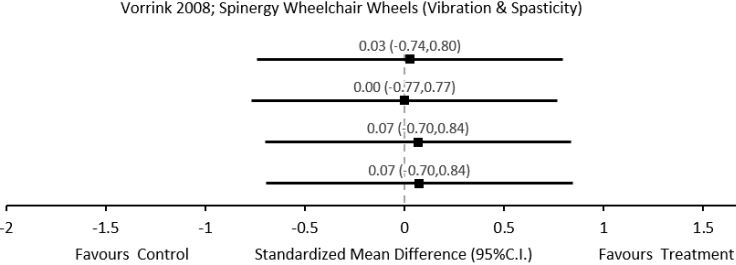


Author Year Country Research Design Score Total Sample Size	Methods	Outcome
<p>Vorriink et al. 2008 Canada RCT PEDro=4 N=13</p>	<p>Population: Mean age: 46.2 yr; Gender: males=10, females=3; Level of injury: C=3, T=10; Severity of injury: complete=7, incomplete=2, unknown=4.</p> <p>Intervention: Subjects were asked to perform an obstacle course in their own wheelchairs and were randomly assigned one of two types of wheels: spinergy or steel traditional spoke wheels.</p> <p>Outcome Measures: Average speed, Peak acceleration, Root-mean-square, Visual Analog Scale (VAS).</p>	<ol style="list-style-type: none"> The two wheel types did not differ in their average speed, peak acceleration, and RMS or peak power. Overall, the footplate compared to the axel had higher peak accelerations ($p<0.001$) and RMS values ($p<0.001$). Spasticity and comfort measures on the VAS and the overall VAS did not differ significantly between the two wheel types. Steel spoked wheels showed a trend towards being rated as higher in spasticity on 8/9 obstacles ($p=0.06$).
	<p>Effect Sizes: Forest plot of standardized mean differences (SMD \pm 95%C.I.) as calculated from pre- and post-intervention data.</p> 	
<p>Garcia-Mendez et al. 2013 USA Post Test N=37 (SCI=25)</p>	<p>Population: Mean age: 47.6 yr; Gender: males=32, females=5; Injury etiology: SCI=25, amputation=6, MS=3, other=3; Level of injury: paraplegia=20, tetraplegia=5; Mean duration of w/c use: 15.0 yr.</p> <p>Intervention: Exposure to whole body vibration was measured over a 2 wk period using a vibration data logger (VDL) at the back support and the seat and a manual wheelchair data logger (MDL) which measures distance speed and continuous movement.</p> <p>Outcome Measures: Shock-sensitive vibration evaluation method (VDV) of the seat surface and back support, duration of vibration exposure, frequency-weighted acceleration.</p>	<ol style="list-style-type: none"> Participants spent an average of 13.07 hr/day in their wheelchairs. Nearly 31% of participants were exposed to vibration levels at the seat within the health caution zone, and the rest of the participants were exposed to levels above this zone. Exposure to vibration measured at the back support was lower and tended to be localized within the health caution zone in comparison to the seat. Suspension systems did not significantly decrease the vibration exposure at the wheelchair frame.