Reviewer ID: Carlos L. Cano, Tyra Chu

Last Updated: January 23rd, 2024

Research Summary - Clinical Outcome Variables Scale (COVS) - Lower Limb and Walking

Author Year Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability
[Barker et al. 2007](#) Methodological Assessments conducted in participants' home environment	**Study 1:** N=37 (31M, 6F) Mean age=41 Mean time since injury=8months Tetraplegia=18 Paraplegia=19 Complete injury=19 Incomplete injury=18 **Study 2:** N=43 (35M, 8F) Mean age=46 Criteria for inclusion=same as study 1 Tetraplegia=18 Paraplegia=25 Complete injury=21 Incomplete injury=22		Telephone-administered COVS (TCOVS) test-retest ICC= 1.00 Equivalence reliability of TCOVS (COVS assessed by telephone) and COVS, ICC= 0.98	**Interpretability:** See Table 1. below

Table 1.

Item Aggregate:	TCOVS: mean (SD)	COVS: mean (SD)
Composite score	54 (18)	55 (20)
Mobility subscale	37 (12)	39 (13)
Ambulation subscale	11 (9)	11 (9)
Individual Items:	-------	--------

Author Year Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability
	Roll right	5.3 (2.3)		5.5 (2.2)
	Roll left	5.4 (2.3)		5.5 (2.2)
	Supine to sit	5.1 (2.2)		5.4 (2.2)
	Sitting balance	3.7 (2.1)		4.9 (2.3)
	Horizontal transfer	4.9 (2.4)		5.1 (2.3)
	Vertical transfer	3.2 (2.3)		3.3 (2.4)
	Walking	2.0 (1.8)		1.9 (1.9)
	Walking aids	1.8 (1.6)		1.8 (1.6)
	Walking distance	1.9 (1.8)		2.0 (2.0)
	Walking speed	2.0 (1.7)		2.1 (2.0)
	Wheelchair mobility	6.1 (0.68)		5.7 (1.0)
	Right arm function	6.2 (1.2)		6.0 (1.4)
	Left arm function	6.0 (1.6)		6.1 (1.4)
Campbell & Kendall, 2003 Cross-sectional Community rehabilitation settings/hospitals	N=169 (124M, 45F) Median age: 33 years Lesion level: 36 complete paraplegia 56 incomplete paraplegia 25 complete paraplegia 52 incomplete paraplegia	**Factor Analysis:** Two factors emerged from COVS: 1. General mobility 2. Ambulation **Discriminate across clinically distinct groups during discharge from hospital and admission to Transitional rehabilitation program:**		

Author Year Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability
		<u>Lesion level (paraplegia and tetraplegia):</u> Composite score at discharge: t=5.11 (P<.001) Composite score at admission: t=5.57 (P<.001) General mobility subscale at discharge: t=8.80 (P<.001) General mobility subscale at admission: t=9.40 (P<.001) Ambulation subscale at discharge: t=0.81 (ns) Ambulation subscale at admission: t=1.76 (ns) <u>Completeness of injury:</u>		

Author Year Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability
		Composite score at discharge: t=-6.85 (P<.001) Composite score at admission: t=-6.69 (P<.001) General mobility subscale at discharge: t=-4.15 (P<.001) General mobility subscale at admission: t=-3.92 (P<.001) Ambulation subscale at discharge: t=-7.96 (P<.001) Ambulation subscale at admission: t=-8.28 (P<.001) Walking Status: Composite score at discharge: t=14.37 (P<.001) Composite score at admission: t=13.86 (P<.001)		

Author Year Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability
		General mobility subscale at discharge: t=6.88 (P<.001) General mobility subscale at admission: t=6.53 (P<.001) Ambulation subscale at discharge: t=20.95 (P<.001) Ambulation subscale at admission: t=19.87 (P<.001)		