

Central Lancashire Online Knowledge (CLoK)

Title	Effects of different heel heights on lower extremity joint loading in
	experienced and in-experienced users: A musculoskeletal simulation
	analysis
Type	Article
URL	https://clok.uclan.ac.uk/25781/
DOI	https://doi.org/10.1007/s11332-019-00534-4
Date	2019
Citation	Sinclair, Jonathan Kenneth, Brooks, Darrell and Butters, Bobbie (2019) Effects of different heel heights on lower extremity joint loading in experienced and in-experienced users: A musculoskeletal simulation analysis. Sport Sciences for Health. ISSN 1824-7490
Creators	Sinclair, Jonathan Kenneth, Brooks, Darrell and Butters, Bobbie

It is advisable to refer to the publisher's version if you intend to cite from the work. https://doi.org/10.1007/s11332-019-00534-4

For information about Research at UCLan please go to http://www.uclan.ac.uk/research/

All outputs in CLoK are protected by Intellectual Property Rights law, including Copyright law. Copyright, IPR and Moral Rights for the works on this site are retained by the individual authors and/or other copyright owners. Terms and conditions for use of this material are defined in the http://clok.uclan.ac.uk/policies/

Table 2: Muscle-tendon length parameters (Mean & standard deviations) as a function of experience and heel height. *

	Experienced									In-Experienced								
	High		Medium		Low		Trainer		High		Medium		Low		Trainer		MCID	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD										
Soleus (cm)	27.53 вср	0.54	28.63 ACD	0.40	28.80 <i>ABD</i>	0.46	29.99 <i>ABC</i>	0.25	28.04 вср	1.33	28.50 ACD	0.43	28.78 <i>ABD</i>	0.31	29.92 <i>ABC</i>	0.25	0.01	*
Lateral gastrocnemius (cm)	42.19 <i>BCD</i>	0.49	43.41 <i>ACD</i>	0.28	43.70 <i>ABD</i>	0.43	44.93 <i>ABC</i>	0.28	42.71 <i>BCD</i>	1.25	43.37 <i>ACD</i>	0.44	43.65 <i>ABD</i>	0.34	44.84 <i>ABC</i>	0.29	0.01	*
Medial gastrocnemius (cm)	42.60 вср	0.48	43.79 <i>ACD</i>	0.28	44.08 <i>ABD</i>	0.42	45.29 <i>ABC</i>	0.28	43.11 вср	1.22	43.75 ACD	0.43	44.02 <i>ABD</i>	0.33	45.19 <i>ABC</i>	0.29	0.01	*

* = main effect of FOOTWEAR

A = significantly different from high
B = significantly different from medium
C = significantly different from low
D = significantly different from trainer