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The Effect of Offloading Tools on Complex Decision-Making: Evidence from Laboratory Experiments

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Abstract

People face daily complex cognitive tasks, like selecting appropriate health insurance or planning for retirement, that require solving computationally complex problems. To assist in this process, individuals often rely on tools, such as financial calculators, which can be used to offload computations to help achieve better decisions. To date, however, it remains an open question what drives the use of offloading tools and whether their use improves the quality of complex decisions. Employing lab experiments, we find that as the computational complexity of a task increases, participants rely more on the use of offloading tools. However, utilising the offloading tools does not necessarily improve performance. Indeed, in a setting with limited time, participants performed marginally worse. Our results suggest a nuanced effect of offloading on behaviour that has implications for public policy and the design of tools for aiding decision-making.

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