

APS Announces Third Replication Project

DEADLINE FOR PROPOSALS EXTENDED TO 9 JANUARY

October 28, 2014



Two months after APS published its [first Registered Replication Report](#) (RRR), the plan for the third RRR has been finalized and editors are accepting proposals from researchers who would like to participate in the large-scale replication by running the study in their lab.

Roy Baumeister and colleagues (1998; Muraven, Tice, & Baumeister, 1998) proposed that performance on tasks requiring self-control is governed by a general, unitary, and finite “internal” resource. Engaging in tasks requiring self-control is believed to deplete the resource, reducing performance on subsequent tasks that require self-control, a phenomenon known as “ego depletion.”

The classic evidence for the phenomenon comes from a simple paradigm involving two consecutive tasks. For participants randomly assigned to the experimental (ego-depletion) group, both tasks require self-control. For participants assigned to the comparison (no depletion) group, only the second task requires self-control, with the first task not requiring any, or very little, self-control. Self-control tasks typically require individuals to alter or modify an instinctive, well-learned response, such as resisting an impulse or overcoming temptation (Baumeister, Vohs, & Tice, 2007).

Results of the original studies from Baumeister and colleagues showed that participants in the experimental group performed worse on the second task relative to participants in the comparison group. The tasks used in the experiments were from different “domains” of self-control providing evidence to suggest that the resource was “domain-general” and was implicated in all tasks that required self-control. Numerous replications of the original findings have supported this account. A recent meta-analysis revealed a medium effect size ($d = 0.62$) across 198 tests of the ego-depletion effect (Hagger, Wood, Stiff, & Chatzisarantis, 2010).

Despite these findings, some researchers have questioned the strength of the ego-depletion effect. A

recent analysis conducted by Carter and McCullough (2013, 2014) suggested that the effect may be quite small or entirely an artifact of publication bias. The researchers cite evidence that many tests of the effect were substantially underpowered suggesting that the likelihood of finding such a large number of significant effects in the literature is improbable. Although the interpretation of these analyses have been questioned (Hagger & Chatzisarantis, 2014), it is possible that publication bias may have inflated the size of the effect evident from the literature.

Both Carter and McCullough (2013) and Hagger and Chatzisarantis (2014) recommend that large, pre-registered direct replications of the ego-depletion effect be conducted.

The third RRR will do so using the paradigm developed and published by Sripada, Kessler, and Jonides (2014), which is similar to that used in the original depletion experiments (Baumeister et al., 1998; Muraven et al., 1998), using only computerized versions of tasks to minimize variability across laboratories. By using preregistered replications across multiple laboratories, this RRR will allow for a precise, objective estimate of the size of the ego depletion effect.

Researchers interested in participating in this replication project are encouraged to complete and submit a [Secondary Replication Proposal Form](#). Participation in the project will require running the experiment in an individual lab and analyzing the data, following [the detailed protocol](#), to contribute to the comprehensive report to be published in *Perspectives on Psychological Science*.

References

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