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# Tactile self-other distinction in ADHD

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## Abstract

Distinction between tactile sensations produced by oneself and others is crucial for healthy social development and in the creation of a bodily self. Difficulties with social cognition and tactile sensitivity are present in ADHD but mechanisms are poorly understood. Using fMRI, we have previously found differences in neural activation during self and other touch in a group of adults with ADHD, potentially indicating a heightened sense of the bodily self. Using somatosensory evoked potentials (SEP) on the radial nerve during self and other touch, we here explore if these differences are replicable on a cortical level and present at the spinal level, and if any such differences are related to severity of ADHD symptomatology. Preliminary data show differences in tactile processing in people with ADHD, indicating a potential pathway for impaired social cognition and tactile hypersensitivity.

**Keywords:** ADHD, self other distinction

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