**Supplementary Table e-3**:studies reporting cognitive ability after SCI with no able-bodied controls

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| **Author/ year** | **Participants** | **Time since injury** | **Type of test(s)** | **Outcome(s)** |
| Davidoff *et al.*, 198524 | 30 SCI (25 M, 5 F) | 56- 84 days | HCT | 57% of the participants had abnormal HCT scores (>50 errors). |
| Wilmot *et al*., 198510 | 67 SCI (55 M, 12 F) | 48 days | GOAT, Quick test, Stroop test, Serial 7s, Raven matrices, WMS (associate learning), Shipley Hartford | 43/67 participants (67%) were scored as impaired with the majority of them (30/43; 70%) falling under mildly impaired category. |
| Richards *et al.,* 198845 | 150 SCI (121 M, 29 F) | 150 were tested at 7 weeks post injury, 67 were retested at 38 weeks | Benton Visual Retention Test, Benton Facial Recognition Test, HCT, Benton Judgment of Line Orientation Test, RAVLT, Russell Memory Test, WAIS-R, WMS (memory), COWAT, Selective Reminding Task | HCT test scores were impaired at 7 weeks but improved significantly at retesting. |
| Segal *et al.,* 1993104 | 57 SCI (gender ratio not specified) | <3 days | FIM | Mean scores for FIM (cognition) 5.85 indicating cognitive independence. |
| Boss *et al*., 1995105 | 48 SCI (all M) | 0- 42 years | Self-Care Assessment Tool | High scores suggesting cognitive competence. |
| Copes *et al*., 199684 | 94 SCI (85 M, 9 F) | <100 days | Expression element of FIM | The mean score across participants was in the 'completely independent' range. |
| Strubreither *et al*., 199728 | 322 SCI (gender ratio not specified) | 87 days | OPS | 14.5% of the participants were impaired. |
| Shnek *et al.,* 199750 | 80 SCI (51 M, 29 F) | 8.1 years | The Cognitive Beliefs Questionnaire | Cognitive distortions were significantly associated with increased depression and decreased self-efficacy. |
| Tun *et al*., 199751 | 23 younger and 23 elderly adults with SCI (all M) | Younger (17.8 years) and elderly (30.8 years) | Digit Span, SWS, LWS, Prose recall, GDS, CFQ, DAQ, MIA | Younger adults were significantly more impaired than the elderly. |
| Middleton *et al*., 199885 | 112 (88 M, 24 F) | <1 year | FIM | All participants scored at 6 or 7 (independent). |
| Sajkov *et al.,* 199879 | 37 SCI (34 M, 3 F) | Not specified | RAVLT, WAIS-R (Digit span), PASAT, SDMT, and NART | Verbal attention, concentration, memory, cognitive flexibility, internal scanning were impaired in participants with severe oxygen desaturation. |
| Hall *et al*., 199929 | 3971 SCI (gender ratio not specified) | Tested at admission, discharge, 1, 2 and 5 years | FIM | 80-90% participants scored in independent range at the time of discharge, 89-93% at year 1, ~100% by year 2 (ceiling effect). |
| Bode *et al.,* 2002106 | 52 SCI (45 M, 7 F) | Tested at the time of admission and discharge (56 days) | FIM; reported on a scale ranging from 0 (totally dependent) to 100 (completely independent). | Score at admission: 45.6, at discharge: 91.9 |
| Macciocchi *et al.,* 200447 | 41 SCI (36 M, 5 F), 41 SCI+TBI (34 M, 7 F) | Tested at the time of admission and discharge (43 days) | FIM | SCI group scored in independent range. At both time points, SCI+TBI group was impaired. |
| Chan *et al*., 2005107 | 33 SCI (30 M, 3 F) | Acute admission | FIM | All participants showed near maximum scores (ceiling effect). |
| LaChapelle *et al.,* 2005108 | 17 SCI (14 M, 3 F) | 4.9 years | Revised Neurobehavioral Scales of the MMPI | SCI participants scored in near normal range. |
| Masedo *et al.,* 200537 | 84 SCI (67 M, 17 F) | 13.96 years | FIM-Self Report | Maximum possible scores in 88% (communication) and 76% (social cognition) of SCI individuals. |
| Fregni *et al.,* 2006109 | 17 SCI (14 M, 3 F) | Chronic (time not specified) | MMSE, Stroop Test, Digit Span (forward and backward), Simple Reaction Time | Participants scored in the normal range. |
| Lawton *et al.,* 2006110 | 647 SCI (446 M, 201 F) | Tested during inpatient admission | FIM | Mean FIM cognition score of 32.6 (ceiling effect). |
| Holtslag *et al.,* 200796 | 20 SCI (from 335 major trauma survivors; gender ratio not specified) | 12- 18 months | HISC | 75% suffered from cognitive complaints (not controlled for other severe trauma e.g. brain, chest, abdomen, upper/lower extremities). |
| Murray *et al.,* 200752 | 63 SCI; 32 recent (26 M, 6 F), 31 established (24 M, 7 F) | Recent injury (7 weeks), established injury (1 year) | Self-perceived cognitive ability before and after SCI using RNBI | Participants perceived the post-injury cognitive function to be worse compared to pre-injury. |
| New *et al.,* 200782 | 70 SCI (32 M, 38 F) | Tested at the time of admission and discharge (57 days) | FIM | Participants scored in near normal range at both admission and discharge. |
| Ng *et al*., 2007111 | 145 SCI (gender ratio not specified) | Tested at the time of admission and discharge (21.5 days) | FIM | Participants scored in near normal range at both admission and discharge. |
| Tolonen *et al*., 200732 | 31 SCI (30 M, 1 F; including 23 with a concomitant TBI) | 124 days | WAIS-R, PASAT, WMS-R (Visual Pairs), Buschke-Fuld Selective Reminding test; Kalska’s Memory test. | 21 participants had impaired cognition, all of which had a concomitant TBI. |
| Bradbury *et al*., 200833 | 10 SCI, 10 SCI + TBI (7 M, 3 F in each group) | 2- 6 months | FIM, WTAR, WAIS III, WMS III, Stroop Color/word test, CVLT, COWAT, WCST | Neuropsychological performance was significantly impaired in the SCI+TBI group on all tests except FIM. |
| Macciocchi *et al.,* 200842 | 198 SCI including 118 with a co-occurring TBI (156 M, 42 F) | 18 days | FIM | Participants with SCI (no TBI) had near-maximum scores. The scores negatively correlated with the TBI severity. |
| Mulcahey *et al.,* 2009112 | 33 children with SCI (16 M, 17 F) | >6 months | A set of 408 questions to test readability, comprehension and response processes | When controlled for age and education, participants were able to read, understand and respond to items associated with activity performance and participation. |
| Jegede *et al.*, 201053 | 20 SCI [hypotensives (10 M, 1 F) & normotensives (9; all M)] | 2- 39 years | WAIS, (CVLT-II); COWAT; Oral Trails A&B WAIS-III (Digit Span), Stroop test | Memory was significantly impaired and attention/processing speed was moderately impaired in hypotensive group compared to normotensive groups. |
| Samuelkamleshkumar *et al.,* 201086 | 104 SCI (99 M, 5 F) | Not specified | CHART | Mean CHART score of 92 suggesting high degree of cognitive independence. |
| Brougham *et al*., 2011113 | 600 SCI (486 M, 114 F) | 2-236 days (mean 32) | FIM | Mean FIM cognition score of 29 at the time of admission indicative of cognitive independence. |
| Hu *et al.,* 2012114 | 26 SCI (11 M, 15 F) | At discharge and 1 year from discharge | CHART | Cognitive independence score decreased significantly during the 1 year post-discharge (from 75.5 to 61.9 on a scale of 1-100). |
| Macciocchi *et al.*, 201246 | 189 SCI (148 M, 41 F); subset of Macciocchi *et al.,* 2008 | 1-4 weeks | FIM; WAIS-III (Digit Span and Letter-Number Sequencing), CVMT, HVLT-2, SDMT–Oral, Short Category Test | SCI participants with moderate and severe TBI were significantly more impaired compared to SCI alone. |
| Fortmann *et al.,* 2013115 | 118 SCI (115 M, 3 F) | <60 days | FIM | Mean FIM cognition score of 31.39 indicating cognitive independence. |
| Hammond *et al.,* 2013116 | 1032 SCI (836 M, 196 F) | 31 days | FIM | Rasch transformed mean score of 74 (on a scale of 0- 100). Lower scores were associated with re-admission to acute care. |
| Macciocchi *et al.,* 201334 | 64 SCI (49 M, 15 F), 53 SCI+ mild TBI (47 M, 6 F) | 26- 76 days (mean 46) | WAIS-III, HVLT-2, SDMT-Oral, SCAT, CVMT | Both groups showed lower than normative neuropsychological test performance. |
| Barbetta *et al*., 201488 | 218 SCI (176 M, 42 F) | >1 year | FIM | Near maximum cognition scores (FIM scale described as 'non-responsive' to cognition items). |
| Javidan *et al*., 2014117 | 104 SCI (85 M, 19 F) | 9.26 years | FIM | Most participants reached near maximum scores. |
| Nott *et al.,* 201441 | 30 SCI (29 M, 1 F), 30 TBI (24 M, 6 F), 30 SCI+TBI (26 M, 4 F) | Tested at the time of admission and discharge | FIM | Near maximum scores were achieved in both SCI (34.8 admission, 34.9 discharge) and SCI+TBI (32.2 admission, 34.3 discharge) groups indicating cognitive independence. |
| Purohit *et al.,* 201435 | 233,778 SCI (126,918 M, 106,860 F) | 18 days | FIM | FIM score below 5 were reported in comprehension (35%), expression (34%), social interaction (39%), memory (45%), problem solving (50%). |
| Zonfrillo *et al.,* 201438 | 2190 SCI (1652 M, 538 F) | Not specified | FIM | Participants scored a median of 6 suggesting cognitive independence. |
| Craig *et al*., 201555 | 88 SCI (62 M, 26 F) | >6 months | NUCOG | Participants with higher cognitive capacity were 6.3 times less likely to have a psychological disorder 6 months post discharge. |
| Craig *et al*., 2015 (b)15 | 88 SCI (62 M, 26 F) | >6 months | NUCOG | Participants scored a mean of 91.4 (compared to 96.3 in able bodied controls). |
| Jorge *et al*., 2015118 | 83 SCI (64 M, 19 F) | <1 year | FIM | Mean FIM cognition score of 32.3 indicating cognitive independence. |
| Kuo *et al*., 2015119 | 1348 SCI (920 M, 428 F) | Not specified | WHODAS 2.0 | SCI participants had a mean score of 30.69 falling in normal range. |
| Turner-Stokes *et al*., 2015120 | 3753 SCI (gender ratio not specified) | Not specified | FIM | SCI participants had near-maximum scores suggesting cognitive independence. |
| Hundza *et al*., 2016121 | 4 SCI (all M) | 1, 8, 8 and 43 years | SMMSE, Clock Drawing Task | Participants scored in normal range. |
| Navarrete *et al*., 2016122 | 35 SCI (31 M, 4 F) | >2 years | TAVEC (Spanish CVLT), ROCF | Participants scored in normal range based on population mean. |
| Schembri *et al*., 201780 | 104 SCI (94 M, 10 F; all tetraplegic) | 2 months | RAVLT, PASAT, SDMT, WAIS-IV (Digit Span), NAART, HADS, AQoL, POMS | Poor scores on attention, information processing and immediate recall in participants with severe sleep apnea. |
| Allison et al., 2017123 | 20 SCI (10 M, 10 F) | 4-37 years | CVLT | Participants scored in normal range. |

**Abbreviations**: AQOL- Assessment of Quality of Life, CFQ- Cognitive Failures Questionnaire, CHART- Craig Handicap Assessment and Reporting Technique, COWAT- Controlled Oral Word Association Test, CVLT- California Verbal Learning Test, CVMT- Continuous Visual Memory Test, F- Female(s), DAQ- Divided Attention Questionnaire, FIM- Functional Independence Measure, GDS- Geriatric Depression Scale, GOAT- Galveston Orientation and Amnesia Test, HADS- Hospital Anxiety and Depression Scale, HCT- Halstead Category Test, HISC- Head Injury Symptom Checklist, M- Male(s), LWS- Loaded Word Span, MIA- Metamemory In Adulthood, MMPI- Minnesota Multiphasic Personality Inventory, MMSE- Mini–Mental State Examination, NAART- North American Adult Reading Test, NART- National Adult Reading Test, NUCOG- Neuropsychiatry Unit Cognitive Assessment Tool, OPS- Organic Psychic Syndrome, PASAT- Paced Auditory Serial Addition Test, POMS- Profile of Mood States, RAVLT- Rey Auditory Verbal Learning Test, RNBI- Ruff Neurobehavioral Inventory, ROCF- Rey Osterrieth Complex Figure Test, SCAT- Category Test-Short Form, SCI- Spinal Cord Injury, SD- Standard Deviation, SDMT- Symbol Digit Modalities Test, SMMSE- Standardized Mini-Mental Status Examination, SWS- Simple Word Span, TAVEC- Test De Aprendizaje Verbal España-Complutense, TBI- Traumatic Brain Injury, WAIS-R- Wechsler Adult Intelligence Scale- Revised, WCST- Wisconsin Card Sort Test, WHODAS- World Health Organization Disability Assessment Schedule, WMS- Wechsler Memory Scale, WTAR- Wechsler Test of Adult Reading.