

Musical Beats Improve Brain Function, Researchers Say

VOCABULARY WORDS

1. rhythm /'riTHəm/ (noun) a strong, regular, repeated pattern of movement or sound; groove; beat
Example: I can't dance to music without a good rhythm.
2. universal /,yōonə'vərsəl/ (adjective) of, affecting, or done by all people or things in the world or in a particular group; applicable to all cases.
Example: Music is universal.
3. induce /in'd(y)ōos/ (verb) bring about or give rise to.
Example: The advertisement is meant to induce people to eat more fruit.
4. arousal /ə'rouzl/ (noun) the causing of strong feelings or excitement in someone
Example: The intensity of a dream is a measure of emotional arousal.
5. clear-headed /klir'hedəd/ (adjective) alert and thinking logically and coherently.
Example: He was finally clear headed enough to make some sort of decision.



Dancing to musical **rhythms** is a **universal** human activity. But now, researchers from Japan have found that musical beats don't just feel good, hearing them also improves brain function.

In a study recently published in Scientific Reports, researchers from the University of Tsukuba have revealed that music with a groove can significantly increase measures of executive function and associated brain activity in participants who are moved by the music. Music that causes the sensation of groove—a rhythm that **induces** the sensation of “wanting to move to the music”—can bring about feelings of pleasure and enhance behavioral **arousal** levels.

Exercise, which has similar positive effects, is known to enhance executive function. This may also be an effect of listening to groove music. However, no studies have examined the effect of such music on executive function or brain activity in those regions.

Lead author of the study Professor Hideaki Soya said, "We found that groove rhythm enhanced executive function and activity only in participants who reported that the music elicited a strong groove sensation and the sensation of being **clear-headed**."

DISCUSSION QUESTIONS

1. What was the last concert you went to?
2. When was the last time you went dancing?
3. Do you think music can heal sick people?
4. Do you think that animals can enjoy music? How do you know?
5. What do you think the world would be like without music?
6. What do you think are the benefits of music?