

Mapping the Psychophysiology of Anxiety Responses Using Virtual Reality

Results:

To model the development and generalization of anxiety-related behaviours in humans using the conditioned suppression paradigm, three experiments were conducted using a novel virtual reality task. Participants first underwent operant followed by fear conditioning in which a background colour conditioned stimulus (CS+) was paired with an instructed unconditioned stimulus (US), such as the screen shaking and a loss of accumulated points. Another background colour was not paired with the US (CS-). Conditioned suppression was then tested with presentations of the remaining CSs. Suppression ratios were calculated for multiple topographies of response (shots, hits, breaks, and accuracy). Significant suppression was observed for directly learned cues. Across experiments, generalized suppression was observed for all cues associated via acquired equivalence, symmetry and derived equivalence relations. A post-experimental measure of CS-US awareness indicated high levels of conditioning participants reporting awareness of the contingencies.

Published work:

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Area(s) of interest:

conditioning, associative learning, behavioural psychology

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