Optimizing Functional Cognition and Executive Function: Assessment and Strategy Based Intervention

Presented by Joan Toglia

Joan Toglia, PhD, OTR/L, FAOTA is Professor and Dean Emerita of the School of Health & Natural Sciences at Mercy College in Dobbs Ferry, New York. She is also an Adjunct Clinical Professor of Cognitive Science in Rehabilitation Medicine at Weill Cornell Medical College.

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Dr. Toglia has 40 years of experience in Occupational Therapy and is internationally recognized as a leader in the rehabilitation of people with cognitive deficits. In addition to her degree in Occupational Therapy, Dr. Toglia completed advanced graduate and doctoral work in Educational Psychology with specializations in

cognition & learning as well as measurement & evaluation.

Dr. Toglia has contributed extensively to the field of cognitive perceptual rehabilitation as a clinician, author, educator and researcher. She has over 90 publications and presented over 300 workshops and lectures around the world on cognitive rehabilitation, focusing on theory, assessment methods and intervention strategies to support and optimize cognitive function across different ages and diagnostic groups. Her publications and research include a focus on metacognitive strategy intervention, assessment tools and the relationship between cognitive impairments and occupational performance. She was recently honored for revolutionizing cognitive rehabilitation theory and practice by the American Occupational Therapy Association, Award of Merit, the highest Association honor recognizing an occupational therapist who has made significant contributions to the profession.

Part 1: Part 1 Functional Cognition: Clinical analysis of Executive Function, Memory, Self-Awareness and Performance Based Assessment

Requirements: This course is designed for Occupational Therapists with at least 1 year of experience working with people who have functional cognitive difficulties

Part 2: Fundamentals of the Multicontext Approach: An in-depth workshop on metacognitive strategy intervention methods for Cognitive Rehabilitation.

Requirements = Part 1 or equivalent online courses

NOTE: Participants can choose to take Part 1 only or Part 1 & 2.

Part 1: Functional Cognition: Clinical analysis of Executive Function, Memory, Self-Awareness and Performance Based Assessment

This one day workshop will provide therapists with the ability to analyze and interpret cognitive errors or behaviors observed during functional activities and choose the most appropriate functional cognitive assessments.

- An in-depth, updated review of executive function (EF), memory and self-awareness will
 provide a foundation for interpretation of task errors and behaviors. Participants will
 analyze errors and factors influencing performance through video clips and written scenarios
 and discuss implications for treatment. Clinical examples will focus on adults with stroke and
 acquired brain injury; however, implications and applications for a wide range of adult
 populations will be discussed.
- Differences in performance-based assessment methods and specific tools will be reviewed, and compared. Variations in documentation, interpretation of results, and implications for treatment based on assessment methods used will be discussed. The use of error analysis tools as a basis for guiding metacognitive strategy intervention such as the Multicontext approach will be discussed and illustrated through case examples of Weekly Calendar Planning Activity (WCPA) assessment results.

This course is a prerequisite for Part 2: Fundamentals of the Multicontext Approach.

Part 1 Course Objectives

Upon completion of this course, participants will be able to:

- 1. Generate at least 3 clinical implications of the impact of executive dysfunction on IADL, participation, psychosocial functioning or outcome across populations.
- 2. Apply knowledge of executive function and memory to analysis of functional cognitive errors from at least 4 written case scenarios or video clips.
- 3. Analyze factors that may be impacting functional cognitive performance for at least 3 clinical scenarios
- 4. Analyze, interpret, and differentiate between 3 clinical descriptions of awareness during functional performance.
- 5. Select the appropriate type of awareness assessment method for 2 different clinical scenario's.
- 6. Compare and contrast at least 2 different cognitive functional performance-based assessment methods
- 7. Summarize and compare functional cognitive assessment results from at least 2 different performance based methods or tools.
- 6. Link evaluation results to function, treatment planning and recommendations

Part 1: Functional Cognition: Clinical analysis of Executive Function, Memory, Self-Awareness and Performance Based Assessment

8:30 am	Welcome and Introductions
8:40 – 10:00	Overview of Cognition and Occupational Performance
	Functional Cognition and Executive Function
	 Functional cognition across populations, conditions, and settings.
	Executive Function Components
	Video Clips: Analysis of Client Perspectives and Functional Errors
10:00 – 10:15	BREAK
10:15 – 10:45	Continued
am	Types of everyday memory impairments and impact on everyday life
	Other factors influencing performance
	 Interpreting clinical scenarios and performance discrepancies
	Self-Awareness
10:45 – 12:00	Multidimensional aspects of self-awareness and clinical implications
	- Analysis of differences in types of self-awareness deficits (videos and
	clinical scenarios) and implications for treatment
12:00 – 1:00	LUNCH
1:00 – 1:45	Assessment
	Assessing Self-Awareness
	Overview of Contextual Memory Test
	Assessment Resources
	Performance Based Assessment
	Overview of functional cognitive performance-based assessment
	Performance based versus self-report or informant instruments
	Comparison of different performance-based assessment methods: Group
1:45-3:00	activity and discussion
	Interpretation and Documentation of Results
	Dynamic Interactional Model Performance Analysis Guide and error analysis
	methods,
	Specific error analysis tools (eg. MET, WCPA)
3:00-3:15	BREAK
3:15 – 4:45	Weekly Calendar Planning Activity (WCPA)
	Overview of the WCPA
	Sample video and Interpretation of WCPA case results
	Using Assessment as a Foundation for Treatment Planning
4:45-5:00 pm	Q&A and discussion

Part 2: Fundamentals of the Multicontext Approach: An in-depth workshop on Metacognitive Strategy Intervention methods for Cognitive Rehabilitation

This 2-day treatment focused workshop builds upon foundational knowledge and skills gained from prerequisite courses or day 1 and provides an in-depth review and practical guidelines for implementing each of the 3 main components of the Multicontext Approach: (1) strategies, (2) structuring treatment activities to promote transfer and generalization, and (3) metacognitive framework and guided learning methods. There is a focus on building online awareness of performance and self-efficacy throughout treatment to promote optimal strategy use and generalization.

Case examples and videos will show how repeated experiences with a range of activities that present common cognitive challenges provide clients with the opportunity to self-discover patterns of performance errors, anticipate activity conditions that present difficulties, and practice similar strategies across different tasks. Participants will practice case analysis and will be guided in designing and implementing Multicontext intervention, including the use of strategies, guided learning methods, and functional cognitive treatment activities. Clinical examples will focus on adults with stroke and acquired brain injury across inpatient and outpatient settings; however, implications and applications for a wide range of populations will be discussed. Small group handson activities including role playing, and problem solving are integrated throughout the workshop.

This workshop is based on content from the book - *The Multicontext Approach to Cognitive Rehabilitation*" This workshop fulfills 2 out of 3 steps for certification requirements for the Multicontext approach. An online assessment passed with 80% accuracy following this course is required to progress to step 3 of the certification process. The 3rd certification step includes online small group discussions focused on proficiency in clinical application and implementation within a therapist's practice setting. See https://multicontext.net/certification for additional details for certification and part 3 (https://multicontext.net/part3).

Learning Objectives:

Participants will be able to...

- 1. Apply knowledge of the Multicontext approach to analysis and critique of at least 2 treatment videos or case scenarios.
- 2. Choose effective cognitive strategies for at least 2 different functional cognitive problems or performance errors.
- 3. Analyze and determine at least 2 obstacles to effective strategy use.
- 4. Select, modify and manipulate activity characteristics of at least one functional cognitive activity, to place demands on 2 different aspects of executive functioning.
- 5. Select and arrange at least 4 functional cognitive treatment activities along a horizontal continuum to promote generalization of strategy use.
- 6. Apply use of a metacognitive framework within the context of a functional cognitive activity.
- 7. Select and judge at least 3 metacognitive questions and prompts based on written case scenarios.
- 8. Evaluate therapist adherence for at least one metacognitive treatment component through analysis of video, audio or written case scenario.
- 9. Analyze and use an assessment summary to select and prioritize Multicontext treatment goals and activities for at least one clinical case.
- 10. Select at least 2 outcome measures to assess the effectiveness of treatment.

Course Schedule for Fundamentals of the Multicontext Approach

	Day 2: Fundamentals of the Multicontext Approach
	Overview of the Multicontext Approach: Promoting Strategy Use across Functional Activities (Chapters 6-7) • Metacognitive strategy approaches and evidence
8:30 – 10:00	 Strategy reflection and analysis Functional cognitive activities and strategy analysis Types of strategy training Video illustrations and discussion of MC treatment
10:00 - 10:15	BREAK
	Strategy Use (continued) (Chapter 7)
10:15 – 12:00	 The Multicontext Approach: Summary of key components and evidence Strategy-based intervention and types of strategies Obstacles to strategy use Observing and analyzing strategy use An interprofessional team approach to strategy-based intervention
12:00 – 1:00	LUNCH BREAK
1:00 – 2:45	 Analyzing and Expanding Functional Cognitive Activities (Chapters 4 & 8) Functional cognitive activities: Using the same materials in different ways Practice manipulating activity characteristics and demands Practice manipulating activity characteristics to increase or decrease executive function and motor demands The role and use of structured functional cognitive activities
2:45 – 3:00	BREAK
3:00 – 4:30	 Analyzing and Expanding Functional Cognitive Activities (continued) Use of activity themes and modules to promote transfer and generalization Structuring activities horizontally to promote transfer and generalization Tailoring functional cognitive activities to the client's interests and goals
4:30-5:00	Q&A and discussion

	Day 3: Fundamentals of the Multicontext Approach
8:30 – 10:00	 Metacognitive Framework (Chapters 9-10) Overview of the MC metacognitive framework Guidelines for using mediation and prompts before, during, after activities Cue scenarios within the context of activities (What if?) Analysis and critique of cueing methods and feedback (videos, audio)\
10:00 – 10:15	BREAK
10:15 – 12:00	 Metacognitive Framework continued (chapter 10) Analysis and critique of cueing methods (continued) Written scenarios and guided questions Metacognitive methods: role play within a functional cognitive activity
12:00 - 1:00	LUNCH BREAK
1:00-1:30	Metacognitive Framework (Continued)
1:30 – 2:15	 Assessing Client Response & Measuring Functional Outcomes (Chapter 11-12) Methods for summarizing, and tracking client progress within sessions and across sessions. Documenting treatment program outcomes
2:15 – 2:45	Practice in Case Analysis and Application (Chapter 15) Case analysis, treatment planning and discussion
2:45 – 3:00	BREAK
3:00 – 3:50	Practice in Case Analysis and Application (continued) • Case analysis, treatment planning, and discussion
3:50-4:30	 Implementing the MC Approach Steps in implementation Recommendations for practice and research
4:30-5:00	Summary, Q&A and discussion

Examples of Publications - See www.multicontext.net -

- Foster, E., Doty, T., Campbell, M., Schechtman, K., Toglia, J. (in press). Pilot and feasibility trial of a metacognitive strategy intervention for people with Parkinson disease. *American Journal of Occupational Therapy*.
- Goverover Y, Rosenfeld M, DeLuca J, Toglia J. (2025). Enhancing everyday memory and participation in multiple sclerosis: A pilot study of a metacognitive strategy-based intervention. *Multiple Sclerosis Journal Experimental, Translational and Clinical.* 11(2). doi:10.1177/20552173251333383
- Giles, G. M., Goverover, Y., Foster, E. R., Connor, L. T., Farrar Edwards, D., Baum, C., & Toglia, J. (2024). Functional Cognition: Moving the Field Forward. *OTJR: Occupational Therapy Journal of Research*, 15394492241296811.
- Sansonetti, D., Fleming, J., Patterson, F., Lannin, N. A., & Toglia, J. (2024). Online awareness: a concept analysis and review of assessment approaches for adults with neurological conditions. *Disability and Rehabilitation*, 1-16.
- Foster, E., Carson, L., Jonas, J., Kang, E., Doty, T., Toglia, J. (2022). The Weekly Calendar Planning Activity to assess functional cognition in Parkinson disease. *OTJR: Occupation, Participation and Health.* 42(4), 315-323.. https://doi.org/10.1177/15394492221104075.
- Jaywant, A., Steinberg, C., Lee, A., & Toglia, J. (2022). Feasibility and acceptability of the multicontext approach for individuals with acquired brain injury in acute inpatient rehabilitation: A single case series. *Neuropsychological Rehabilitation*, 32(2), 211-230.
- Katz, N. & Toglia, J. (2018). Co-Editors. *Cognition and Occupation Across the Life Span: Models for Intervention in Occupational Therapy* 4th Edition. Baltimore: MD: AOTA Press. doi:10.7139/2017.978-1-56900-479-1
- Arora, C., Frantz, C. & Toglia, J. (2021). Awareness of Performance on a Functional Cognitive Performance Based Assessment Across the Adult Lifespan. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg.2021.753016
- Toglia, J. & Foster, E.R. (2021). The Multicontext Approach to Cognitive Rehabilitation: A Metacognitive Strategy Intervention to Optimize Functional Cognition. Gatekeeper Press. ISBN 978-1662903113
- Toglia, J. & Foster, E. (2025). *Multicontextual Approach for Cognitive Rehabilitation*. In M.N. Ikiugu, S.D. Taff, S. Kantartzis, & N. Pollard (Co-editors). *Routledge Companion to Occupational Therapy Theories, Concepts and Models*. Routledge, *ISBN 9781032897851*
- Toglia, J. & Goverover, Y. (2022). Revisiting the Dynamic Comprehensive Model of Self-Awareness: A Scoping Review and Thematic Analysis of Its Impact 20 Years Later. *Neuropsychological Rehabilitation*, 1-50. DOI: 10.1080/09602011.2022.2075017.
- Toglia, J. P. & Goverover, Y. (2023). *Cognition, Perception, and Occupational Performance*. In G. Gillen and C. Brown (Eds.), Willard and Spackman's Occupational Therapy, (14th ed.), Chapter 55, p.942-991. Philadelphia, PA: Lippincott Williams and Wilkins.
- Toglia, J., Lee, A., Steinberg, C., & Waldman-Levi, A. (2020). Establishing and measuring treatment fidelity of a complex cognitive rehabilitation intervention: The Multicontext Approach. *British Journal of Occupational Therapy*. https://doi.org/10.1177/0308022619898091
- Toglia, J. (2015). The Weekly Calendar Activity: A Performance Measure of Executive Dysfunction, *AOTA Press*, Bethesda, MD.