

Reviewer ID: Emily Procter, Matthew Querée, Gita Manhas			
Type of Outcome Measure: Brief Symptom Inventory (BSI)			Total articles: 4
Author ID Year	Study Design	Setting	Population (sample size, age) and Group
Shabany et al. 2018	Cross-sectional psychometric study	Brain and Spinal Cord Injury Research Center in Tehran, Iran	<p>N=97 (77M, 20F) Age: 25\geq (N=13), 26-35 (N=47), 36-45 (N=16), 46-55 (N=11), 55\leq (N=10)</p> <p>SCI duration: 1-5 (N=77), 6-10 (N=10), 11-15 (N=2), 16-20 (N=7), 20\leq (N=1)</p> <p>79.4% Paraplegia, 20.6% Tetraplegia; 61.9% Complete injury, 38.1% Incomplete injury</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • persons with traumatic SCI (paraplegia and tetraplegia) • \geq1 year post-injury • able to read/comprehend Persian • \geq18 years <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • cognitive disorders
Mitchell et al. 2008	Comparison of two self-report instruments with a structured diagnostic interview to investigate the properties of the Depression Anxiety Stress Scale-21 (DASS-21) in patients with SCI.	South Australian Spinal Cord Injuries Service	<p>N=40 Male=30 Female=10 Mean time since injury=113.9 months</p> <p>Paraplegia=26 Tetraplegia=14</p>
Scherer & Cushman 2001	Cross-sectional; assesses the validity of a subset of items of the ATD-PA	Acute medical rehabilitation unit in a general hospital	<p>N=20 Age: 51.05\pm16.44, range 22-78 years 10 female, 10 male</p> <p>13 paraplegia (4 complete), 7 tetraplegia (1 complete)</p>
Tate et al. 1993	Retrospective review	University of Michigan Medical Center/SCI Rehabilitation Service	<p>Sample 1 N=162 (128M, 34F) Mean age 33.6\pm9.9yrs Outpatients who had received initial rehab between 1985 and 1989. Time post SCI: 6 months to 5 years 45% paraplegia, 55% tetraplegia.</p> <p>Sample 2 N=30 (28M, 2F) Mean age 31.3\pm12.4yrs Consecutively admitted inpatients. 30% paraplegia, 70% tetraplegia. Acute SCI</p>

1. RELIABILITY		
Author ID	Internal Consistency	Test-retest, Inter-rater, Intra-rater
Tate et al. 1993	Cronbach's alpha. $\alpha=0.96$	No data available
2. VALIDITY		
Author ID	Validity	
Shabany et al. 2018	<p>Convergent:</p> <p>BSI with Spinal Cord Injury Lifestyle Scale (SCILS): Depression: $r = -0.48$ Anxiety: $r = -0.42$</p> <p>BSI with Health Behaviour Questionnaire (HBQ): Depression: $r = -0.33$ Anxiety: $r = -0.17$</p>	
Tate et al. 1993	<p>Pearson correlations. There were significant correlations between a) BSI (global severity index; GSI) and Zung total scores ($r=0.53$; $P<.001$), b) BSI (depression; DEP) and Zung total scores ($r=0.52$; $P<.001$), and c) BSI/GSI and Zung affective scores ($r=0.52$; $P<.001$).</p> <p>Cohen's kappa coefficient for inter-test percent agreements. Correlations were stronger between the Zung total and the BSI/DEP scores ($K=0.59$; $P<.0005$; 85% agreement) than between the Zung total and the BSI/GSI scores ($K=0.44$; $P<.0005$; 78% agreement).</p> <p>Construct validity was also investigated through factor analyses using principal components methodology and varimax rotation. BSI: none of the scales measured a single separate construct and the factor loadings were different in this population compared to the original test population. There were also problems with factor loading when 3 domains were forced (affective, somatic and cognitive).</p> <p><i>Two experienced clinicians rated participants as depressed or not depressed. The percent agreement with the results of the questionnaires for sample 2 was reported.</i></p> <p>The clinicians' ratings were in 80% agreement with BSI/DEP scores ($kappa=0.44$; $P<.01$) and 67% agreement with the BSI/GSI scores ($kappa=0.07$ not significant).</p> <p>In terms of percent positive agreement (i.e. sensitivity), the clinicians' ratings were in 57% agreement with the BSI/DEP scores and 29% agreement with the BSI/GSI scores.</p> <p>In terms of percent negative agreement (i.e. specificity), the clinicians' ratings were in 87% agreement with the BSI/DEP scores and 73% agreement with the BSI/GSI scores.</p>	
Scherer & Cushman 2001	<p>All items on the Assistive Technology Device Predisposition Assessment (ATD-PA) QOL subset correlate negatively with the BSI depression subscale.</p> <p><u>Spearman correlations between the BSI, Satisfaction With Life Scale (SWLS) and ATD-PA QOL subset</u> ATD-PA QOL & BSI: $r=-0.71$, ($P<.01$) SWLS & BSI: $r=-0.64$, ($P<.01$)</p>	
Mitchell et al. 2008	BSI (D) w/ Depression Anxiety Stress Scale (D): $r = 0.70$; $P<.01$	

	BSI (A) w/ Depression Anxiety Stress Scale (A): $r = 0.61$; $P < .01$		
3. RESPONSIVENESS – no data available			
4. FLOOR/CEILING EFFECT – no data available			
5. INTERPRETABILITY			
Author ID	Interpretability		
Tate et al. 1993	Subscale:	Mean (SD) score:	
	Somatization	59.3 (11.1)	
	Obsessive-compulsive	55.1 (11.2)	
	Interpersonal sensitivity	54.8 (11.3)	
	Depression	56.6 (11.7)	
	Anxiety	55.2 (12.5)	
	Hostility	54.7 (11.8)	
	Phobic Anxiety	57.0 (10.8)	
	Paranoid Ideation	56.1 (11.9)	
	Psychoticism	56.4 (10.3)	
	Global Severity Index (GSI)	58.0 (12.4)	
Scherer & Cushman 2001	BSI Depression subscale: BSI mean (SD) score: 59.11 (13.38), range = 42-80		
Mitchell et al. 2008	Subscale:	Mean (SD) score:	
	Somatization	60.52 (9.36)	
	Obsessive-compulsive	53.42 (11.39)	
	Interpersonal sensitivity	52.85 (13.46)	
	Depression	55.95 (12.49)	
	Anxiety	52.40 (13.65)	
	Hostility	51.20 (11.77)	
	Phobic Anxiety	54.80 (11.70)	
	Paranoid Ideation	53.23 (12.68)	
	Psychoticism	54.10 (10.18)	
		Global Severity Index (GSI)	56.98 (11.69)
		Positive symptom total	53.53 (12.15)
	*Patients with SCI report higher levels of distress across all nine BSI subscales and GSI compared to normative samples, and therefore higher cutoff scores for BSI have been proposed for use with patients with SCI.		