Table 8. Systematic Reviews Assessing Virtual Reality (VR) (some including Biofeedback Techniques) for Standing Balance

Authors Year; Country Date included in the review Number of articles Level of Evidence Type of Study AMSTAR Score	**Method Databases Outcome Measures**	**Conclusions**
Abou et al. (2020); USA Reviewed published articles up to September 2019 N=10 in the systematic review and 6 in the meta-analysis **Level of evidence:** Cochrane Risk of Bias Tool for RCTs and Quality Assessment Tool for pre-post studies with no control group **Type of study:** 3 RCTs 7 pre-post trials **AMSTAR:** 8	**Method:** The main objective of this systematic review and meta-analysis was to evaluate and synthesize the effects of VR therapy on gait and balance rehabilitation among people with SCI. **Database:** PubMed, Web of Science, Scopus, SportDiscus, and CINAHL. **Outcome Measures:** Sitting balance (T-shirt test and the mFRT); static sitting balance (Trunk Recovery Scale item D and sway distance and velocity); dynamic sitting balance assessment (Trunk Recovery Scale item E); standing balance assessment (BBS, the ABC scale, the LOS, the Romberg Index, the parameters of the CoP, the forward functional reach test and lateral functional reach test; and gait outcomes (WISCI II, 10MWT, TUG, 2MWT, spatiotemporal gait parameters, 6MWT, and gait speed).	1. A total of 149 participants were included. 2. Five studies used only VR therapy and the other studies used a combination of VR therapy with balance or coordination training. 3. Methodological quality: a. Two of the three RCTs included in this review presented a low risk of bias and the third was rated as high risk of bias (and was not included in the meta-analysis). b. Four out of the seven pre-post studies included in this review presented an overall good quality and three studies were rated as fair overall quality (and were not included in the meta-analysis). 4. Effects of VR therapy assessed by meta-analysis (n=6): a. After completion of VR therapy, standing balance significantly improved compared with baseline. The analysis of the BBS scale showed a statistically significant within-group difference (MD=4.22; 95% CI 1.78-6.66; P<.01) and the analysis of the ABC scale showed a statistically significant within-group difference (MD = 8.53; 95% CI 2.52- 14.53; P<.01).