

Embodied cognition from inside out in atypical development

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Understanding another's behavior and how other people see the world is one of the vital abilities for us to live in our dynamic and fluid social world. In this talk, two aspects of the body perception from two different views in atypical development will be discussed. The first view for observing the body and bodily motion from the outside, our series of electrophysiological and behavioral studies on action perception in people with autism spectrum disorders (ASD) and Williams syndrome (WS) will be reported. The second view for observing the body from the inside, a series of studies on visual perspective taking (VPT) where the ability of understanding, taking into account what and how they see will be presented. The results showed that the ability of VPT was impaired compared to that of the mental rotation task in people with WS and this difficulty may be due to an inability to accurately simulate mental body motion. These results indicate both aspects of body perception – inside and outside - may be impacted in people with neurodevelopmental disorders. The relationship between the atypical body perception and social cognition will be discussed further.

References:

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