

RESOURCE-DEPLETION: OUTCOME OF FAILED ENERGY MANAGEMENT OR
ADAPTIVE EMOTION?

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ABSTRACT

After exerting a demanding amount of mental effort people perform worse on a second unrelated task that also requires mental effort (resource-depletion). Limited resource explanations of this effect (such as the Strength Model) remain popular. Theories of this sort maintain that there is a real sense in which the operations needed to perform demanding mental tasks are compromised after use. The following experimental study tested a purely motivational account of "depletion" effects. This theory does not posit depletable resources, and instead, appeals to shifts in the motivational priority assigned to activities available to a person. Based on evidence demonstrating that non-rewarding mental labor increases the motivation to pursue activities associated with approach motivation, this motivation-based theory predicts that "depleted" participants should perform *better* than non-depleted participants on rewarded trials of cognitive control tasks. Contrary to this prediction, results indicated that rewards had a greater influence on control participants, supporting a depleted capacity theory. In addition, the depleting task was not rated as any less enjoyable relative to the control task, again supporting a limited resource theory. However, the study did not replicate the resource-depletion effect inasmuch as the depletion manipulation had no influence on non-rewarded trials. Thus, the experiment provides support for a limited capacity theory of depletion effects as motivational explanations rise in popularity. Yet, these results need to be interpreted with caution since the thing to be explained--namely resource-depletion--did not occur in the first place.