Associative learning of new word forms in a first language and haptic features in a single-day experiment

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Abstract

This study focused on associative learning for new words in the first language and haptic stimuli. In the first, healthy Japanese participants made nine subjective evaluations of haptic stimuli using five-point semantic differential scales (e.g., regarding stickiness, scored from 1 [not sticky] to 5 [sticky]). In the second and third, the participants carried out two learning tasks for associative pairs of a new word in Japanese and haptic stimulus (H), or new words only (W). In the fourth one, after each learning task, participants performed recognition and free recall tasks. The results of the recognition tasks showed that the accuracy rates of W were better than those of H, whereas the response times of W were faster than those of H. Further, preference of haptic features negatively correlated with free recall scores of H; however, there was no significant difference between the free recall scores of H and W.