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Presentation Title: Neural dynamics of moments of interest during dyadic improvisation in music therapy

Abstract:

A core element of music therapy is the interaction between a patient and a therapist, often engaged in dyadic clinical improvisation. During these interactions, some segments can be regarded as being of indicative importance for patients' development in therapy. To study the underlying neural dynamics of such moments of clinical interest (MOIs), we employ an in situ, wireless EEG hyper scanning approach combined with synchronized audio and video recordings. In this talk, we will present first results of a study with music therapy students, aiming to model real-world music therapy situations. Participants selected MOIs and moments of less interest by using video recordings and described them in interviews. Based on this selection, the corresponding EEG segments were compared in terms of inter- and intra-brain coupling measures as well as network properties, similar to previous studies investigating art improvisation. Results will be discussed in terms of neural correlates of potential action mechanisms of music therapy and an outlook will be given with regards to the applicability of this approach for investigating real-world therapy situations.