

Mohammad Yousefi (PhD)
Assistant Professor of Sport Biomechanics
Faculty of Sport Sciences
University of Birjand
Birjand
Tel.: +985632202042
Email: m.yousefi@birjand.ac.ir- mohammadyousefi2008@gmail.com



Educational Qualification:

- 2017- PhD in **Sport Biomechanics**, University of Kharazmi, Tehran, Iran.
- 2008- 2010 **MA in Sport Biomechanics**, University of Birjand, Iran.
- 2004 – 2008 **BA in Sport Sciences**, University of Birjand, Iran.
- 2014-2018 **BA in Biomedical engineering**, University of North Tehran, Tehran, Iran.

Title of PhD Thesis: Comparison of the motor control strategies during **gait phases** in individuals with functional ankle instability and healthy subjects in response to external perturbation

Title of MSc Dissertation: The intelligent estimating of spinal column abnormalities by using artificial neural networks and characteristics vector extracted from image processing of reflective markers.

Research Interest: **CGA** (Clinical Gait Analysis) in CP (Cerebral Palsy) patients, Designing the new system for measuring the **musculoskeletal disorders, signal and image processing** of the human body, sport injuries

Patent Certificate(s):

- Design of the Intelligent Detection System for spinal deformities by use of image processing.*
- Design of the Intelligent Detection System for spinal deformities by use of ultrasonic waves.*
- Design of the Intelligent Pencil for diagnosing spinal deformities by use of IR waves.*
- Design of the perturbation system for measuring FAI individuals.*
- Design of the intelligent neurofeedback system for learning.*
- Development of the badminton Shuttle by use of Finite element.*
- Development of the intelligent system for visual -movement disorders.*

Awards:

- Top Student of the country in the field of the Biomechanics; 2017.*
- Member of the national elite foundation.*
- Winner of the Elite Festival Award.*
- First Rank of the National Festival of identifying and empowering selected ideas.*
- First Rank of the National Festival of ideas and creativity.*
- Selected in the First National rehabilitation Festival*

Publications

A: Papers

Mohammad Yousefi, Hiedar Sadeghi, Saeed Ilbiegi, Zahra Ebrahim Abadi, Erik Wikstrom. "Center of pressure excursion and muscle activation during gait initiation in individuals with and without chronic ankle instability. **Journal of Biomechanics**, [Volume 108](#), 17 July 2020, 109904.

Mohammad Yousefi, Saeed Ilbiegi, Seyed abbas farjad pezeshk, Reliability of Body Landmark Analyzer (BLA) System for Measuring Hyperkyphosis and Hyperlordosis Abnormalities, **Journal of Advanced Sport Technology** 2020,4(2), 20-29.

Seyed abbas farjad pezeshk, Mohammad Shariatzadeh, Saeed Ilbiegi, **Mohammad Yousefi**. Comparison of Muscle Activity and Timing between a Custom Shoe with Hydrodynamic Mechanism and Regular Ethylene-Vinyl Acetate Shoe. **Journal of Advanced Sport Technology** 2019,3(2), 129-145.

Motahare hashem Broujerdi, Abbas Rahimi, **Mohammad Yousefi**. The Occurrence of Flexion-Relaxation Phenomenon in Elite Cyclists during Trunk Forward Bending **Journal of Manipulative and Physiological Therapeutics**. (in press)

Motahare hashem Broujerdi, Abbas Rahimi, **Mohammad Yousefi**. Thoracic and Lumbar sagittal spine curvature adaptation between Iranian Road and Speed Cyclists. **Journal of Biomedical Physics and Engineering**. (In press)

Mohammad Yousefi, Saeed Ilbiegi, Study of musculoskeletal disorders and the physical status of male barber in Tehran province. *J Rehab Med* .2019; 6(4): 240-248.

Seyed abbas farjad pezeshk, Mohammad shariat zadeh, **Mohammad yousefi**; Sepodeh samvati sharif, mihammad nouri. comparison of plantar pressure distribution and ground reaction force during walking between prefabricated shoe with hydrodynamic mechanism and EVA sport shoe. *J Rehab Med*. 2019; 6(2): 234-245.

- **Mohammad Yousefi**, Hiedar Sadeghi. Ankle Movement Pattern Variation during Walking gait in People with Functional Ankle Instability: **A Review Article**. *J Rehab Med*. 2017; 6(2): 234-245.
- **Mohammad Yousefi**, Hiedar Sadeghi, Saeed Ilbeigi, Abbas Rahimi, Mahdi Khaleghi Tazegy Detection of Compensatory Mechanism during Gait in Individuals with Functional Ankle Instability Using Inversion Perturbation. *J Rehab Med*. 2018; 6(4): 240-248.
- Zahra Ebrahimabadi, Abbas Rahimi, **Mohammad Yousefi**, Erick Wikstrom, Effect of temporal pressure condition on center of pressure displacement during gait initiation in individuals with chronic ankle instability.

- Seyed Ehsan Naghibi, Mehrdad Anbarian, **Mohammad Yousefi**, , Principal Component Analysis of Anthropometric and Biomechanical Variables in Adolescent Elite Karateka Athletes. **J Sport Biomech** 2017 Summer; 3 (2):27-41
- **Mohammad Yousefi**, Saeed Ilbiegi, Intelligent estimating of spinal column abnormalities by using artificial neural networks and characteristics vector extracted from image processing of reflective markers. **African Journal of biotechnology**. Vol.12(4), pp. 419-426,23 January 2013.
- **Mohammad Yousefi**, Saeed Ilbiegi, Comparing the Validity of Non-Invasive Methods in Measuring Thoracic Kyphosis and Lumbar Lordosis. **Zahedan J Res Med Sci (ZJRMS)**2012; 14(4): 37-42.
- **Mohammad Yousefi**, Saeed Ilbiegi, is reflective Markers Image Processing a Precise Method to Diagnose Lumbar Lordosis and Thoracic Kyphosis? **World Journal of Sport Sciences** 4(4): 416-422,2011.

Yousefi M, Shabani M, Fuladin-Toroghi E, Rahimi M. Comparison of density and mineral content of spinal vertebra in disabled athletes and non-athletes. **Zahedan J Res Med Sci (ZJRMS)** 2012; 13(suppl 1): 14.

Mohammad Yousefi, Futsall injuries in the Asian Cup 2010. **World Applied Sciences Journal** 14(10): 1559-1564,2011.

- Hashem Piry, **Mohammad Yousefi**. Handball Injuries in Elite Asian Players. **World Applied Sciences Journal** 14(10): 1559-1564,2011.

B: Papers Presented at National and International Symposiums:

Mohammad Yousefi, Saeed Ilbiegi The calculation of thoracic kyphosis and lumbar lordosis angles by using the image Processing of reflective marker. (7th international congress on physical education and sport science, Tehran, Iran, March 2010)

- **Mohammad Yousefi**, Saeed Ilbiegi The relation between impact forces and sport shoe. (1st national congress on sport engineering and sport sciences, Birjand, Iran, February 2010)
- **Mohammad Yousefi**, Saeed Ilbiegi The intelligent estimating of spinal column abnormalities using by artificial neural networks and characteristics vector extracted from image processing of reflective markers. (1st international congress on Physical Fitness and Aerobic, Tehran, Iran,15-16 Feb 2011)
- **Mohammad Yousefi**, Saeed Ilbiegi Determine the frequency of injuries and etiology of them among elite skaters. (1th international congress on physical Fitness and Aerobic, Tehran, Iran,15-16 Feb 2011)

- **Mohammad Yousefi**, Saeed Ilbiegi Intelligent determination of the load for Wingate test by the artificial neural networks (2th national congress on sport biomechanics, Hamedan, Iran, may 2011)
- **Mohammad Yousefi**, Saeed Ilbiegi The image processing method validity in lumbar lordosis and thoracic kyphosis measurement (2th national congress on sport injuries, Tehran, Iran, May 2010).
- **Mohammad Yousefi**, Saeed Ilbiegi Comparison of density and minerals content of bone in disabled athletes and non-athletes. Zahedan University of medical science.14 May 2011.
- **Mohammad Yousefi**, Saeed Ilbiegi .The image processing method validity in lumbar lordosis and thoracic kyphosis measurement (FIMS-ICSM 2011, **international congress of sports & medicine. MALAYSIA**)
- **Mohammad Yousefi**, Saeed Ilbiegi .Diagnosis of the spinal column abnormalities using by image processing of reflective markers set on spinus process (FIMS-ICSM 2011, international congress of sports & medicine. MALAYSIA)
- **Mohammad Yousefi**, Saeed Ilbiegi **10th International Congress on Sport Sciences Tehran-Iran**” Designing, making and validity of the intelligent pencil for diagnosing of the spinal column abnormalities using non-visible infrared waves”
- Saeed Ilbiegi , **Mohammad Yousefi 30th Annual Conference of Biomechanics in Sports-Melbourne** “The effect of gender and anthropometrical parameters on dynamic of sprint start among young elite sprinters”
- **Mohammad Yousefi,10th International Congress on Sport Sciences Tehran-Iran**” Detection of inefficiency compensatory mechanism during gait in individual with functional ankle instability by use of inversion perturbation”

C: Book:

- *Clinical Gait Analysis*
- *Functional Anatomy in sport*
- *Sport Biomechanics*
- *Neuromuscular Physiology*