

Attachment 3

Structure/Tool	IMCAP-ND	IAPs	Creative music therapy evaluation scales	AQR	MAKS	MATADOC
Name of developer	J. Carpente	K. Bruscia	P. Nordoff C. Robbins	K. Schumacher, C. Calvet & S. Reimer	D. v. Moreau	W. L. Magee, G. Lenton-Smith & B. Daveson
Title (Acronym)	Individual Music-Centered Assessment Profile for Neurodevelopmental Disorders	Improvisational Assessment Profiles	Creative music therapy evaluation scales	Tool for the Assessment of the Quality of Relationship	Music Therapy Expression and Communication Scale	Music Therapy Assessment Tool for Awareness in Disorders of Consciousness
Publication Date in English	2013	1987	1977 (revision in 1992)	2019	Translation by Winkler (2017)	2016 (2 nd edition)
Function	<ul style="list-style-type: none"> – Assess perception, interpretation and music making of participants with music therapist 	<ul style="list-style-type: none"> – Assess interaction and building of relationship through improvising (solo, duo or group) – Therapist gains a picture of participants difficulties 	<ul style="list-style-type: none"> – Assess the self-perception of a child through the “use of instruments, dynamics, tempo, rhythm, and phrasing” (Birnbaum, 2014, p. 30) 	<ul style="list-style-type: none"> – Assess quality of relationship between participant and therapist – Is therapist’s intervention pertinent to participant’s state of development? – Get an answer for question mentioned above 	<ul style="list-style-type: none"> – Assess expression and communication functions 	<ul style="list-style-type: none"> – Assess auditory receptiveness with adults with disorders of consciousness (DOC) arising from acquired brain injuries
Point of view	<ul style="list-style-type: none"> – Developmental psychological – Music-centred approach 	<ul style="list-style-type: none"> – Musical improvisation 	<ul style="list-style-type: none"> – Music-centred approach – Improvisational and compositional approach – Shared intersubjective experience 	<ul style="list-style-type: none"> – Developmental psychological 	<ul style="list-style-type: none"> – Not belonging to any therapeutic schools – Phenomenological approach, related to psychology, psychopathology and Gestalt therapy 	<ul style="list-style-type: none"> – “Clinically derived with an emphasis on its clinical utility within interdisciplinary assessment and treatment of adults with PDOC following acquired profound brain injury” (Magee et al., 2014, p. 7)
Assessment index terms	<ul style="list-style-type: none"> – Observational – Test 	<ul style="list-style-type: none"> – Outcome assessment 	<ul style="list-style-type: none"> – Outcome assessment 	<ul style="list-style-type: none"> – Observational – Viewing participants behaviour, creating main mode of data collection – During administration phase: use of electronic/digital device 	<ul style="list-style-type: none"> – Assessment – Informing treatment planning, process and evaluation 	<ul style="list-style-type: none"> – Assessment – Diagnostic service

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Populacy	<ul style="list-style-type: none"> Participants of all age groups with neurodevelopmental disorders (for example: ADS, attention deficit, ADHD) 	<ul style="list-style-type: none"> Originally participants with learning and severe difficulties Further populations At least 18 months of age 	<ul style="list-style-type: none"> Children and adults (scales originally for children) 	<ul style="list-style-type: none"> Children with ADS Participants with severe multiple disabilities People with dementia People with BPD Music therapy in psychosomatic medicine Music therapy in neurorehabilitation 	<ul style="list-style-type: none"> Children and adolescents with different psychiatric disorders 	<ul style="list-style-type: none"> Adults of working age with DOC (validated)
Scores	<ul style="list-style-type: none"> Musical Emotional Musical Cognitive/Perception Musical Responsiveness 	<ul style="list-style-type: none"> Systematic observational rating (based on video recordings) Qualitative and quantitative analysis 	<ul style="list-style-type: none"> Observational rating 	<ul style="list-style-type: none"> Scores on four scales 	<ul style="list-style-type: none"> Two subscales: <ol style="list-style-type: none"> 15 items on expression scale in solo playing 14 items on communication scale in duo playing Each item is divided in seven operationalized levels 	<ul style="list-style-type: none"> Three subscales with 14 items
Administration process	<ul style="list-style-type: none"> Individually 	<ul style="list-style-type: none"> Individually (most commonly) Possible: in dyads, family or group 	<ul style="list-style-type: none"> Individually Group setting 	<ul style="list-style-type: none"> Individually (results comparable with groups) 	<ul style="list-style-type: none"> Individually (results comparable to testing against norms) (v. D. Moreau et al., 2010) 	<ul style="list-style-type: none"> Individually
Time	<ul style="list-style-type: none"> Two times 30 minutes Assessments one week apart 	<ul style="list-style-type: none"> Choosing two to three improvisations from the session before deciding on what profile to rate it with Watching/ Listening to the chosen musical (video) pieces two to three times Scoring number of happenings in the correct boxes (Wigram, 2007) 	<ul style="list-style-type: none"> Sessions need to be video recorded and reviewed 	<ul style="list-style-type: none"> Assessment question determines administration time Immediate intervention questions during therapy Diagnosis: therapy session and 15 minutes to assess the video Research: watch video three times to conclude the basic mode; for microanalysis watch video six times 	<ul style="list-style-type: none"> Minimum: 1 client solo and on duo-play in one music therapy session assessment session: 20 minutes Clinical: <ol style="list-style-type: none"> At the beginning and during the process: supporting clinical assessment and treatment planning, to inform therapist about “strength, creativity, flexibility, vitality, independency, or contact behaviour”(Moreau, 2019, p. 124) and deficits of participant At the end as an evaluation Research: Using MAKS while watching 30 to 40 seconds of videos (standardized if possible) and blind observers rating the predominant manner 	<ul style="list-style-type: none"> Operated over four clinical sessions each lasting 15–30 minutes; total of 60–120 minutes

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Description	<ul style="list-style-type: none"> – “Musical play-based evaluation instrument made up of three quantitative criterion-referenced rating scales designed to examine how clients perceive, interpret, and make music” (Carpente, 2019, p. 105) – The three scales are linked to one another: “Scale I: Musical Emotional Assessment Rating Scale (MEARS) Scale II: Musical Cognitive/Perception Scale (MCPS). Scale III: Musical Responsiveness Scale (MRS)” (Carpente, 2019, p. 107) – Every Scale is split into sub-categories that are scored on their prevalence on a six-point scale starting from zero. The same rating is applied for the therapist and its assistance. – Through musical protocol the music therapist is given ideas of how to organize the playing concerning the format and following the goal of provoking a distinct musical answer 	<ul style="list-style-type: none"> – “Six profiles: integration, variability, tension, congruence, salience and autonomy. Each profile is comprised of scales for musical elements.” (Cripps et al., 2016, p. 26) 	<ol style="list-style-type: none"> 1. Scale: “The Child-Therapist Relationship in Coactive Musical Experience” (Birnbaum, 2014, p. 30) using “seven levels of Participation [...] seven Qualities of Resistiveness” (Birnbaum, 2014, p. 30) 2. Scale: “Musical Communicativeness” (Cripps et al., 2016) scoring “Communicativeness (rated with seven level scale) with three modes of activity: instrumental, vocal, and body movement” (Cripps et al., 2016, p. 31) 3. Scale: “Musicing: Forms of Activity, Stages and Qualities of Engagement” (Cripps et al., 2016, p. 32) 	<p>Assessment tool consists of:</p> <ol style="list-style-type: none"> 1. Scale to assess “Instrumental Quality of Relationship (IQR)” (Schumacher et al., 2019, p. 198) 2. “Vocal Pre-Speech Quality of Relationship (VQR)” (Schumacher et al., 2019, p. 198) 3. “Physical-Emotional Quality of Relationship (PEQR)” (Schumacher et al., 2019, p. 198) 4. “Therapeutic Quality of Relationship (TQR)” (Schumacher et al., 2019, p. 198) 	<p>The expression scale is divided into:</p> <ol style="list-style-type: none"> a) “Interaction with the instrument” (Moreau, 2019, p. 126) b) “Form/ structure” (Moreau, 2019, p. 127) c) “Liveliness/ dynamics of expression” (Moreau, 2019, p. 128) d) “Quality of expression” (Moreau, 2019, p. 129) 	<p>Three subscales resulting in two ratings with information about level of functioning registered:</p> <ol style="list-style-type: none"> 1. Subscale: delivering information about “vegetative state (VS) [...] and minimally conscious state (MSC)” (Magee et al., 2016, p. 1) 2. Subscale: musical reaction and answer 3. Subscale: levels of operation to help formulate clinical objectives and define therapeutical process

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Description of Observation	<ul style="list-style-type: none"> – MT maintains musical experiences and surroundings to provoke musical reactions – Determined outcomes and observations to evaluate participant's capability in every area checked – Data collection: <ol style="list-style-type: none"> 1. Consulting participants file 2. Observation – In sessions: music making (with instruments and voice) as well as movement is looked at and the level offered is increased by the therapist, to explore the potential 3. "Clinical observations" (Carpente, 2019, p. 108) – Recommendation: record sessions (visual and sound) or keep a record directly following the session 	<ul style="list-style-type: none"> – Every profile is underpinned by a framework to help a broad analysis of the improvised music – All profiles are rated on a "continuum of five gradients or levels, ranging from one extreme or polarity to its opposite" (Bruscia, 1987, p. 406) – Advice and directive are offered – Not every profile needs to be assessed for every therapeutic goal that is set 	<ul style="list-style-type: none"> – Picking up child's emotional state and offering suitable musical improvisation – Paying special attention to melodically, harmonically, and rhythmically components of the musical improvisation (C. Robbins & Robbins, 1998) 	<ul style="list-style-type: none"> – Every scale is divided in seven "qualities of relationships, called modus 0 to modus 6" (Schumacher et al., 2019, p. 201) following the development concepts of Sroufe (1996) and Stern (2000) 	<ul style="list-style-type: none"> – The seven-point Likert scale is used to describe ordinary behaviour with score 3 to 5 and extreme/morbid with the rating at the upper and lower end 	<ul style="list-style-type: none"> – Individualized sessions and goals to apply music of individual importance as well with tangible audible stimulation and getting a better picture of the answers of the participant (Magee, 2005) – 14 items comprise "five behavioural domains commonly assessed in DOC: motor responses, communication, arousal, and auditory and visual responsiveness" (Magee et al., 2014, p. 105) – Clear protocol is to be followed, mostly using live music – First subscale can be used for diagnostic purposes

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Aim	<ul style="list-style-type: none"> – Assessment process should delve into “the individual’s capacities for relational and communicative interactions” (J. Carpenste, 2019) 	<ul style="list-style-type: none"> – Assessing interaction and how participants relate to themselves as well as others (group members; therapist); understanding participants needs and difficulties 	<ul style="list-style-type: none"> – Strengthen self-articulation, conversation, enrich interaction with other humans, build up identity, feed creativity and liberty in exploring, scatter pathological performance (K. E. Bruscia, 1988) 	<ul style="list-style-type: none"> – Avoid over Sand understimulation of participant to bolster development 	<ul style="list-style-type: none"> – Gain information on participants autonomy, need for help, behaviour in relational situations (v. D. Moreau, 2019) 	<ul style="list-style-type: none"> – Delivering precise and specific information about the auditory responsiveness and further behavioural categories through applying a collection of routines
Specialized training	<ul style="list-style-type: none"> – Trained music therapist – Mandatory 	<ul style="list-style-type: none"> – Trained music therapist 	<ul style="list-style-type: none"> – Trained music therapist in NRMT 	<ul style="list-style-type: none"> – Trained music therapist – Mandatory 	<ul style="list-style-type: none"> – Trained music therapist – Mandatory 	<ul style="list-style-type: none"> – Trained music therapist – Mandatory
Further information	<ul style="list-style-type: none"> – Inter-rater reliability (published evidence) – Construct validity, convergent and predictive validity (unpublished evidence) – Used in outcome studies and in clinical context 	<ul style="list-style-type: none"> – Wording development grounded on ten years clinical experience and observation 	<ul style="list-style-type: none"> – Two therapists work as a team – Broad overhaul of all three Nordoff-Robbins scales began in 1992 (Nordoff et al., 2007) 	<ul style="list-style-type: none"> – Highlight importance of synchronization and how to achieve it 	<ul style="list-style-type: none"> – Validation studies available – Translations and testing ongoing 	<ul style="list-style-type: none"> – At the moment approved for paediatric DOC and end-stage dementia – Possibly beneficial: for further population who show lowest reactions – Validation in Mandarin and Spanish under development

Comparison of different music therapy assessment tools mentioned by contributors