

Essentials

of **ADHD Assessment for Children and Adolescents**

- Detailed guidance on evaluation and differential diagnosis of ADHD
- Expert advice on selecting, interpreting, and integrating evaluation components
- Conveniently formatted for rapid reference

Elizabeth P. Sparrow

Drew Erhardt

Alan S. Kaufman & Nadeen L. Kaufman, *Series Editors*

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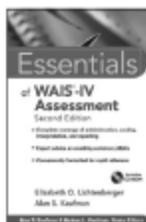
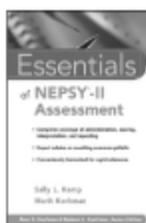
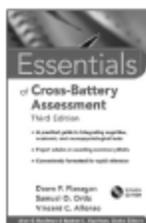
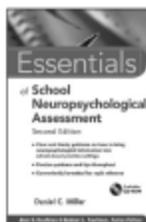
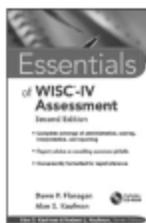
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Library of Congress Cataloging-in-Publication Data:

Sparrow, Elizabeth P.

Essentials of ADHD assessment for children and adolescents/Elizabeth P. Sparrow, Drew Erhardt.

1 online resource.—(Essentials of psychological assessment; 97)

Includes bibliographical references and index.

Description based on print version record and CIP data provided by publisher; resource not viewed.

ISBN 978-1-118-41894-9 (pdf)—ISBN 978-1-118-41623-5 (epub)—ISBN 978-1-118-11270-0 (pbk.: acid-free paper)

1. Attention-deficit-disordered children. 2. Attention-deficit disorder in adolescence. 3. Attention-deficit-disordered children—Psychological testing. 4. Attention-deficit disorder in adolescence—Diagnosis. I. Erhardt, Drew. II. Title.

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Dedication

*To my family and friends—thank you for always
understanding—ES*

To Selma and Warren, with love and appreciation—DE

*To C. Keith Conners, our valued mentor, colleague, and
friend—DE & ES*

Foreword

This new book by Elizabeth Sparrow and Drew Erhardt addresses important needs during this time of rapid change in our understanding of ADHD. The American Psychiatric Association continues to “tweak” the DSM criteria for recognizing ADHD. Professionals need to be aware of these changes and understand their impact on clinical practice in a variety of settings. The knowledge required to correctly assess ADHD goes well beyond the general guidelines in the DSM manual. The purpose of this book is to provide that knowledge.

With prevalence estimates of ADHD already approaching nine to twenty percent of the child population, it seems that ADHD has been diagnosed too liberally, in a slap-dash fashion. There are an ever-increasing number of children and adolescents who are misdiagnosed, and therefore mistreated, with dire consequences such as drug diversion, emergency room visits, and suicide. Conversely, there are children and adolescents who are not correctly treated due to failure to recognize ADHD when it is present. The thorough, comprehensive guidelines in this book will help prevent the common occurrences of under- and over-diagnosis of ADHD.

Although often ignored, there is a vast array of practical clinical issues relevant to the assessment of this syndrome (e.g., dealing with discrepant data, differential diagnosis, comorbidity). This book will heighten mental health professionals' awareness of these issues and provide the tools necessary to address them successfully. A clear, concise guide for conducting state-of-the-art ADHD evaluations, this book is a valuable resource for

professionals in training, for those working in schools, and for those seeking to hone their ADHD assessment skills.

I had the good fortune to mentor Drs. Sparrow and Erhardt at the beginning of their careers and continue to collaborate with them as colleagues. In this authoritative yet highly accessible book, they combine their extensive experience in clinical assessment and treatment with their backgrounds in teaching, research, and test development.

The fundamental message of this book is the importance of a ***comprehensive*** assessment of ADHD and related disorders. This means that the assessment must include multiple sources of information and multiple methods. There is no single test or method for this task, and appropriate selection of the tasks and sources of information is the *sine qua non* of a good assessment.

This book offers a truly comprehensive *and* evidence-based approach to assessment, without fluff, surplus speculation, or unsupported opinion. I highly applaud this significant new work by two excellent, well-informed authors.

C. Keith Conners, Ph.D.

Professor Emeritus

Duke University

Department of Psychiatry & Behavioral Sciences

Series Preface

In the *Essentials of Psychological Assessment* series, we have attempted to provide the reader with books that will deliver key practical information in the most efficient and accessible style. The series features instruments in a variety of domains, such as cognition, personality, education, and neuropsychology. For the experienced clinician, books in the series offer a concise yet thorough way to master utilization of the continuously evolving supply of new and revised instruments, as well as a convenient method for keeping up to date on the tried-and-true measures. The novice will find here a prioritized assembly of all the information and techniques that must be at one's fingertips to begin the complicated process of individual psychological diagnosis.

Wherever feasible, visual shortcuts to highlight key points are utilized alongside systematic, step-by-step guidelines. Chapters are focused and succinct. Topics are targeted for an easy understanding of the essentials of administration, scoring, interpretation, and clinical application. Theory and research are continually woven into the fabric of each book, but always to enhance clinical inference, never to sidetrack or overwhelm. We have long been advocates of “intelligent” testing—the notion that a profile of test scores is meaningless unless it is brought to life by the clinical observations and astute detective work of knowledgeable examiners. Test profiles must be used to make a difference in the child's or adult's life, or why bother to test? We want this series to help our readers become the best intelligent testers they can be.

In *Essentials of ADHD Assessment in Children and Adolescents*, the authors provide a clear and informative

road map for practitioners seeking to conduct state-of-the-art assessments for one of the most common disorders of childhood. Drawing upon years of experience in conducting diagnostic evaluations of ADHD following best-practice standards, they emphasize the importance of a comprehensive evaluation, incorporating data from multiple sources, using multiple methods, and interpreting findings within the appropriate developmental and cultural contexts. The major components of an ADHD evaluation (interviews, rating scales, cognitive testing, observation, record review) are reviewed in detail. Expert guidance is provided for resolving the most common challenges in assessing ADHD, including differentiating symptoms from normal development, dealing with discrepant data, differential diagnosis, and considering comorbidity. The latest scholarly literature is integrated with the authors' practical recommendations to provide clinicians with the concepts and tools needed for effective and accurate assessment of ADHD.

*Alan S. Kaufman, PhD, and Nadeen L. Kaufman, Ed.D,
Series Editors*

Yale Child Study Center, Yale University School of
Medicine

Preface

Attention-deficit/hyperactivity disorder (ADHD) is one of the most common childhood disorders in the United States (Merikangas et al., 2010), and one of the diagnoses parents worry about the most (Garbutt et al., 2012). As a result, clinicians frequently receive requests to evaluate children for possible ADHD. Although there are diagnostic criteria for ADHD (see [Chapter 2](#)) and several practice guidelines delineating appropriate assessment components (see [Chapter 3](#)), it can be difficult to bridge the gap between these aspirational guides and the nitty-gritty of actual clinical work. Even seasoned professionals can fall prey to the lure of drawing conclusions based on first impressions and incomplete data. Misdiagnosis, whether over- or under-identification, has serious consequences for children, including inappropriate or denied treatment, prolonged distress, misuse of resources (time, energy, money), and development of secondary problems. Unfortunately, there is no definitive assessment tool, no neurological signature, no blood test for ADHD. There are certainly measures that improve the accuracy of ADHD diagnosis, but none of these are sufficient in isolation.

We believe that ADHD is a widely misunderstood disorder, and that a careful and comprehensive evaluation is the *only* way to ensure that a child is accurately diagnosed so that she can receive appropriate services. As such, we have prepared this book as an expert guide for the assessment of ADHD. We blend diagnostic guidelines with research findings, and add clinical tips from our years of thinking about ADHD in individual evaluations, scientific studies, and rating scale development.

Organization of the Book

Just as an evaluation often starts with a developmental history, this book begins with a brief history of ADHD to provide you with a context for understanding the disorder. [Chapter 1](#) then describes the core diagnostic features of ADHD—inattention, hyperactivity, and impulsivity—as well as non-diagnostic features associated with the disorder. Disorders that tend to co-occur with ADHD are summarized before the chapter concludes with discussions of etiology and epidemiology.

In [Chapter 2](#), we introduce diagnostic criteria for ADHD, based on the *Diagnostic and Statistical Manual of Mental Disorders* (DSM). We provide information for clinicians familiar with the DSM-IV-TR (American Psychiatric Association, 2000) who are transitioning to using the DSM-5 (American Psychiatric Association, 2013). If one regards the DSM criteria as the “laws” for diagnosing ADHD, then [Chapter 3](#) elaborates on the “spirit” of ADHD assessment, including the essential goals of inclusion and exclusion as well as a number of guiding principles. [Chapter 4](#) examines the major components of a comprehensive evaluation for ADHD, including record review, interviews, clinical observations, rating scales, and cognitive testing. For each component, we discuss what information to obtain, whom to ask, and when to implement it. We provide examples of tests that represent each of these assessment components.

[Chapter 5](#) has two aims: (1) to guide your integration of data obtained from the assessment, and (2) to help you apply the essential concepts discussed in this book. In addition to elaborating on key ways to discriminate what *is* ADHD from what is *not*, the chapter walks you through a number of diagnostic challenges likely to arise in your clinical work. Issues like overlapping symptoms, differential diagnosis, and comorbidity are addressed. For each of

these challenges, we provide information about how to compare the possibilities and reach a diagnostic determination. We share advice on resolving the inevitable discrepancies that occur as part of a comprehensive assessment for ADHD. [Chapter 5](#) closes with the reminder that assessment does not end once you assign a diagnosis (or diagnoses), and offers some suggestions for treatment planning and providing feedback. The book concludes in [Chapter 6](#) with three case studies of children referred for evaluation of ADHD.

Focus of the Book

This book focuses on the assessment of ADHD in children and adolescents. Thus, with occasional exceptions, content pertaining to ADHD in adults, ADHD in preschoolers, interventions for ADHD, general clinical practice, and general child psychopathology is excluded. Additional resources are noted in the text and annotated bibliography for readers interested in learning more about these topics.

Intended Audience

Our intended audience is licensed clinicians as well as those still in training. Professionals who do not have a background in child psychopathology and development will need additional information to responsibly apply the principles outlined in this book within a developmental framework. Researchers, educators, and the general public may find some of what we discuss informative; however, they are reminded that this book cannot substitute for clinical training and supervision. The book is intended to supplement (not replace) the DSM-5; indeed, we urge clinicians to review and consult the DSM on a regular basis.

Stylistic Conventions

Throughout the book, we strive to be clear and straightforward. When there are essential points, we emphasize them with “Don't Forget,” “Caution,” and “Rapid Reference” boxes. Special topics are discussed as they arise.

Out of necessity, we have adopted a few stylistic conventions used throughout the book:

- The terms *child* and *children* are used to describe school-aged children ages 6 through 18 years, rather than repeatedly specifying “children and adolescents.” The decision to split “children” (16 years and younger) from “older adolescents and adults” (17 years and older) for DSM-5 diagnosis of ADHD varies from the typical division of children from adults at 18 years old. Thus, we remind you of the distinction when relevant.
- ADHD occurs in both boys and girls, so we alternate *male and female pronouns* with no intended bias (other than when discussing gender-specific information).
- The term *parent* represents any relevant parental or caretaking figure, and should not be read as exclusively meaning “biologic parent.”
- Because the American *Psychiatric* Association and the American *Psychological* Association both use the acronym *APA*, we spell out the relevant organization name each time to avoid confusion.

Summary

By gathering comprehensive data from multiple sources with multiple methods, you can establish the child's history of symptoms, current presentation, and levels of

impairment. These data will support your hypothesis testing as you evaluate the presence of ADHD and consider other explanations for the child's difficulties. Although the core features of ADHD are behaviors that occur to some extent in most children, we believe that conducting the type of thorough assessment described here will enable you to successfully differentiate these normal variants from the symptoms of ADHD.

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Acknowledgments

This book would not have been possible without the support of our colleagues and the fantastic Wiley team. In particular, we appreciate Patsy Collins, who generously shared her report format and clinical data for [Chapter 6](#). Thank you also to Leigh Kokenes for her helpful input on sequencing assessment components within a public school setting ([Chapter 4](#)). The Wiley team, including Marquita Flemming, Sherry Wasserman, Rose Sullivan, and Suzanne Ingrao, provided invaluable support and counsel. We are also indebted to Peggy Alexander and Isabel Pratt for their receptivity to our proposal and for encouraging us to write this book. We value Alan and Nadeen Kaufman's insightful questions that helped focus and shape the final product. We appreciate the ongoing support provided by North Carolina State and Pepperdine Universities. Finally, we are grateful for the lessons learned and enriching experiences provided by the children and families with whom we have had the pleasure of working.

One

Understanding ADHD

Attention-deficit/hyperactivity disorder (ADHD) is a common neurodevelopmental condition marked by developmentally inappropriate levels of inattention, and/or impulsivity and hyperactivity that often significantly impair functioning across multiple domains and place children at elevated risk for a variety of adverse outcomes. It is important for clinicians who work with youth to possess a basic understanding of ADHD as it is one of the most frequently diagnosed disorders of childhood and among the most common reasons for child mental health referrals in both community and school settings. However, ADHD is frequently misunderstood even by mental health professionals. This is due in part to the confusing array of labels by which it is known, misinformation disseminated through the popular press, social media, and on the web, and to the complex, heterogeneous, and highly variable nature of the disorder itself.

Fortunately, ADHD has been subject to an enormous amount of scientific research (viz. more than 10,000 journal articles and over 100 textbooks) (Barkley, 2013). As a result, we know more about ADHD than any other mental health disorder beginning in childhood. The purpose of this chapter is to provide a brief but informative overview of ADHD, including current scientific knowledge. (Numerous resources exist for readers interested in more detailed descriptions of ADHD; see, for example, Barkley, 2006; DuPaul & Kern, 2011; Evans & Hoza, 2011; Goldstein & DeVries, 2011; Hinshaw & Scheffler, 2013; Jensen & Cooper, 2002). After a short summary of the history of ADHD, the chapter addresses core and associated features of the disorder, common comorbidities, etiology, and epidemiology. Although this book focuses on ADHD in children and adolescents, there is a growing body of literature about ADHD in adults (e.g., see Barkley, Murphy, & Fischer, 2008; Goldstein & Ellison, 2002; Surman, 2013; Weiss, Hechtman, & Weiss, 1999).

Historical Perspective

ADHD has a long and somewhat controversial history (historical landmarks are summarized in Rapid Reference 1.1; for detailed accounts, see Antshel & Barkley, 2011; Taylor, 2011). Early clinical descriptions of the disorder, dating back over 200 years, came from physicians on the basis of children seen in their practices. These took numerous forms, ranging from book chapters (Weikard in 1775; see Barkley & Peters, 2012) and lengthy tomes (Crichton, 1798, 2008), to lectures (Still, 1902) and doggerel poems (Hoffmann's verses, "Fidgety Philip" and "Johnny Head-In-Air"; Hoffmann, 1844; English edition in 1848). Although the inclusion of inattentive,

hyperactive, and impulsive symptoms has been relatively constant across clinical and scientific descriptions of the disorder over time, conceptualizations have evolved considerably with respect to presumed defining features, diagnostic labels, etiologic theories, and practice standards for assessment and treatment.

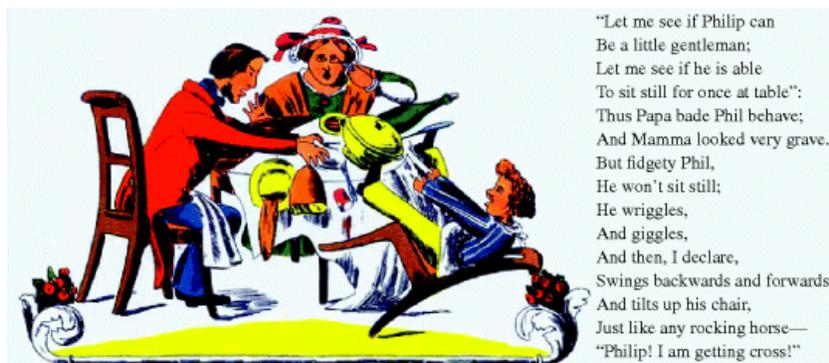


Figure 1.1 Excerpt from “The Story of Fidgety Philip,” a cautionary poem about hyperactivity from the 1840s

Source: Hoffmann, 1844.

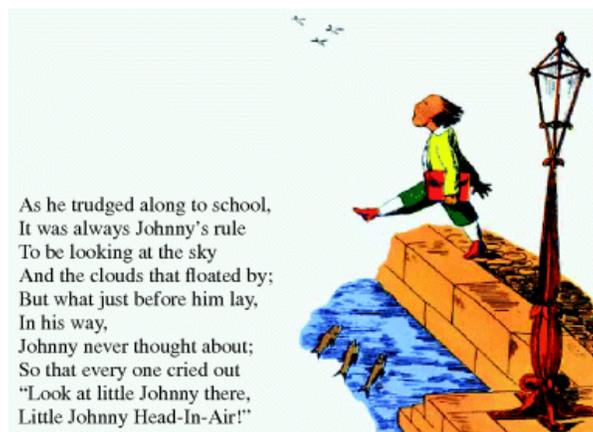


Figure 1.2 Excerpt from “The Story of Johnny Head-in-Air,” an 1840s poem about pervasive inattention

Source: Hoffmann, 1844.

Early descriptions of ADHD often included inattention, but focused on hyperactivity as the core feature of the disorder. However, studies from Virginia Douglas' lab in the late 1960s and 1970s firmly reinstated the importance of deficits in sustained attention and impulse control in descriptions of the syndrome (Douglas, 1972, 1976). Influenced largely by this research, deficits in sustained attention rather than overactivity came to be viewed as central to the disorder by the early 1980s (American Psychiatric Association, 1980). Over recent decades, a neuroscience perspective has been applied to examining difficulties with motivation, response to reinforcement, inhibition, and executive functions as possible

core problems underlying ADHD (Barkley, 1997; Brown, 2013; Castellanos, Sonuga-Barke, Milham, & Tannock, 2006; Nigg, 2013a; Nigg & Casey, 2005; Sagvolden, Aase, Zeiner, & Berger, 1998; Schachar, Tannock, & Logan, 1993).

Similarly, presumptions about the causes of ADHD have changed considerably over time, reflecting both research findings and prevailing scientific paradigms used to explain cognitive and behavioral functioning (Conners & Erhardt, 1998). Early views centering on defective “moral control” and presumed brain damage along with later environmental theories highlighting diet and child-rearing gradually gave way to more biologically based and data-driven explanations. At various times, research investigations have focused on psychophysiology, motivational deficits, neurotransmitter deficiencies, neuropsychological functioning, and genetic factors. More recently, studies employing increasingly rigorous and sophisticated methods (including brain imaging techniques) have elucidated potential structural and functional neurological bases for ADHD and illuminated how genetically based risk might interact with or be triggered by various environmental factors (e.g., pre- or post-natal environmental toxins such as alcohol, nicotine, and pesticides) to culminate in the self-regulation problems characteristic of ADHD (see the section on etiology below).