

Effects of post-exposure processing on subsequent face recognition. Wogalter, Michael Seth, Ph.D. Rice University, 1987.

This research concerns the effects of post-exposure verbal description and imaging on subsequent face recognition. In Experiment 1 subjects viewed a sequence of 6 target photographs, and after each, groups of subjects performed one of four tasks. Two were target-directed description tasks, an adjective checklist or an adjective generate task. Other subjects were instructed to image the target face or they performed an irrelevant/distractor task. In the subsequent recognition test subjects looked for the targets in a sequence of 140 facial photographs. The results indicated that the adjective checklist task produced lower recognition performance compared to the adjective generate task. The imaging task produced the highest recognition performance but was not significantly different from the adjective generate task. The irrelevant/distractor task did not significantly differ from the other tasks.

Experiment 2 used different adjective checklist and adjective generate forms, and added an adjective rate task. Orthogonal to the post-exposure manipulation was the presence vs. absence of imaging instructions. Like Experiment 1, the results indicated that the adjective generate condition produced higher recognition performance than the adjective checklist condition. The adjective rate task was intermediate but did not differ from the other two description tasks.

Imaging instructions did not produce a main effect, but it did interact with post-exposure task. The adjective checklist and adjective rate tasks produced lower recognition when imaging instructions were given compared to when they were not given. However, the adjective generate task produced better recognition with imaging instructions than without.

The highest quality descriptions were produced by the adjective generate condition. In addition, the quality of the adjective generate and adjective rate descriptions related to subsequent recognition but the adjective checklist condition did not.

The recognition decrements shown by the adjective checklist task are explained primarily in terms of confusion by irrelevant face cues. If verbal descriptions are requested from eyewitnesses, a descriptor generation task is preferred over a descriptor checklist because it does not degrade subsequent recognition, it produces the best quality descriptions, and description quality is diagnostic of subsequent recognition performance.

Reprinted from

DISSERTATION ABSTRACTS INTERNATIONAL

Volume 48, Number 5, 1987

A Publication of University Microfilms International