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# Balancing Sensory Inputs: Sensory Reweighting of Ankle Proprioception and Vision during A Bipedal Posture Task

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Highlights

-Vision and ankle proprioception interact with each other to maintain balance
-Visual flow moderates the instability produced by disrupted ankle proprioception
-Proprioception is downweighed during conflicts between vision and proprioception
-The results point to the potential use of controlled visual flow in balance training

## Abstract

During multisensory integration, it has been proposed that the central nervous system (CNS) assigns a weight to each sensory input through a process called sensory reweighting. The outcome of this integration process is a single percept that is used to control posture. The main objective of this study was to determine the interaction between ankle proprioception and vision during sensory integration when the two inputs provide conflicting sensory information pertaining to direction of body sway. Sensory conflict was created by using