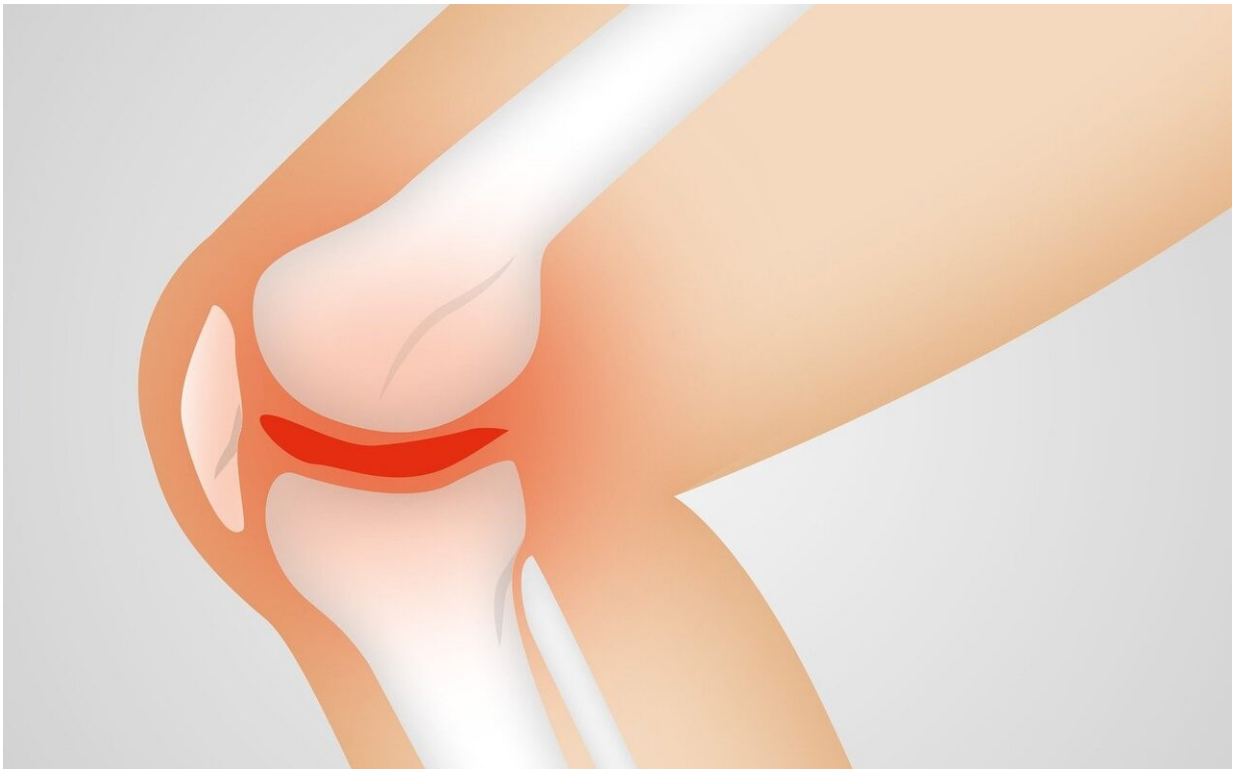


Visual illusion proves effective in relieving knee pain for people with osteoarthritis

July 18 2018



Credit: CC0 Public Domain

In a new study published in the journal *Peer J* this week, researchers at UniSA's Body in Mind Research Group have found people suffering osteoarthritis in the knees reported reduced pain when exposed to visual illusions that altered the size of their knees.

UniSA researcher and NHMRC Career Development Fellow, Dr. Tasha Stanton says the research combined [visual illusions](#) and touch, with participants reporting up to a 40 per cent decrease in pain when presented with an [illusion](#) of the knee and lower leg elongated.

"We also found that the pain reduction was optimal when the illusion was repeated numerous times – that is, its analgesic effect was cumulative," Dr. Stanton says.

The small study—12 participants—focused on people over 50 years with [knee pain](#), and a clinical diagnosis of osteoarthritis.

Dr. Stanton says the research provides "proof of concept" support that visual illusions can play a powerful role in reducing pain.

"We have shown that pain is reduced significantly when a visual stimulus, in this case a smaller or an elongated joint, is provided, but not only that, when exposed to that illusion repeatedly, pain decreases even further," she says.

"It seems that seeing is believing, and by understanding the neurological processes at work we may be able to ease pain more effectively for people with chronic conditions, reduce their reliance on medications and find alternative physical therapies to help manage conditions like osteoarthritis.

"This research adds to a growing body of evidence that the pain experienced in osteoarthritis is not just about damage to the joint.

"There are other factors at play and the more we understand about these natural mechanisms for reducing [pain](#) and how they are triggered, the more opportunity we have to develop a range of treatments to manage chronic conditions."

The published paper "Illusory resizing of the painful knee is analgesic in symptomatic [knee osteoarthritis](#)" is in today's edition of Peer J.

More information: Tasha R. Stanton et al. Illusory resizing of the painful knee is analgesic in symptomatic knee osteoarthritis, *PeerJ* (2018). [DOI: 10.7717/peerj.5206](https://doi.org/10.7717/peerj.5206)

Provided by University of South Australia

Citation: Visual illusion proves effective in relieving knee pain for people with osteoarthritis (2018, July 18) retrieved 19 April 2024 from <https://medicalxpress.com/news/2018-07-visual-illusion-effective-relieving-knee.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.