

Jack A. Naglieri, Ph.D., & Sam Goldstein, Ph.D.

Measure **Executive Function** Strengths & Weaknesses in adults 18 & older





MHS.com/CEFIadult



The Comprehensive Executive Function Inventory Adult<sup>™</sup> (CEFI Adult<sup>™</sup>) is a comprehensive assessment of executive function *strengths* and *weaknesses* in adults aged 18 years and older. Intended to be used by professionals in clinical, educational, and research settings, the CEFI Adult is an effective and reliable tool for evaluating executive function to guide diagnosis, intervention, and treatment planning as well as to evaluate the success of the intervention program.

### • Normative samples:

The CEFI Adult was normed on a large national sample that is representative of the U.S. population on a number of key demographic variables within 1.7% of U.S. Census targets.

### • Multi-rater forms available:

Observer and self-report ratings provide multiple perspectives of an individual's strengths and weaknesses contributing to a comprehensive evaluation of executive function.

### • Executive Function Strengths and Weaknesses:

Strengths and weaknesses can be evaluated across nine different areas of executive function.

### Psychometric properties:

The CEFI Adult possesses excellent reliability and validity.

### • Computerized reports:

Narrative reports include reporting of all scores, comparisons between raters, and significance of changes in scores over time.

# CEFI Adult Author Team



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Jack A. Naglieri, Ph.D., is Research Professor at the Curry School of Education at the University of Virginia, Senior Research Scientist at the Devereux Center for

Resilient Children, and Emeritus Professor of Psychology at George Mason University. He is a Fellow of APA Divisions 15 and 16 and recipient of several awards for his contribution to the field of psychology.

Dr. Naglieri is the author or co-author of more than 300 scholarly papers, books, and tests. His scholarly research includes investigations related to topics such as intellectual disabilities, specific learning disabilities, giftedness, and Attention Deficit/Hyperactivity Disorder.

Sam Goldstein, Ph.D., is an Adjunct Assistant Professor at the University of Utah School of Medicine, with expertise in school psychology, child development, and neuropsychology. He is

a board certified pediatric neuropsychologist, licensed as a psychologist and certified as a developmental disabilities evaluator in the State of Utah.

Dr. Goldstein has authored, co-edited, or coauthored 51 books, including 24 textbooks. He has also authored approximately 70 book chapters and peer-reviewed scientific research studies, and a number of psychological tests.

**AGE** 18+

ADMINISTRATION Self-Report and Observer Forms

ADMINISTRATION TIME 10-15 minutes

NUMBER OF ITEMS

FORMATS Online Handscored (QuikScore™)

TRANSLATIONS Spanish

**QUALIFICATION LEVEL** B-level

### What is Executive Function?

Like a conductor of an orchestra in charge of keeping a variety of instruments working in harmony, our executive functioning system helps us regulate ourselves and our actions. These skills allow us to analyze our decisions, plan how we take on and organize tasks, help us stay in control of our impulses, and achieve our goals.

# Why Measure Executive Function Strengths as well as Weaknesses?

Executive function impacts our ability to successfully navigate day-today life. The CEFI Adult provides a comprehensive, strength-based way

of assessing these skills by highlighting areas where a person may have stronger abilities. This unique approach to identifying areas of both strengths and weaknesses ensures support is being provided where it is needed most. This allows professionals to more effectively guide diagnosis, intervention, treatment planning, and accurately evaluate the success of a treatment program over time.

### **How is the CEFI Adult Different?**

In addition to a Full Scale score, the CEFI Adult has nine scales that focus on different areas of executive function measured on a 6-point Likert scale to better capture depth of severity (See Figure 1.0). By using scale level scores we can determine how an individual compares to the general population and whether or not certain scale scores significantly differ from their own personal average score. As an added benefit, the CEFI Adult also consists of item level statistics that can be used to identify specific behaviors that are above or below average. Using this advanced, yet user friendly, scoring procedure, the CEFI Adult makes treatment planning easier than ever before.

### **Executive Function Full Scale**

Attention	Inhibitory Control	Planning					
Measures how well an adult can avoid distractions,concentrate on tasks, and sustain attention	Reflects and adult's control over behavior or impulses	Reflects how well an adult develops and implements strategies to accomplish tasks					
Emotion Regulation	Initiation	Self-Monitoring					
Measures an adult's control and management of emotions	Describes an adult's ability to begin tasks or projects without being prompted	Describes an adult's self-evaluation of his/her performance or behavior					
Flexibility	Organization	Working Memory					
Describes how well an adult can adapt to circumstances, including problem solving ability	Describes how well an adult manages personal effects, work, or multiple tasks	Reflects how well an adult can keep information in mind that is important for knowing what to do and how to do it, including remembering important things, instructions, & steps					
Figure 1.0							

Who are you?	Why is it useful?	What disorders can benefit from using an executive function measure?*			
Clinical Psychologist	Deficits in executive function skills can impair problem solving, reasoning, and adaptive behavior, making it difficult to successfully navigate through the challenges of daily life.	Depression, Obsessive Compulsive Disorder (OCD), Schizophrenia, Bipolar disorder			
Neuropsychologist	Designed for use in both clinical and research settings, the CEFI Adult helps examine the cognitive processes largely carried out by the prefrontal areas of the frontal lobes regardless of type of cognitive impairment or brain injury.	Neurocognitive Disorders (e.g., due to Alzheimer's Disease, Lewy Bodies, or Traumatic Brain Injury)			
School Psychologist	Measure executive function in youth 18-21 who are still in the school system but aged out of typical youth measures. Created to combine seamlessly with the youth version of the CEFI, together both assessments can cover all students from 5 to 21.	Anxiety, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorder (ASD)			

\* An executive function rating scale can be used with a large number of clinical populations. This table should not be viewed as an exhaustive list of usage but rather as an example of popular practice.

## **A Highly Representative Normative Sample**

The CEFI Adult has a large normative sample with 3,320 ratings included (1,660 for both the Self-Report and Observer Forms). It was stratified to match a number of key demographics within 1.7% of the most recent U.S. Census targets. These demographics include age, gender, race/ethnicity, region, and education level. Additionally, 10% of the normative sample for each of the Self-Report and Observer Forms were drawn from individuals with a clinical diagnosis, approximating the actual U.S. general population.

### **Reliable and Valid**

Internal Consistency Reliability Cronbach's alpha values for the Full Scale and the nine CEFI Adult Scales were strong:

Self-Report Full Scale  $\alpha$ = .97( CEFI Adult Scales median= .83) Observer Full Scale  $\alpha$ = .98 (CEFI Adult Scales median= .90)

### **Test-Retest Reliability**

Interval between test administrations: 2 to 3 months. Excellent test-retest reliability was found:

**Self-Report Full Scale** *r* = .93( CEFI Adult Scales median= .91) **Observer Full Scale** *r* = .92 (CEFI Adult Scales median= .85)

### Distinguish Clinical Groups Meaningfully: CEFI Adult Score Differences by Clinical Groups

As expected, individuals diagnosed with Dementia, ADHD, General Anxiety Disorder and Mood Disorders score lower in executive functioning (CEFI Adult Full Scale) than matched general population samples (with moderate to large standardized mean score differences).

### **A Lifespan Executive Function Solution**

Additionally, both the youth version of the CEFI and the CEFI Adult framework are consistent and empirically supported. A child assessed with the youth version can continue to be assessed with the adult version as they age. Both assessment solutions have strong reliability and validity making them highly accurate and trustworthy for clinicians.



# <u>Assess Online</u>

Interpreting results has never been simpler with MHS's acclaimed, easy-to-read report options.

# Why Use the CEFI Adult<sup>™</sup> Online?

- **Save Time** Fast, easy, and accurate administration with automated scoring.
- Assess and Score from Anywhere View reports with an online connection.
- Improve Efficiency and Accuracy When items are absent, prompts appear to ensure information is not missed.
- **User-Friendly** Easy to use interface for practitioners and respondents.
- **Gain Information Easily** Email a link to the form directly to the respondent.
- **Tailored Organization** Data can be customized to how you work.



# **3 Valuable Reports Available**

Generate up to three user-friendly reports using the MHS Online Assessment Center.



**1.** The *Interpretive Report* provides information about a single administration.

Overview	of I	Results	for	Jodie								
									LEGEND:	$\nabla$	ULENT AVERAGE	
		Well Below A	werage	Below Average	Low Average	Avera	ge	High Average	Superior	٧	ery Superior	
Full Scale					80							
Attention		52										
Emotion Regulation			_	_	_	98						
Flexibility							105					
Inhibitory Control					87							
Initiation				_		91						
Organization				68								
Planning					82							
Self-Monitoring					87							
Working Memory		_	_	76	$\nabla$							
Standard Score	40	50	60	70 8	80 9	0 100	1	10 12	20 1	30	140	150

**3.** The **Progress Monitoring and Treatment Effectiveness Report** combines results from up to four ratings over time by the same rater.



2. The *Comparative Report* provides a multi-rater perspective by combining results from up to three different raters.



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# **CEFI Adult** Pricing

**CEFI** and **CEFI Adult** Bundles



### ONLINE CEFI Adult Complete Online Kit (Manual & 25 CEFA02 CEFI Adult Self Report and Observer Online \$280.00 Forms) CEFA03 CEFI Adult Self-Report Online Form \$4.00 ea. CEFA04 **CEFI Adult Observer Online Form** \$4.00 ea. Spanish CEFI Adult Complete Online Kit CFFA08 (Manual & 25 Spanish CEELAdult Self Report/ \$280.00 Observer Online Forms) CEFA09 Spanish CEFI Adult Self-Report Online Form \$4.00 ea. Spanish CEFI Adult Observer Online Form CEFA10 \$4.00 ea. MANDSCORED CEFI Adult Complete Handscored Kit (Manual & CEFA05 \$213.00 25 CEFI Adult Self Report/Observer Online Forms) CEFI Adult Self-Report Quikscore Forms (25/pkg) CEFA06 \$65.00 CEFI Adult Observer Quikscore Forms (25/pkg) CEFA07 \$65.00 Spanish CEFI Adult Complete Handscored Kit CEFA11 (Manual & 25 Spanish CEFI Adult Self Report \$213.00 and Observer Online Forms) Spanish CEFI Adult Self-Report Quikscore CEFA12 \$65.00 Forms (25/pkg) Spanish CEFI Adult Observer Quikscore Forms CFFA13 \$65.00 (25/pkg) MANUAL CEFAOO **CEFI Adult Manual** \$92.00 S MHS CE/CPD TRAINING PROGRAM CEFA14 CEFI Adult CE Online Manual Quiz (3 CE Credits) \$45.00 ★ ▲ LIFESPAN EXECUTIVE FUNCTION SOLUTIONS CEFI and CEFI Adult Bundle - Intro Special Online Kit (CEFI Manual, 25 CEFI Self-Report/Parent/ CEFA16 \$647.00 Teacher Online Forms & CEFI Adult Manual, 25 CEFI Adult Self-Report/Observer Online Forms) CEFI and CEFI Adult Bundle - Intro Special Handscore Kit (CEFI Manual, 25 CEFI Self-Report/ CEFA17 Parent/Teacher Quikscore Forms & CEFI Adult \$507.00 Manual, 25 CEFI Adult Self-Report/Observer Quikscore Forms) Spanish CEFI and CEFI Adult Bundle - Intro Special Online Kit (CEFI Manual, 25 CEFI Self-Report/

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B-level

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# Special Introductory Offer!

Available for a limited time while supplies last.

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Receive a FREE copy of Dr. Goldstein and Dr. Naglieri's "Handbook of Executive Functioning" (\$119 value) with purchase of any CEFI Adult Kit\*

\*Go to mhs.com/CEFIAdult for more details or contact your MHS consultant

# MHS

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