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Are age-related differences in associative memory mediated by sensory decline?

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Naveh-Benjamin (2000) suggested an associative deficit hypothesis, explaining that some of the decline in episodic memory in older adults is due to their difficulty in binding unrelated components together into a cohesive unit. Other researchers demonstrated how sensory acuity can account for a significant portion of age-related differences in cognitive performance (Baltes & Lindenberger, 1997). We investigated whether age-related declines in associative memory could be in part due to declines in sensory functioning. This study extends the associative deficit hypothesis to the visuo-spatial realm by using nameable picture pairs (i.e., object pairs). Picture pairs were blurred, or “perceptually degraded”, both at encoding and retrieval in order to simulate the sensory functioning of older adults. Older and younger adults were compared on their recognition memory for each individual picture in the pair, as well as their recognition memory for which pictures appeared together. The results and their implications will be presented and discussed in the context of potential mediating factors of age-related associative memory decline.