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### Strategy Training Using a Multiple Levels of Processing Task

Despite the effectiveness of semantic orienting tasks, it is difficult to induce participants to engage in them voluntarily (Chow, Currie, & Craik, 1978). Hornak et al. (2004, 2005, 2006) have studied multiple levels of processing effects in a mixed-list design, where participants randomly performed either one processing task or two processing tasks. Results showed that multiple tasks not only benefited recall, but also benefits increased with deeper levels of processing. In a mixed-list task, participants were unable to predict when multiple tasks would occur. In contrast, Hornak and Loehman (2007) used a pure-list presentation, blocking all repeated items to enable participants to predict multiple tasks. Surprisingly, when a block of items with two orienting tasks was presented followed by a block of items with a single orienting task, items processed with only one task were recalled as well as items processed with multiple tasks, indicating the possibility that a multiple task strategy was spontaneously adopted by participants. This study explores the possibility of implicitly training participants to use a multiple task strategy through an ABAB design. Target items were arranged in 4 blocks of 12 items each, with a block of items alternating between one processing task or two processing tasks per target. Each block contained half semantic tasks and half structural tasks, and half yes responses and half no responses. Block order was manipulated between subjects, with half of the participants ( $N = 94$ ) receiving the task order One-Two-One-Two (OTOT); and the remaining participants receiving the reverse order (TOTO). Significant three-way (Task X Practice X Group) and four-way (Levels X Task X Practice X Group) interactions indicated that implicit training occurred, but only for the block order TOTO. Implications for inducing effective strategies are discussed.