

The Effects of Uninostril Yoga Breathing on Creativity

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Background. After the innovative work by Varela, Thompson and Rosch “The Embodied Mind” (1991), the strong connection between mind and body could no longer be deniable. Embodiment is currently the most popular approach among psychologists and neuroscientists. Although it is a relatively new perspective in the Western tradition, the ancient science of yoga has always treated the human being as a unit of body and mind instead of a double-natured being. According to yoga, physical and respiratory practices are powerful enough to change mental states, emotions, and cognitive abilities. Especially in the last three decades, the yogic practices of *asanas* (body poses), *pranayama* (voluntary regulation of breath) and meditation became the subject of scientific research designed to study their physical and cognitive effects, as well as to assess their potential therapeutic value.

Experimental design. My research examines whether a pranayama technique called *anuloma-viloma*, also known as “uninostril yoga breathing”, can change the levels of creativity, understood as divergent and convergent thinking. This practice consists in breathing only through a particular nostril, by selectively closing the other one with the fingers. According to yoga – and to science, too – the active nostril stimulates the cognitive activity in the contralateral hemisphere. Because of the lateralization of functions in the brain, I hypothesize that right nostril breathing is associated with higher performance in a verbal-convergent task. On the contrary, left nostril breathing may result in better performances in a visual-divergent task.

Materials and methods. I took a group of right-handed young adults, both males and females. Half of them were assigned *surya anuloma-viloma* (right nostril breathing), while the second half was assigned *chandra anuloma-viloma* (left nostril breathing). Participants underwent an 8-days training in *anuloma-viloma*, preceded by an online session of questions designed to assess relevant personality traits as well the level of right-handedness. On the first and the last day, participants were asked to perform four tasks: a visual-divergent test (Antonietti&Cerioli), a visual-convergent test (rebus puzzle), a verbal-divergent test (AUT), and verbal-convergent test (RAT).

Results. Data analysis showed different and interesting results between the first and the second group.

Key words: uninostril yoga breathing, creativity, divergent thinking, pranayama.

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