Steckbrief **Forschung**

The MUSED study: Music Therapy for Depression
A Randomized Controlled Trial to Evaluate Psychobiological Effects of Music Therapy on Depression in Adult Women

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Keywords: RCT, Depression, Chronobiology, Psychoneuroendocrinology, Ecological Momentary Assessment

Background

People suffering from major depressive disorder commonly display impaired emotion regulation and altered regulation of psychobiological stress systems(Jarczok et al. 2018; Dedovic und Ngiam 2015). Music therapy is a complementary therapeutic approach that may contribute to an effective treatment of depression. Initial studies indicate that music therapy may positively impact depressive symptoms and psychobiological stress systems (Aalbers et al. 2017; Ellis et al. 2012; Leubner und Hinterberger 2017; Erkkilä et al. 2011). However, further research is needed to pursue these findings and uncover the psychobiological mechanisms.

Objectives

- Primary objective:

    o Is music therapy effective in the treatment of depressive adult women as measured by the observer-rated Hamilton Depression Rating Scale?

- Secondary objectives:

    o How does music therapy affect circadian rhythms of psychobiological stress markers such as heart rate variability (HRV) and diurnal cortisol in everyday life?

    o How does music therapy impact the following self-rated psychological constructs: stress perception, stress coping, emotion regulation through music, receptive and active consumption of music in daily life, quality of life, loneliness, social support and quality of social relationships?

Methods

A total of 66 adult females between 18 and 65 years with current depression will be eligible for participation in the Music Therapy for Depression (MUSED) Study (DRKS study registration number: DRKS00016616). Participants will be randomly assigned to either the intervention group (IG) or the waitlist control group (CG). The IG receives 10 music therapy group sessions (two hours, once a week) in addition to treatment as usual (TAU) whereas the CG obtains solely TAU over the intervention period. Having completed all assessments, the CG will receive an equal music therapy offer. Observer-ratings of depression will be ascertained before (pre)

and after the intervention (post). Self-report data will be assessed pre, post, 10 weeks follow-up, and in part during the intervention period (process measures). Psychobiological data including HRV (48h) and cortisol (6 saliva samples per day) will be collected pre and post intervention each on two consecutive days and will be accompanied by an ecological momentary assessment (EMA). The EMA approach offers the potential to assess the participants behaviors and moods in their daily life. We will analyze the psychological data regarding group x time interaction effects using repeated-measures analysis of variance. The diurnal variation of HRV measures will be calculated using trigonometric regressions (cosine analysis) whereas cortisol profiles will be analyzed with multilevel analysis.

Discussion

We expect music therapy to reduce depressive symptomatology and to improve the functioning of psychobiological stress-systems. We aim at contributing to the understanding of the effects of music therapy on the complex mechanisms of stress-related psychopathology and psychobiology in the context of depressive disorders.

Allgemeine Angaben

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Publications

Kim, S.; Gäbel, C.; Aguilar-Raab, C.; Hillecke, T. K.; Warth, M. (2018): *Affective and autonomic response to dynamic entrainment – Mechanisms of a specific music therapy factor.* The Arts in Psychotherapy, doi: 10.1016/j.aip.2018.06.002.

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