

## Short Report

## Misconceptions of Memory

## The Scooter Libby Effect

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People often claim they cannot remember, and other people often doubt those claims. For example, during his 2007 trial, Vice-Presidential Chief of Staff I. Lewis “Scooter” Libby claimed that he could not remember mentioning the identity of a Central Intelligence Agency employee to other government officials or reporters. Jurors found it difficult to believe that Libby could have forgotten having had such important conversations and found him guilty of obstruction of justice, making false statements, and perjury.

Libby’s conversations were indeed important, but they were less important at the time he had them than they became months later when the Justice Department launched its investigation. Although important information increases the motivation to remember (MTR), research on human memory suggests that MTR is considerably more effective when it arises before rather than after information is encoded (Loftus & Wickens, 1970; Naveh-Benjamin, Craik, Gavrilescu, & Anderson, 2000). MTR at encoding leads people to attend to and organize information in ways that promote accessible storage in long-term memory, whereas MTR at retrieval merely leads people to work hard to retrieve information, and even the most earnest search of long-term memory is ineffective when information was never stored there in the first place.

Do people take the timing of MTR into account when judging other people’s memories? Research suggests that people’s intuitions about memorial processes are often flawed, leaving them susceptible to a host of errors, ranging from the illusion of knowing to hindsight bias (Bjork & Dunlosky, 2008; Dunlosky, Serra, & Baker, 2007; Metcalfe, 2000). If people do not consider the fact that MTR is more effective at encoding than at retrieval, then they may mistakenly expect other people to remember information that became important as though it had always been important. We tested this possibility.

## METHOD

Participants (89 women, 41 men; mean age = 22.4 years,  $SD = 7.0$  years) were shown photographs of six individuals ostensibly

taken from a high-school yearbook. Each photograph was accompanied by five facts (e.g., “John Smith enjoyed playing sports with his friends” or “Sarah Palmer spent a lot of time tutoring her younger brother”). Participants were randomly assigned to the role of memorizer or judge.

## Memorizers

Memorizers were told that they would study the material for 2 min before seeing the photographs and trying to recall the facts associated with each. They were also told that they would receive \$0.10 for each recalled fact. Before they studied the material, memorizers in the MTR-at-encoding condition ( $n = 21$ ) were told that they would receive a \$0.50 bonus for each fact they remembered about the individual named Beryl White. Memorizers in the MTR-at-retrieval condition ( $n = 22$ ) were told about this bonus immediately after they studied the material. Memorizers in the no-MTR condition ( $n = 21$ ) were not told about the bonus. After studying the material, memorizers were shown the photograph of Beryl White and were asked to recall the facts about her.

## Judges

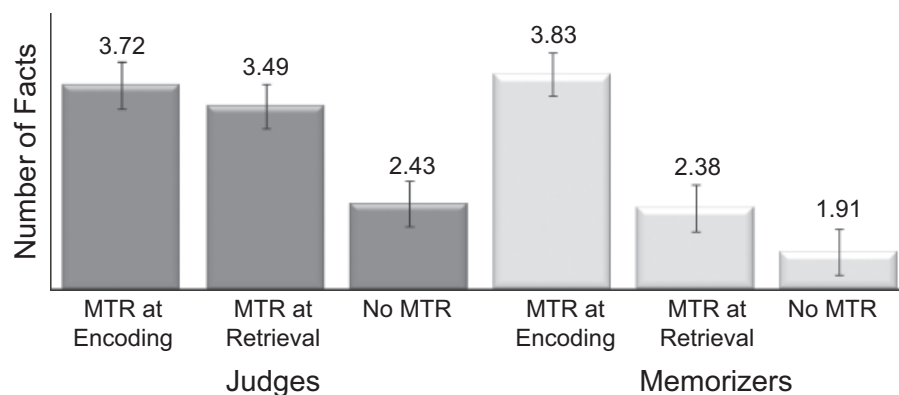
Judges were shown the same material as memorizers and read a detailed description of the instructions from the MTR-at-encoding condition ( $n = 24$ ), the MTR-at-retrieval condition ( $n = 21$ ), or the no-MTR condition ( $n = 21$ ). Judges were then asked to predict the percentage of memorizers in that condition who would remember each fact.

## RESULTS

Memorizers’ responses were scored by two blind coders with 100% agreement. Memorizers were awarded 1 point for each fact correctly recalled. Judges’ predictions were converted to decimal format (e.g., a judge who predicted that 67% of memorizers would recall a particular fact was awarded 0.67 points).

A 2 (role: memorizer or judge)  $\times$  3 (MTR: MTR at encoding, MTR at retrieval, or no MTR) between-participants analysis of variance performed on actual and predicted memory revealed a main effect of role,  $F(1, 124) = 6.27, p = .014$ , and a main effect of MTR,  $F(2, 124) = 21.15, p < .001$ , both of which were

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**Fig. 1.** Memory and predicted memory for information in each motivation-to-remember (MTR) condition. The graph shows the mean number of facts that judges expected the memorizers in each condition to recall and the mean number of facts actually recalled by memorizers in each condition. Cell means are shown above the bars, and error bars indicate standard deviations.

qualified by a Role  $\times$  MTR interaction,  $F(2, 124) = 3.12, p = .048$ . As shown in Figure 1, memorizers recalled more facts about Beryl White when they were motivated to remember those facts before reading them than they did when they were motivated after reading them,  $t(124) = 3.57, p = .001$ . Being motivated after reading was no more effective than not being motivated at all,  $t(124) = 1.13, p = .27$ . Nonetheless, judges expected memorizers who were motivated after reading to remember just as many facts as those who were motivated before reading,  $t < 1$ , and they expected both motivations to be more effective than no motivation at all,  $t_s(124) = 4.462$  and  $3.602, p_s < .001$ . In short, judges mistakenly expected memorizers to remember information that became important as though it had always been important,  $t(124) = 3.16, p = .002$ .

## DISCUSSION

Participants who were asked to judge another individual's memory did not distinguish between information that was important when the individual encountered it and information that became important only later. Clearly, people's theories about the effects of motivation on memory are imperfect. It is interesting to note, in light of these findings, that the U.S. District Court denied Libby's motion to allow expert psychologists to testify about the foibles of memory and metamemory because, the court argued, such research would tell jurors little that they did not already know.

Everyone in their daily lives is called upon to store, encode, and retrieve information he or she has been subjected to. Although the average juror may not understand the scientific basis and labels attached to causes for memory errors, jurors inevitably encounter the frailties of memory as a commonplace matter of course. (*United States v. Libby*, 2006)

People do indeed encounter the frailties of memory as a matter of course, but this does not mean that they understand the nature or power of these frailties. Our study shows that people mistakenly expect MTR to be just as effective when it arises after information is encountered as when it arises beforehand. Thus, they sometimes expect others to remember more than they possibly can.

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