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| **SUPPLEMENTARY MATERIAL C.**  Inter- and intrarater reliability of included studies | | |
| **Study** | **Interrater** | **Intrarater** |
| Ageberg et al | -Kappa 0.92, 95% CI 0.75 to 1.08.  -PA 96%. |  |
| Barker-Davis et al | **Composite scores:**  -ICC(1.1)=0.419 | **Composite scores:**  -ICC(1.1)=0.672 |
| Chmielewski et al  (Unilateral Squat) | **Overall method scoring system:**  -Weighted Kappa 0.00-0.37.  -Generalized Kappa 0.01, 95% CI -0.27 to 0.25.  -PA 41-60%.  **Specific method scoring system:**  - Weighted Kappa 0.29-0.42.  -Generalized Kappa 0.18, 95% CI 0.04 to 0.32.  - PA 32-41%. | **Overall method scoring system:**  - Weighted Kappa 0.18-0.42.  - PA 60-64%.  **Specific method scoring system:**  - Weighted Kappa 0.35-0.53  - PA 32-48%. |
| Chmielewski et al  (Lateral Step-Down) | **Overall method scoring system:**  -Weighted Kappa 0.21-0.55  -Generalized Kappa 0.19, 95% CI -0.15 to 0.53.  -PA 55-82%.  **Specific method scoring system:**  - Weighted Kappa 0.23-0.53.  -Generalized Kappa 0.22, 95% CI 0.07 to 0.36.  - PA 20-50%. | **Overall method scoring system:**  - Weighted Kappa 0.13-0.50.  - PA 56-76%.  **Specific method scoring system:**  - Weighted Kappa 0.56-0.68  - PA 40-60%. |
| Cornell et al |  | **Right leg:**  -Foot; PABAK 0.57, PA 78%  -Knee in; PABAK 0.74, PA 87%  -Knee out; PABAK 1.0, PA 100%  -Trunk; PABAK 0.83, PA 91%  -Balance; PABAK 0.65, PA 83%.  **Left leg:**  -Foot; PABAK 0.57, PA 78%  -Knee in; PABAK 1.0, PA 100%  -Knee out; PABAK 1.0, PA 100%  -Trunk; PABAK 0.65, PA 83%  -Balance; PABAK 0.91, PA 86%. |
| Crossley et al | **Consensus panel vs. experienced physical therapists:**  -Kappa 0.700-0.800.  -PA 80-87%.  **Consensus panel vs. the least experienced physical therapist:**  -Kappa 0.600.  -PA 73%. | -Kappa 0.613-0.800.  -PA 73-87%. |
| DiMattia et al | **Knee valgus:**  -Kappa 0.28.  -PA 66.6%.  **Hip adduction:**  -Kappa 0.016.  -PA 71.3%. |  |
| Edmondston et al | **Dominant leg:**  -Kappa 0.63.  -PA 87%.  **Non-dominant leg:**  -Kappa 0.47.  -PA 93%. |  |
| Friedrich et al | ICC (1,1) 0.14, 95% CI 0.00 to 0.44. |  |
| Frohm et al | ICC 0.5, Measurement error 0.61. |  |
| Gianola et al | **Generalized weighted Kappa:**  -Time point 0; 0.34, 95% CI 0.28 to 0.41  -Time point 1; 0.31, 95% CI 0.23 to 0.38  -Time point 2; 0.30, 95% CI 0.23 to 0.37  **Weighted Kappa, range 6 raters:**  -Lowest; 0.24 95% CI 0.09 to 0.39  -Highest; 0.61 95% CI 0.46 to 0.76 | **Generalized weighted Kappa:**  -Rater 1; 0.61, 95% CI 0.51 to 0.72  -Rater 2; 0.85, 95% CI 0.79 to 0.92  -Rater 3; 0.55, 95% CI 0.44 to 0.65  -Rater 4; 0.80, 95% CI 0.73 to 0.87  -Rater 5; 0.70, 95% CI 0.61 to 0.79  -Rater 6; 0.83, 95% CI 0.77 to 0.90 |
| Harris-Hayes et al | **Experienced tester 1:**  -Weighted Kappa 0.90 (95% CI 0.77 to 1.0).  -PA 93% (95% CI 83 to 100).  **Experienced tester 2:**  -Weighted Kappa 0.75 (95% CI 0.54 to 0.96).  -PA 83% (95% CI 68 to 98).  **Novice tester:**  -Weighted Kappa 0.75 (95% CI 054 to 0.96).  -PA 83% (95% CI 68 to 98). | **Experienced tester 1:**  Weighted Kappa 0.80 (95% CI 0.61 to 0.99).  -PA 87% (95% CI 73 to 100).  **Experienced tester 2:**  -Weighted Kappa 0.90 (95% CI 0.77 to 1.0).  -PA 93% (95% CI 83 to 100).  **Novice tester:**  -Weighted Kappa 0.84 (95% CI 0.67 to 1.0).  -PA 90% (95% CI 78 to 100). |
| Herman et al | **Overall agreement:**  -ICC 0.61, PA 73.83%.  **Experience (year):**  0-1= ICC 0.61, PA 66.67%.  1-5=ICC 0.59, PA 78.33%  >5=ICC 0.59, PA 73.40%.  No difference in PA between groups, P=0.141  **Familiar:**  -Yes= ICC 0.62, PA 78.08%.  -No= ICC 0.57, PA 69.32%.  Significantly greater PA in the familiar group, P=0.004.  **Training:**  -Yes=ICC 0.60, PA 75.23%.  -No= ICC 0.50, PA 72.38 %.  No difference in PA between groups, P=0.345.  Familiar group versus training group: No difference regardless familiarity and training, P=0.884 |  |
| Junge et al | -Linear weighted kappa 0.54-0.86.  -Un-weighted kappa 0.52-0.88.  -PABAK 0.50-0.94.  -Quadratic weighted kappa 0.76-0.95.  -Overall agreement 0.86-0.97%. |  |
| Kaukinen et al | **Weighted Kappa, 95% CI and PA:**  -Index knee: 0.52 (0.34-0.69), 76%  -Contralateral knee: 0.43 (0.23-0.62), 73%. | **Weighted Kappa, 95% CI and PA:**  -Index knee: 0.73 (0.56-0.90), 88%  -Contralateral knee: 0.66 (0.46-0.85), 88%. |
| Kennedy et al | **Most significant limiting factor:**  **-**Kappa 0.26-0.37  **Regardless limiting factor:**  **-**Kappa 0.4-0.62**.** | **Most significant limiting factor:** Kappa 0.31-0.53. |
| Lenzlinger-Asprion et al | -Weighted Kappa 0.66, 95 % CI 0.46-0.86.  -PA 70%. | **Tester A:**  -Weighted Kappa 0.78, 95 % CI 0.64-0.93.  -PA 77%  **Tester B:**  -Weighted Kappa 0.61, 95 % CI 0.40–0.82.  -PA 70%. |
| McKeown et al | **Left leg:**  -Average kappa 0.53.  **Right leg:**  -Average kappa 0.58. | **Left leg:**  -Average ICC 0.75.  **Right leg:**  -Average ICC 0.80. |
| Nae et al | **Within-task scoring system:**  -Weighted kappa, 95% CI; 0.664 (0.369-0.958)  **-Segment-specific scoring system, weighted kappa, 95% CI:**  -Foot pronation- 0.517 (0.276-0.758).  Medial knee to foot position- 0.592 (0.321-0.863)  Hip/pelvic- 0.429 (0.128-0.729)  Trunk- 0.524 (0.147-0.90) |  |
| Park et al | -Kappa 0,80, 95% CI 0.57-1.0  -PA 85% |  |
| Piva et al | -Kappa 0.67, 95% CI 0.58-0.76  -PA 80% |  |
| Poulsen et al | -Generalized weighted kappa 0.68, 95% CI 0.46-0.87. | -Weighted kappa 0.38-0.94 |
| Rabin et al (2010) | -Kappa 0.59, 95% CI 0.26-0.91.  -PA 83%. |  |
| Rabin et al (2014) | -Kappa 0.81, 95% CI 0.68–0.94.  -PA 91% |  |
| Räisänen et al | **Physiotherapist vs. non-experienced tester:**  -Dominant leg=kappa 0.32, p <0.06.  -Non-dominant leg=kappa 0.16, p=0.35. | **First year:**  -Dominant leg; kappa 0.28, P=0.06; -Non-dominant leg; kappa 0.29, p=0.06  **Second year:**  -Dominant leg; kappa 0.60,  p <0.01.  -Non-dominant leg; kappa 0.64,  p <0.001  **Third year:**  -Dominant leg; kappa 0.89,  p <0.001.  -Non-dominant leg; kappa 0.78,  p <0.001  **All years:**  -Dominant leg; kappa 0.58,  p <0.001;  -Non-dominant leg; kappa 0.58,  p <0.001 |
| Stensrud et al |  | **Right leg:** kappa 0.43  **Left leg:** kappa 0.32 |
| Teyhen et al | ICC 2,5=0.61, 95% CI 0.30-0.79 |  |
| Van Mastrigt et al | **Among all raters:**  -Linearly weighted kappa= 0.43, 95% CI 0.02–0.65.  -Quadratically weighted kappa =0.57, 95% CI 0.14-0.80.  -Generalized kappa =0.29  **Among surgeons:**  -Linearly weighted kappa=0.51, 95% CI 0.44-0.61.  -Quadratically weighted kappa= 0.68, 95% CI 0.62-0.74.  -Generalized kappa= 0.32. |  |
| Weeks et al | **Experienced physiotherapists:**  -ICC 3,1=0.71  **Physiotherapy students:**  -ICC 3,1=0.60. | **Experienced physiotherapists:**  -ICC 3,1=0.81, Range 0.66-0.87.  **Physiotherapy students:**  -ICC 3,1=0.71, Range 0.50-0.87.  Neither physiotherapist nor student ratings differed significantly between the two occasions. |
| Weir et al  (Unilateral Squat) | ICC 2,1=0.41, 95% CI 0.26-0.58 | ICC 2,1=0.55, 95% CI 0.45-0.64  PA of all observers between the 2 observations 49%. |
| Weir et al  (Lateral Step-Down) | ICC 2,1=0.39, 95% CI 0.23–0.57 | ICC 2,1=0.49, 95% CI 0.39–0.59  PA of all observers between the 2 observations 47%. |
| Whatman et al | **Percent agreement and AC1 (95% CI):**  **Knee rating:**  All Physiotherapists: PA 73%, AC1 0.52 (0.41-0.65).  Experience <5 year: PA 70%, AC1 0.44 (0.29-0.58).  Experience 5-9 year: PA 72%, AC1 0.50 (0.37-0.63).  Experience 10-14 year: PA 72%, AC1 0.50 (0.37-0.63).  Experience >14 year: PA 75%, AC1 0.55 (0.40-0.70).  **Pelvis rating:**  All Physiotherapists: PA 73%, AC1 0.52 (0.42-0.62).  Experience <5 year: PA 70%, AC1 0.47 (0.36-0.70).  Experience 5-9 year: PA 75%, AC1 0.53 (0.36-0.70).  Experience 10-14 year: PA 74%, AC1 0.54 (0.44-0.64).  Experience >14 year: PA 74%, AC1 0.53 (0.42-0.65). | **Percent agreement and AC1 (mean range):**  **Knee rating:**  All Physiotherapists (N=26): PA 83% (70-96), AC1 0.71 (0.41-0.95)  Experience <10 year (N=9): PA 84% (70-96), AC1 0.71 (0.41-0.95)  Experience >14 year (N=11): PA 84 % (74-91), AC1 0.71 (0.49-0.87)  **Pelvis rating:**  All Physiotherapists (N=26): PA 84% (70-100), AC1 0.73 (0.48-1.00)  Experience <10 year (N=9): PA 83% (74-100), AC1 0.70 (0.48-1.00)  Experience >14 year (N=11): PA 85% (70-96), AC1 0.74 (0.52-0.93). |
| Örtqvist et al | -Kappa 0.57, 95% CI 0.30-0.85.  -PA 79%. | -Kappa 0.48, 95% CI 0.16-0.79.  -PA 76%. |
| Abbreviations: ICC, Intraclass correlation Coefficient; AC1, First order of agreement coefficient;  PABAK, Prevalence-adjusted bias-adjusted kappa; PA, Percent Agreement; CI, Confidence Interval | | |