

Extended Communication of Affective States: physiological and emotional responses to non-sensory stimuli

Results:

Study 1 attempted to influence forced-choice behavioural responses via (a) 5 microT magnetic field (MF) modulated at 10 Hz and (b) a remote 'sender' undergoing autobiographical recall of positive affect memories . The MF stimulus did not influence the object choice (Rosenthal $\pi = .52$, $z = .3$, $p = .62$) whereas the 'sender' did have an effect (Rosenthal $\pi = .38$, $z = -1.54$, $p = .06$). When a target object was correctly chosen in the MF condition, Ss impressions were mostly affective (39%) or tactile(28%) , the former being associated with object appearance. In the 'Sender' condition, impressions were also mostly affective (55%) or tactile (18%), the former again being object related.

Study 2 evaluated affective responses to 5 microT MFs modulated at EEG alpha-range frequencies . For normalised mean SC, 57% of Ss showed a non-significant decrease in arousal (Wilcoxon $p = .41$, 1-t). For EEG Global Field Power (GFP), 65% of Ss exhibited a significant decrease (Wilcoxon $p = .03$, 1-t). EEG Frontal Asymmetry (FA) suggested a less positive emotional state (non-significant) , whereas Ss responses indicated a more positive emotional state (Wilcoxon $p = .002$, 2-t). There was no significant difference between the 2 MF frequency types or hemispheric difference.

Study 3 evaluated affective responses to a remote person undergoing autobiographical recall of affective memories. For normalised mean SC, 45% of Ss showed a decrease in arousal (non-significant). For GFP, 60% of Ss exhibited a decrease (non-significant). FA again suggested a less positive emotional state (nonsignificant) while Ss responses suggested a more positive emotional state (Wilcoxon $p = .001$, 2-t). There was no significant difference between the Sender affect types.

Published work:

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