**Supplementary Table 1.** Reliability of measurements for lumbar RoM (range of motion) and plantar pressures.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Variable | Intraclass  Correlatiowen coeficent | 95% Confidence  interval | p-value |
| Lumbar  RoM | Flexion | .676 | .436 - .827 | .000 |
| Extension | .753 | .555 - .871 | .000 |
| Right rotation | .979 | .957 - .990 | .000 |
| Left rotation | .969 | .938 - .985 | .000 |
| Right lateral flexion | .806 | .641 - .900 | .000 |
| Left lateral flexion | .895 | .797 - .947 | .000 |
| Plantar  Pressures | Right Pmax | .859 | .732 - .928 | .000 |
| Left Pmax | .839 | .699 - .918 | .000 |
| Right Pmean | .881 | .772 - .940 | .000 |
| Left Pmean | .868 | .749 - .993 | .000 |
| Right Pmax-mean | .783 | .604 - .888 | .000 |
| Left Pmax-mean | .793 | .620 - .893 | .000 |
| Dif %Load | .380 | .045 - .639 | .014 |

Intraclass correlation coefficients obtained by repeated-measures analysis of variance. Pmax=maximal pressure; Pmean= mean pressure; Pmax-mean= maximal pressure minus mean pressure; Dif.%Load= Difference of percentage of load left foot minus right foot.

**Supplementary Table 2.** Pearson correlation coefficient between variables.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Lumbar RoM | | | | | |  | Plantar Pressures | | | | | |
|  | Correlation | Flexion | Extension | Right  rotation | Left  rotation | Right  lateral flexion | Left  lateral flexion | Right Pmax | Left  Pmax | Right  Pmean | Left  Pmean | Right  Pmax-mean | Left  Pmax-mean | Dif %Load |
| Lumbar RoM | Flexion | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Extension | -.02 | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Right rotation | -.328\*\* | -.045 | 1 |  |  |  |  |  |  |  |  |  |  |
| Left rotation | -.349\*\* | -.033 | .960\*\* | 1 |  |  |  |  |  |  |  |  |  |
| Right lateral | .157 | .253\* | 0.1 | .099 | 1 |  |  |  |  |  |  |  |  |
| Left lateral | .088 | .169 | -.014 | .033 | .632\*\* | 1 |  |  |  |  |  |  |  |
| Plantar pressures | Right Pmax | -.016 | .086 | .111 | .153 | .15 | -.047 | 1 |  |  |  |  |  |  |
| Left Pmax | .002 | .073 | .087 | .128 | .148 | -.056 | .975\*\* | 1 |  |  |  |  |  |
| Right Pmedia | -.002 | .033 | .055 | .093 | .16 | -.028 | .946\*\* | .920\*\* | 1 |  |  |  |  |
| Left Pmedia | .018 | .01 | .012 | .052 | .112 | -.086 | .900\*\* | .945\*\* | .904\*\* | 1 |  |  |  |
| Right Pmax-mean | -.026 | .123 | .148 | .191 | .129 | -.059 | .963\*\* | .941\*\* | .822\*\* | .823\*\* | 1 |  |  |
| Left Pmax-mean | -.012 | .121 | .143 | .182 | .166 | -.025 | .955\*\* | .960\*\* | .854\*\* | .815\*\* | .960\*\* | 1 |  |
| Dif %Load | .062 | .059 | -.148 | -.177 | -.172 | -.071 | -.025 | .065 | -.071 | .193 | .016 | -.051 | 1 |

Statistical signification (\*) p< .05; (\*) p< .01; Pmax = maximal pressure; Pmean = mean pressure; Pmax-mean = maximal pressure minus mean pressure; Dif.%Load = difference of percentage of load left foot minus right foot.