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Reviewer ID: Christie Chan, John Zhu, Matthew Querée, Joanne Chi			
Type of Outcome Measure: Satisfaction with Life Scale (SWLS)			**Total articles:** 9
Author ID Year	**Study Design**	**Setting**	**Population (sample size, age) and Group**
Dijkers 1999	Survey; follow-up study	National SCI database	N=2183 (1766M, 417F) # participants in each age range: 0-19: N=412 20-29: N=802 30-39: N=444 40-49: N=268 50-59: N=142 >60: N=115 Records from the National SCI database, containing entries since 1973.
Geyh et al. 2010	Cross-sectional multi-centre study	Out-patients with SCI from study centers in Australia, Brazil, Canada, Israel, South Africa, and the US	N=243 Mean age=41.4 ± 13.6 % male = 79.4 % female = 20.6 Mean time since onset = 139.6±138.8 months SCI % paraplegia = 45.7 % tetraplegia = 54.3 Completeness of injury (AIS) % complete (A) = 47.7 % incomplete (B-D) = 43.6 % unspecified = 8.6
Hitzig et al. 2012	Cross-sectional telephone survey	Rehabilitation institute	N=618 (M=501; F=117) Mean age = 49.2y (18-92) Mean YPI = 16.3y (1-60) Community-dwelling SCI patients who were at least 1 year postinjury. Incomplete tetraplegia = 203 Complete tetraplegia = 102 Incomplete paraplegia = 156 Complete paraplegia = 157

Johnston et al. 2005	Cross-sectional survey	New Jersey Outpatient SCI Center	N=107 (88M, 19F)
			Mean age 39.1(11.16)
			Median age 38.0
			Mean post-injury time: 11.36(9.56) yrs
			Median post-injury time: 8.71 yrs
			Community-living traumatic SCI individuals
			ASIA-A/B/C/D: 56.4%/20.2%/14.9%/8.5%
			Neurologic Category:
			    Tetraplegia complete: 38.7%
			    Tetraplegia incomplete: 15.1%
			    Paraplegia complete: 37.6%

			Paraplegia incomplete: 8.6%
Krause et al. 2009	Follow-up survey	Hospital in the Southeastern United States	727 SCI subjects mean age: 47.9 70.2% male 75.8% White 53.3% cervical injury Average years since injury = 18.2 A total of 1,385 participants were enrolled in the original study in 1997–1998. Participants were then contacted in 2007–2008 to participate in a follow-up survey. At that time, 306 were deceased, 34 could not be located, and 5 were eliminated. Responses were received by 727 participants, yielding an adjusted response rate of 69.5% percent.
Post et al. 2012	Cross-sectional study 5 years after discharge from inpatient rehab	8 rehab centres with specialized SCI units	145 SCI participants (104 men, 41 women) mean age: 45.4±13.7 27 incomplete paraplegia 65 complete paraplegia 16 incomplete tetraplegia 37 complete tetraplegia 116 traumatic SCI, 29 non-traumatic
Richardson & Richards 2008	Retrospective analysis	National Spinal Cord Injury Database (NSCID)	2570 participants 1 year postinjury: 682 subjects (535 M, 147F) mean age: 38.66±15.32 5 years postinjury:517 subjects (402M, 115F) mean age: 40.26±14.53 15 years postinjury: 653 subjects (518M,135F) mean age: 42.72±10.09 25 years postinjury: 718 subjects (558M, 160F) mean age: 49.49±8.60
Scherer & Cushman 2001	Cross-sectional	Acute medical rehabilitation unit in a general hospital	N=20 Age: 51.05±16.44, range 22-78 years 10 female, 10 male 13 paraplegia (4 complete), 7 tetraplegia (1 complete)

1. RELIABILITY

Author ID	Internal Consistency	Test-retest, Inter-rater, Intra-rater
Dijkers 1999	Principal component factor analysis revealed one factor, which explained 61.1% of the variance. Item loadings ranged from 0.64 to 0.84.	A subgroup (n=165) completed the SLWS twice, with a follow-up interval range of 93-626 days. Test-retest correlation for the whole scale was 0.65 and for individual items was between 0.39 and 0.60 (P<.001 for all).
Post et al. 2012	Cronbach's alpha for the whole scale = 0.83	No data available

	Corrected item-to-total correlations for the questions ranged from 0.47 to 0.74	
Geyh et al. 2010	No data available	Person reliability index: r=0.88
Krause et al. 2009	Cronbach's alpha= 0.92.	No data available

2. VALIDITY	
Author ID	**Validity**
Dijkers 1999	*SWLS scores were correlated to those for the Functional Independence Measure (FIM) and the Craig Handicap Assessment and Reporting Technique (CHART).* **ANOVA and Eta².** Both FIM subscales (motor and sociocognitive) and all four CHART subscales (physical independence, mobility, social integration and occupation) were significantly correlated to SLWS scores (P<.001). Effect size (Eta²): <u>FIM</u> motor = 0.05 sociocognitive = 0.02 <u>CHART</u> physical independence = 0.14 mobility = 0.11 social integration = 0.11 occupation = 0.14 **Stepwise Regression Analysis.** (Beta weights and significance level indicated in brackets.) Adding the FIM motor (0.21, P<.0001) and sociocognitive (0.10, P<.0001) variables into the regression produced an R² value of 0.14. Adding the CHART subscales of physical independence, mobility (0.26, P<.0001), occupation (0.10, P<.001) and social integration (0.11, P<.0001) produced an R² value of 0.23.
Scherer & Cushman 2001	<u>Spearman correlations between the Brief Symptom Inventory (BSI), SWLS and Assistive Technology Device Predisposition Assessment (ATD-PA) QOL subset</u> ATD-PA QOL & SWLS: ρ=0.89, (P<.01) BSI & SWLS: ρ=-0.64, (P<.01) Correlations between the 5 SWLS and 11 QOL subset items were positive and generally high, with the exception of QOL item 16. Of the 55 correlation coefficients among SWLS and QOL items, 69.1% were significant: 18 at P<.01 and 20 at P<.05.
Post et al. 2012	(ns = P>.05) Correlation between the SWLS and scales measuring different constructs: FIM-Motor: 0.14 (ns) Level of injury: 0.21 (P<.05) Completeness of injury: 0.15 (ns) Cause of injury: 0.02 (ns)

	Age: -0.19 (P<.05) Sex: 0.02 (ns) Education: 0.05 (ns) Spearman's correlations: Correlation between the SWLS and scales measuring the same construct as the SWLS: Life Satisfaction Questionnaire (LISAT-9) vs. SWLS: 0.60 (ns) SWLS vs. MHI-5 (mental health subscale of SF-36): 0.48 (P<.01) SWLS vs. SIP-SOC (social dimension of SIP-68): -0.41 (P<.01)
Richardson & Richards 2008	With PHQ-9: Among persons 1 year postinjury, both affective and somatic subscores showed a significant inverse correlation with satisfaction with life (r_S=-.463, P<.001, and r_S =-.346, P<.001, respectively). Significant negative correlations were also found between SWLS scores and factor subscores at 5 years postinjury (r_S=-.415, P<.001 for the somatic subscore; r_S=-.456, P<.001 for the affective subscore) and at 15 years postinjury (r_S=-.404, P<.001, for the affective subscore; r_S=-.248, P<.001, for the somatic subscore). Authors did not state if the negative correlation was expected. Regarding the 25 years postinjury group, the affective subscale also correlated significantly, and in a negative direction, with satisfaction with life (r_S=-.368, P<.001). A significant negative relationship was also found with the somatic subscale for the 25 year postinjury group (r_S=-.255, P<.001).
Hitzig et al. 2012	To evaluate the construct validity of the Reintegration to Normal Living Index (RNL) compared with the SWLS, a 3 factor CFA model was fit to the combined items of both scales. A 1-factor CFA of items of both scales yielded poor fit (RMSEA = 0.173, CFI = 0.822, TLI = 0.908). The 3-factor model was an appropriate fit (RMSEA = 0.067, CFI = 0.963, TLI = 0.986). Interfactor correlations showed a stronger relationship between the scores of the 2 factors of the RNL Index than between each factor and the SWLS. Hence, the 3-factor CFA supports our hypothesis that the SWLS and RNL Index assess distinct, although related, constructs.
Krause et al. 2009	Spearman Rank correlations between SWLS and: Patient Health Questionnaire-9 (PHQ-9): -0.477 Major depressive disorder: -0.335 Older Adult Health and Mood Questionnaire (OAHMQ): -0.538 (P<.0001 for all the above)
Johnston et al. 2005	Pearson's r btwn SWLS and ASIA Motor Score: -0.07 (P=0.55)

3. RESPONSIVENESS – no data available

4. FLOOR/CEILING EFFECT – no data available

5. INTERPRETABILITY

Author ID	Interpretability
Dijkers 1999	Summary statistics for the 5 SWLS items and SWLS total: (n=2183)

Item	Mean (SD)
1. In most ways my life is close to ideal	3.76 (2.06)
2. The conditions of my life are excellent	3.75 (2.01)
3. I am satisfied with my life	4.34 (2.02)
4. So far I have gotten the important things I want in life	4.28 (2.01)
5. If I could live my life over, I would change almost nothing	3.29 (2.10)
SWLS total	19.4 (7.9)

SEM for total SWLS (calculated from data in Dijkers et al. 1999): 4.67
MDC for total SWLS (calculated from data in Dijkers et al. 1999): 12.95

Scherer & Cushman 2001	Item	Mean (SD)
	1. In most ways my life is close to ideal	3.40 (2.58)
	2. The conditions of my life are excellent	3.05 (2.04)
	3. I am satisfied with my life	4.05 (2.46)
	4. So far I have gotten the important things I want in life	4.05 (2.11)
	5. If I could live my life over, I would change almost nothing	3.45 (2.19)
	SWLS total	10.5 (5.9)

> **Commented [BM1]:** This seems low considering average scores.. Should be around 17… Can someone double check?

Geyh et al. 2010

SWLS scores for 6 countries

Item	ALL (n=243) Mean (SD)	AUS (n=40) Mean (SD)	BRZ (n=34) Mean (SD)	CAN (n=34) Mean (SD)	ISR (n=71) Mean (SD)	RSA (n=30) Mean (SD)	USA (n=34) Mean (SD)
SWLS 1	3.3 (1.9)	2.9 (1.4)	3.5 (1.8)	4.1 (2.1)	3.3 (1.8)	2.5 (1.7)	3.6 (2.2)
SWLS 2	3.5 (1.9)	3.4 (1.5)	3.7 (1.7)	4.2 (2.1)	3.5 (1.9)	2.7 (1.8)	3.7 (2.2)
SWLS 3	4.0 (1.9)	4.1 (1.4)	3.7 (2.0)	4.4 (2.0)	3.9 (1.9)	3.6 (1.9)	4.3 (2.1)
SWLS 4	3.9 (1.8)	4.0 (1.4)	3.5 (2.0)	4.6 (1.7)	3.8 (1.8)	3.0 (1.4)	4.4 (1.8)
SWLS 5	3.5 (1.9)	2.9 (1.4)	2.9 (1.8)	3.0 (1.7)	4.8 (1.9)	2.3 (1.3)	3.5 (2.0)
SWLS total	18.2 (7.4)	17.2 (6.0)	17.3 (7.5)	20.2 (7.7)	19.3 (7.1)	14.1 (6.7)	19.6 (8.5)

AUS = Australia
BRZ = Brazil
CAN = Canada
ISR = Israel
RSA = Republic of South-Africa
USA = United States of America

Standard error of item location for the SWLS items:

Item	SE
SWLS 1	0.05
SWLS 2	0.05
SWLS 3	0.05
SWLS 4	0.06
SWLS 5	0.05

Hitzig et al. 2012

Mean SWLS score = 21.4 ± 7.4