

Inspired by Distraction. The relation between mind wandering and creativity

Mind wandering, the phenomenon that you are thinking about things that are unrelated to the task that you are doing, is generally known to have negative effects on behavior. Although the detrimental effects of mind wandering are well established, articles periodically emerge in popular media suggesting that increased allowance for mind wandering in educational and professional settings may have potential benefits. One of the most critically acclaimed benefits is that mind wandering may foster creativity, the generation of novel yet useful ideas. Famous anecdotal examples include Newton's falling apple that inspired his ideas on gravity, Archimedes' "Eureka!" moment when he suddenly discovered the principle of buoyancy while taking a bath, or Poincaré, who experienced one of his most important theoretical breakthroughs during a geological excursion. In all these cases, a mind wandering episode would act as an incubation period during which your brain is working on problems without you necessarily being aware of this. Solutions to difficult problems, novel ideas and inventions would find their origin in mind wandering episodes.

The proposed project aims to empirically substantiate this popular claim. The study is largely based on prior work and consists of combining a creativity task (i.e., the Unusual Uses Task) with different tasks that fill the incubation period (see Baird et al., 2012, *Psychological Science*). The participants of the study will all be healthy volunteers.

The selected candidate will collect and analyze behavioral data. Applicants should have basic knowledge of statistics. Knowledge of Python/R is considered a plus.

Applicants should speak basic French to interact with participants. Applicants with a background in engineering, computer science or physics are also encouraged to apply.

The work will take place at the *Laboratoire de Psychologie et Neurocognition* and the *Maison de Creativity et Innovation (MaCI)* in Grenoble.

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