significance of evaluating both the underlying cognitive deficits related to these illnesses as well as the behavioral symptoms (Faedda et al., 2019). The development of specialized therapies and support techniques can be influenced by an understanding of the particular cognitive strengths and weaknesses among children with ADHD and SLD (Faedda et al., 2019). These results have significant ramifications for clinical practice. When designing interventions and support for these people, professionals, particularly psychiatric mental health nurse practitioners, might be guided by the identification of distinct cognitive profiles linked to ADHD and SLD. As such, appropriate interventions can be implemented to address particular requirements by taking into account the differences in intellectual and executive functioning between the groups.

**Rate and Grade the Article**

The article’s quality and level of evidence were evaluated using the John Hopkins Nursing Evidence-Based Practice Guidelines. The tool is effective in determining the level and quality of evidence based on the research design applied and the conclusions drawn from the findings (Johns Hopkins Nursing Evidence-Based Practice, n.d.). Regarding the study design, the article used a cross-sectional design, which is categorized as Level III evidence. Cross-sectional studies involve the assessment of a specific population at a single point in time, allowing for the examination of associations and comparisons. In this study, researchers evaluated executive and intellectual functioning in children and adolescents with ADHD and SLD. Regarding the quality of evidence, the article received a Grade B score for the standard of the evidence. The standards characterize Grade B evidence as being of good quality, demonstrating consistency in results, control, having a suitable sample for the research design, drawing clear conclusions, and offering practice-oriented recommendations (Johns Hopkins Nursing Evidence-Based Practice, n.d.). This study used a variety of measures to assess the cognitive profiles of pediatric patients with ADHD and SLD. The use of multiple metrics strengthened the reliability and validity of the results.

However, the lack of interventions or long-term follow-up prevents the study from achieving a higher evidence level. In general, studies or interventions with longer follow-up periods are needed for higher evidence levels, such as Level II or Level I, to assess outcomes and demonstrate causation (Johns Hopkins Nursing Evidence-Based Practice, n.d.). Despite its drawbacks, the study advances knowledge in the field by highlighting the cognitive deficits connected to ADHD and SLD. The findings would help with clinical decision-making and intervention planning by providing insights into the distinctive cognitive profiles of these populations. Although the level of evidence is not the highest, it contributes to the body of knowledge and can guide EBP in diagnosing and treating ADHD and SLD in children and adolescents.

**Application**

When conducting assessments and formulating treatment plans, psychiatric mental health nurse practitioners can incorporate the conclusions of this research into practice by taking into account the cognitive profiles of patients with ADHD and SLD. The assessment and treatment planning process for pediatric patients with ADHD and SLD can be improved by incorporating the findings from the article by Faedda et al. (2019). The study has a Level III rating and a B grade of, and it offers insightful information about the cognitive profiles related to these disorders. Nurse practitioners should take into account the specific cognitive deficits that were identified in the study to include measures of executive and intellectual functioning in their evaluations (Bombonato et al., 2023; Faedda et al., 2019). This thorough assessment would give a more precise picture of the patient’s cognitive strengths and shortcomings regarding intellectual and executive functioning (El Wafa et al., 2020; Faedda et al., 2019).

The results can inform patient assessment and treatment planning by indicating areas of impairment that might need specific interventions (Faedda et al., 2019). For instance, interventions like executive function skill development and cognitive training can be added into a child with ADHD’s treatment plan if they exhibit deficiencies in working memory and cognitive flexibility. Similar to this, verbal comprehension and perceptual reasoning therapies can be used with a child with SLD who has specific intellectual disabilities (Singh et al., 2021; Faedda et al., 2019). As such, nurse practitioners can deliver more tailored care and therapies that target the particular cognitive needs of each child or teenager with ADHD or SLD by drawing on the findings from this study.

**Perspective**

This article has significantly impacted my view of the assessment and management of SLD and ADHD in children and teenagers. My attention was mostly on the behavioral signs related to these diseases before reading this article. The results from the study by Faedda et al. (2019) underscore the significance of considering the cognitive profiles of people with ADHD and SLD in the assessment and treatment planning. For instance, realizing that working memory and cognitive flexibility are frequently impaired in children with ADHD has increased my awareness of the necessity to include interventions that focus on these particular issues. This could include tactics like working memory enhancement through cognitive behavioral therapy or implementing scheduled activities to improve cognitive flexibility (Crisci et al., 2021; Faedda et al., 2019).

Similarly, I have changed my approach to focus on interventions that specifically target verbal comprehension and perceptual reasoning in light of the possibility that children with SLD may have distinct intellectual deficiencies in these areas (Faedda et al., 2019). These cognitive abilities can be improved by incorporating language-based interventions or visual-spatial activities. This article has improved my understanding of how ADHD and SLD are assessed and treated, highlighting the significance of treating cognitive deficits combined with behavioral symptoms to provide more individualized and successful interventions for children and adolescents with these disorders.

**Discussion**

My trusted colleague and I discussed the research results and implications in the article by Faedda et al. (2019). The study was well received by my colleague, who recognized the value of taking cognitive characteristics into account when treating SLD and ADHD. They stated that the study offered significant support for the inclusion of cognitive evaluations in the thorough examination of children and adolescents with these illnesses. The colleague also commended the researchers for conducting a comprehensive assessment that encompassed intellectual functioning and executive functions, as it provided valuable insights into the specific cognitive impairments associated with these conditions (Faedda et al., 2019). She acknowledged that the findings resonated with her own clinical observations, further validating the importance of considering cognitive factors in treatment planning.

Additionally, the discovery of certain cognitive impairments in the populations of people with ADHD and SLD caused my colleague to consider their professional approach. They acknowledged that the results will force a shift in their care approach, especially with regard to implementing personalized interventions to address the unique cognitive deficiencies found in each person. They understood the significance of matching treatment plans to the distinct cognitive profiles of their patients and held that doing so would increase the efficacy and personalization of the care given. Overall, the conversation made my colleague more conscious of the importance of cognitive functioning in the management of SLD and ADHD, and she made a commitment to incorporate these discoveries into her practice to enhance patient outcomes.

**Conclusion**

The article selected highlights the importance of considering cognitive profiles in children and adolescents diagnosed with ADHD and SLD. The study provides valuable insights into the distinct cognitive impairments associated with these disorders and emphasizes the need for a comprehensive assessment that encompasses intellectual functioning and executive functions. The findings suggest that individuals with ADHD exhibit deficits in both intellectual performance and executive functioning, while those with SLD show specific intellectual impairments but relatively intact executive functions. Overall, the article serves as a valuable resource for healthcare practitioners in enhancing their understanding and management of ADHD and SLD in children and adolescents.

References

“Johns Hopkins Nursing Evidence-Based Practice.” (n.d.). <https://www.hopkinsmedicine.org/evidence-based-practice/_docs/appendix_c_evidence_level_quality_guide.pdf>

Abu-Baker, N. N., AbuAlrub, S., Obeidat, R. F., & Assmairan, K. (2021). Evidence-based practice beliefs and implementations: A cross-sectional study among undergraduate nursing students. *BMC Nursing*, *20*(1), 1-8. <https://doi.org/10.1186/s12912-020-00522-x>

Bombonato, C., Del Lucchese, B., Ruffini, C., Di Lieto, M. C., Brovedani, P., Sgandurra, G., ... & Pecini, C. (2023). Far transfer effects of trainings on executive functions in neurodevelopmental disorders: A systematic review and metanalysis. *Neuropsychology Review*, 1-36. <https://doi.org/10.1007/s11065-022-09574-z>

Crisci, G., Caviola, S., Cardillo, R., & Mammarella, I. C. (2021). Executive functions in neurodevelopmental disorders: Comorbidity overlaps between attention deficit and hyperactivity disorder and specific learning disorders. *Frontiers in Human Neuroscience*, *15*, 594234. <https://doi.org/10.3389/fnhum.2021.594234>

El Wafa, H. E. A., Ghobashy, S. A. E. L., & Hamza, A. M. (2020). A comparative study of executive functions among children with attention deficit and hyperactivity disorder and those with learning disabilities. *Middle East Current Psychiatry*, *27*(1), 1-9. <https://doi.org/10.1186/s43045-020-00071-8>

Faedda, N., Romani, M., Rossetti, S., Vigliante, M., Pezzuti, L., Cardona, F., & Guidetti, V. (2019). Intellectual functioning and executive functions in children and adolescents with attention deficit hyperactivity disorder (ADHD) and specific learning disorder (SLD). *Scandinavian Journal of Psychology*, *60*(5), 440–446. <https://doi.org/10.1111/sjop.12562>

Shah, H. R., Sagar, J. K. V., Somaiya, M. P., & Nagpal, J. K. (2019). Clinical practice guidelines on assessment and management of specific learning disorders. *Indian Journal of Psychiatry*, *61*(Suppl 2), 211–225. <https://doi.org/10.4103/psychiatry.IndianJPsychiatry_564_18>

Singh, J., Arun, P., & Bajaj, M. K. (2021). Theory of mind and executive functions in children with attention deficit hyperactivity disorder and specific learning disorder. *Indian Journal of Psychological Medicine*, *43*(5), 392-398. <https://doi.org/10.1177/0253717621999807>

Wolraich, M. L., Hagan, J. F., Jr, Allan, C., Chan, E., Davison, D., Earls, M., Evans, S. W., Flinn, S. K., Froehlich, T., Frost, J., Holbrook, J. R., Lehmann, C. U., Lessin, H. R., Okechukwu, K., Pierce, K. L., Winner, J. D., Zurhellen, W., & Subcommittee on Children and Adolescents with Attention-Deficit/Hyperactive Disorder (2019). Clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents. *Pediatrics*, *144*(4), e20192528. <https://doi.org/10.1542/peds.2019-2528>