



The influence of another's actions on one's own synchronization with music

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How is one's own music performance affected by the presence of a co-performer? The present study provides a first step into the investigation of this question. Pairs of musically trained participants were asked to tap the beat of two types of auditory sequences (a musical piece and a metronome), either on their own (solo) or alternating with another participant (joint). Tapping either produced no audible effects (Experiment 1) or percussive sounds (Experiments 2). Results showed higher synchronization accuracy and lower timing variability when tapping produced auditory effects, which may be because temporal information is processed more rapidly when auditory feedback is given in addition to tactile feedback. This feedback benefit was stronger for metronomic than for musical sequences. Further, variability was higher in joint than in solo conditions. Correlation analyses revealed interdependencies between participants' tapping, suggesting that mutual error correction may have inflated variability in joint conditions.

