A preliminary study on the effects of a mindfulness intervention on the temporary availability of self-control strength

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Abstract

Mindfulness training is associated with beneficial effects on psychological well-being, cognition, emotion regulation, self-regulation, and other factors. Baumeister’s (2002) strength model of self-control postulates that all acts of self-control are empowered by a metaphorical strength with restricted capacity which can become temporarily depleted after a primary self-control act (ego depletion). Various studies report that ego-depleted individuals complete a cognitive or a physical follow-up task less efficiently than non-ego-depleted individuals (e.g. Baumeister, Heatherton, & Tice, 1994; MacMahon, Schücker, Hagemann, & Strauss, 2014).

The aim of the following pre-study is to examine the effects of a short-time mindfulness exercise on depleted self-control strength. The author predicts that participants from a mindfulness condition, contrary to a control condition, can compensate - at least partly - for the ego-depletion effect procured by a strenuous cognitive task.

To induce ego-depletion, all participants are asked to transcribe a text as fast as they can while omitting the letters “e” and “n”. A short-time mindfulness exercise will serve as intervention as opposed to a control condition in which participants are listening to a story book. The dependent variable is the performance in the Stroop test which is a task which requires self-control strength. In addition, trait-mindfulness (Comprehensive Inventory of Mindfulness Experience) and dispositional self-control strength (Self-Control Scale) will be controlled for. Heart rate variability, which is considered as indicator of ego-depletion, will serve as a manipulation check. Fifty sport students attending their first semester are to be tested. In a follow-up study, the author intends to investigate the potential beneficial effect of a short-time mindfulness exercise in ego-depleted individuals on physical performance (endurance and strength).

Keywords: Mindfulness, ego-depletion, self-control theory, physical performance
References

