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Research Summary – Spinal Cord Injury Ability Realization Measurement Index (SCI-ARMI) – Self Care and Daily Living

Author Year Country Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability

Catz et al. 2004
 	
Development of instrument and preliminary comparative before-after study
 	
Spinal department in a rehabilitation hospital in Israel
	N=79 (60M, 19F)
	Mean age 46±18
	33 tetraplegia, 46 paraplegia
	AIS-A/B = 27, AIS-C/D = 52
	41 traumatic, 38 nontraumatic SCI
		Pearson's r btwn SCI-ARMI & AIS motor score:
		    Admission to rehabilitation: 0.296 (p<0.01)
		    During rehabilitation: -0.248 (p<0.16, nonsignificant)
		    At rehabilitation completion: -0.123 (p<0.62, nonsignificant)
		Pearson's r btwn SCI-ARMI (regression-based score) & Time since rehabilitation admission: 0.46 (p<0.01)
		No significant correlation found btwn SCI-ARMI improvement and Patient age, gender, or spinal cord lesion level or severity (p>0.05)		

Scivoletto et al. 2015 Validation and further development of	N=661 (478M, 183F) Mean age at admission: 47.6±18.2 AIS-A/B/C/D: 214/55/144/248 patients	Pearson's r btwn SCI-ARMI gain and: ASIA Motor Score at admission: -0.14, p<0.0001		**Interpretability:** Mean (SD) admission-discharge change = 38.8 (22)

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the SCI-ARMI formula using data from 6 countries
 	
Spinal cord injury centers from 6 countries and the StatisticalLaboratory, Tel-Aviv University, Israel.
	387 traumatic, 274 nontraumatic SCI Patients from:
	    Israel = 233 (151M, 82F)
	    Italy = 237 (183M, 54F)
	    Portugal = 26 (17M, 9F)
	    Spain = 30 (24M, 6F)
	    UK = 58 (47M, 11F)
	    US = 77 (56M, 21F)
		ASIA Motor Score gain: 0.13, $p < 0.0006$
		Age: -0.23, $p < 0.0001$		

Aidinoff et al. 2012 Development of SCI-ARMI and examination of its validity and utility Loewenstein Rehabilitation Hospital, Raanana. Statistical Laboratory, School of Mathematics, Faculty of Exact	250 successive spinal cord lesion (SCL) inpatients treated in the Spinal Department of Loewenstein Rehabilitation Hospital between 2004 and 2010 N=226 (65%M, 35%F) Mean age 51.3(18.6) 42% tetraplegia, 58% paraplegia AIS-A/B/C/D at admission: 19%/2.7%/23.9%/54.4% 38.9% traumatic, 61.1% nontraumatic	Pearson's r btwn SCI-ARMI and ASIA Motor Score at discharge: 0.28, $p = 0.00001$		

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Sciences, Tel-Aviv University, Israel				