

电子步道在步态时空参数测量中的可靠性

作者: 刘志, 杨先军, 姚志明, 孙怡宇, 龍希文

单位: 中国科学院合肥智能机械研究所

基金项目:

摘要:

本文评估电子步道在步行运动学参数采集中的可靠性。37名男性志愿者参与到实验中, 年龄在21岁到32岁之间, 所有受测者都是健康的个体。在实验中, 分别以自选的慢走、正常走和快走三个模式采集步行中的步长、步频和步速。研究结果显示电子步道在测量步态时空参数时具有很高的可靠性, 还展示了可靠系数分别达到0.75和0.9所需的测试次数。当利用电子步道采集不同速度模式下的步态参数用于实验研究时(可靠系数大于0.9), 至少需要3次测量。

关键词: 可靠性, 电子步道, 自选速度, 运动学参数

Reliability of the Electronic Walkway for the Measurement of Temporospacial Parameters of Gait

Author's Name:

Institution:

Abstract:

The purpose of this paper was assessing the reliability of the electronic walkway via the walking kinematics parameters. Thirty seven male volunteers between the ages of 21 and 32 years were recruited for this study. All participants in this study were able-bodied individuals. The step length, cadence, and velocity were obtained while walking speed at the self-selected slow, normal, and fast. The results showed that the reliability of the temporospacial gait parameters in the electronic walkway was excellent. It also showed the number of walking trials needed to achieve the reliability coefficient at 0.75 and 0.9 respectively. To achieve the reliability coefficient at 0.9, at least 3 measurement trials should be made while the gait research used the electronic walkway.

Keywords: reliability, electronic walkway, self-selected speed, kinematics parameters

投稿时间: 2009-12-14

[查看pdf文件](#)