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Subjects'

judgment). Subjects were told at test that there were always two

(presentation 1/presentation 2) × Repetition type (same-exemplar/ different-exemplar) × Memory (correct detail hits/misses). Given our particular interest in whether repetition-related neural attenuation (or enhancement) that is associated with subsequent recognition varies as a function of perceptual similarity of the repeated stimuli, our analyses place a special emphasis on the three-way interaction involving Presentation × Repetition type × Subsequent memory.

The proportions of high confidence hits, low-confidence hits and misses for target words did not differ between same-exemplar and different-exemplar repetitions ( >0.1 in all cases) and therefore, are presented collapsed on Fig. 2A. Fig. 2B and C shows the proportions of correct detail hits, incorrect detail hits and unsure responses for the second question regarding whether the two presentations were same or different. The data are presented only for high confidence hits. New items (foils) were correctly rejected 81% of the time; of the 19% false alarms, 8% were high confident old responses.

In this paper, we focus on correct detail hits and misses in order to compare neural priming for two extremes—the stimuli that are later recollected (or have the strongest memory trace) and stimuli that are

As illustrated in Fig. 3, the first presentation of the same- vs. different-exemplar hits did not differ. However, the first presentations of the same-exemplar misses were often lower than those of the different-exemplar misses. Moreover, the differences between hits and misses on the first presentation appeared greater in the sameexemplar condition than in the different-exemplar condition. Paired -tests were conducted to evaluate the statistical significance of these differences. In the left ITG, activation for hits was significantly higher than for misses in the same-exemplar condition, (12) = 3.8, < 0.005, but not in the different-exemplar condition. The differences between hits and misses on the first presentation were significantly greater for the same-exemplar repetition than for the different-exemplar repetition in the left ITG, (M = 0.26, SE = 0.09, (12) = 2.9, <0.05). Moreover, neural activity in this region was significantly lower for the same-exemplar misses than for the different-exemplar misses, (12) = 3.9, <0.005. In the left oFFG, the same-exemplar hits were greater than misses, (12) = 3.6, < 0.005, and the different-exemplar hits were marginally greater than misses, (12) = 2.1, <0.1, on the

than the difference between the blocks 1 and 2, and there was no difference between blocks 3 and 4. This pattern of data indicates that a repetition priming account explains the neural attenuation effects in these regions better than task learning. In contrast, in right ITG, right

function of subsequent memory and the nature of the stimulus repetition. We examined whether neural attenuation would be larger for confident hits than misses, as shown by

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