Dear Members,

We are pleased to bring to you the September 2020 issue of Research in Review highlighting research articles relevant to neurologic physical therapy over the past months. We hope that you enjoy perusing through the collection of articles we selected for this edition. In the midst of this unprecedented Covid-19 pandemic, our team hopes you are all doing well and staying safe!

We choose recently published articles that are available through a link on PubMed or directly through the link on the Research in Review citation. Please note that to avoid redundancy with other APTA-based research newsletters, typically, we do not include articles published in Physical Therapy or Journal of Neurologic Physical Therapy. However, we included a couple in this cycle due to their importance and impact. We welcome any suggestions or comments you may have to help improve the newsletter.

Sincerely,

Research in Review Co-Chairs

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Visit the Academy of Neurologic Physical Therapy website

Research Topics

Feature Article
Motor Control
Rehabilitation
Clinical Neurophysiology
Technologies
Feature Article(s)


Motor Control


**Rehabilitation**


Augmenting propulsion demands during split-belt walking increases locomotor adaptation
of asymmetric step lengths.


Clinical Neurophysiology


Users with spinal cord injury experience of robotic Locomotor exoskeletons: a qualitative study of the benefits, limitations, and recommendations.


Toward a hybrid exoskeleton for crouch gait in children with cerebral palsy: neuromuscular electrical stimulation for improved knee extension.

Passive, yet not inactive: robotic exoskeleton walking increases cortical activation dependent on task.

The ReWalk ReStore™ soft robotic exosuit: a multi-site clinical trial of the safety, reliability, and feasibility of exosuit-augmented post-stroke gait rehabilitation.

Effects of Virtual Reality Therapy on Gait and Balance Among Individuals With Spinal Cord Injury: A Systematic Review and Meta-analysis.

Relationship between Nintendo's Wii balance board derived variables and clinical balance scores in individuals with stroke.


The Research in Review was designed using Medline filters to extract high impact research articles related to the field of neuroscience and physical therapy, which includes areas of motor control, rehabilitation, clinical neurophysiology, and technology. Emphasis is placed heavily on articles published within the last eight weeks, that cover issues related to spinal cord injury, stroke, balance and falls, brain injury, degenerative diseases, and vestibular rehabilitation. The list contains the full citation and a link to the abstract or full text article. The Research in Review is published once every 2 months and will arrive in your email box in a format that is easily viewable by both HTML and text-based readers. Articles with no volume, issue or page numbers indicate that the article has not been published in paper form yet, but may be available in electronic form through the publisher. We welcome requests for article postings at the first and third Mondays of each month. Those interested in assisting with this endeavor are welcome to contact Trisha Kesar, PT, PhD.