

Annotated Bibliography for Executive Function Processes

Prepared by

George McCloskey, Ph.D.

Philadelphia College of Osteopathic Medicine

gmccloskz@aol.com

Simeonsson, R.J., & Rosenthal, S.L. (Eds.) (2001). *Psychological and developmental assessment: Children with disabilities and chronic conditions*. New York: Guilford Publications, Inc.

Chapter 15 by Gioia, Isquith, & Guy (authors of the BRIEF) is possibly the single best reference on executive functions for clinicians working with school-age children. A must read.

Stuss, D.T., & Knight, R.T. (2002). *Principles of frontal lobe function*. Oxford University Press.

Extensive discussions on frontal lobe functions by various researchers; most discussion is geared toward adult functioning.

Lyon, G. Reid, & Krasnegor, Norman A. (Eds.) (1996). *Attention, memory, and executive function*. Baltimore: Paul H. Brookes.

Up-to-date summary of research on these three important cognitive functions as well as discussions of their role in learning. Martha Denkla's chapter (Chapter 15) is one of the best available summary discussions of executive functions in school-age children.

Temple, C. (1997). *Developmental cognitive neuropsychology*. East Sussex, UK: Psychology Press. See Chapter 8 titled Executive Disorders.

Barkley, R.A. (1998). *Attention-Deficit Hyperactivity Disorder: A handbook for diagnosis and treatment*. New York: The Guilford Press.

Elaboration of a general theory of executive functions presented in Chapter 7.

Emphasis throughout the book on the importance of executive functions in the direction of attention processes.

Stuss, D.T., & Alexander, M.P. (2000). Executive functions and the frontal lobes: a conceptual view. *Psychological Research*, 63: 289-298.

Lyon, G. Reid. (Ed.) (1994). *Frames of reference for the assessment of learning disabilities*. Baltimore: Paul H. Brookes.

Invaluable resource, especially the chapters in sections II and III related to the processes underlying learning and assessment in specific academic domains.

Pennington, Bruce F. (1991). *Diagnosing learning disorders: A neuropsychological framework*. New York: The Guilford Press.

The best reference available for presenting a core constellation of the more common clinical syndromes, detailed descriptions of symptomatology, assessment procedures, and interventions. See especially Chapters 1 and 5 for discussions of executive function processes.

Levine, Melvin D. (1998). *Developmental Variation and Learning Disorders*. Cambridge: Educators Publishing Service.

Up-to-date, practical handbook for understanding cognitive functions, normal development of these functions, and problems that arise. A good reference for tying together a conceptual framework for problem identification, assessment procedures, and appropriate intervention strategies. Some of Levine's terminology does not match-up well with the general terminology used by most of the authors listed on this page (e.g. Levine does not use the term executive function and instead lumps reasoning abilities with it and calls them Higher-Order Thinking).

Damasio, A. (1999). *The feeling of what happens: Body and emotion in the making of consciousness*. New York: Harcourt.

An in-depth discussion of emotions and consciousness and how these form the basic substrate upon which all cognitive processing is carried out.

- Varley, R., Siegal, M., & Want, S.C. (2001). Sever impairment in grammar does not preclude theory of mind. *Neuroscience*, December, Vol. 7 No. 6, pp489-493.
- Mackintosh, N. J. (1998). *IQ and human intelligence*. New York: Oxford University Press.
Engrossing discussions of cognitive processes within, and beyond, the bounds of the standard conception of general intellectual ability. See especially Chapter 8 and Chapter 7.
- Frakowiak, R.S.J., Friston, K.J., Frith, C.D., Dolan, R.J., & Mazziotta, J.C. (1997). *Human brain function*. New York: Academic Press.
See Chapter 14, Higher Cognitive Functions for a discussion of executive functions, working memory and willpower.
- Luria, A.R. (1973). *The working brain: An introduction to neuropsychology*. New York: Basic Books. See Chapter 7 regarding frontal lobe functions.
- Goldberg, Elkhonon. (2001). *The executive brain: Frontal lobes and the civilized mind*. New York: Oxford University Press.
- Lichter, D.G., & Cummings, J.L. (2001). *Frontal-subcortical circuits in psychiatric and neurologic disorders*. New York: The Guilford Press.
- Miller, B. L., & Cummings, J. L. (1998). *The human frontal lobes: Functions and disorders*. New York: The Guilford Press. A comprehensive overview of the areas of cognitive performance affected by various types of executive function deficits.
- Freeman, W.J. (2000). *How brains make up their minds*. New York: Columbia University Press.
- Mapou, R.L., & Spector, J. (Eds.) (1995). *Clinical neuropsychological assessment: A cognitive approach*. New York: Plenum Press.
Many elements of an information processing approach are described in this edited volume.
See Chapter 3: Assessment of problem solving and executive functions.
- Roberts, A.C., Robbins, T.W., & Weiskrantz, L. (Eds.) (1998). *The prefrontal cortex: Executive and cognitive functions*. New York: Oxford University Press.
A compilation of cutting edge basic research on cognitive functions.
- Benson, D. Frank. (1994). *The neurology of thinking*. New York: Oxford University Press.
See separate chapters on the neurology of basic mental control disorders: alertness, attention and mental tone; the neurology of higher mental control disorders; the neurology of thought disorders.
- Fuster, J.M. (1997) (3rd Ed.). *The prefrontal cortex: Anatomy, physiology and neuropsychology of the frontal lobe*. Philadelphia: Lippincott-Raven.
- Gazzaniga, M.S. (Ed.) (2000). *The new cognitive neurosciences* (2nd Edition). Cambridge, MA: MIT Press.
See Chapters 85, 86, and 87 under the heading "Evolution."
- Damasio, A.R. (1994). *Descartes' Error: Emotion, reason, and the human brain*. New York: Avon Books.
An exploration of social-emotional issues and cognition (executive functions).
- Krasnegor, N.A., Lyon, G.R., Goldman-Rakic, P.S. (1997). *Development of the Prefrontal Cortex: Evolution, neurobiology, and behavior*. Baltimore: Paul Brookes Publishing Co.
An exploration of developmental and definitional issues related to executive functions.
- Gardner, H. (1983). *Frames of mind: the theory of multiple intelligences*. New York: Basic

Books.

Gardner's conceptions of intrapersonal and interpersonal intelligences fit nicely into a more comprehensive view of frontal lobe functions in the social domains.

Instruments Developed Specifically to Assess Attention and/or Executive Functions

Delis-Kaplan Executive Function Scale (D-KEFS) (Fall 2000). Harcourt Assessment.

This new multisubtest battery addresses executive functions across verbal and nonverbal content domains applied to the symbol system arena. Appropriate for ages 8 to 89.

NEPSY: A Developmental Neuropsychological Assessment (1998) Harcourt Assessment.

The NEPSY battery includes several subtests designed to measure attention and executive functions within the symbol system arena. Can be used with children ages 3 to 12. See sample reports for the NEPSY subtests used in an Executive Functions section write-up.

Wisconsin Card Sorting Test (WCST) (1993). Psychological Assessment Resources, Inc.

One of the classic measures of executive function for ages 7 to 89 applied to the symbol system arena. See sample reports for process-oriented write-ups of WCST results. The child's overall approach to the WCST often resembles the child's approach to orienting to new material and reasoning with new material in the classroom.

Behavior Rating Inventory of Executive Functions (BRIEF). Psychological Assessment Resources, Inc.

An excellent parent and teacher rating scale for rating the behavior of children ages 6-18. Items draw from the inter and intra personal arenas as well as the symbol system arena. Also now available are a Preschool Form for ages 3-5 and a Self-report Form for ages 6-18.

ADHD Rating Scale-IV (1998). The Guilford Press.

An excellent brief rating scale completed by teachers and parents; assesses behavior organized by the two domains of executive control used to diagnose ADHD according to DSM-IV guidelines: Inattentiveness and Hyperactivity/Impulsivity.

Behavioural Assessment of the Dysexecutive Syndrome (1996). Harcourt Assessment.

Includes measures of executive functions oriented to everyday application of executive functions within the symbol system and environment arenas. Appropriate for ages 16-87.

Behavioural Assessment of the Dysexecutive Syndrome for Children (2003). Harcourt Assessment.

Includes measures of executive functions oriented to everyday application of executive functions within the symbol system and environment arenas. Appropriate for ages 8-16.

Test of Everyday Attention (1994). Harcourt Assessment

Provides a direct assessment of a client's attention capacities: oriented to everyday application of attention capacities within the symbol system and environment arenas. Appropriate for ages 18 to 80.

Test of Everyday Attention for Children (1998). Harcourt Assessment.

Provides a direct assessment of a child's attention capacities: oriented to everyday application of attention capacities within the symbol system and environment arenas. Appropriate for ages 6 to 15.

Hayling and Brixton Tests. (1997). Harcourt Assessment

Two quick measures for identifying some aspects of executive function difficulties. Geared primarily to the symbol system arena, it deals with constrained language production requiring executive control processes for effective performance. Appropriate for ages 18-90.

Intervention Idea Sources for students with ADHD and Executive Function Disorders and/or Conduct Problems

Dawson, P. & Guare, R. (2004). Executive skills in children and adolescents: A practical guide to assessment and intervention. New York: Guilford Press.

A newly published practical guide for clinicians.

Greene, R.W. (2001). *The explosive child: A new approach for understanding and parenting easily frustrated, chronically inflexible children*. New York: Harper-Collins Publishers, Inc.
An excellent sourcebook for developing and implementing interventions for children with a specific subset of executive function deficits (inflexibility and emotional control problems resulting in explosive episodes). Reading this book will help a professional understand how executive functions can affect behavior and how deficiencies can be dealt with. The principles discussed in the book can be applied to milder forms of executive deficits just as effectively.

Barkley, R.A. (2006). *Attention-Deficit Hyperactivity Disorder: A handbook for diagnosis and treatment*. (3rd Ed.) New York: The Guilford Press.

Barkley's (2006) book is a good source of information about classroom interventions that can be used effectively while maintaining a student in the regular classroom (see Chapters 15 and 16), as well as many other approaches to intervention for ADHD (Section III, Chapters 12-22).

Barkley, R.A. (2002). *Taking charge of ADHD. The complete, authoritative guide for parents*. (2nd Ed.). New York: The Guilford Press.

A very practical guide for parents of children with ADHD and some aspects of executive function deficiencies.

Hallowell, E.M., & Ratey, J.J. (1994). *Driven to distraction: Recognizing and coping with attention deficit disorder from childhood through adulthood*.

Well-written, easy to read. Provides a very good understanding of ADHD and how to deal with the symptoms.

Jones, Claire B. (1999). *Sourcebook for children with attention deficit disorder* (2nd Edition). San Antonio, TX: The Psychological Corporation.

Jones, Claire B. (1996). *Attention deficit disorder: Strategies for school-age children*. San Antonio, TX: The Psychological Corporation.

Jones, Claire B. (Ed.) (1999) *Parent articles about ADHD*. San Antonio, TX: The Psychological Corporation.

All three of the Jones references emphasize practical intervention strategies for classroom and home. Many of the ADHD strategies in these books can be used with children with executive function difficulties.

Teeter, P.A. (1998). *Interventions for ADHD: Treatment in Developmental Context*. New York: The Guilford Press.

A thorough treatment of intervention issues from early childhood through adulthood.

Zeigler-Dendy, C. A. (2000). *Teaching teens with ADD and ADHD: A quick reference guide for teachers and parents*. See especially Chapter 3, Executive Function and Organizational Skills.

Schwartz, J.M. (1996). *Brain Lock: Free yourself from obsessive-compulsive behavior: A four-step self-treatment method to change your brain chemistry*.

Schwartz's ground-breaking therapeutic approach that teaches OCD sufferers how to take control of their executive function processes to overcome their problem behaviors. Schwartz offers hard-core scientific proof that it is possible to alter neural activation patterns to change the efficiency of executive function processes.

Schwartz, J.M. (2002). *The mind and the brain*.

This book expands on Schwartz's work with OCD patients and considers the bigger picture related to self regulation of neural processes. An engrossing and optimistic read on the future of self-control therapies.

Segal, Z.V., Williams, J.M.G., & Teasdale, J.D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York: The Guilford Press.

This book describes in rationale and the procedures for conducting a form of cognitive therapy that integrates

mindfulness-based meditative practice as part of the therapeutic process.

Bersma, D., & Visscher, M. (2003). *Yoga games for children: Fun and fitness with postures, movement and breath*. Alameda, CA: Hunter House Inc. Games for children ages 3-12.

General Intervention References:

Dawson, P.G., & Guare, R. (2004). *Executive skills in children and adolescents: A practical guide to assessment and intervention*. New York: The Guilford Press.
Newly published, lots of good practical advice for developing interventions. Highly recommended.

Levine, Melvin D. (1998). *Developmental Variation and Learning Disorders*. Cambridge: Educators Publishing Service.

Good recommendations for dealing with executive function and attention deficits can be found in separate chapters of the text addressing areas such as Attention, Memory, Higher Order Cognition, Social Ability, and Reading.

Watson, S.M.R., Westby, C.E. (2003). Strategies for addressing the executive function impairments of students prenatally exposed to alcohol and other drugs. *Communication Disorders Quarterly*, 24(4), 194-204.

Singer, B.D. & Bashir, A.S. (1999). What are Executive Functions and Self-Regulation and what do they have to do with language learning disabilities. *Language, Speech and Hearing Services in the Schools*. July, Vol 30 No.3.

Feuerstein, R. (1980). *Instrumental enrichment: An intervention program for cognitive modifiability*.
Although this original reference is more than 20 years old, the concepts were far ahead of their time; we are only now beginning to catch on to what this text so eloquently and thoroughly described more than two decades ago.

Kelley, Robert E. (1998). *How to be a star at work: Nine breakthrough strategies you need to succeed*. New York: Random House.

Kelley's nine breakthrough strategies sound very much like operational definitions of the effective use of executive mental functions in the workplace.

Assagioli, Roberto. (2000). *Psychosynthesis: A collection of basic writings*. Synthesis Center.

This classic text (originally published in the U.S. in 1965) on humanistic-oriented clinical methods for improving "the self" can be viewed as a primer for awakening and/or developing executive functions related to self-regulation of behavior; in Assagioli's words, "strengthening the will."

Evans, J. R. & Abarbanel, A. (1999). *Introduction to quantitative EEG and neurofeedback*. New York: Academic Press.

This book contains a discussion of the clinical application of neurofeedback in the treatment of ADHD and executive function deficits as well as reports of empirical studies of the effectiveness of neurofeedback in clinical settings.

Segal, Z.V., Williams, J.M.G., & Teasdale, J.D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York: Guilford Press.

This book describes a combination of meditation and cognitive behavior therapy for treating depression especially for persons who are prone to relapse. The techniques described clearly demonstrate an effective means for improving executive functions in order to control depression.

References specifically targeted at teaching cognitive strategies for academic success:

Look at any or all of the titles in the Cognitive Strategy Training Series published by Brookline Books:

Pressley, M., & Woloshyn, V. (1995). *Cognitive strategy instruction that really improves children's academic performance*.

Wood, E., Woloshyn, V., & Willoughby, T. *Cognitive strategy instruction for middle and high schools*.

- Gaskins, I. & Elliott, T. Implementing cognitive strategy instruction across the school: The benchmark manual for teachers.
- Scheid, K. Helping students become strategic learners: Guidelines for teaching.
- Harris, K. & Graham, S. (1996). Helping young writers master the craft: Strategy instruction and self-regulation in the writing process.
- Mastropieri, M. & Scruggs, T. Teaching students ways to remember: Strategies for learning mnemonically.
- Scruggs, T & Mastropieri, M. Teaching test-taking skills: Helping students show what they know.
- Ciborowski, J. Textbooks and the students who can't read them: A guide for teaching of content.

References Related to the BRIEF Software Portfolio Intervention Section:

- Isquith, P.K., Gioia, G.A., & PAR Staff. (2002) Behavior Rating Inventory of Executive Functions – Software Portfolio. This is the interpretive program that accompanies the BRIEF Parent and Teacher Rating Forms. A section providing detailed discussion of interventions is included. The BRIEF-SP intervention component was crafted using the following resources as primary guides:
- Levine, B., Robertson, I. H., Clare, L., Carter, G., Hong, J., Wilson, B. A., et al. (2000). Rehabilitation of executive functioning: An experimental-clinical validation of Goal Management Training. *Journal of the International Neuropsychological Society*, 6, 299-312.
- Marlowe, W. B. (2001). An intervention for children with disorders of executive functions. *Developmental Neuropsychology*, 18, 445-454.
- Ylvisaker, M. (Ed.). (1998). *Traumatic brain injury rehabilitation: Children and adolescents* (2nd ed.). Boston: Butterworth-Heinemann.
- Ylvisaker, M., & Feeney, T. (1998). *Collaborative brain injury intervention: Positive everyday routines*. San Diego, CA: Singular Publishing Group.
- Ylvisaker, M., Szekeres, S., & Feeney, T. (1998). Cognitive rehabilitation: Executive functions. In M. Ylvisaker (Ed.), *Traumatic brain injury rehabilitation: Children and adolescents* (2nd ed., pp. 221-269). Boston: Butterworth-Heinemann.

Perspective Broadening: An Integral Vision as the Big Picture to guide thinking about Executive Functions

- Wilber, Ken. (2000). A theory of everything: An integral vision for business, politics, science, and spirituality. Boston: Shambhala.
- Wilber, Ken. (2000). *Integral Psychology: Consciousness, spirit, psychology, therapy*. Boston: Shambhala.
- Wilber, Ken. (1997). *A brief history of everything*. Boston: Shambhala.
- Wilber, Ken. (1983). *Eye to eye: The quest for the new paradigm*. Boston: Shambhala.
- Wilber, Ken. (1977). *The spectrum of consciousness..* (or see a more readable presentation of the ideas in the book entitled: *No Boundary: Eastern and western approaches to personal growth* (1979, 2002). Boston: Shambhala.
- Visser, Frank. (2003). *Ken Wilber: Thought as passion*. Albany, NY: State University of New York Press.
- Reynolds, B. (2004). *Embracing reality: The integral vision of Ken Wilber: A historical survey and chapter-by-chapter guide to Wilber's major works*. New York: Jeremy P. Tarcher.
- Combs, Allan. (2002). *The radiance of being: Understanding the grand integral vision; Living the integral life*. (2nd Ed.) St. Paul, Minnesota: Paragon house.