

New study reveals connection between dance movements and mood regulation

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An interdisciplinary research team led by researchers at the Max Planck Institute for Empirical Aesthetics (MPIEA) in Frankfurt am Main, Germany, in collaboration with researchers from the Max Planck

Institute for Biological Cybernetics in Tübingen, Germany, the University of Glasgow, UK, and the Technical University of Munich, Germany, has made a significant finding regarding the impact of dance movements on emotional states. The results have recently been published in the *British Journal of Psychology*.

There is a close relationship between how we feel and how we move. We all know the situation: when we're happy, our movements, like how we walk and gesture are very different from when we're—say—sad or angry. But does it also work the other way round? Can certain ways of moving affect how we feel? Can we make ourselves happier—or sadder—by the way we move?

The main goal of the study was to explore the potential of a "[dance break](#)" to regulate our mood. In the experiment, participants were asked to imitate a pre-recorded dancer model on a [computer screen](#), first learning a series of simple dance sequences, with a focus on expressive arm movements.

Participants were then asked to repeat these dance movements several times, but with an important difference: They were asked to use the same movements to express either happiness or sadness. Again, they imitated the dancer model on the screen who was expressing either happiness or sadness. And indeed, expressing these different emotions through the simple dance movements did change the participants' mood.

One interesting facet of the study was that the researchers used two different types of dance models. One group of participants imitated a human dancer, and another group imitated an avatar dancer. Strikingly, the source of the movements—whether human or avatar—had no effect on the effectiveness of mood regulation. This finding suggests a strong link between dancing and emotional experience, regardless of the type of dancer model.

"Our research underscores the importance of collaborations between the disciplines of psychology, dance, and computer science in unraveling the complex tapestry of human emotions," says Eva-Madeleine Schmidt, a master's student at the MPIEA and first author of the study.

Beyond the academic implications, the study also has practical significance, particularly in contexts, where managing emotions is crucial, such as in the workplace. "Not only did the participants regulate their mood by imitating [movement](#), but they also showed increased work-related motivation afterwards," emphasizes senior author and thesis supervisor Julia F. Christensen of the MPIEA.

Remarkably, the study was conceived and conducted during the challenges of the COVID-19 pandemic, highlighting the potential of computer-based systems for emotion regulation in times of social isolation. In a next step, the research team is now developing a science-backed dance break app.

Notably, this study also adopted a rigorous scientific approach by following a peer-reviewed pre-registration process with the *British Journal of Psychology*. This means that the experiment's hypotheses and analysis plans were pre-registered and accepted by the journal before the research was conducted. This approach ensures transparency and minimizes the risks of deductive science.

In summary, this study highlights the remarkable influence of dance movements on mood regulation and offers a novel approach to enhancing emotional well-being. By recognizing the interplay between movement and emotion, individuals and organizations can harness the therapeutic potential of simple dance movements to regulate [mood](#) and motivation.

More information: Eva-Madeleine Schmidt et al, Mood induction

through imitation of full-body movements with different affective intentions, *British Journal of Psychology* (2023). [DOI: 10.1111/bjop.12681](https://doi.org/10.1111/bjop.12681)

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