



## The Neuropsychology of Executive Functions Emotional Processing: Theory and Practical Applications

### GAUTENG

9 & 10 MAY 2018

Kleinkaap Boutique Hotel, Centurion  
87 Jim van der Merwe Road, Clubview, Centurion

### DAY 1

### DAY 2

Clinical neuropsychology of emotion: Integrating theory and practice  
ABSTRACT: The first half of this workshop (approximately 3 hours) will be spent on a detailed review of five domains of emotional processing that are relevant for neuropsychological (as well as general psychological) practice, including (a) the emotional trigger mechanism, (b) the reflexive emotional response, (c) the awareness and understanding of an emotional response, (d) emotional communication, and (e) emotion regulation/coping. The basis for the theoretical framework for each domain will be presented, consisting of an integration of functional and structural imaging, lesion, animal, and neuropsychological research, with a particular focus on neuroanatomic underpinnings and interface with cognition. Next, the workshop will examine ramifications for clinical practice, including ways in which deficits in each domain affect test performance, descriptions of relevant syndromes, as well as an overview of typical clinical populations characterized by deficiencies in a given domain. The second half of this workshop (approximately 3 hours) will review how emotions motivate complex behavior via interface with temperament, personality, mood, and cognition. Important implications of these processes for coping with stress will be examined, with a particular focus on how deficiencies in stress coping mediate physical, psychological, and neurocognitive dysfunction, principally via dysregulation of the HPA axis.

#### LEARNING OBJECTIVES:

This workshop will help you to

1. Be able to name the five primary domains of emotional processing and their neuroanatomic substrates
2. Be able to name clinical populations that exhibit deficits in emotional processing
3. Understand how neurocognitive abilities and test performance are affected by strengths and weaknesses in individual domains of emotional processing
4. Understand how emotions motivate complex behaviors via interface with temperament, personality, mood, and cognition
5. Understand how and why deficiencies in coping with stress translate into poor physical, psychological, and neurocognitive health

Executive functioning: A comprehensive guide for clinical practice  
ABSTRACT: The first half (approximately 3 hours) of this workshop will be spent on a conceptual overview of five clinically relevant subdomains of executive functioning, including executive cognitive functions, meta-tasking, response selection/inhibition, initiation/maintenance, and social cognition. For each subdomain, elemental neurocognitive processes, neuroanatomic underpinnings, and relevance to daily life will be detailed. Following a thorough exploration of the executive construct, typical clinical syndromes characterized by discrete patterns of EF dysfunction will be reviewed, highlighting associated etiologies, behavioral and personality changes in daily life, as well as patient presentations during formal evaluations. The second half (approximately 3 hours) of this workshop will be spent on a review of assessment methods for each subdomain of EF, as well as assessment challenges and hindrances to ecologically valid interpretation of standardized tests of EF. Clinically useful recommendations for overcoming those challenges and hindrances will be offered, including the introduction of the Contextually Valid Executive Assessment (ConVExA) model and the first steps toward the application of the model in every-day clinical practice.

#### LEARNING OBJECTIVES:

This workshop is designed to help you

1. Gain a thorough and clinically useful understanding of the construct of executive functioning (EF) and be able to name the subdomains and elemental processes that comprise the EF construct.
2. Describe individual neurobehavioral syndromes characterized by discrete patterns of executive function measures, as well as the associated etiologies.
3. List the limitations of typical executive measures, as well as available methods for overcoming those limitations.



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Title: Key Elements of Evidence-based Practice and their Application  
in Clinical Practice: Using the five A's

### Specialist Talk

The primary goal of any diagnostic evaluation is to reduce clinical uncertainty regarding a patient in an empirical manner. To achieve this goal, evidence-based practice involves a value-driven pattern of clinical practice that attempts to integrate the 'best research' derived from the study of populations to inform clinical decisions about individuals. This presentation will discuss the five key steps (five A's) in evidence-based practice

While neuropsychology has a robust research literature, many research studies fail to provide key details that can inform the clinician as to the quality and applicability of the investigational findings for individual clinical decision making. Likewise, even when present, practitioners often have difficulty applying the information that is available in an evidence-based manner.