

SCIRF 2014 I – 01
Community-based Virtual Reality Group Exercise Training in
Persons with Spinal Cord Injury

Overview

Persons who sustain a spinal cord injury (SCI) many times become physically inactive, which leads to increased risk of cardiovascular disease, type 2 diabetes, osteoporosis, and certain forms of cancer. Also, research demonstrates that the disability-related physical inactivity can cause a decrease in health-related quality of life (QOL). Some individuals with SCI may not want to incorporate exercise into their daily routine. Virtual reality (exercise computer games) in group settings are fun, increase motivation for exercise, and offer major advantages over traditional aerobic exercise programs including increased safety and immediate feedback on how they are performing. This study will first compare health and quality of life in persons with SCI who are active versus those who are not active. Then, we will see if increasing activity in the physically inactive group will improve health and QOL. We expect that active SCI individuals will have a better health and quality of life than inactive persons with SCI. We also expect that participating in 8 weeks of group VR hand cycle training in the community will improve health at 8 weeks and 3 months compared to persons with SCI who do not participate in the exercise program.