



Effects of Speed and Visual-Target Distance on Toe Trajectory During the Swing Phase of Treadmill Walking

By Christopher A Miller

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.Toe trajectory during swing phase is a precise motor control task that can provide insights into the sensorimotor control of the legs. The purpose of this study was to determine changes in vertical toe trajectory during treadmill walking due to changes in walking speed and target distance. For each trial, subjects walked on a treadmill at one of five speeds while performing a dynamic visual acuity task at either a far or near target distance (five speeds two targets distances = ten trials). Toe clearance decreased with increasing speed, and the vertical toe peak just before heel strike increased with increasing speed, regardless of target distance. The vertical toe peak just after toe-off was lower during near-target visual acuity tasks than during far-target tasks, but was not affected by speed. The ankle of the swing leg appeared to be the main joint angle that significantly affected all three toe trajectory events. The foot angle of the swing leg significantly affected toe clearance and the toe peak just before heel strike. These results will be used to enhance the...



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Reviews

Very helpful to all type of individuals. It really is rally interesting throgh looking at time. Its been designed in an extremely basic way which is just soon after i finished reading this pdf through which basically modified me, change the way i believe.

-- **Tyshawn Brekke**

The publication is easy in read through preferable to fully grasp. It is writter in simple phrases instead of hard to understand. You will not sense monotony at at any moment of your respective time (that's what catalogs are for concerning if you request me).

-- **Kevin Bergstrom Sr.**