

## Accepted Manuscript

Real-time Biofeedback Can Increase and Decrease Vertical Ground Reaction Force, Knee Flexion Excursion, and Knee Extension Moment during Walking in Individuals with Anterior Cruciate Ligament Reconstruction

Brittney A. Luc-Harkey, Jason R. Franz, J. Troy Blackburn, Darin A. Padua, Anthony C. Hackney, Brian Pietrosimone

PII: S0021-9290(18)30422-6  
DOI: <https://doi.org/10.1016/j.jbiomech.2018.05.043>  
Reference: BM 8737

To appear in: *Journal of Biomechanics*

Received Date: 25 October 2017  
Revised Date: 17 May 2018  
Accepted Date: 30 May 2018

Please cite this article as: B.A. Luc-Harkey, J.R. Franz, J. Troy Blackburn, D.A. Padua, A.C. Hackney, B. Pietrosimone, Real-time Biofeedback Can Increase and Decrease Vertical Ground Reaction Force, Knee Flexion Excursion, and Knee Extension Moment during Walking in Individuals with Anterior Cruciate Ligament Reconstruction, *Journal of Biomechanics* (2018), doi: <https://doi.org/10.1016/j.jbiomech.2018.05.043>

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.



**Real-time Biofeedback Can Increase and Decrease Vertical Ground Reaction Force, Knee Flexion Excursion, and Knee Extension Moment during Walking in Individuals with Anterior Cruciate Ligament Reconstruction**

Brittney A. Luc-Harkey<sup>1</sup>  
Jason R. Franz<sup>2</sup>  
J. Troy Blackburn<sup>3</sup>  
Darin A. Padua<sup>3</sup>  
Anthony C. Hackney<sup>3</sup>  
Brian Pietrosimone<sup>3</sup>

<sup>1</sup>Orthopedic and Arthritis Center for Outcomes Research, Department of Orthopedic Surgery, Brigham and Women's Hospital, Boston, MA.

<sup>2</sup>Joint Department of Biomedical Engineering, University of North Carolina at Chapel Hill and North Carolina State University, Chapel Hill, NC.

<sup>3</sup>Department of Exercise and Sports Science, University of North Carolina at Chapel Hill, Chapel Hill, NC.

**Corresponding Author:**

Brittney A. Luc-Harkey, PhD  
Orthopaedic and Arthritis Center for Outcomes Research  
Department of Orthopedic Surgery  
Brigham and Women's Hospital  
Bc-4016, 75 Francis St  
Boston MA 02115  
The United States of America  
Email: [bharkey@bwh.harvard.edu](mailto:bharkey@bwh.harvard.edu)

**Key Words:** Gait, ACL, vertical ground reaction force loading rate, internal knee extension moment, knee flexion excursion

**Word Count:** 3,944

Download English Version:

<https://daneshyari.com/en/article/7235745>

Download Persian Version:

<https://daneshyari.com/article/7235745>

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