

Table S1. Quality assessment of included articles

Quality Index Item	Brett et al. ³¹ (2018)	Cheng et al. ³⁸ (2019)	Crossley et al. ³⁹ (2018)	Fong et al. ⁴⁵ (2015)	García-Liñeira et al. ⁴⁶ (2020)	García-Soidán et al. ⁴⁷ (2020)
Were the research objectives or aims clearly stated?	2	2	2	2	2	2
Was the study design clearly described?	0	2	0	2	2	2
Was the study population adequately described?	2	2	2	2	2	2
Were the eligibility criteria specified?	1	2	0	2	2	2
Was the sampling methodology appropriately described?	0	1	0	0	0	0
Was the sample size used justified?	0	2	0	1	0	0
Did the method description enable accurate replication of the measurement procedures?	0	0	2	1	1	2
Was the equipment design and set up clearly described?	0	0	1	2	2	2
Were accelerometers locations accurately and clearly described?	0	2	2	2	2	2
Was accelerometers attachment method clearly described?	0	0	2	1	2	2
Was the signal/data handling described?	1	2	2	2	2	2
Were the main outcomes measured and the related calculations clearly described?	2	2	2	2	2	2
Was the system compared to an acknowledged gold standard?	2	0	0	2	0	0
Were measures of reliability/accuracy of the accelerometers used reported?	0	0	2	0	2	2
Were the main findings of the study stated?	1	0	2	2	2	2
Were the statistical tests appropriate?	2	2	2	2	2	2
Were limitations of the study clearly described?	2	2	2	2	2	2
Total score (out of 34)	15	21	25	27	27	28
Percentage score	44.1%	61.8%	73.5%	79.4%	79.4%	82.4%
Quality category	Medium	Medium	High	High	High	High

Table S1. Quality assessment of included articles (cont.)

Quality Index Item	Iosa, et al. ⁴⁰ (2018)	Jobbágy et al. ⁴⁸ (2016)	Kim et al. ⁴³ (2018)	Kim et al. ⁴⁴ (2018)	Linder et al. ⁴¹ (2018)	Mutoh, et al. ³² (2016)	Saether et al. ³⁶ (2015)
Were the research objectives or aims clearly stated?	2	1	2	2	2	2	2
Was the study design clearly described?	1	0	0	0	0	0	1
Was the study population adequately described?	2	1	2	2	2	2	2
Were the eligibility criteria specified?	1	0	2	1	1	2	2
Was the sampling methodology appropriately described?	0	0	2	2	0	0	0
Was the sample size used justified?	0	0	2	2	0	0	0
Did the method description enable accurate replication of the measurement procedures?	0	0	0	1	0	0	0
Was the equipment design and set up clearly described?	2	1	2	2	2	0	1
Were accelerometers locations accurately and clearly described?	2	0	2	2	2	2	2
Was accelerometers attachment method clearly described?	2	1	1	2	2	2	2
Was the signal/data handling described?	2	2	2	2	2	0	2
Were the main outcomes measured and the related calculations clearly described?	2	1	1	1	2	1	1
Was the system compared to an acknowledged gold standard?	0	0	1	1	2	0	1
Were measures of reliability/accuracy of the accelerometers used reported?	0	0	0	0	2	0	1
Were the main findings of the study stated?	2	1	2	2	0	2	2
Were the statistical tests appropriate?	2	0	1	2	2	1	2
Were limitations of the study clearly described?	1	0	2	2	2	2	1
Total score (out of 34)	21	8	25	26	23	16	22
Percentage score	61.8%	23.5%	73.5%	76.5%	67.6%	47.1%	64.7%
Quality category	Medium	Low	High	High	High	Medium	Medium

Table S1. Quality assessment of included articles (cont.).

Quality Index Item	Shiratori et al.⁴² (2016)	Speedtsberg et al.³³ (2018)	Summa et al.³⁷ (2015)	Tramontano et al.³⁴ (2017)	Wolter et al.³⁵ (2019)
Were the research objectives or aims clearly stated?	2	2	2	2	2
Was the study design clearly described?	0	0	0	0	0
Was the study population adequately described?	2	0	1	0	1
Were the eligibility criteria specified?	1	2	0	2	1
Was the sampling methodology appropriately described?	0	0	0	0	0
Was the sample size used justified?	0	0	0	0	1
Did the method description enable accurate replication of the measurement procedures?	1	0	1	0	1
Was the equipment design and set up clearly described?	2	1	2	1	1
Were accelerometers locations accurately and clearly described?	2	2	2	2	2
Was accelerometers attachment method clearly described?	2	0	2	0	2
Was the signal/data handling described?	2	2	2	0	0
Were the main outcomes measured and the related calculations clearly described?	2	2	2	2	2
Was the system compared to an acknowledged gold standard?	2	0	0	2	0
Were measures of reliability/accuracy of the accelerometers used reported?	0	0	0	0	0
Were the main findings of the study stated?	0	2	2	2	1
Were the statistical tests appropriate?	2	2	2	2	2
Were limitations of the study clearly described?	2	2	0	2	0
Total score (out of 34)	23	17	18	17	16
Percentage score	67.6%	44.1%	52.9%	50%	47%
Quality category	High	Medium	Medium	Medium	Medium