



Editorial: One Year of Journal of Cognitive Enhancement

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Published online: 26 February 2018

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The first year of Journal of Cognitive Enhancement included a broad overview of cognitive enhancing methods ranging from nootropic ingredients (Caldenhove et al. 2017) to online brain-training games (Bainbridge and Mayer 2017), biofeedback and neurofeedback (Dessy et al. 2017), cognitive training (Carretti et al. 2017), life-experience training (Babcock et al. 2017), and video games (Dale and Green 2017). The journal pursues a mechanistically oriented, theory-driven approach that tries to understand and explain individual differences to a degree that allows a comprehensive understanding of how and why a particular intervention enhances (social) cognition. We reached this goal by publishing 61 articles and three exceptional special issues dedicated to (a) brain stimulation edited by Roberta Sellaro, Michael Nitsche, and myself (issue 1, volume 1); (b) meditation edited by Cristiano Crescentini, Franco Fabbro, and Barbara Tomasino (issue 1, volume 2); and (c) cognitive training edited by Susanne Jaeggi, Julia Karbach, and Tilo Strobach (issue 1, volume 4). The included articles cover multiple aspects of the ongoing research in the field of brain stimulation, meditation, and cognitive training and allow an appreciation of the difficult task ahead in fully understanding the complexity of how to enhance brain and cognition via those methods.

Regarding the special issues, four articles caught my attention for their theoretical insight and practical implications. First, the seminal article by Au et al.

(2017) focuses on the use of transcranial direct current stimulation (tDCS) to promote long-term learning. The authors propose that the full potential of tDCS cannot be truly realized without a longitudinal design which allows for tDCS to act directly upon learning. Second, Böckler et al. (2017) tested the effects of a 3-month contemplative training, which focused on observing-thought meditation and perspective taking and allowed healthy adult participants to practice the ability to understand their own and others' mental states. The data showed that the degree to which participants improved their understanding of themselves predicted their improvements in understanding others' mental states. Third, the articles by Blacker et al. (2017) and Karbach et al. (2017) highlight that the search for effective cognitive interventions will not benefit from "one-size-fits-all" approaches, and that we need tailored interventions in order to maximize the training outcomes. As pointed out by Jaeggi et al. (2017), the question in the field of cognitive training really should be "what type of training is best for whom?". Even though this field has been moving forward in that direction, there clearly is a lot of work to be done. For instance, theoretical models to explain these training and transfer effects (or the lack thereof) are still mostly missing and should be developed and tested in future studies.

Along the lines of 2017, we will keep looking for interesting special issues, please let us know about any thoughts you might have on these topics.

Let me conclude by thanking all our loyal readers and authors and, of course, all our enthusiastic reviewers, who are so essential for maintaining the journal's high quality.

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