

TITLE

Apollo's gift: Therapeutic Effects of Music in Neuro-Psychiatric Disorders

ABSTRACT

Music induced brain plasticity is a powerful means to improve neurologic function in rehabilitation following brain injury or degenerative disease. In motor dysfunctions following stroke, keyboard playing may improve fine motor functions along with neurophysiological changes in audio-motor networks. Rhythmic cueing has a positive effect in gait disorders, improving stride length, speed and overall mobility. Melodic intonation therapy can improve recovery from non-fluent aphasia via activation of right hemispheric networks. Music supported therapy can at least temporarily improve cognition in dementia and may have impact on rehabilitation of disorders of consciousness. Effects of music induced brain plasticity together with music's ability to tap into the emotion and reward system in the brain can thus be used to facilitate neurorehabilitation.

Keywords Brain plasticity, Music supported therapy, Neurorehabilitation