WELLNESS TEAM CULTURE

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RESEARCH BRIEF · THE EVIDENCE, PLAINLY

The Note Is Not the Skill

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Reminders and notes do their job: a 2026 meta-analysis of experiments found that offloading memory to an external aid improved performance on memory tasks and narrowed the spread of performance between people. Two 2026 experiments add the other half. After a reminder had covered one future-memory task and was then removed, performance on that task fell below the level of people who had never had a reminder, and people who had lived with a perfectly reliable reminder thought about the intention less and retrieved less when it was withdrawn. This brief sets out what each source found, how strong each is, and what none of it proves.

WHAT WAS ACTUALLY STUDIED

01

Burnett and Richmond (2026), Memory & Cognition

TIER I · TWO META-ANALYSES OF EXPERIMENTS (MEANS AND VARIANCE)

The overview source. Two meta-analyses of experiments on cognitive offloading, defined as using physical action to reduce internal cognitive demand, and its effect on memory-based task performance. The meta-analysis of mean differences found the benefit of offloading was greater when offloading was forced than when it was a free choice, and greater in within-subject than between-subject designs. The meta-analysis of variance found that offloading reduced interindividual variability in performance, and the reduction was greater for adults than children, for forced than choice offloading, and for prospective than retrospective memory tasks. Study modality was not a significant moderator in either analysis. The abstract does not report the number of studies or effect sizes, and this brief does not state them.

02 Fellers and Storm (2026), Journal of Experimental Psychology: Learning, Memory, and Cognition

TIER 2 · TWO LABORATORY EXPERIMENTS (ABSTRACT-LEVEL READ)

The withdrawal source. In two experiments, participants performed two prospective memory tasks, either relying on internal memory for both or using an external reminder for one. Reminders improved performance on the task they covered but did not improve performance on the concurrent task that was not offloaded. When all reminders were removed in a later phase, performance on the previously offloaded task was significantly impaired and fell below the baseline of participants who never used reminders. The authors conclude that offloading can improve performance while undermining the cognitive processes needed for learning, and later success on, the task when reminders are no longer available.

03 Dupre and Ball (2026), Psychonomic Bulletin & Review

TIER 2 · LABORATORY EXPERIMENT, N = 320 STUDENTS

The trust source. The study crossed reminder reliability (0%, 50%, 100%) with reminder availability (present or absent) in a student population, and used thought probes as a real-time proxy for whether the intention stayed in conscious awareness during the wait. In the first session, reminders improved performance without reducing prospective-memory-related thoughts, consistent with reminders supporting memory in a duplicative way. After experiencing reliable external support, the 100% group in the second session reduced prospective-memory-related thoughts, redistributed attention to the ongoing task, and showed reduced retrieval when reminders were unexpectedly withdrawn.

04 Storm and Stone (2015), Psychological Science

TIER 2 · THREE LABORATORY EXPERIMENTS

The capacity source. In three experiments, saving one file before studying a new file significantly improved memory for the contents of the new file. The effect was not observed when the saving process was deemed unreliable or when the contents of the saved file were not substantial enough to interfere with memory for the new file. The authors interpret saving as a way to strategically offload memory onto the environment, reducing interference from information that is no longer needed.

05 Gilbert, Boldt, Sachdeva, Scarampi and Tsai (2023), Psychonomic Bulletin & Review

TIER 2 · NARRATIVE REVIEW OF INTENTION OFFLOADING

The context source. A review of research on intention offloading, the use of calendars, diaries, strategically placed objects and smartphone alerts to remember delayed intentions, with a focus on how people decide between internal memory and external reminders. The authors conclude that intention offloading is highly effective, experimentally tractable and guided by metacognitive

processes, that individuals have systematic biases in their offloading strategies that are stable over time, and that metacognitive interventions could help people use cognitive tools adaptively.

06 Buchli and Storm (2025), Memory

TIER 2 · THREE EXPERIMENTS (CORRELATIONAL MODERATOR)

The moderator source. Across three experiments on the saving-enhanced memory effect, participants with higher working memory capacity showed a larger effect than participants with lower working memory capacity. The authors suggest that working memory capacity may enhance a person's ability to benefit from saving as a form of cognitive offloading. The relation is correlational.

WHAT THEY FOUND

Offloading memory to an external aid helps. A 2026 meta-analysis in Memory & Cognition found that offloading improved performance on memory-based tasks, more when it was required than when people chose it, and that it narrowed the spread of performance between people, more for adults than children and more for prospective memory (remembering to do something later) than for retrospective memory (Burnett and Richmond, 2026). Earlier experiments found that saving one file before studying a new one improved memory for the new file, unless the saving was unreliable or the saved material was too slight to interfere (Storm and Stone, 2015). A review concluded that using reminders is highly effective and guided by metacognitive processes (Gilbert and colleagues, 2023).

The aid also changes what is learned. In two experiments, a reminder improved performance on the task it covered and did not improve a concurrent task that was not covered. When every reminder was removed, performance on the previously covered task was significantly impaired and fell below the baseline of participants who had never used reminders (Fellers and Storm, 2026).

100%

Reminder reliability in the group that, after living with a perfectly dependable reminder, thought about the intention less during the wait and retrieved less when the reminder was unexpectedly withdrawn. 320 students; reliability crossed at 0, 50 and 100 percent (Dupre and Ball, Psychonomic Bulletin & Review, 2026).

A second 2026 experiment points to a possible route. While reminders were present they helped without reducing intention-related thoughts. After experiencing a reminder that was always right, participants thought about the intention less during the wait, gave more attention to the ongoing task, and retrieved less when the reminder was unexpectedly withdrawn (Dupre and Ball, 2026). A 2025 set of experiments found that people with higher working memory capacity showed a larger saving-enhanced memory effect (Buchli and Storm, 2025).

WHERE THE EVIDENCE STANDS

Where the evidence converges: external aids improve performance while they are available, and the benefit is larger for forced than for chosen offloading and for prospective than retrospective tasks. Two 2026 experiments from different labs point the same way once the aid is gone. Fellers and Storm found that performance on a previously reminded task fell below the baseline of people who never had reminders, and Dupre and Ball found reduced retrieval and reduced intention-related thinking after a perfectly reliable reminder was unexpectedly withdrawn. The abstract of the second does not say which comparison group the reduction is measured against, so this brief does not claim it fell below a never-reminded baseline.

Where it diverges or is thin: the meta-analysis measures performance on the memory task, usually while the aid is in use, and the two withdrawal experiments measure what happens after the aid is removed. These are different questions, so the findings do not contradict one another. The withdrawal effect rests on two experiments and one study of 320 students, all short laboratory tasks. The reason the withdrawn task is worse is not settled: the authors of one study read it as reduced learning, and the other describes memory adapting to reliable support. The 2025 working-memory-capacity result concerns a different effect (the benefit of saving for learning new information) measured differently, so it is reported alongside the equalizer finding and not as evidence for or against it.

What follows for a reader is a way to choose what to offload, not a treatment claim. Offloading one-off tasks, deciding in advance what to keep in memory, recalling before checking, running low-stakes withdrawal tests and tallying one's own offloading habits are translations of the findings. The fading schedule in particular has not been tested as a protocol.

WHAT THIS DOES NOT PROVE

The withdrawal evidence comes from short laboratory tasks in which reminders were removed suddenly. Nothing here measures years of real-world use of calendars, phones or notes, and the findings should not be read as showing that everyday reminder use harms memory over time.

The reminders in these experiments covered one task at a time. How the effects scale when dozens of tasks are offloaded, or when offloaded information is something a person never needed to learn, is not addressed.

Dupre and Ball's sample was students (N = 320). A press report on Fellers and Storm described online experiments with undergraduates, but this brief did not confirm sample sizes or participants from the paper, and none are stated in the copy. Results may differ in older adults, in clinical groups and in everyday settings.

The meta-analysis reports performance and variability on memory-based tasks. It does not say whether the people who gain most from offloading learn more or less from it, and this brief makes no claim either way. The abstract does not report the number of studies or the size of the effects, so none are stated.

This brief read abstract-level records retrieved from PubMed. Details beyond the abstracts were not verified and are not claimed.

None of this is medical advice. These are laboratory memory tasks, not studies of memory disorders. Memory lapses that are new, getting worse or affecting safety are worth a clinician's attention, and medication or other safety-critical routines are not a place to run withdrawal tests.

WHAT IT MEANS FOR YOU

Put one-off tasks, appointments and errands in a tool as they arrive, since that is the use the evidence supports best. Decide in advance which things you want to keep in memory, such as a name, a route or a procedure, and keep that job for yourself. For anything you want to own, try recalling it before checking the note and lengthen the gap as it holds; this fade is a translation of the withdrawal findings and has not been tested as a protocol. Once a month, run a low-stakes withdrawal test by doing one thing a tool normally covers without it, never with medication or anything safety-critical. For a week, tally the reminders you set that you did not need and the things you trusted to memory that slipped, since biases in how much people offload are stable. The newsletter walks through those five moves. The research above is why they are the five, and where each one runs out.

GO TO THE SOURCE

TIER 1 · META-ANALYSES Burnett, L. K., & Richmond, L. L. (2026). Meta-analytic investigations of the effect of cognitive offloading on memory-based task performance and interindividual variability. Memory & Cognition, 54(1), 144-168. doi.org/10.3758/s13421-025-01743-8

TIER 2 · EXPERIMENTS Fellers, C., & Storm, B. C. (2026). Offloading reduces prospective memory learning. Journal of Experimental Psychology: Learning, Memory, and Cognition. doi.org/10.1037/xlm0001630

TIER 2 · EXPERIMENT Dupre, C., & Ball, B. H. (2026). Let it go: How trusted reminders alter intention maintenance. Psychonomic Bulletin & Review, 33(7). doi.org/10.3758/s13423-026-02985-6

TIER 2 · EXPERIMENTS Storm, B. C., & Stone, S. M. (2015). Saving-enhanced memory: The benefits of saving on the learning and remembering of new information. Psychological Science, 26(2), 182-188. doi.org/10.1177/0956797614559285

TIER 2 · REVIEW Gilbert, S. J., Boldt, A., Sachdeva, C., Scarampi, C., & Tsai, P.-C. (2023). Outsourcing memory to external tools: A review of 'intention offloading'. Psychonomic Bulletin & Review, 30(1), 60-76. doi.org/10.3758/s13423-022-02139-4

TIER 2 · EXPERIMENTS Buchli, D. R., & Storm, B. C. (2025). Working memory capacity and the saving-enhanced memory effect. Memory, 33(8), 1015-1030. doi.org/10.1080/09658211.2025.2551230

Tier 1 means peer-reviewed primary research or meta-analysis, the strongest evidence. Tier 2 means an expert framework or smaller study that traces to peer-reviewed work. We grade every source so you can see the weight behind each claim.

Pegasus Realm publishes Wellness Team Culture and the practice resources behind it.

Education, not medical advice.