

## Dr Juliane Honisch BSc, PhD

Research Fellow in Social Neurosciences

[School of Psychology \(/schools/psychology/index.aspx\)](/schools/psychology/index.aspx)

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### About

Dr Honisch is broadly interested in human movement timing and coordination. She is affiliated with the [Sensory Motor Neuroscience \(SyMoN\) lab \(/facilities/symon/index.aspx\)](#) and currently works with Dr Kimberly Quinn (Social Psychologist). Her present work investigates theoretical models of interpersonal behavioural synchronisation. Dr Honisch also conducts research on multi-person synchronisation in expert dancers and non-expert performers.

### Qualifications

BSc Psychology 2007

PhD (Psychology in the area of Sensory Motor Neurosciences) 2012

### Biography

Dr Juliane J. Honisch has a background in dance. She worked as a professional dancer and choreographer and received her training in Germany and from the Northern School of Contemporary Dance (Leeds).

She was keen to focus on her interest in Psychology and graduated with a BSc in Psychology in 2007. After briefly working for Prof Alan M. Wing in the SyMoN lab at the University of Birmingham, she returned to the University to do her PhD in human movement timing and coordination. Her PhD focused on interpersonal synchronization between two or more people, with specific interest in expert dancers' movement coordination in time and space. During her PhD she developed techniques to measure and analyse multi-person movement data. Dr Honisch joined the University of Birmingham in 2012 as a research fellow on an ESRC funded grant working with Dr Kimberly Quinn (in collaboration with Prof John T. Cacioppo and Prof Alan, M. Wing as an advisor). The ESRC grant investigates theoretical models of interpersonal behavioural synchrony.

### Teaching

Taught as a Teaching Assistant practical sessions and computer labs in subjects such as: Research Methods (Level 1 and 2) and Theoretical issues of Nonverbal Behaviour (Level 3) (University of Birmingham, 2007-2011).

### Postgraduate supervision

- Supervised a masters student of Psychology (2012-2013) – Placement project 'behavioral synchrony of meaningful gestures and its effect on turn-taking efficiency' in collaboration with Dr Sotaro Kita
- Supervised a computational neuroscience and cognitive robotics (CNCR) masters student (2013) – Placement project on group coordination in time and space

### Research

Dr Honisch's research investigates theoretical models of behavioural synchrony (ESRC funded). The theoretical model includes specific processes such as (1) classical conditioning, (2) perceptual fluency and (3) self-other overlap. For example with respect to the process of perceptual fluency (2); when two or more people synchronise with one another, they unify with each other to create a perceptual unit, a meaningful whole. This perceptual unit can reduce cognitive load and consequently increase perceptual fluency and the availability of limited processing capacities. Dr Honisch's researches if the effect of synchrony on limited cognitive resources can influence social perception through its early effects on perceptual fluency.

She also investigates how we use sensory information to time and synchronise our movements with focus on interpersonal synchronization between two or more people. Dr Honisch uses 3D motion tracking tools and 3D virtual displays to investigate how expert and non-expert performers (e.g. dancers) coordinate their movements in time and space. This research focuses on identifying events within the movement trajectory to which performers may time their movements with one another. In addition, she looks into the effects of visual and motor familiarity on expert dancers' interpersonal synchronization accuracy. Dr Honisch's research also looks into group performances, in specific how the brain combines visual timing information from each member within the group as a cue for one's own movement timing.

Dr Honisch is also interested in the aspect of agency and movement timing ("I am in control of what I produce vs. someone else is in control of what I produce"), audience perception of ensemble synchronization and creativity in dance.

### Publications

Blaesing, B., Calvo-Merino, B., Cross, E.S., Jola, C., **Honisch, J.**, Stevens, C.J. (2012). Neurocognitive control in dance perception and performance. *Acta Psychologica*, 139 (2), 300-308. DOI: 10.1016/j.bbr.2011.03.031

