

**To:** Jeffrey Epstein[jeevacation@gmail.com]  
**From:** John Cacioppo  
**Sent:** Tue 2/2/2010 1:55:34 PM  
**Subject:** Re: Book

Title: Re: Book There are fMRI studies of attraction. They use visual stimuli but the circuit is largely the same as seen in pain. Which tells you something about such studies. Attraction is the product of the operation of multiple psychological constructs, each of which represents a complex set of integrated component processes, each of which in turn can be further divided into specific information processing operations (computations) performed by various regions of the brain. As a consequence, social interactions tend to be associated with strong activation of most regions of the brain, but this activation reflects the operation of so many different constructs, component processes, and computations that it is not a particularly useful scientific result. The development and application of neuroimaging methods offers a powerful means to study brain functions, but the resulting knowledge is more likely to be beneficial when these methods are combined with: (a) conceptual analyses that decompose complex psychological constructs into component structures, representations, processes, and computations; (b) converging measures that gauge neural events at different temporal and spatial scales; (c) behavioral measures that permit fine-grain analyses of brain-behavior associations; and (d) experimental (e.g., lesion, transcranial magnetic stimulation) and nonhuman animal studies that test the putative role of specific brain structures, circuits, or processes. In addition, quantitative meta-analyses are important to move beyond idiosyncrasies of individual studies, and neurodevelopmental investigations can contribute to our understanding of brain-behavior associations. When this is done in research, specific regions (e.g., the region of brain tissue surrounding the temporoparietal junction) are found to be associated with specific operations (e.g., attentional shifting and control) that are involved when an individual, for instance, takes the perspective of a person with whom they are interacting. Autism is a syndrome that has more than one etiology, but one popular recent theory focuses on connectivity rather than activation in specific nuclei per se. Our brains differ from other higher mammals not so much in terms of (relative) brain size or nuclei in the forebrain but in terms of white matter (connectivity). There is some evidence that some of the nuclei in the brains of autistics (e.g., the amygdala) abnormally rapid early in life than , and as a result there are fewer connections between the amygdala and other key nuclei.

On 2/2/10 5:33 AM, "Jeffrey Epstein" <jeevacation@gmail.com> wrote:

you and I agree on many things, especially fmri. Are there studies on attraction between people? does it require vision? what about attractions amongst the blind, deaf, etc. does autism, with its " attraction deficit " act as a block of this system?

On Sun, Jan 31, 2010 at 7:59 AM, Jeffrey Epstein <jeevacation@gmail.com> wrote:

thanks,, is there a physics person in the group..? , i love some of the insights. . how do you define forces.

On Sat, Jan 30, 2010 at 5:03 PM, John Cacioppo [REDACTED] wrote:

Jeffrey,

[REDACTED] suggested that you might wish to see a copy of our forthcoming book,  
so I have attached a copy. We look forward to seeing you in a  
couple weeks.

All the best,  
John