

Neuroscientists probe link between music pleasure responses, dopamine and cravings

29 June 2016, by Jane Gardner



Is there a connection between dance music and cravings? Credit: University of Melbourne

Researchers at the University of Melbourne are recruiting electronic music fans for a study exploring the connection between cravings and the "risky" sounds of dance music.

Neuroscience PhD student Kiralee Musgrove said pleasure responses to [music](#) were generated by the same primitive part of the brain—the nucleus accumbens—associated with highs from sex, drugs or even chocolate.

"In evolutionary terms, it makes sense that we would have a profound pleasure response to sex or food, but it's not so obvious why music also makes our spine tingle or our heart race," Ms Musgrove said. "We're interested in why we don't just hear music, but why we also feel it in our bodies. Science doesn't really understand how the brain makes that leap from hearing to feeling."

While many studies have focused on people's pleasure responses to classical music, researchers have not turned to music that appeals to young people—an oversight Ms Musgrove describes as "a bit silly".

She said her study will look at how cravings set the scene for our pleasure responses to music. "As anyone craving a chocolate bar would know, half the pleasure is in the anticipation. We think craving typically precedes [pleasure](#)."

Electronic music typically features a build up, or crescendo, before a "drop" or resolution, when the bass and melody lines return.

"In nightclubs, dancers get really excited as everything builds to the 'drop'—they experience peak levels of craving driven by the perception of risk," Ms Musgrove said.

"It's that moment when the bass is about to drop when some amazing reactions are happening inside your brain." She said the findings could shed more light on the potential for music therapy in treating eating disorders, self harm and substance abuse.

The researchers are recruiting participants living in Melbourne aged 18-40, by 14 July.

Provided by University of Melbourne

APA citation: Neuroscientists probe link between music pleasure responses, dopamine and cravings (2016, June 29) retrieved 23 October 2021 from <https://medicalxpress.com/news/2016-06-neuroscientists-probe-link-music-pleasure.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.