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## **Testing the neural locus of affective priming effects**

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Research has consistently shown that participants are faster to categorize the valence (positivity or negativity) of an affective target when it is preceded by a stimulus (prime) that shares its valence compared to one that is opposite in valence. This so-called "affective priming" effect has been attributed to one of two main theoretical mechanisms: 1) Primes activate valenced concepts in long-term memory, such that all affectively similar constructs are temporarily more accessible (i.e., spreading activation); or 2) Primes activate response tendencies prior to target onset, such that responses to affectively congruent targets get a head start over affectively incongruent targets (i.e., response conflict). In this study, event-related potentials (ERPs) are recorded while participants complete an affective priming task using words as primes and targets. All participants are undergraduate students completing the task for class credit. Incongruent prime-target pairs should result in longer reaction times than congruent pairs. More importantly, comparison of patterns of ERP activity will be used to distinguish between the spreading activation account and the response conflict account of this effect. Support for spreading activation would be seen in longer latency of the P300 ERP component on incongruent vs. congruent trials, suggesting greater difficulty in evaluating targets preceded by opposite valence primes. In contrast, support for the response conflict account would be indicated if the lateralized readiness potential, a component reflecting activation of motor responses in the brain, shows evidence of competing motor activation on incongruent trials.

This project was completed to fulfill a Capstone requirement.