



# JHSE

JOURNAL OF HUMAN SPORT AND EXERCISE  
University of Alicante



Universitat d'Alacant  
Universidad de Alicante

Home

Team

Policies

Information

Editorial

Submissions

## JHSE

• [Current Issue](#)

• [Back Issues](#)

• [Most recent articles](#)

• [Index](#)

• [Advertisement](#)

## ARTICLE TOOLS

 [Print this article](#)

[article](#)



[Indexing metadata](#)



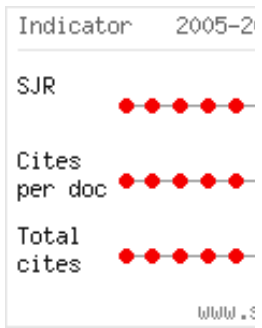
[How to cite item](#)



[Finding](#)

- Co
- Sit  
Ma
- Ab
- Lir

**GOOGL  
TRANS**



## References



### Review

### policy

✉ Email

this

article

(Login

required)

✉ Email

the

author

(Login

required)

**FONT  
SIZE**

**Browse**





## CURRE ISSUE

ATOM 1.0

RSS 2.0


## OPEN JOURN SYSTEM

By  
Issue

By  
Author

By  
Title

## Search

All 

Search

## USER

Username

Password

€

Remember

me

Log In

[Announcements](#)

[Home](#) > [Vol 8, No 3 \(2013\)](#) > [Nakhostin-Roohi](#)

The effect of flexible  
flat-footedness on  
selected physical  
fitness factors in  
female students aged  
14 to 17 years

*Babak Nakhostin-Roohi, Soheila*

*Hedayati, Azar Aghayari*

## Abstract

The purpose of this study was to evaluate influence of flexible foot flatness on several physical fitness factors that are necessary for sport performance. Fifty students were randomly selected from each group (Flatfoot and Normal group). Static balance (One Leg Test), Dynamic balance (Modified Bass Test), speed (45 Meter Dash Test) and agility (T Test) were selected as physical fitness factors. There were significant differences in agility and static balance records ( $P < 0.05$ ) but not significant differences in speed and dynamic balance records between groups ( $P > 0.05$ ). It seems foot as a last part of a close kinematic chain has very important role in dynamic and static position and affects physical fitness factors.

However, owing to presence of a plenty of controversies suggests more works in this domain.

Key words: Flexible Flatfoot, Static balance, Dynamic Balance, Agility

doi: 10.4100/jhse.2013.83.03

## References

Shih YF, Chen CY, Chen WY, Lin HC. Lower extremity kinematics in children with and without flexible flatfoot: a comparative study. BMC musculoskeletal disorders. 2012; 13:31.

Milenković S, Bubanj S, Živković D, Bubanj R, Purenović T, Obradović B, Dimić A, Bubanj M. Incidence Of Flat Foot In High School Students. Facta Universitatis. 2011; 9:275-281.

Bordelon RL. Hypermobile

flatfoot in children.

Comprehension, evaluation, and treatment. Clinical orthopaedics and related research. 1983; 7-14.

Kuhn DR, Shibley NJ, Austin WM, Yochum TR. Radiographic evaluation of weight-bearing orthotics and their effect on flexible pes planus. Journal of manipulative and physiological therapeutics. 1999; 22:221-226.

Donatelli RA, Hurlburt C, Conaway D, St Pierre R.

Biomechanical foot orthotics: a retrospective study. The Journal of orthopaedic and sports physical therapy. 1988; 10:205-212.

Highlander P, Sung W, Weil L, Jr. Subtalar arthroereisis. Clinics in podiatric medicine and surgery. 2011; 28:745-754.

Dennis KJ, Cooke RA, Valmassy RL, Weed JH. Biplane Posting Elevator. A new method of rearfoot post application. Journal of the American Podiatric Medical Association. 1985; 75:272-274.

McCulloch MU, Brunt D, Vander Linden D. The effect of foot orthotics and gait velocity on lower limb kinematics and temporal events of stance. The Journal of orthopaedic and sports physical therapy. 1993; 17:2-10.

Nawoczinski DA, Saltzman CL, Cook TM. The effect of foot structure on the three-dimensional kinematic coupling behavior of the leg and rear foot.