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## ***Variability and Stability of Gait in Stoke Survivors***

Washkewicz College of Engineering

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### **Abstract**

Individuals who have survived a stroke have unstable gait due to poor balance control which jeopardizes the safety of that individual. We analyzed the stability and variability of gait before and after exercise- interventions for individuals who have survived stroke to determine the effect of these interventions on the individual as well as any correlation between measured and perceived stability. 9 randomly assigned participants participated in three exercise interventions: (a) clinical physical therapy, (b) reactive slipping, and (c) video gaming. Kinematics of the participant were obtained using motion analysis and a treadmill equipped with force plates. There was an overall correlation between measured and perceived stability of gait. Exercise- interventions did not greatly improve perceived or measured stability of gait. Improvement of variability of gait varied between participants.

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