# Research Summary – Sense of Well-Being Inventory (SWBI) – Quality of Life

| **Author YearResearch Design****Setting (country)** | **Demographics and Injury Characteristics of Sample** | **Validity** | **Reliability** | **Responsiveness Interpretability** |
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| [Catalano et al.](https://www.cambridge.org/core/journals/australian-journal-of-rehabilitation-counselling/article/abs/sense-of-wellbeing-inventory-as-a-quality-of-life-measure-for-people-with-spinal-cord-injury/D2628C4C3B90D548161AA45867FC6A81) 2010Quantitative descriptive research design – Cross-sectionalRecruited from Canadian Paraplegic Association | N = 413 with paraplegic SCIMean (SD) age = 46.41 years (14.09)71% were men Mean (SD) duration since injury = 29.30 months (14.45); range=1 to 77 months86% were white (6% of aboriginal, 5% of non-white, and 3% of others) 44 % were either engaged or married80% had completed high school, including 48% with some post- secondary education or trainingAt the time of the survey, 30% were employed full-time. | **Exploratory Factor Analysis:**The Kaiser-Meyer-Olkin (KMO) resulted in a measure of sampling adequacy of .91 (greater than .50) and the Bartlett’s test of sphericity, c2(630, *N* = 202) = 3893.01, *p* < .001, indicated that it was appropriate to proceed with exploratory factor analysis. A four-factor solution was chosen using The Kaiser-Guttman rule (eigenvalue greater than one) and Cattell’s scree test. Exploratory factor analysis resulted in minor relocation and elimination of some items, reducing the instrument to 20 items.**Confirmatory Factor Analysis:**The results indicated that the data did not fit the single factor model. The model fit for the four-factor intercorrelated and the four-factor hierarchical factor models were excellent. The four-factor intercorrelated model represents a significantly better explanation of the data than the single factor model. **Convergent Validity:**Acceptance of Disability Scale (ADS)Rosenberg Self-Esteem Scale (RSES)Subjective Happiness Scale (SHS)Bivariate Correlations between SWBI subscales and other scalesSee table 1. | **Internal Consistency:**Cronbach’s alpha:Psychological Well-Being = 0.82Financial Well-Being = 0.81Family and Social Well-Being = 0.85Physical Well-Being = 0.81 | **Interpretability:**Mean (SD) well-being rating for each subscale: Psychological Well-Being = 2.75 (0.61)Financial Well-Being = 2.93 (0.70)Family and Social Well-Being = 3.22 (0.60)Physical Well-Being = 2.82 (0.63) |
|  | Table 1.

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|  | SHS | ADS | RSES |
| Financial WB  | .45\* | .37\* | .42\* |
| Psychological WB | .72\* | .59\* | .76\* |
| Family and social WB | .58\* | .44\* | .49\* |
| Physical WB | .46\* | .50\* | .49\* |

\*P<.01 |
| [deRoon-Cassini et al.](https://pubmed.ncbi.nlm.nih.gov/19702429/) 2009Cross-sectionalClement J. Zablocki VA Medical Center Milwaukee, WI | N= 79 veterans with SCI 76 menMean age = 55.9 years (SD = 11.0)Mean (SD) duration of injury = 17.5 (14.7) months21 incomplete paraplegia, 20 complete paraplegia, 34 partial tetraplegia, 4 complete tetraplegia80% Caucasian, 11% African American, 4% Native American, and 5% other10% were employed (*n* = 13)Mean number of years of education = 13.9 (SD = 2.3)Mean income = $34,000 (*SD* = 26,000)44% lived alone33% were divorced, 30% were married, 26% were single, 8% in a committed relationship or dating, 3% other | Perceived loss of physical functioning: items from the Conservation of Resources—Evaluation (COR-E) and SF-36 Health SurveyGlobal meaning making: Purpose in Life (PIL) scale Psychological well-being: Psychological well-being SWBI subscaleBivariate correlations between:Psychological well-being and Perceived loss of physical functioning = -.30 (P<.01)Psychological well-being and Global meaning making = .71 (P<.01) |  |  |
| [Chapin et al.](https://pubmed.ncbi.nlm.nih.gov/15371026/) 2004Cross-sectionalRecruited from Alberta, Saskatchewan, Nova Scotia, and Manitoba chapters of the Canadian Paraplegic Association | N = 132 with paraplegic SCI Mean (SD) Age = 45.82 (15.67) years77% menMean (SD) duration since injury = 15.21 (11.63) months; Range = 1.08 to 50.92 months51% engaged or married83% in middle class61% completed high school, 42% with postsecondary education or training At time of injury: 67% employedAt time of survey: 19% were employed full-time, with 6% employed part-time, 9% in training, and 67% not employed. | **Principal Axis Factor Analysis:**The Kaiser-Meyer-Olkin (KMO) resulted in a measure of sampling adequacy of 0.84 (greater than 0.50) and the Bartlett’s test of sphericity (**χ**2 = 2203.96, df = 630, p < 0.001) allowed researchers to proceed with factor analysis. Eight factors were indicated using The Kaiser-Guttman rule (eigenvalue greater than one), resulting in trivial factors. Cattell’s scree test was then used as an alternative to determine the number of factors to be retained. Four factors were indicated using this method: Psychological Well-Being, Financial Well-Being, Family and Social Well-Being, and Physical Well-Being.**Convergent Validity:**Correlations between SWBI subscales and World Health Organization Quality of Life-Brief Version (WHOQOL-BREF) subscales:SWBI psychological well-being subscale and WHOQOL-BREF psychological subscale: r = 0.75, P<0.01SWBI physical well-being subscale and WHOQOL-BREF physical health subscale: r = 0.63, p<0.01SWBI family and social well-being subscale and WHOQOL-BREF social relationships scale: r = 0.45, p<0.01 SWBI financial well-being subscale and WHOQOL-BREF environment subscale: r = 0.59, p<0.0001 | **Internal Consistency:**Cronbach’s alpha:Psychological Well-Being = 0.87Financial Well-Being = 0.88Family and Social Well-Being = 0.84Physical Well-Being = 0.79 | **Interpretability:**Mean (SD) well-being rating for each subscale: Psychological Well-Being = 2.68 (0.62)Financial Well-Being = 2.73 (0.66)Family and Social Well-Being = 3.14 (0.57)Physical Well-Being = 2.70 (0.60) |