

The present study examined age-related differences in monitoring memory performance on a test using a novel task that asked people to monitor how much information they had forgotten (Halamish & Koriat, 2010). In many real-life free-recall situations, for example, when we try to draft a mental list that includes errands, assignments, and things to buy in the supermarket, we occasionally feel that we have forgotten some information. It seems likely that what is occurring in such situations is that individuals make spontaneous attempts to monitor forgetting. Yet, the validity of such monitoring, as well as potential age-related differences in monitoring forgetting, has not received experimental attention.

more information than young adults. When summed across the different categories, older adults estimated they forgot 16.20 items, significantly more than young adults who estimated they forgot 10.08 items, $t(38) = 2.33, p = .05$. The finding that the age-related differences in the MOF estimates were consistent with the age-related differences in actual memory performance indicates that older adults accurately estimated their increased forgetting. Occasionally, participants provided category exemplars that were not studied and older adults had significantly more intrusions than younger adults (3.00 vs. 0.5), $t(38) = 2.89, p = .01$. Across all categories, 17.0% of the responses that older adults provided were intrusions, compared with only 0.2% of the responses of young adults.

Monitoring of Forgetting Calibration

Actual forgetting and estimated forgetting were compared across the different categories in order to examine MOF calibration. As Figure 1 indicates, both age groups estimated that they forgot less information than they actually did. We conducted a 2 × 2 analysis of variance with age group as a between-participants measure (young vs. old) and forgetting (actual vs. estimated) as a within-participants measure. This analysis yielded a main effect of age group, $F(1, 38) = 7.18, MSE = 87.01, p = .05$, with older adults displaying higher forgetting scores compared with younger adults. The analysis also yielded a main effect of the forgetting measure, $F(1, 38) = 6.17, MSE = 20.88, p = .05$, which indicated that, across the two age groups, actual forgetting was higher than estimated forgetting. The analysis did not yield a significant interaction, $F = 1$.

However, when we compared actual (memory) and estimated (MOF judgment) forgetting scores for each age group separately, an interesting pattern emerged. For older adults, there was no significant difference between actual and estimated forgetting, $t(19) = 1.14, ns$

suggesting age invariance in the ability to estimate and monitor performance that has already occurred (Baker et al., 2010; Brigham & Pressley, 1988; Bunnell et al., 1999; Hertzog et al., 1994), although somewhat inconsistent with other bodies of research (Gopie et al., in press; Koriat et al., 1988; Souchadt

studying) in terms of future encoding operations that could serve to enhance memory performance.

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