

Accepted Manuscript

Title: Transitioning from the level surface to stairs in children with and without Down syndrome: Motor strategy and anticipatory locomotor adjustments

Authors: Huaqing Liang, Xiang Ke, Jianhua Wu



PII: S0966-6362(18)31537-6
DOI: <https://doi.org/10.1016/j.gaitpost.2018.09.010>
Reference: GAIPOS 6508

To appear in: *Gait & Posture*

Received date: 11-11-2017
Revised date: 23-7-2018
Accepted date: 9-9-2018

Please cite this article as: Liang H, Ke X, Wu J, Transitioning from the level surface to stairs in children with and without Down syndrome: Motor strategy and anticipatory locomotor adjustments, *Gait and Posture* (2018), <https://doi.org/10.1016/j.gaitpost.2018.09.010>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Transitioning from the level surface to stairs in children with and without Down syndrome:
Motor strategy and anticipatory locomotor adjustments**

Huaqing Liang^a, Xiang Ke^a, Jianhua Wu^{a,b*}

^a Department of Kinesiology and Health, ^b Center for Pediatric Locomotion Sciences, Georgia State University, Atlanta, GA, USA 30302

* Corresponding author:

Jianhua Wu, Ph.D.

Department of Kinesiology and Health

Center for Pediatric Locomotion Sciences, Georgia State University

125 Decatur Street, Atlanta, GA 30302, USA

Telephone: 1-404-413-8476; Fax: 1-404-413-8053; Email: jwu11@gsu.edu

Word count for Abstract: 299

Word count for main text: 2,998

Number of Tables: 2

Number of Figures: 3

Number of Tables in Appendix: 1

This manuscript is submitted as an Original Article.

Highlights

- Children with DS choose a more conservative strategy to safely ascend the stairs.
- Children with DS decrease step length and velocity for last four approaching steps.
- Children with DS decrease vertical toe clearance for last four approaching steps.
- Children with DS decrease horizontal toe velocity for last four approaching steps.
- Ankle load affects children with DS more in motor strategy and locomotor pattern.

Abstract

Download English Version:

<https://daneshyari.com/en/article/10129841>

Download Persian Version:

<https://daneshyari.com/article/10129841>

[Daneshyari.com](https://daneshyari.com)