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Effects of a dancer's emotions on their dance movements

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Abstract

Our body movements often reflect our inner states. Dance is one of the remarkable movements closely related to the emotional state. Previous studies suggest that the velocity of dance movements changes when dancers are instructed to express joyful or sad feelings through neutral gestures. However, whether a dancer's emotions can emerge in dance movements remains unclear. We examined changes in dance movements when dancers' emotions were naturally induced by music. In the experiment, semi-professional dancers were asked to perform the same choreography while listening to joyful or sad music or a metronome. The results revealed that joyful music increased the dancers' heart rates, pelvic velocity, and range of motion compared to sad music and the metronome. This outcome suggests that naturally induced joyful emotions promote fast, bouncing dance movements. The dance performance could implicitly express the dancers' inner states, which an audience might feel.