

UNDERGRADUATES' IMMEDIATE MEMORY SPAN FOR FACES IS THREE

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Warrington and Taylor (2) report that normal hospital patients have an immediate recognition memory span of only one for photographs of human faces, and they argue that faces are processed entirely by longer-term memory. This study shows that 12 undergraduates' memory span for faces is not one, but three. These hospital patients had a mean age of 60.7 yr. whereas our undergraduates had a mean age of 20.5 yr. In other respects the procedure was similar. Six men and six women were subjects. Two sets of stimuli, A and B, were used for both faces and surnames with half the subjects using set A and half set B, and half tested on faces first and half on surnames first. From *Spotlight*, a directory of actors and actresses, 120 photographs measuring 10 cm by 8 cm were taken. These were male faces excluding any with beards, spectacles, or other obtrusive features, and any judged as familiar. Two-syllable, relatively unfamiliar surnames ($n = 168$) were drawn from the London telephone directory. On each trial the subject saw a string of n stimuli presented singly on cards turned at a 3 sec. rate, followed by a recognition test with the n old stimuli and $2n$ new stimuli randomly arranged on a single card. Subjects were asked to point to the old stimuli but they were not required to recall the order of presentation. The intertrial interval was about 5 sec. With faces, n was 1, 1, 2, 2, 3, 3, 4, 4 on eight successive trials. With surnames it was 2, 2, 3, 3, 4, 4, 5, 5. A subject's memory span indicates perfect performance on lists of this length and on shorter lists. Adopting this definition, three subjects had a span of four faces, six had a span of three, two had a span of two, and only one had a span of one. For surnames, six subjects had a span of five, five had a span of four, and one had a span of two.

Undergraduates' memory span for faces is not one, but about three. Their span for surnames is about five. The discrepancy with Warrington and Taylor's result could be explained by differences between undergraduates and hospital patients, but their method of calculating the span may be relevant. They argue (a) that faces are not processed by 'auditory verbal short-term memory' and (b) that no other post-perceptual short-term memory processes faces. It would be difficult to find any opposition to their first point, but the second is more contentious. Even if the memory span was only one, this would not necessarily rule out some form of short-term storage. The fact that people can form mental images of faces and make reliable judgments about them (1) might suggest a short-term store does exist.

REFERENCES

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