



credit Manuel Nageli

The perfect synchronicity of a classical symphony has the power to similarly synchronize the movement, heart rate, breathing rate, and the electrical conductivity of skin between audience members,

The beautiful finding comes from a study of 132 people and three classical pieces: Ludwig van Beethoven's "Op. 104 in C minor," Brett Dean's "Epitaphs," and Johannes Brahms' "Op. 111 in G major."

Previous studies, the authors note, have shown that music may be able to induce synchronization in listeners, but there has been little investigation into whether concert audiences become synchronized.

Most synchronization in humans is caused by a direct social interaction with another person and is typically found in breathing or walking.

Professor Wolfgang Tschacher and his colleagues at the University of Bern in Switzerland **observed 132 people** whilst they listened to a string quintet of the three pieces whilst monitoring them in several ways.

Participants' movement was tracked with overhead cameras and their physical responses with wearable sensors. They were also asked to fill out a questionnaire about their personality and mood.

The authors observed significant synchronization between audience members for movement, heart rate, breathing rate, and the electrical conductivity of skin (which indicates arousal of the sympathetic nervous system). The greatest level of synchronization was seen in the breathing rate.

Additionally, the personality traits of a listener were associated with their likelihood of synchronizing physical responses—those with agreeableness or openness traits were more likely to become synchronized, whilst those with neurotic or extravert traits were less likely to become synchronized.

These are four of the "Big Five" personality traits, with openness being typical of creative types, and agreeableness found in people who find tension and conflict very difficult.