The use of virtual body ownership as a tool for pain modulation

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In the last few years a branch of pain research has been focusing on the modulatory effects of the vision of the body on pain perception. So, for instance, the vision of one's own real body has been proven to induce analgesic effects. On the other hand, bodily illusions such as the rubber hand illusion have provided new tools for the study of perceptual processes during altered body ownership states. Recently, new paradigms of body ownership made use of a technology that is going places both in clinical and in experimental settings, i.e. virtual reality. While the vision of one's own real body has been proven to yield compelling analgesic effects, slightly more controversial are those attributed to the vision of "owned" dummy bodies. I will present a couple of studies that show how this visually-driven analgesic effect holds true during the vision of the "owned" avatar's body and I will provide an example of how the visual modification of the avatar's body modulates pain thresholds.

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