

Meditation to affect metaphor production? A randomized controlled study

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Metaphor production (MP) as a creative process (Beaty, Silvia, 2013) could be linked to cognitive flexibility (CF) on executive and metacognitive levels (Fröding, Osika, 2015; Hommel, Colzato, 2017). Open Monitoring meditation (OMM) shows effects on creativity and CF (Colzato et al., 2017), although the results can be contradictory (Lippelt et al., 2014). We expected: 1) OMM to improve creativity in MP; 2) CF to mediate the effect of OMM on creativity.

Participants (n=55, aged 18–33, M=20.5) completed several measures and were randomly assigned to one of three groups: OMM, sham-meditation, or control. First two groups had been performing audio-guided tasks (OMM or a narrative on house plants, respectively) for two weeks before post-test, and the third one had no task. Groups were balanced for sex, age, IQ, days between tests, days of non-missed training (chi-squared, Kruskal-Wallis, $p>.05$).

Measures: MP (Bashmakova, Avanesyan, 2016); CF ('Consequences' by Torrance; 'Opposite statements' by Schcherbakova, Golovanova, 2013); state ('Well-being, activity, mood' by Doskin et al., 1973); sustained attention (Bourdon-Anfimov test); attention shifting (Shulte's tables); intelligence (Raven's APM).

OMM group showed no significant intragroup differences for metaphors' creativity and CF (Wilcoxon, $p>.05$). The only significant intergroup difference was between OMM and sham group for the post-test metaphor (Kruskal-Wallis, Mann-Whitney, $p<.05$). The effect of meditation on MP is to be explored further, considering potential confounders (Davidson, Kaszniak, 2015). CF did not predict metaphors' creativity (Spearman's rho, $p>.05$), which may be due to the low coordination between convergent and divergent processes at the metacognitive level (Hommel, 2012).

Poster session 1 (December 16, 12:20-14:05), poster 3