

Reviewer ID: Christie Chan, Jeremy Mak, John Zhu, Gita Manhas			
Type of Outcome Measure: Fatigue Severity Scale (FSS)			Total articles: 4
Author ID Year	Study Design	Setting	Population (sample size, age) and Group
Gavrilov et al. 2018	Russian version	Russia	N=85 MS patients Mean age: 37.6±10.2 years 32 Male, 53 Female
Craig et al. 2015	Prospective longitudinal design	3 SCI units in Sydney, Australia	N=88 (62M, 26F) Mean age (SD): 42.6 (17.8) Duration of SCI in weeks (SD): 7.3 (6.1) 39% Tetraplegic, 61% Paraplegic Inclusion criteria: <ul style="list-style-type: none"> • Acute SCI sustained • First-time admission to a SCI unit • 18-80 years of age at time of interview • able to speak English
Anton et al. 2008	2-week methodologic study to assess the internal consistency, reliability and construct validity of the FSS.	A tertiary spinal cord rehab facility in Vancouver, Canada.	N=48 Male=31 Female=17 Mean age=40.4 Mean time since injury=14.9 years Major cause of injury=motor vehicle collision=27 Motor complete SCI=48 Tetraplegia=26 ASIA grade A injuries=30
Menon et al. 2015	Prospective descriptive study	Research hospital in India	N=127 (35F, 92M) Age: 32.71 ±13.08 Time Since Injury (days): 76.22 ± 82.5 Myelopathy patients Admission AIS: AIS A: 58 AIS B: 18 AIS C: 36 AIS D: 11 Discharge AIS: AIS A: 47 AIS B: 16 AIS C: 26 AIS D: 34
1. RELIABILITY			
Author ID	Internal Consistency		

Gavrilov et al. 2018	Cronbach α =0.88-0.96 Individual items showed a high correlation (Pearson's $r > 0.60$) to the total score.	Test-retest reliability ICC=0.78-0.89
Anton et al. 2008	Cronbach α =0.89	ICC=0.84 Items (ICC) 1=0.32 2=0.42 3=0.51 4=0.73 5=0.77 6=0.74 7=0.70 8=0.75 9=0.74
2. VALIDITY		
Author ID	Validity	
Gavrilov et al. 2018	Convergent Validity of FSS with: (FIS – Fatigue Impact Scale) FIS _{cognitive} : $r=0.35$, $P=0.001$ FIS _{physical} : $r=0.82$, $P<0.001$ FIS _{psychosocial} : $r=0.75$, $P<0.001$ Discriminant Validity of FSS with: BMI (Body mass index): $r = -0.08$, $P = 0.14$ ESS (Epworth Sleepiness Scale): $r = 0.183$, $P = 0.09$	
Craig et al. 2015	Odds Ratio (95% CI) = 1.69 (1.09-2.29) $\chi^2 = 3.23$ p-value = 0.07	
Anton et al. 2008	Pearson correlation FSS convergent with: Visual Analog Scale for Fatigue (VAS-F) $r=0.67$ Centre for Epidemiologic Studies Depression Scale (CES-D) $r=0.58$ divergent with Short Form-36 (SF-36) $r=-0.48$ Assuming an FSS cut-score of 4 to indicate significant fatigue and a VAS-F score of over 6 to indicate severe fatigue.. Sensitivity=75% Specificity=67% The diagnostic values for a cut-score of 5 improved the specificity at the expense of sensitivity. Area under the ROC=0.799	
Menon et al. 2015	Change in FSS and change in SCIM III Spearman's rho: 0.283 ($p=0.031$, significant)	
3. RESPONSIVENESS – no data available		
4. FLOOR/CEILING EFFECT		

Gavrilov et al. 2018	Floor = 2.4% Ceiling = 0.9%			
5. INTERPRETABILITY				
Author ID	Interpretability			
Gavrilov et al. 2018		Control subjects (n=250)	MS patients (n=85)	P
	FSS	3.4 ± 1.4	4.1 ± 1.6	<0.001
	95% CI	3.23–3.59	3.83-4.52	
	Fatigue (FSS ≥ 4.0)	87 (34.8%)	45 (52.9%)	0.005
Anton et al. 2008	Mean (SD) values for Total and Individual FSS Items			
	Item:	Mean (SD) FSS Score:		
	1	5.7 (1.6)		
	2	3.8 (1.7)		
	3	4.1 (1.8)		
	4	4.7 (1.9)		
	5	4.0 (1.7)		
	6	4.1 (1.9)		
	7	4.2 (1.9)		
	8	4.1 (2.0)		
	9	4.3 (2.1)		
Total	4.4 (1.4)			
SEM for total FSS (calculated from data in article): 0.56 MDC for total FSS (calculated from data in article): 1.55				