

# New research shows babies are born to dance

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Researchers have discovered that infants respond to the rhythm and tempo of music and find it more engaging than speech.

The findings, based on the study of infants aged between five months and two years old, suggest that babies may be born with a predisposition to move rhythmically in response to [music](#).

The research was conducted by Dr Marcel Zentner, from the University of York's Department of Psychology, and Dr Tuomas Eerola, from the Finnish Centre of Excellence in Interdisciplinary Music Research at the University of Jyväskylä.

Dr Zentner said: "Our research suggests that it is the beat rather than other features of the music, such as the melody, that produces the response in infants.

"We also found that the better the children were able to synchronize their movements with the music the more they smiled.

"It remains to be understood why humans have developed this particular [predisposition](#). One possibility is that it was a target of [natural selection](#) for music or that it has evolved for some other function that just happens to be relevant for music processing."

Infants listened to a variety of audio stimuli including classical music, rhythmic beats and speech. Their spontaneous movements were recorded by video and 3D motion-capture technology and compared across the different stimuli.

Professional ballet dancers were also used to analyse the extent to which the [babies](#) matched their movement to the music.

The findings are published today in the journal [Proceedings of the National Academy of Sciences](#)

Online Early Edition.

**More information:** The research "Rhythmic engagement with music in infancy" will be available in full at [www.pnas.org](http://www.pnas.org) .

Provided by University of York

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