

# Music Therapy and Music Cognition: Parallel Fields

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## Music Therapy

Using music for intervention

- Offers novel ways to learn and practice life skills <sup>1</sup>
- Utilizes shared networks in the brain to work on non-musical goals<sup>2</sup>
- Offers an appropriate way to express negative feelings<sup>3</sup>

The greatest possible interventionary work?

## Music Cognition

How we perceive and respond to music

- Studies the rhythmic nature of attention<sup>4,5</sup>
- Defines what increases intelligibility of singing<sup>6</sup>
- We can learn about pro-social behavior from babies!<sup>7</sup>

### Abstract

The current project is building a connection between the fields of music therapy and music cognition. Music therapists research and practice evidence-based musical interventions to reach non-musical goals with clients in many different populations. Music cognition is a field learning about cognitive, perceptual, and behavioral aspects of music and humanity. While seemingly similar, they are frequently detached despite asking similar questions.

My goal is to go forward and educate music therapists, the public, possible employers, and other health professionals on utilizing music neuroscience research in practice. By working in partnership these two fields can do the most good for humanity.

### Citations

- <sup>1</sup>Duffy, B. and Fuller, R. (2000), Role of Music Therapy in Social Skills Development in Children with Moderate Intellectual Disability. *Journal of Applied Research in Intellectual Disabilities*, 13: 77–89. doi:10.1046/j.1468-3148.2000.00011.x
- <sup>2</sup>Schlaug, G. (2015) Musicians and music making as a model for the study of brain plasticity. *In Progress in Brain Research*, 217: 37-55, <https://doi.org/10.1016/bs.pbr.2014.11.020>.
- <sup>3</sup>Hakvoort, L., Bogaerts, S., Thaut, M., Spreen, M. (2013) Influence of Music Therapy on Coping Skills and Anger Management in Forensic Psychiatric Patients: An Exploratory Study. *International Journal of Offender Therapy and Comparative Criminology* 59 (8): 810 - 836
- <sup>4</sup>Krumhansl, C. (2000). Rhythm and pitch in music cognition. *Psychological Bulletin* 126(1): 159-179
- <sup>5</sup>Jones, M. R., Moynihan, H., MacKenzie, N., Puente, J. (2002). Temporal aspects of stimulus-driven attending in dynamic arrays. *Psychological Science*, 13(4): 313-319
- <sup>6</sup>Huron, D. (2008). *Sweet anticipation: Music and the psychology of expectation*. Cambridge, MA: MIT Press
- <sup>7</sup>Cirelli, L., Wan, S., Trainor, L. (2014) Fourteen-month-old infants use interpersonal synchrony as a cue to direct helpfulness. *Phil. Trans. R. Soc. B* 369 20130400; DOI: 10.1098/rstb.2013.0400.