Feeling yourself when your self is altered, a study in Schizophrenia

Paula Salamone*,†, Adam Enmalm, Reinoud Kaldewaij, Charlotte Medley, Andrea Johansson Capusan, and Rebecca Boehme‡

1Linköping University – Sweden

Abstract

The current criteria and diagnosis of psychiatric conditions is based on symptoms rather than biological mechanisms. Science is trying to move forward towards a mechanism-based classification, which would likely improve patient care and treatment. It has been suggested that people with schizophrenia (SZ) may have altered interoceptive mechanisms and self-other distinction.

In order to assess these mechanisms in SZ we designed a study including behavioral, electrophysiological and neuroimaging tasks. An easy way to study bodily self-perception is to compare self-touch with touch from others: both provide comparable stimulation of the skin, but the brain must be able to distinguish between the two types of touch. Interoception is tested using a heartbeat detection task and questionnaires.

Preliminary results (questionnaires, behavioral and Somatosensory evoked potentials) show some alterations in self and interoception domains with respect to neurotypical volunteers. A disturbance of these processes can have far-reaching consequences for the establishment of an adequate bodily self-perception which may lead also to alterations in allostasis and in higher order cognitive domains. This study may increase our understanding of self-perception and body awareness in SZ. In the long run, the results may enable the development of new treatment strategies.

Keywords: schizophrenic patients, affective touch, interoception, self

*Speaker
†Corresponding author: paula.salamone@liu.se
‡Corresponding author: rebecca.bohme@liu.se