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## **Sensory “Mismatch” Aggravates Whiplash Symptoms**

Previous research has shown central sensitization plays an important role in the development of chronic whiplash symptoms. A new study adds to the understanding of the mechanisms causing pain by suggesting that a mismatch between motor feedback and visual feedback, or sensorimotor incongruence, can aggravate pain and sensory changes in patients with chronic whiplash.

In the study, 35 patients with chronic whiplash and 31 healthy participants were subjected to a coordination test. They performed congruent and incongruent arm movements while looking at a mirror or whiteboard. All of the patients with chronic whiplash reported sensory changes such as dizziness, increased pain, or loss of control. The pattern of reported changes was significantly different between the control group and the group of whiplash patients.

This study shows that symptoms may be exacerbated by disturbing the visual input during movement. The researchers conclude that this indicates altered sensorimotor central nervous processing and altered perception of distorted visual feedback. The same team of researchers recently published a similar study documenting altered visual feedback in whiplash patients.

*Daenen L, Nijs J, Roussel N, et al. Sensorimotor incongruence exacerbates symptoms in patients with chronic whiplash associated disorders: an experimental study. Rheumatology (Oxford) 2012;51(8):1492-9.*