Mindfulness-Based Intervention Strategies: A multimodal assessment of Mindful-Yoga, Sitting Meditation and Body Scan effects

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Intervention dismantling studies are necessary to better understand the mechanisms behind changes produced by Mindfulness-based treatment program (Shapiro & Carlson, 2009). Usually, mindfulness-based stress reduction interventions (MBSR, Kabat-Zinn, 1982; 1990) include different meditation practices, such as Mindful-Yoga, Sitting Meditation and Body Scan (Chiesa & Serretti, 2011). Investigating these training techniques could be crucial to better explain mindfulness effects on psychophysiological well-being.

We examined whether the aforementioned meditation practices lead to different changes in psychophysiological outcomes (e.g. mindfulness scale, emotions-related scales, heart rate variability indices, skin conductance level, etc.) when presented separately. We recruited 23 healthy subjects aged from 21 to 42 years (M = 26.34; SD = 5) who were randomly assigned to a Sitting Meditation (n=8), Body Scan (n=7), or Mindful Yoga condition (n=8). Participants in all conditions attended a seven-sessions program (one hour per session a week). Before and after intervention plan Mindfulness Attention Awareness Scale (MAAS, Brown & Ryan, 2003), Psychobiosocial States Questionnaire (PBS, Robazza et al., 2016) and the Optimal Performance Assessment (Wilson, 2006) were administered. RMANOVA 3 (groups) x 2 (tests) did not show any significant differences in psychophysiological outcomes (e.g. mindfulness scale, functional emotions, eyes closed skin conductance). Notwithstanding, we could observe idiosyncratic effects for each of the three meditation practices as documented in the literature (Sauer-Zavala, Walsh, Eisenlohr-Moul, Lykins, 2012).

We acknowledge that this study contains a fairly restricted sample and a short-duration program which may have limited the results. Future studies involving a control group could help us to draw more reliable conclusions.