Table 15. Virtual Reality for Depression following SCI

Author Year Country Research Design PEDro Score Total Sample Size	Methods	Outcome
Lakhani et al. (2020) Australia RCT Crossover Pedro=3 Level 2 NInitial=24 NFinal=20	Population: Intervention group 1 (VR session first; n=10) Mean age=56.2±20.7yr; Gender: males=100%; Mean time post injury=135.2±63.64d; Level of injury: cervical=5, thoracic/lumbar=5; Severity of injury: AIS A=7, AIS B=1, AIS C=2, AIS D=0; Depression status=mild as assessed by the PHQ-8. Intervention group 2 (usual care first; n=14): Mean age=48±16.21yr; Gender: males=6, females=8; Mean time post injury=127.21±79.51d; Level of injury: cervical=6, thoracic/lumbar=8; Severity of injury: AIS A=3, AIS B=0, AIS C=7, AIS D=4; Depression status=mild as assessed by the PHQ-8. Intervention: The treatment condition and the control	 A t-test confirmed that the Td1 PHQ-8 values were significantly different between groups (p<.05). <p>Difference scores were significantly greater for group 1 participants, and the direction of the change suggests that the psycho- emotional health of group 1 (intervention condition) had improved significantly compared with group 2 (control condition). </p> A second t test confirmed that the Td2 PHQ-8 values were not significantly different between groups (p>.05). While the direction of difference scores suggested that psychoemotional health improved for the group 2 (intervention condition)

condition were tested over 2wk. The intervention week involved participation in up to three 20min virtual reality (VR) sessions over 3d, where a diversity of virtual natural environments available via the Oculus Go VR headset were delivered. The control condition involved regular rehabilitation practice over 1wk. Group 1 participants experienced the intervention during week 1 and the control during week 2, while group 2 experienced the opposite. The PHQ-8 was completed at 3 time points: TI prior to the first condition, T2 immediately after the first condition and prior to the second condition, and T3 after the second condition. The feeling intensity scales were completed prior to and following each VR session.

Patient Health Questionnaire-8 (PHQ-8), three feeling intensity scales (adapted versions of the Depression Intensity Scale Circles).

Outcome Measures:

- compared with group 1 (control condition), the difference was not significant.
- 3. The effect size of the difference in Td1 and Td2 values between groups was large and medium, respectively.