



# Essentials

## of **Conners Behavior Assessments**<sup>TM</sup>

- Complete coverage of administration, scoring, interpretation, and reporting
- Expert advice on avoiding common pitfalls
- Conveniently formatted for rapid reference

**Elizabeth P. Sparrow**

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



# Essentials

## of **Conners Behavior Assessments**<sup>™</sup>

- Complete coverage of administration, scoring, interpretation, and reporting
- Expert advice on avoiding common pitfalls
- Conveniently formatted for rapid reference

**Elizabeth P. Sparrow**

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

# Table of Contents

*Essentials of Psychological Assessment Series*

*Title Page*

*Copyright Page*

*Dedication*

*Series Preface*

One - OVERVIEW

USE OF RATING SCALES

HISTORY AND DEVELOPMENT OF THE CONNERS

ASSESSMENTS

CONNERS 3rd EDITION (CONNERS 3)

CONNERS COMPREHENSIVE BEHAVIOR RATING SCALES  
(CONNERS CBRS)

CONNERS EARLY CHILDHOOD (CONNERS EC)

STANDARDIZATION AND PSYCHOMETRIC PROPERTIES

COMPREHENSIVE REFERENCES

Two - ADMINISTRATION OF THE CONNERS ASSESSMENTS

PRACTICAL DETAILS: PERSON, MATERIALS, TIME, AND  
PLACE

SELECTING THE RIGHT FORM

INTERACTING WITH THE RATER

MODIFIED ADMINISTRATION

Three - SCORING THE CONNERS ASSESSMENTS

OPTIONS

PRINCIPLES AND SCORES

## Four - INTERPRETATION OF THE CONNERS ASSESSMENTS

INTERPRETATION ELEMENTS  
INTEGRATING RESULTS FROM THE CONNERS  
ASSESSMENTS

## Five - STRENGTHS AND WEAKNESSES OF THE CONNERS ASSESSMENTS

OVERVIEW OF STRENGTHS AND WEAKNESSES

## Six - CLINICAL APPLICATIONS OF THE CONNERS ASSESSMENTS

STRUCTURAL ELEMENTS

DSM

ICD

IDEA

APPLICATIONS

CLINICAL GROUPS

ANCOVAS and DFAS

## Seven - ILLUSTRATIVE CASE REPORTS

NEUROPSYCHOLOGICAL REPORT

TEST RESULTS AND INTERPRETATION

SUMMARY OF RESULTS

DIAGNOSTIC IMPRESSIONS

RECOMMENDATIONS

NEUROPSYCHOLOGICAL REPORT

TEST RESULTS AND OBSERVATIONS

SUMMARY OF RESULTS

OVERALL IMPRESSIONS

RECOMMENDATIONS

[NEUROPSYCHOLOGICAL REPORT](#)  
[TEST RESULTS AND OBSERVATIONS](#)  
[OVERALL IMPRESSIONS](#)  
[RECOMMENDATIONS](#)

[Appendix A - ACRONYMS AND ABBREVIATIONS USED IN CONNERS ASSESSMENTS](#)

[Appendix B - CALCULATING A CONFIDENCE INTERVAL \(CI\) FOR CONNERS ASSESSMENTS](#)

[Appendix C - SAMPLE TABLES FOR REPORTS](#)

[Appendix D - CALCULATING CONNERS CI INDICATOR SCORES FROM FULL-LENGTH CONNERS ...](#)

[References](#)

[Annotated Bibliography](#)

[About the Author](#)

[About the Contributors](#)

[INDEX](#)

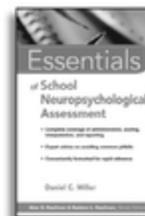
# Essentials

## of Psychological Assessment Series

Everything you need to know to administer, score, and interpret the major psychological tests.

I'd like to order the following *Essentials of Psychological Assessment*:

- WAIS®-IV Assessment (w/CD-ROM) / 978-0-471-73846-6 • \$46.95
- WJ III™ Cognitive Abilities Assessment / 978-0-471-34466-7 • \$36.95
- Cross-Battery Assessment, Second Edition (w/CD-ROM) / 978-0-471-75771-9 • \$46.95
- Nonverbal Assessment / 978-0-471-38318-5 • \$36.95
- PAT® Assessment / 978-0-471-08463-1 • \$36.95
- CAS Assessment / 978-0-471-29015-5 • \$36.95
- MMPI-2™ Assessment / 978-0-471-34533-6 • \$36.95
- Myers-Briggs Type Indicator® Assessment, Second Edition / 978-0-470-34390-6 • \$36.95
- Rorschach® Assessment / 978-0-471-33146-9 • \$36.95
- Millon™ Inventories Assessment, Third Edition / 978-0-470-16862-2 • \$36.95
- TAT and Other Storytelling Assessments, Second Edition / 978-0-470-28192-5 • \$36.95
- MMPI-A™ Assessment / 978-0-471-39815-8 • \$36.95
- NEPSY®-II Assessment / 978-0-470-43691-2 • \$36.95
- Neuropsychological Assessment, Second Edition / 978-0-470-43747-6 • \$36.95
- WJ III™ Tests of Achievement Assessment / 978-0-471-33059-2 • \$36.95
- Evidence-Based Academic Interventions / 978-0-470-20632-4 • \$36.95
- WRAML2 and TOMAL-2 Assessment / 978-0-470-17911-6 • \$36.95
- WMS®-III Assessment / 978-0-471-38080-1 • \$36.95
- Behavioral Assessment / 978-0-471-35367-6 • \$36.95
- Forensic Psychological Assessment, Second Edition / 978-0-470-55168-4 • \$36.95
- Bayley Scales of Infant Development II Assessment / 978-0-471-32651-9 • \$36.95
- Career Interest Assessment / 978-0-471-35365-2 • \$36.95
- WPPSI™-III Assessment / 978-0-471-28895-4 • \$36.95
- 16PF® Assessment / 978-0-471-23424-1 • \$36.95
- Assessment Report Writing / 978-0-471-39487-7 • \$36.95
- Stanford-Binet Intelligence Scales (SR5) Assessment / 978-0-471-22404-4 • \$36.95
- WISC®-IV Assessment, Second Edition (w/CD-ROM) / 978-0-470-18915-3 • \$46.95
- KABC-II Assessment / 978-0-471-66733-9 • \$36.95
- WIAT®-III and KTEA-II Assessment (w/CD-ROM) / 978-0-470-55169-1 • \$46.95
- Processing Assessment / 978-0-471-71925-0 • \$36.95
- School Neuropsychological Assessment / 978-0-471-78372-5 • \$36.95
- Cognitive Assessment with KAIT & Other Kaufman Measures / 978-0-471-38317-8 • \$36.95
- Assessment with Brief Intelligence Tests / 978-0-471-26412-5 • \$36.95
- Creativity Assessment / 978-0-470-13742-0 • \$36.95
- WNV™ Assessment / 978-0-470-28467-4 • \$36.95
- DAS-II® Assessment (w/CD-ROM) / 978-0-470-22520-2 • \$46.95
- Executive Function Assessment / 978-0-470-42202-1 • \$36.95
- Conners Behavior Assessments™ / 978-0-470-34633-4 • \$36.95
- Temperament Assessment / 978-0-470-44447-4 • \$36.95
- Response to Intervention / 978-0-470-56663-3 • \$36.95



Please complete the order form on the back.

To order by phone, call toll free 1-877-762-2974

To order online: [www.wiley.com/essentials](http://www.wiley.com/essentials)

To order by mail: refer to order form on next page



# Essentials

## of Psychological Assessment Series

### ORDER FORM

Please send this order form with your payment (credit card or check) to:  
John Wiley & Sons, Attn: J. Knott, 111 River Street, Hoboken, NJ 07030-5774

QUANTITY	TITLE	ISBN	PRICE
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Shipping Charges:	Surface	2-Day	1-Day
First item	\$5.00	\$10.50	\$17.50
Each additional item	\$3.00	\$3.00	\$4.00

For orders greater than 15 items,  
please contact Customer Care at 1-877-762-2974.

ORDER AMOUNT	_____
SHIPPING CHARGES	_____
SALES TAX	_____
TOTAL ENCLOSED	_____

NAME \_\_\_\_\_

AFFILIATION \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY/STATE/ZIP \_\_\_\_\_

TELEPHONE \_\_\_\_\_

EMAIL \_\_\_\_\_

Please add me to your e-mailing list

**PAYMENT METHOD:**

Check/Money Order    Visa    Mastercard    AmEx

Card Number \_\_\_\_\_ Exp. Date \_\_\_\_\_

Cardholder Name (Please print) \_\_\_\_\_

Signature \_\_\_\_\_

Make checks payable to John Wiley & Sons. Credit card orders invalid if not signed.  
All orders subject to credit approval. • Prices subject to change.

To order by phone, call toll free 1-877-762-2974  
To order online: [www.wiley.com/essentials](http://www.wiley.com/essentials)



# Essentials of Psychological Assessment Series

Series Editors, Alan S.Kaufman and Nadeen L.Kaufman

*Essentials of 16 PF<sup>®</sup> Assessment* by Heather E.-P. Cattell and James M. Schuerger

*Essentials of Assessment Report Writing* by Elizabeth O.Lichtenberger, Nancy Mather, Nadeen L.Kaufman, and Alan S.Kaufman

*Essentials of Assessment with Brief Intelligence Tests* by Susan R. Homack and Cecil R. Reynolds

*Essentials of Bayley Scales of Infant Development-II Assessment* by Maureen M. Black and Kathleen Matula

*Essentials of Behavioral Assessment* by Michael C.Ramsay, Cecil R. Reynolds, and R. W.

Kamphaus

*Essentials of Career Interest Assessment* by Jeffrey P.Prince and Lisa J. Heiser

*Essentials of CAS Assessment* by Jack A. Naglieri

*Essentials of Cognitive Assessment with KAIT and Other*

*Kaufman Measures* by Elizabeth O. Lichtenberger, Debra Broadbooks, and Alan S. Kaufman

*Essentials of Conners Behavior Assessments<sup>TM</sup>* by Elizabeth P. Sparrow

Essentials of Creativity Assessment by James C. Kaufman, Jonathan A. Plucker, and John Baer

Essentials of Cross-Battery Assessment, Second Edition by Dawn P. Flanagan, Samuel O. Ortiz, and Vincent C. Alfonso

*Essentials of DAS-II* <sup>®</sup> *Assessment* by Ron Dumont, John O. Willis, and Colin D. Elliot

*Essentials of Evidence-Based Academic Interventions* by Barbara J. Wendling and Nancy Mather

Essentials of Forensic Psychological Assessment, Second Edition by Marc J. Ackerman

*Essentials of Individual Achievement Assessment* by Douglas K. Smith

*Essentials of KABC-II Assessment.* by Alan S. Kaufman, Elizabeth O. Lichtenberger,

Elaine Fletcher-Janzen, and Nadeen L. Kaufman

*Essentials of Millon*<sup>™</sup> *Inventories Assessment, Third Edition* by Stephen Strack

*Essentials of MMPI-A*<sup>™</sup> *Assessment* by Robert P. Archer and Radhika Krishnamurthy

*Essentials of MMPI-2*<sup>™</sup> *Assessment* by David S. Nichols

*Essentials of Myers-Briggs Type Indicator* <sup>®</sup> *Assessment, Second Edition* by Naomi Quenk

*Essentials of NEPSY* <sup>®</sup> *-II Assessment* by Sally L. Kemp and Marit Korkman

*Essentials of Neuropsychological Assessment, Second Edition* by Nancy Hebben and William Milberg

Essentials of Nonverbal Assessment by Steve McCallum, Bruce Bracken, and John

Wasserman

*Essentials of PAI*® *Assessment* by Leslie C. Morey

*Essentials of Processing Assessment* by Milton J. Dehn

*Essentials of Response to Intervention* by Amanda M. VanDerHeyden and Matthew K. Burns

*Essentials of Rorschach*® *Assessment* by Tara Rose, Nancy Kaser-Boyd, and Michael P. Maloney

*Essentials of School Neuropsychological Assessment* by Daniel C. Miller

*Essentials of Stanford-Binet Intelligence Scales (SB5) Assessment* by Gale H. Roid and R. Andrew Barram

*Essentials of TAT and Other Storytelling Assessments, Second Edition* by Hedwig Teglasi

*Essentials of Temperament Assessment* by Diana Joyce

*Essentials of WAIS*® *-IV Assessment* by Elizabeth O. Lichtenberger and Alan S. Kaufman

*Essentials of WIAT*® *-III and KTEA-II Assessment* by Elizabeth O. Lichtenberger and Kristina C. Breaux

*Essentials of WISC-III*® *and WPPSI-R*® *Assessment* by Alan S. Kaufman and Elizabeth O. Lichtenberger

*Essentials of WISC*® *-IV Assessment, Second Edition* by Dawn P. Flanagan and Alan S. Kaufman

*Essentials of WJ III*™ *Cognitive Abilities Assessment* by Fredrick A. Schrank, Dawn P. Flanagan, Richard W.

Woodcock, and Jennifer T. Mascolo

*Essentials of WJ III*™ *Tests of Achievement Assessment* by Nancy Mather, Barbara J. Wendling, and Richard W.

Woodcock

*Essentials of WMS<sup>®</sup> -III Assessment* by Elizabeth O. Lichtenberger, Alan S. Kaufman, and

Zona C. Lai

*Essentials of WNV<sup>TM</sup> Assessment* by Kimberly A. Brunnert, Jack A. Naglieri, and Steven

T. Hardy-Braz

*Essentials of WPPSI<sup>TM</sup>-III Assessment* by Elizabeth O. Lichtenberger and Alan S. Kaufman

*Essentials of WRAML2 and TOMAL-2 Assessment* by Wayne Adams and Cecil R. Reynolds

# Essentials

## of Conners Behavior Assessments

Elizabeth P. Sparrow



John Wiley & Sons, Inc.

This book is printed on acid-free paper. ⓧ

Copyright © 2010 by John Wiley & Sons, Inc. All rights reserved.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.  
Published simultaneously in Canada.

*“Conners 3<sup>rd</sup> edition”* and *“Conners 3”* are trademarks of MultiHealth Systems, Inc. registered in the United States of America and/or other jurisdictions.

*“Conners Comprehensive Behavior Rating Scales”* and *“Conners CBRS”* are trademarks of MultiHealth Systems, Inc. registered in the United States of America and/or other jurisdictions.

*“Conners Early Childhood”* and *“Conners EC”* are trademarks of MultiHealth Systems, Inc. registered in the United States of America and/or other jurisdictions.

*“Conners Line of Assessments”* and *“Conners Behavior Assessments”* are trademarks of MultiHealth Systems, Inc. registered in the United States of America and/or other jurisdictions.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600, or on the web at [www.copyright.com](http://www.copyright.com). Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable

for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold with the understanding that the publisher is not engaged in rendering professional services. If legal, accounting, medical, psychological or any other expert assistance is required, the services of a competent professional person should be sought.

Designations used by companies to distinguish their products are often claimed as trademarks. In all instances where John Wiley & Sons, Inc. is aware of a claim, the product names appear in initial capital or all capital letters. Readers, however, should contact the appropriate companies for more complete information regarding trademarks and registration.

For general information on our other products and services please contact our Customer Care Department within the U.S. at (800) 762-2974, outside the United States at (317) 572-3993 or fax (317) 572-4002.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books. For more information about Wiley products, visit our website at [www.wiley.com](http://www.wiley.com).

***Library of Congress Cataloging-in-Publication Data:***

Sparrow, Elizabeth P.

Essentials of Conners behavior assessments/Elizabeth P.Sparrow. p. cm.—  
(Essentials of psychological assessment series)

Includes bibliographical references and index.

eISBN : 978-0-470-59969-3

1. Psychological tests for children. 2. Behavioral assessment of children. 3. Behavioral assessment of teenagers. 4. Adolescents—Psychological testing. 5. Problem youth—Psychological testing. 6. Children with disabilities—Psychological testing. I. Title.

BF722.3.S67 2010

155.4028' 7-dc22

2009041485

*To my family, with appreciation for your time, support, and understanding.*

*To Jenni Pitkanen and Sara Rzepa, wonderful colleagues and contributors to this book and other projects.*

*To Penny Koepsel, who reviewed every chapter multiple times, and provided great questions and comments.*

*And finally, to the supportive and responsive staff of MHS who provided information, explanations, and corrections whenever needed, particularly Maggie Bailey, Charlene Colella, Penny Koepsel, Maria-Luisa Marocco, Danielle Politi, Gill Sitarenios, Hazel Wheldon, Josie Woodson, and many others.*

*Thank you all.*

## 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 will 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.

This Essentials book describes the Conners 3rd edition (Conners 3<sup>TM</sup>), Conners Comprehensive Behavior Rating Scales (Conners CBR<sup>TM</sup>), and Conners Early Childhood (Conners EC<sup>TM</sup>), and how each can best be used to describe behavioral, emotional, social, and academic issues of children and adolescents (and developmental milestones for young children). The Conners EC<sup>TM</sup> is normed for use with young children (2 to 6 years old), and the Conners 3<sup>TM</sup> and Conners CBR<sup>TM</sup> are co-normed for use with school-aged children (6 to 18 years old); all three scales can be completed by parents or teachers, and a self-report form can be completed by 8- to 18-year-old youth. This book helps those who used the Conners' Rating Scales, Revised (CRS-R<sup>TM</sup>) as they transition to these updated and improved assessment options. It also provides guidance for new examiners, suggesting structured techniques to organize and understand the scores that are produced by scoring these rating scales, so that valuable information is not lost in interpretation and application. This book, written by one of the world's experts on the Conners Scales, reviews not only the fundamentals of these Conners assessments, but adds sophistication and depth for meaningful and responsible use of these tools in the evaluation of children and adolescents.

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

Yale University School of Medicine

# One

## OVERVIEW

**Elizabeth P. Sparrow**  
**Sara R. Rzepa**  
**Jenni Pitkanen**

For decades the rating scales developed by Dr. C. Keith Conners have been used worldwide for assessment of children with Attention-Deficit/Hyperactivity Disorder (ADHD) and related issues. The Conners 3rd Edition (Conners 3) continues this tradition of excellence for ADHD identification and treatment monitoring. With the publication of the Conners Comprehensive Behavior Rating Scales (Conners CBRS), this standard of clinical utility and statistical foundations has been extended for assessment of a broad range of issues that occur in school-aged youth.<sup>1</sup> Most recently, these same techniques were applied for the development of a comprehensive rating scale for young children—the Conners Early Childhood (Conners EC). Rapid Reference 1.1 provides a quick snapshot of the three assessments.

The main objective of this book is to offer a comprehensive and user-friendly guide to the Conners 3, Conners CBRS, and Conners EC. This book was developed for those who work with youth 2 through 18 years old in educational, clinical, or research settings, including professionals in evaluation and treatment roles. The subsequent chapters explain the core “essentials” of Conners rating scale assessment and

interpretation in a straightforward and understandable manner, including not only key information from the test manuals, but also practical tips and high-level interpretation guidelines. Chapter 1 provides a historical context for understanding the Conners assessments as well as a quick overview of each rating scale. Chapter 2 reviews key assessment tips, such as choosing which rating scale is best for a specific child and deciding which form to use. Scoring is covered in Chapter 3. Chapter 4 explains a straightforward technique for interpreting the Conners assessments, with special sections for integrating results across more than one version of the rating scales. Chapter 5 offers a critical review of the strengths and weaknesses of the Conners assessments, and Chapter 6 explores clinical applications. Finally, Chapter 7 illustrates use of the Conners 3, Conners CBRS, and Conners EC through several case studies. Throughout the book, Rapid Reference, Caution, and Don't Forget boxes draw attention to critical points. Tables present information succinctly, and figures illustrate information in graphic form. Each chapter ends with a Test Yourself section to help review and check retention of important concepts. Information contained in this book should support responsible and competent use of the Conners 3, Conners CBRS, and Conners EC.

### ***Rapid Reference 1.1***

#### **Snapshot of the Conners Assessments**

	<b>Conners 3rd Edition (Conners 3)</b>	<b>Conners Comprehensive Behavior Rating Scales (Conners CBRS)</b>	<b>Conners Early Childhood (Conners EC)</b>
<b>Author</b>	C. Keith Conners, PhD		
<b>Publication date</b>	2008	2008	2009
<b>Purpose</b>	Focused assessment of ADHD and most commonly co-occurring problems and disorders in school-aged children	Comprehensive assessment tool for a wide range of behavioral, emotional, social, and academic concerns in school-aged children	Broad coverage of important behavioral, emotional, social, cognitive, and developmental issues in young children
<b>Age Range</b>	Parent & Teacher: 6–18 years Self-Report: 8–18 years	Parent & Teacher: 6–18 years Self-Report: 8–18 years	Parent & Teacher: 2–6 years Self-Report: n/a

<b>Available Forms</b>	Conners 3 <sup>a</sup> Conners 3 Short <sup>a</sup> Conners 3 ADHD Index <sup>a</sup> Conners 3 Global Index <sup>b</sup>	Conners CBRS <sup>a</sup> Conners Clinical Index <sup>a</sup>	Conners EC <sup>b</sup> Conners EC-BEH <sup>b</sup> Conners EC-BEH(S) <sup>b</sup> Conners ECGI <sup>b</sup> Conners EC-DM <sup>b</sup>
<b>Minimum Reading Levels<sup>c</sup></b>	Parent & Teacher: 5th grade Self-Report: 3rd grade	Parent & Teacher: 5th–6th grade Self-Report: 3rd–4th grade	Parent: 3rd–5th grade Teacher: 5th grade Self-Report: n/a
<b>Rater Requirements</b>	Must have known and had the opportunity to observe child for at least one month. Cognitive abilities and reading level must be adequate (see above). Must be motivated to assist in assessment.		
<b>Examiner Requirements</b>	Administration and scoring: Formal training in clinical psychology or psychometrics is not required Interpretation: Graduate-level courses in tests and measurement at a university (or other documented equivalent training)		
<b>Publisher</b>	Multi-Health Systems, Inc. 1-800-456-3003 in the United States; 1-800-268-6011 in Canada; 1-416-492-2627 International www.mhs.com		

<sup>a</sup> Available in forms for completion by parent, teacher, or youth.  
<sup>b</sup> Available in forms for completion by parent or teacher.  
<sup>c</sup> Approximate range listed here for quick reference; varies by form used. See relevant test manual for details.

This chapter includes an overview of appropriate ways to use rating scales and a brief history of the Conners assessments. Each of the new rating scales is described, with an overview of key features, changes from the Conners' Rating Scales-Revised<sup>TM</sup> (CRS-R<sup>TM</sup>), and psychometric properties. See Rapid References 1.14, 1.18, and 1.23 for an overview of the content provided by each of the Conners assessments. Chapters 2, 3,

and 4 in this book discuss the administration, scoring, and interpretation of each rating scale in more detail, including how to select which rating scale and form to use.

## **USE OF RATING SCALES**

A rating scale is simply a group of items that are rated on a specified scale to describe an individual. For example, a food critic might use a rating scale of one to five stars to rate a chef on the appearance, speed, and taste of his food. In the world of educational and psychological measurement, some rating scales are not much more complicated than those used by a food critic. Some rating scales are just a group of items that can be rated, and interpretation is a matter of opinion. At the other end of the spectrum are rating scales that are derived solely from statistical analyses with little input as to the clinical utility of the factors for diagnosis or treatment, or rating scales that are based entirely on results of a single research project without consideration of generalizability. Ideally, a rating scale that is used in the assessment and monitoring of a child will have a blend of these features, combining clinical wisdom with research data and statistical expertise. See Rapid Reference 1.2 for important features of rating scales.

### ***Rapid Reference 1.2***

#### **Summary of Key Points to Consider in Rating Scale Selection**

Ideally, a rating scale that is used in the assessment and monitoring of a child will have a blend of these features, combining clinical wisdom with research data and statistical expertise. Features to look for when selecting a rating scale include:

- Results that can be interpreted to answer your questions about a child and that can be explained to parents, teachers, and others who help the child.

- Item development and selection guided by clinicians with experience in relevant areas.
- Relevant research findings reflected in scale content and interpretation.
- Large and diverse standardization sample (i.e., considering different ages, genders, races/ethnicities, geographic regions, neighborhood types, and socioeconomic statuses), providing an appropriate comparison for each child assessed and helping to decide if any of these factors impact how results are interpreted (e.g., does age matter for this?).
- Data from relevant clinical groups, showing how results help distinguish between children with and without different diagnoses (i.e., specificity and sensitivity).
- Solid psychometrics, including reliability and validity, so you know how confident you can be that the rating scale is consistently measuring the targeted issues over different people and dates.
- Ease of use (administration, scoring, and interpretation).
- Results that help identify targets for treatment and then measure response to treatment.

Even when a rating scale has all of the features listed in Rapid Reference 1.2, it should not be used in isolation for assessment purposes. An assessment should be multimodal, based on information from multiple informants and multiple settings. A rating scale is only one mode of assessment; other modes might include interview, record review, observation, and direct assessment of knowledge, skills, and abilities. For example, you might review available records, interview the child and her parents, observe the child in the classroom and other settings, administer a rating scale, and administer tests of intellectual ability, academic achievement, and memory skills. This would be a multimodal evaluation. Assessments should not rely on information from a single source, but should

include more than one informant. For children, informants can include parents, teachers, and service providers. Do not forget that the child is often a valuable source of information and that you are in fact an informant—your reactions to the child and your observations of him are very relevant. Finally, an assessment should combine information from multiple settings. Typical settings for children include home, school, and community. School does not just mean the academic classroom, but it also includes aspects of the child’s functioning in other parts of the schoolday (e.g., the hallway between classes, the lunchroom, the bus-stop, the playground, special classes like art, music, and gym). The community setting might be after-school care, neighborhood park, religious centers, grocery stores, or community centers. For adolescents, there may be a work setting as well.

## **DON'T FORGET**

### **The “Multi’s” of Responsible Assessment**

1. Multi-modal: Use more than one mode of assessment (e.g., interview, record review, observation, rating scale, individual testing).
2. Multi-informant: Gather data from more than one informant (e.g., child, parents, teachers, other professionals, yourself).
3. Multi-setting: Gather data from more than one setting, considering physical settings (e.g., home, school, community) and functional settings (e.g., social interactions, structured settings).

Once all the “multi” requirements are met (i.e., multimodal, multi-informant, and multiple settings), it is also important to gather sufficient depth and breadth of information to help with differential diagnosis decisions. These include deciding if the child’s symptoms are due to one thing or another, or possibly a combination of more than one factor. In some cases, the decision is not a simple yes/no but whether additional evaluation might be helpful in answering questions and forming

a plan to help the child. Again, no single instrument can serve in isolation for differential diagnosis decisions.

## **DON'T FORGET**

### **Differential Diagnosis and Referrals**

Gather sufficient breadth and depth of information to help you decide if the child's diagnosis is "either/or" (e.g., "Is it ADHD or something else?"), or if his diagnosis is "this and that" (e.g., "Does he have ADHD *and* comorbid CD?"). If you do not have expertise in an area that you think might be important for a child, get enough information to help you make a referral or to consult with a colleague.

When a rating scale has the features described above, and is used as part of a responsible assessment, it can contribute in a variety of ways, informing diagnosis, treatment planning/monitoring, research, and program evaluation. (See Chapter 6 for additional information on these applications of the Conners assessments.)

- Most people use rating scales primarily as diagnostic aids, as a rating scale can help you gather data from multiple settings and multiple raters. When referral questions are vague, information gathered by a rating scale can help focus initial efforts to begin assessment quickly and efficiently. Even when the referral is clear, results from a rating scale may identify additional issues to address or investigate through other modalities of assessment.
- Rating scales can be equally valuable in planning treatment. Results from raters in different settings can help you understand which settings are impacted by which issues and which settings do not seem to be affected. This information can help you discover potentially useful differences among raters/settings that could suggest interventions to try with a child in an RTI model (see also Rapid Reference 6.1). For example, if a

child shows symptoms of anxiety and academic failure in a classroom with 25 students but is indistinguishable from peers in her reading group of 8 students, this might indicate the benefit of trying small group instruction for other subject areas while determining if the difference is content area, group size, or instructor characteristics (among other possible explanations). Results from rating scales can help identify target behaviors to address in treatment and can even help prioritize these targets. Rating scales can provide data to support treatment recommendations, showing why a particular suggestion is being made for the child in that setting.

- Once an intervention is begun, rating scales can help monitor changes in the child.<sup>2</sup> These might include improvement in the target behavior, lack of change, or deterioration in that area. Rating scales can indicate new areas that are emerging as concerns as old areas are addressed, or suggest a shift in relative importance of which target should be addressed first. Some rating scales can help track potential side effects of treatment—usually a consideration for pharmaceutical intervention. Results from a repeated rating scale can suggest considerations for change in a treatment plan, whether adding services, decreasing intensity of services, shifting to maintenance levels, or discontinuing services.
- In research settings, rating scales offer a systematic way to identify children for inclusion in a research study or to identify children who might not be appropriate for that particular study. Data from rating scales are often used as a way to measure the outcome of a studied intervention or research manipulation.
- Finally, rating scales can be used programmatically. A rating scale can help screen a group of children to determine who might be candidates to participate in a special program (e.g., a reading enrichment program, a social skills group). Results from rating scales could be used to evaluate the effectiveness of such programs as

might be needed when deciding whether to continue the program or to support continued funding for the program.

In summary, rating scales should reflect a combination of clinical, statistical, and research supports. When used for assessment purposes, they should be part of a complete evaluation that integrates data from multiple modalities, informants, and settings to obtain sufficient information for differential decisions or referrals. Rating scales can be used in a variety of ways, for individuals and groups of children. With this information in mind, let's take a look at the background for the Conners 3, Conners CBRS, and Conners EC.

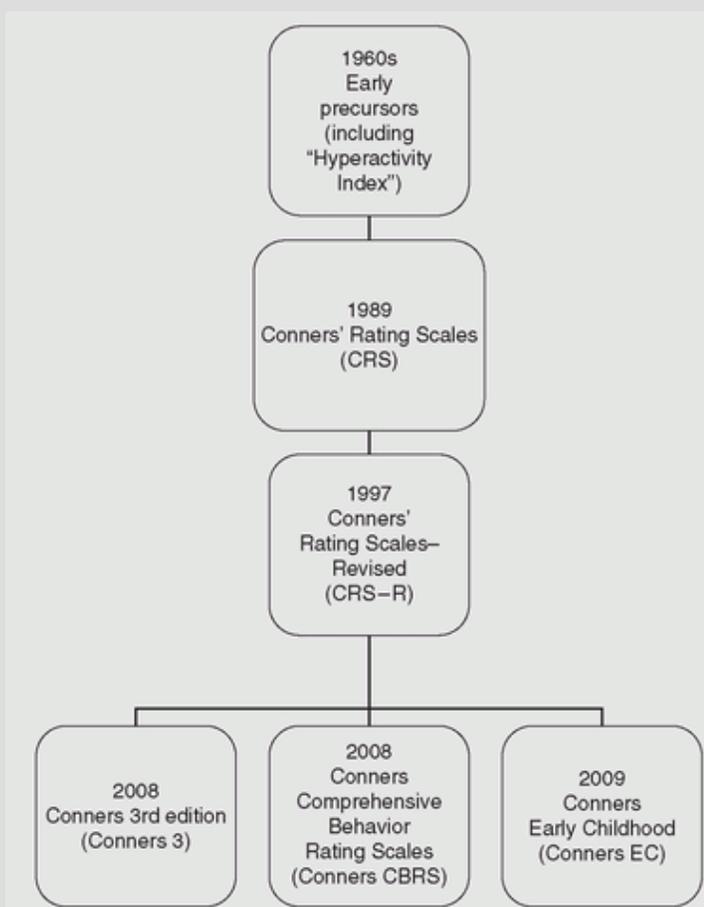
## **HISTORY AND DEVELOPMENT OF THE CONNERS ASSESSMENTS**

The Conners line of assessments has grown from a lifetime of clinical work and research (see Rapid Reference 1.3 for an overview of the timeline, and Rapid Reference 1.4 for a summary of published Conners rating scales). The earliest versions of rating scales by Dr. Conners were developed in the 1960s when he was training at Johns Hopkins Hospital. While studying the effects of stimulant medications on juvenile delinquents, Dr. Conners discovered that parents and teachers were effective observers of behavioral changes exhibited by this group of youth. He developed a list of items, grouped by problem area, that he could use to quantify changes parents and teachers observed. This list of items was shared with colleagues, who gathered further information about how parents and teachers rated children at different ages. Over time, sufficient data were collected to be a useful comparison when determining if a child's results were typical or atypical. Some felt the list of items was too long for use when monitoring a child's response to treatment, so Dr. Conners worked to create a shorter form. He selected the 10 best items for distinguishing children with hyperactivity from those

without hyperactivity and called this the “Hyperactivity Index” (referencing the DSM-II diagnostic term in use at that time). It was not uncommon to see very faint copies of the Hyperactivity Index being used at that time, as the original typed list was photocopied many times and distributed. As copies reached the point where they could not be read, individual clinicians retyped the form, resulting in many variations in formatting and even wording as unintentional changes were made.

### ***Rapid Reference 1.3***

#### **History of the Conners Assessments**



In the 1980s, Dr. Conners partnered with a small start-up company that was developing tests—Multi-Health Systems, Inc. (MHS). He worked with MHS to gather a more comprehensive

normative sample, and in 1989, the first copyrighted version of the items was published as the Conners' Rating Scales (CRS). The CRS became very widely used across the globe and was translated into many languages. After many validation studies were conducted and published, the CRS was established as the gold standard for assessment of what is now called ADHD. Over the next 10 years, additional data were collected, items were reviewed, and statistical analyses were conducted. This led to revision of the CRS, and in 1997 the Conners' Rating Scales-Revised (CRS-R) was released for rating children ages 3 to 17.

The CRS-R reflected a larger, more diverse normative sample and improved psychometric properties. It expanded the rater options from parent and teacher by adding an adolescent self-report form (for use with youth ages 12 to 17). Items based on DSM-IV criteria for ADHD were added. In addition to continuing in-depth coverage of ADHD, the CRS-R included conduct problems, cognitive problems, family issues, emotional lability, and anger control. Items reflecting internalizing features were added, such as anxiety, psychosomatic symptoms, and perfectionism; coverage of these features was facilitated by the addition of the adolescent self-report form. The historic "Hyperactivity Index" (also known as the "Conners 10-item" or the "Abbreviated Symptoms Questionnaire [ASQ]") was updated and labelled the "Conners Global Index" to reflect its utility in identifying children with general pathology (not just hyperactivity). A statistically derived index was developed using the best items for distinguishing between children with ADHD and children in the general population; this was called the "ADHD Index." The physical forms for the CRS-R were improved, including simplified hand-scoring options and new feedback/progress forms. Both "long" and "short" forms were made available.

## **Changing the CRS-R**

In 2003, the research and development team at MHS began gathering feedback from users of the CRS-R to update and revise the CRS-R into the Conners 3. Team members included Dr. Conners (the author of the Conners assessments), Dr. Sparrow (clinical consultant for the project), and MHS staff. During many conversations, we realized the need to develop a comprehensive rating scale that was built on the same principles as the CRS-R: guided by clinical experience and research, supported by solid psychometrics and statistical analyses, and useful to professionals who work with children and adolescents. As the rating scale grew longer and longer, it became clear that one rating scale could not responsibly serve as both a focused ADHD tool and a comprehensive survey. Thus, the Conners CBRS was added to the development plan to provide broad coverage of important clinical issues in children and adolescents, and the Conners 3 was streamlined to serve as a focused ADHD tool.

### ***Rapid Reference 1.4***

#### **Published Conners Assessments Over the Years**