

# Book Review: Working Memory and Clinical Developmental Disorders. Theories, Debates, and Interventions. 1st Edition.

Book Review Volume 3 Issue 3- 2022

### **Author Details**

Eid AK\*

Independent Scientific Researcher, Egypt

\*Corresponding author

Ahmed Kamal Eid, Ph.D. in Cognitive Psychology, Independent Scientific Researcher, Egypt

**Article History** 

Received: December 2, 2022 Accepted: December 12, 2022 Published: December 13, 2022

## **Book Review**

This first edition of the book brings (32) of international experts specialized in applying and developing understanding of working memory in the field of neurodevelopmental disorder, neurocognitive disorders, and depressive disorders. This comprehensive volume consists of (227) pages, and (13) chapters with epilogue, written by Drew, that offers insight into the real world impact of living with a neurodevelopmental disorder, he presents this epilogue depending on his experience as a practicing clinician.

The volume starts with chapter (1) which presents an introduction by the editor Tracy Packiam Alloway, in this chapter Alloway focuses on the definition of working memory, and its components, the chapter also presents a quick review for the rest (12) chapters and epilogue.



# Each chapter from the rest includes the following topics:

- 1. Description of the disorder following the "Diagnostic and Statistical Manual of Mental Disorders", 5th edition (DSM-5) criteria.
- 2. Working memory (WM) and related executive functions (EF) deficits.

- 3. Neurological profile
- 4. Impact of disorder in daily functioning such as academic, social, etc.
- 5. Current debate topics related to this disorder
- 6. Medication or interventions.

Each chapter is concerned with one disorder, but these chapters are classified into (3) main sections depending on the publication of the DSM-5 in 2013 that provided the basis for the chapter structure in this edited book, sections include:

# Neurodevelopmental Disorders

This section covers intellectual disability in chapter (2) by Henry, Messer & Poloczek, by presenting a good review of this neurodevelopmental disorder that starts in childhood and affects adaptive functions, academic attainment, social skills, and daily functioning, the authors also review the efficacy of interventions on these skills. In chapter (3) Montgomery, Evans, and Gillam, focus on specific language impairments (SLI) that include both receptive and expressive language disorders, the authors present working memory and executive functions profiles of SLI. Chapter (4) by Williams, covers Autism spectrum disorder (ASD), and discusses in detail different levels of symptoms severity that includes autistic disorder, Asperger's disorder, Childhood disintegrative disorder, and pervasive developmental disorder not otherwise specified, Williams also outlines the visuospatial and verbal working memory profile of Autism spectrum disorder (ASD), he also reviews the efficacy of different interventions methods. In chapter (5) by Rapport, the author reviews the working memory, and executive functions of individuals with attention deficit hyperactivity disorders (ADHD), specific learning disorders (SLD), such as learning deficits in reading, writing, and math are reviewed by Swanson and Kong in the chapter (6). chapter (7) by Berninger and Swanson focus on specific learning disorder in written language, the chapter covers assessment and differential diagnosis and intervention,



and they also discusses the role of working memory components in the language learning mechanism. Chapter (8) by Mazzocco, Chan, and Prager reviews the debate surrounding the definition of specific learning disabilities in mathematics and discuss the role of working memory in mathematical thinking and the promising interventions especially early intervention. In chapter (9) prepared by Maclean, Duvall, and Lowe, they focus on children with low birth weight, they report that children with low birth weight show executive deficits and difficulties in social interaction due to the role of working memory in processing social cues. Chapter (10) by Rodak and Alloway focuses on developmental coordination disorder (DCD), they discuss previous debates that have centered on the comorbidity of attention and motor deficits. Individuals who named unspecified neurodevelopmental disorder (UNDD) are experiencing symptoms of a neurodevelopmental disorder, but do not meet the full diagnostic criteria for one of the neurodevelopmental disorders, Filder, Daunhauer, Will and Schworer present a good review of the nature of working memory for this disorder in the chapter (11).

# **Neurocognitive Disorders**

In chapter (12) by Kayser, Ballard, and D'Espoito, the authors discuss traumatic brain injury (TBI), which is an alternation in brain function, they review the working memory profile for TBI patients and discuss the effect of medications and cognitive training.

### **Depressive Disorders**

In chapter (13) Synder and Hankin perform a systematic meta-analysis for (10) studies and review links between depression and working memory in children and adolescents, they report that youth with depressive disorders performed significantly worse than their normal peers.

In conclusion, this book is an excellent reference that should be readily handy on the shelf of every researcher in cognitive psychology, and clinical developmental disorders, in hands of experienced clinicians, psychiatrists, and instructors in fields related to the title of the book.

**Edited by:** Tracy P. Alloway, Routldege, Taylor & Français Group, London/New York, 2018, ISBN: 978-1-138-23649-3

**Review by:** Ahmed Kamal Eid, Ph.D. in Cognitive Psychology, Independent Scientific Researcher