
Evidence for the automatic evaluation of self-generated actions

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Abstract

The accuracy of simple actions is swiftly determined through specific monitoring brain systems. However, it remains unclear whether this evaluation is accompanied by a rapid and compatible emotional appraisal of the action that allows to mark incorrect actions as negative/bad and conversely correct actions as positive/good. In this study, we used a new method to decode the affective value of simple actions generated by participants during a standard Go/noGo task. Immediately after each Go/noGo action, participants responded to the valence of either a positive or a negative word. Results showed that False Alarms performed during the Go/noGo task led to a faster evaluative categorization of negative words relative to positive words. This action - word evaluative priming effect occurred when the interval between these two events was set to either 300 or 600 ms, but not 1000 ms. Finally, higher levels of trait anxiety were associated with a reduction of the evaluative priming effect. Our results suggest that simple actions are rapidly evaluated as positive or negative depending on the automatic monitoring of their perceived accuracy.

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