

Merle T. Fairhurst

## **Walking together in groups**

Much of what we know about how we temporally coordinate with others is based on research on dyadic interaction. However, from sports to group music-making to surgical interventions, we often do things together with more than two people and coordinating with a group may not simply scale. Instead, it may significantly change how we coordinate with, relate to and feel about ourselves and others. Do we follow the (temporal) leader of the group or instead coordinate our behaviour based on the average performance of the group as a whole? Will we observe scaled outgroup effects such that we behave and feel differently when coordinating with several individuals who are different to ourselves? Departing from tasks involving limb coordination, in this talk I will introduce and discuss a novel task, chosen for its enactive and ecological qualities, that involves the whole body. The immersive quality is particularly important for modulating subjective feelings of agency and implementation into a virtual reality (VR) environment. Data will be shown from two behavioural studies, one in which a participant walks with a group of 8 virtual auditory partners, the other where we tested groups of 7 coordinating individuals. Lastly, I will discuss how this paradigm is being adapted to an audio-visual VR environment to test significantly larger groups sizes and the effect this has on the so-called self-to-other ratio. Using a paradigm that models a typical everyday behaviour, this project describes rich, dynamic interactions between coordinating individuals. Moreover, based on the presented empirical studies, I will discuss how this adds to a richer theoretical account of the self as it relates to others.