Abstract

An experiment was conducted to investigate the existent of subliminal semantic processing. Since words linked to each other by semantic meaning, the direct method, which tested subjects' ability to recognize the prime, was not able to investigate the priming effect caused by semantic associations because it did not require the subjects to interpret the whole word (prime) before responding to the target. Thus, an indirect method, which assessed the influence of the prime on some other task (Klinger, Burton, & Pitts, 2000) should be applied. According to different semantic priming theories, if prime and target were associated words, a priming effect would be resulted. Also, with respect to Neely (1977), automatic process played a dominant role in the retrieval of over-learned associations. It was believed that the well-established associations would react faster than those new-learned associations in subliminal condition. To test the hypotheses, three types of word pairs indicating different semantic associations were created: well-established, new-learned and control. Participants were asked to memorize sixteen pairs of irrelevant word pairs (new-learned) before performing a lexical decision task. Although results from the experiment showed that the different in reaction time on target words between well-established and new-learned associations was insignificant under subliminal condition, the different in reaction time on target words between control association and the well-established or new-learned association was significant. With such results, it was clear that semantic processing could be activated subliminally.