# Manual of Music Therapy Interventions

## Introduction

Music therapy clinicians at the ORU Music Therapy Clinic use standardized clinical techniques supported by scientific evidence. These music therapy techniques are defined by (1) the diagnostic treatment goal and (2) the role of the music—or mechanisms in the processes of music perception and music production—for achieving the treatment goals and objectives.

## Music Therapy Interventions

### SENSORI-MOTOR

- **Patterned Sensory Enhancement (PSE):**
  PSE is a technique that uses the rhythmic, melodic, harmonic, and dynamic-acoustical elements of music to provide temporal, spatial, and force cues for movements which reflect functional movements of activities of daily living, or the fundamental motor patterns underlying these activities. PSE is often used to work toward goals to increase physical strength and endurance, improve balance and posture, and increase functional motor skills of the upper limbs.

- **Therapeutic Instrumental Music Performance (TIMP):**
  TIMP utilizes musical instruments to help patients to exercise impaired motor function and regain functional patterns of movement. The choice of musical instruments, their spatial configurations, and therapeutically designed patterns for playing them all help to facilitate the (re)training of functional movement skills. TIMP can help clients to address appropriate ranges of motion, limb coordination, finger dexterity and grasp, flexion/extension, adduction/abduction, rotation in the lower and upper extremities.

- **Rhythmic Auditory Stimulation (RAS):**
  RAS is used to facilitate the rehabilitation, development, and maintenance of gait. RAS uses the physiological effects of auditory rhythm on the motor system to improve the control of movement in rehabilitation of functional, stable, and adaptive gait patterns.
COGNITIVE

- **Musical Sensory Orientation Training (MSOT):**
  The use of live or recorded music to stimulate arousal and recovery of wake states and to facilitate meaningful responsiveness and orientation to time, place, and person. In more advanced recovery or developmental stages, active engagement in simple musical exercises increases vigilance and trains basic attention maintenance with emphasis on quantity rather than quality of response.

- **Musical Attention Control Training (MACT):**
  MACT provides structured active or receptive musical exercises, involving pre-composed performance or improvisation in which musical elements cue different musical responses to practice sustained, selective, divided, alternating attention functions.

- **Musical Mnemonics Training (MMT):**
  MMT uses music as a mnemonic device to sequence and organize information and add meaning, pleasure, emotion, and motivation in order to enhance the person’s ability to learn and recall the information involved. MMT uses rhythms, songs, rhymes, chants, etc., to enrich learning and to increase client’s chances of successful remembering.

- **Associative Mood and Memory Training (AMMT):**
  Musical mood induction techniques used to instate a) mood congruent mood states to facilitate memory recall, b) to access associative mood and memory networks to direct specific memory access, c) to enhance learning and memory function through inducing positive emotion states in the learning and recall process.

- **Musical Echoic Memory Training (MEM):**
  MEM uses the immediate recall of musical sounds presented by singing, instrumental playing, or recorded music to retrain echoic memory. The target population for MEM are clients with auditory memory dysfunction due to stroke, clients with traumatic brain injury, cochlear implant users, children with developmental language disorders and ASD, and clients with dementia.

- **Musical Neglect Training (MNT):**
  MNT includes active performance exercises on musical instruments that are structured in time, tempo, and rhythm, and use appropriate spatial configurations of the musical instruments to focus attention on a neglected or inattentively viewed visual field. A second application consists of receptive music listening to stimulate hemispheric brain arousal while engaging in exercises that address visual neglect or inattention.

- **Auditory Perception Training (APT):**
  APT focuses on auditory perception and sensory integration. It is composed of musical exercises that help clients to identify and discriminate between different components of sound, such as time, tempo, duration, pitch, rhythmic patterns, and speech. APT integrates different sensory modalities (visual, tactile, and kinesthetic) during active musical exercises, such as playing from symbolic or graphic notation using tactile sound transmission or integrating movement and music.

- **Musical Executive Function Training (MEFT):**
  MEFT includes improvisation and composition exercises in a group or individually to practice executive function skills such as organization, problem solving, decision making, reasoning, and comprehension.
<table>
<thead>
<tr>
<th><strong>SPEECH/LANGUAGE</strong></th>
</tr>
</thead>
</table>
| **Developmental Speech and Language Training Through Music (DSLM):**  
Specific use of developmentally appropriate musical materials and experiences to enhance speech and language development through signing, chanting, playing musical instruments, and combining music, speech and movement. |
| **Melodic Intonation Therapy (MIT):**  
A treatment technique for rehabilitation of expressive aphasia which utilizes a client's unimpaired ability to sing to facilitate speech production through signing and 'speech singing' functional sentences whose prosodic inflections patterns the therapy process the 'musically' intoned speech output is gradually retranslated into normal speech prosody. |
| **Musical Speech Stimulation (MUSTIM):**  
The use of musical materials such as songs, rhymes, chants, musical phrases simulating prosodic speech gestures to stimulate non-propositional speech in aphasia therapy, e.g., through completion or initiation of over-learned familiar song lyrics, association of words with familiar tunes, or using musical phrases to elicit functional speech responses. |
| **Rhythmic Speech Cueing (RSC):**  
The use of metric or patterned rhythmic cues to control the rate of speech as well as facilitate initiation of speech for dysarthria, apraxia, and fluency disorder rehabilitation. |
| **Oral Motor and Respiratory Exercises (OMREX):**  
The use of musical materials and exercises, mainly through sound vocalization and wind instrument playing, to enhance articulatory control and respiratory strength and function of the speech apparatus, e.g., used for developmental disorders, dysarthria, muscular dystrophy, etc. |
| **Vocal Intonation Therapy (VIT):**  
Musical vocalization, e.g., through controlled singing and other vocal control exercises, to train all aspects of voice control regarding inflection, pitch, breath control, timbre, loudness, etc., in voice disorder rehabilitation. |
| **Therapeutic Singing (TS):**  
An unspecific use of singing activities to facilitate initiation, development, and articulation in speech and languages as well as to increase functions of the respiratory apparatus, used with a variety of neurological or developmental speech and language dysfunction. |
| **Symbolic Communication Training Through Music (SYCOM):**  
Musical performance exercises using structured instrumental or vocal improvisation to train communication behavior; language pragmatics, appropriate speech gestures, emotional communication in a nonverbal 'language' system, that is sensory structured, has strong affective saliency, and can simulate communication structures in social interaction patterns in real time. |
Music in Psychosocial Training and Counseling (MPC):
MPC focuses on psychosocial training which uses guided music listening, musical role playing, and expressive improvisation or composition exercises. It uses musical performance to address issues of mood control, affective expression, cognitive coherence, reality orientation, and appropriate social interaction to facilitate psychosocial functions.

1) **MPC Mood Induction and Vectoring (MPC-MIV):**
   Clinical improvisation exercises are used to aid the development of social and emotional functioning, such as mood modification, interpersonal communication, and expression of emotion.

2) **MPC Social Competence Training (MPC-SCT):**
   MPC gives clients the opportunity to utilize music as a method of aiding the development of skills necessary for appropriate and useful social interaction. Music is used to allow the client to directly practice the various non-musical behaviors used while interaction with other people.

3) **Music-Centered Psychotherapy (MCP):**
   MCP provides clients ample opportunities of self-expression (e.g., inner conflicts, emotion, undefined thoughts, etc.), self-awareness, mood management, and coping skills for anxiety, depression, anger, trauma, and high level of stress. MCP includes various music making experiences such as song writing, song lyric analysis, improvisation, music & imagery, music & art, and music focused relaxation.