

novel Literature References

updated July 2020

[Click the article for PubMed reference](#)

Recent/Highlighted References

- Hullfish TJ, Baxter JR, A simple instrumented insole algorithm to estimate plantar flexion moments. *Gait & Posture*. 79 pp 92-5. 2020.
- Anderson, J. et. al Development and evaluation of a dual density insole for people standing for long periods of time at work. *J Foot & Ankle Res*. 13:42. 2020.
- Konings-Pijnappels, APM. Forefoot pathology in relation to plantar pressure distribution in patients with rheumatoid arthritis: A cross-sectional study in the Amsterdam Foot cohort. *Gait& Posture*. 38 pp 317-22. 2020.
- Petersen, E, et al. The effect of real-time feedback on learning lumbar spine joint mobilization by entry-level doctor of physical therapy students: a randomized, controlled, crossover trial. *JMMT*. Oct 8 pp 1-11. 2019
- Aufwerber, S, et al. High Plantar Force Loading After Achilles Tendon Rupture Repair With Early Functional Mobilization. *Am J Sports Med*. 47 pp 894-900. 2019.
- Peebles, A, et al. Using force sensing insoles to predict kinetic knee symmetry during a stop jump. *J Biomech*. 35:109293. 2019.

Reliability References

emed:

- Giacomozzi, C. Appropriateness of plantar pressure measurement devices: A comparative technical assessment. *Gait & Posture*. 32 pp 141-144. 2010.
- Maetzler, M., et al. Normal Pressure Values and Repeatability of the Emed ST-2 System. *Gait & Posture*. 32 pp 391-4. 2010
- Putti, AB, et al. Normal Pressure Values and Repeatability of the Emed ST-4 System. *Gait & Posture*. 27 pp 501-5. 2008.
- Hughes, J, et al. Reliability of pressure measurements: the emed-F system. *Clinical Biomechanics*. 6:14-8. 1991.

pedar:

- Price, C, et al. Validity and Repeatability of Three In-Shoe Pressure Measurement Systems. *Gait & Posture*. 46 pp 69-74. 2016
- Putti, AB, et al. Normal pressure values and repeatability of the Emed ST4 system. *Gait & Posture*. 27 pp 501-507. 2008.
- Putti, AB, et al. The Pedar in-shoe system: Repeatability and normal pressure values. *Gait & Posture*. 25 pp 401-405. 2007.
- Hurkmans, HLP, et al. Validity of the Pedar Mobile system for vertical force measurement during a seven-hour period. *Journal of Biomechanics* 39: 110-118. 2006.

- Hsiao, H., Guan, J., Weatherly, M. Accuracy and precision of two in-shoe pressure measurement systems. *Ergonomics*. 2:537-5. 2002.
- McPoil, TG, et al. A Comparison of Two In-Shoe Plantar Pressure Measurement Systems. *The Lower Extremity*. 2:2. 1995.
- Kalpen, A. and Seitz P. Comparison between the force values measured with the Pedar system and Kistler platform. *Proceedings of the Fourth EMED User Meeting, Ulm. Gait & Posture* 2:238–9. 1994.

pliance:

- Lai, C, Li-Tsang, C. Validation of the Pliance X System in measuring interface pressure generated by pressure garment. *Burns*. 35 pp 845-51. 2009.
- Martinelli, L et al. Comparison of Capacitive versus Resistive Joint Contact Stress Sensors. *Clinical Orthopaedics and Related Research*. 447: pp 214-220. 2006.

loadsol:

- Renner, K, et al. The Reliability and Validity of the Loadsol® Under Various Walking and Running Conditions. *Sensors*. 18(2): 265. 2019.
- Burns, G, et al. Validation of a Wireless Shoe Insole for Ground Reaction Force Measurement. *J Sports Sci*. 37 pp 1129-1138. 2019.
- Peebles, A, et al. Validity and Repeatability of Single-Sensor Loadsol Insoles during Landing. *Sensors*. 18(12): 4082. 2018.

emed References:

- Vette, A, et al. Functional, impulse-based quantification of plantar pressure patterns in typical adult gait. *Gait & Posture*. 67 pp 122-7. 2019.
- Richter, M, et al. Combination of PedCAT Weightbearing CR With Pedography Assessment of the Relationship Between Anatomy-Based Foot Center and Force/Pressure-Based Center of Gravity. *Foot & Ankle International* 39 pp 361-8. 2018.
- Holowka, N, et al. Foot strength and stiffness are related to footwear use in a comparison of minimally vs conventionally shod populations. *Scientific Report*. 8: 3679. 2018.
- Song, J, et al. Comprehensive biomechanical characterization of feet in USMA cadets: Comparison across race, gender, arch flexibility, and foot types. *Gait & Posture*. 60. 175-80. 2018.

pedar References:

- Torp, D. et al. External feedback during walking improves measures of plantar pressure in individuals with chronic ankle instability. *Gait & Post* 67 pp 236-241. 2019.
- Taylor, J, et al. Effects of turf and clear footwear on plantar load distributions in adolescent American football players during resisted pushing. *Sports Biomech*. 17 pp 227-37. 2018.

- Dobson, J, et al. Effects of wearing gumboot and leather lace-up work boots on plantar loading when walking on a simulated underground coal mine surface. *Footwear Science*. 2018.
- Nolan, K and Yarossi, M. Weight transfer analysis in adults with hemiplegia using ankle foot orthosis. *Pros & Orth Interl*. 35 pp 45-53. 2011.

pliance References:

- Roost, L, et al. The effects of rider size and saddle fit for horse and rider on forces and pressure distribution under saddles. *Equi Vet Edu*. 32 pp 151-61. 2020.
- Caciari, L. et al. Novel instrumented probe for measuring 3D pressure distribution along the vaginal canal. *J Biomech*. 58 pp 139-146. 2017.
- Boutwell, E. et al. Effect of prosthetic gel liner thickness on gait biomechanics and pressure distribution within the transtibial socket. *JRRD*. 49 pp 227-240. 2012.
- Johanson, N et al. Measuring patellofemoral force and pressures in a simulated operating room environment. *J Arthroplasty*. 26. Pp 137-43. 2011.

manugraphy References:

- Cai, A, et al. Force distribution of a cylindrical grip differs between dominant and nondominant hand in healthy subjects. *Arch Orthop Trauma Surg* 138 pp 1323-31. 2018.
- Mühlendorfer-Fodor, M, et al. Load distribution of the hand during cylinder grip analyzed by Manugraphy. *J Hand Therapy*. 30 pp 529-37. 2017.
- Mühlendorfer-Fodor, M, et al. Grip force monitoring on the hand: Manugraphy system versus Jamar dynamometer. *Arch Othop Tauma Surg* 134 pp 1179-88. 2014.

loadsol References:

- Loiret, I, et al. Are wearable insoles a validated tool for quantifying transfemoral amputee gait asymmetry? *Pros & Orthot Intern*. 43 pp 492-9. 2019.
- Bessone, V, et al. Ground Reaction Forces and Kinematics of Ski Jump Landing Using Wearable Sensors. *Sensors*. 19 pp 1-11. 2019.
- Kammerlander, C, et al. Inability of Older Adult Patients with Hip Fracture to Maintain Postoperative Weight-Bearing Restrictions. *J Bone Joint Surg Am*. 100 pp 936-41. 2018.

loadpad References:

- Bye, T, and Lewis, V. Saddle and stirrup forces of equestrian riders in sitting trot, rising trot and trot without stirrups on a riding simulator. *Comp Exer Phys*. 16 pp 75-85. 2020.