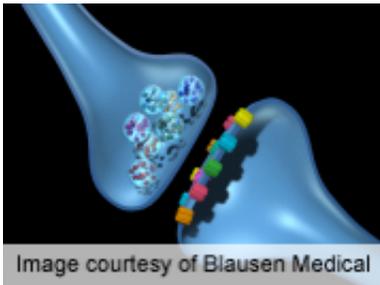


Sadness increases subjective experience of pain

July 6 2012



Sadness increases subjective pain ratings and affects pain-evoked cortical activity, according to a study published in the July issue of *The Journal of Pain*.

(HealthDay) -- Sadness increases subjective pain ratings and affects pain-evoked cortical activity, according to a study published in the July issue of *The Journal of Pain*.

Atsuo Yoshino, M.D., of Hiroshima University in Japan, and colleagues used magnetoencephalography to evaluate pain stimuli experienced during sad, happy, and neutral emotional contexts in 19 healthy individuals, aged 20 to 30 years. Participants self-rated their [pain intensity](#), and cortical beta rhythms were measured.

The researchers found that subjective pain ratings were higher in the sad emotional context compared with happy or neutral contexts. A corresponding larger event-related desynchronization of lower beta

bands in subjects' [right hemisphere](#) was observed during sad emotional context compared with happy emotional context.

"In conclusion, our results provide evidence that people tend to show higher pain sensitivities when they are feeling sad, and that the cortical [oscillations](#) (event-related desynchronization/event-related synchronization) in response to pain stimuli are particularly changeable under such conditions," the authors write. "These results suggest that observing sad emotion can modulate both subjective sensitivity and [neural activity](#), and that emotional context is an important factor for understanding pain in human beings."

More information: [Abstract](#)
[Full Text \(subscription or payment may be required\)](#)

Copyright © 2012 [HealthDay](#). All rights reserved.

Citation: Sadness increases subjective experience of pain (2012, July 6) retrieved 23 April 2024 from <https://medicalxpress.com/news/2012-07-sadness-subjective-pain.html>

<p>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.</p>
--