

Vividness of positive mental imagery predicts positive emotional response to visually-presented Project Soothe pictures

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Abstract

Lang's bio-informational theory of mental imagery proposes that mental imagery and external stimuli engage emotional information-processing systems in similar ways. However, the positive and negative systems are thought to be distinct, so this similarity is likely to show a valence-specific effect. Therefore, we hypothesised that an individual's ability to construct vivid positive, but not negative, mental imagery would predict positive emotional responding to positive visual stimuli, independently of depressive symptoms. Our stimuli were pictures collected through Project Soothe for possible use in psychotherapy (www.projectsoothe.com); since these pictures were intended to induce soothing emotion, we hypothesised that theoretically-linked variables Self-compassion and Self-criticism would also predict positive responding to the stimuli. A total of 214 participants completed an online study including validated questionnaire measures, mental imagery tasks, and a picture-rating exercise. Only Positive Imagery Vividness and Self-compassion were significant predictors of positive responding to the soothing pictures, even controlling for depressive symptoms and Negative and General Imagery Vividness. These findings support Lang's theory, and provide evidence for individual differences in a positive processing tendency shared across mental imagery-based and perceptual representations. Since this relationship is distinct from depressive symptoms, future imagery-based psychotherapies might aim to influence this positive processing tendency.