

## **OVERVIEW OF THE IMCAP-ND MANUAL**

The Individual Music-Centered Assessment Profile for Neurodevelopmental Disorders (IMCAP-ND) is a criterion-referenced assessment of musical interaction, communication, cognition and perception, and responsiveness in musical-play for individuals with neurodevelopmental disorders. The IMCAP-ND can be used to evaluate clients at various developmental levels and chronological ages from children to adults.

Administering the IMCAP-ND requires the therapist to improvise music experiences based on the client's interests and musical lead, while targeting specific musical responses that are relevant to neurodevelopmental disorders. The IMCAP-ND examines musical-emotional abilities, musical cognition and perception skills, as well as musical responsiveness that deals with preferences, perceptual efficiency, and self-regulation in musical-play.

### **Overview of the Chapters**

The IMCAP-ND manual was designed to provide music therapists with a method to assess and evaluate a client's musical resources, strengths, challenges, and overall responsiveness (i.e., preference, efficiency, and self-regulation) in musical-play. The IMCAP-ND manual includes three interrelated rating scales, definitions and criteria of target responses, assessment protocols, musical-clinical and interpersonal procedures, instructions for clinical observation and listening, procedures for supportive interventions, clinical considerations, and descriptions and rationale for clinical strategies and techniques.

### **Chapter 1**

Chapter 1 provides the therapist with an introduction to the IMCAP-ND including its purpose and function, the data collection process, therapist's qualifications, as well as a summary of neurodevelopmental disorders.

## **Chapter 2**

Chapter 2 details the session format, description of media used in session, definition of musical-play and clinical improvisation, and presents clinical techniques that are specific to the IMCAP-ND. In addition, the chapter discusses procedural considerations, three working phases within the process of musical interaction, range and intentionality in musical-play, and evaluating quality in musical-play interactions. Furthermore, the chapter offers procedures for dealing with perseverative behaviors in musical-play and outlines protocols and criteria for implementing supportive interventions.

## **Chapters 3, 4, and 5**

Chapters 3, 4, and 5 provide detailed descriptions of the three rating scales that make up the IMCAP-ND—Scale I: Musical Emotional Assessment Rating Scale (MEARS), Scale II: Musical Cognitive/Perception Scale (MCPS), and Scale III: Musical Responsiveness Scale (MRS).

The three scales, collectively, are designed to evaluate and identify the client's musical resources, challenges, strengths, preferences, and overall responsiveness. Scale II (MCPS) (Chapter 4) and Scale III (MRS) (Chapter 5) provide the therapist with the client's musical cognitive and perception abilities, preferences, and tendencies in musical-play, while Scale I (MEARS) examines the client's social-emotional capacities in musical-play, i.e., attending, responding affectively, adapting, engaging, and interrelating.

### **Scale I: Musical Emotional Assessment Rating Scale**

The Musical Emotional Assessment Rating Scale (MEARS) described in Chapter 3 is a criterion-referenced rating scale designed to examine the client's musical ability to attend, respond affectively, adapt/engage in parallel play, engage/participate in parallel-interactive play,

and interrelate/engage in true interactive play. The MEARS is based on five specific music domain areas: 1) *musical attention*, 2) *musical-affect*, 3) *adaptation to music-play*, 4) *musical engagement*, and 5) *musical interrelatedness*. Scoring the MEARS is based on the frequency of target response, level of support provided for the target response, as well as indicating the media in which the client offered the response. Chapter 3 discusses the scale in detail, including the sequence and criteria of each music domain area, clinical protocols and procedures, techniques, considerations, and scoring protocols.

### **Scale II: Musical Cognitive/Perception Scale**

Chapter 4 presents the Musical Cognitive/Perception Scale (MCPS), a criterion-referenced scale designed to examine the client's ability to react, focus, recall, follow, and initiate five musical elements, i.e., rhythm, melody, dynamic, phrase, and, timbre. Scoring the MCPS is based on the frequency of the target response as well as indicating the media in which the client offered the response. Chapter 4 discusses the framework of the MCPS and defines each construct of the scale. Chapter 4 also provides detailed descriptions of the clinical protocols, definitions and criteria for each target response, procedures, techniques, considerations, and scoring protocols.

### **Scale III: Musical Responsiveness Scale**

The Musical Responsiveness Scale (MRS), introduced in chapter 5, is a criterion-based rating scale designed to evaluate the client's overall responsiveness and tendencies in musical-play. Hence, the MRS deals with examining the client's musical preferences, perceptual efficiency, and ability to self-regulate in musical-play. Scoring is based on the frequency of the target response in each media, i.e., vocal, instrumental, and movement. In addition, the chapter

also discusses and defines each construct of the scale, provides criteria for each target response, clinical procedures, techniques, considerations, and scoring protocols.

### **Population-based**

The IMCAP-ND is a population-specific assessment tool developed for working with children, adolescents, and adults with neurodevelopmental disorders to address core features of the disorder. The IMCAP-ND is designed to target and assess key aspects and features of neurodevelopmental disorders such as relating, communicating, emotionality, language, cognitive functioning, and sensory-motor processing.

Neurodevelopmental disorders include pervasive developmental disorders (PDD) also referred to as autism spectrum disorders; speech and language disorders and attention deficit-hyperactivity disorder (ADHD) (Tager-Flusberg & Helen, 1999). In addition, neurodevelopmental disorders include genetic disorders, such as fragile-X syndrome, Down's syndrome, Williams syndrome, Rett syndrome, and Angelman syndrome (ICDL, 2005; Tager-Flusberg & Helen, 1999; APA, 2000).

Core features of neurodevelopmental disorders generally impact communication, the ability to experience emotion (affect), language, cognitive functioning, sensory and motor processing, and in some cases impact relatedness (Zero to Three, 1994, 2005; Greenspan, 1992; ICDL, 2005; Tager-Flusberg & Helen, 1999).