Author, Year Country Study Design Sample Size	Population Intervention Outcome Measure	Results
(Duzgun Celik et al., 2018) Turkey Observational N=40	**Population:** *Pediatric-sustained SCI (<18 yr):* Age at interview: 23.9±5.8 (18-44) yr; Age at injury: 14.6±2.8 yr; Time since injury: 9.4±6.1 (3-29) yr; Gender: males=13, females=7; Severity of injury: AIS A=10, AIS B=3, AIS C=3, AIS D=4. *Adult-sustained SCI (18+ yr):* Age at interview: 43.9±12.8 (30-79) yr; Age at injury: 33.1±16.6 yr; Time since injury: 8.7±8.0 (1-31) yr; Gender: males=10, females=10; Severity of injury: AIS A=12, AIS B=1, AIS C=5, AIS D=2. **Intervention:** None. Survey. **Outcome Measures:** Craig Handicap Assessment and Reporting Technique (CHART-sf), World Health Organization Quality of Life Scale Short Form (WHOQOL-Bref; four domains including physical, mental, social, and environmental), Beck Depression Inventory (BDI).	1. There was no significant difference in the mean and total CHART-sf scores between the two groups; total CHART-sf scores were not correlated with ASIA scores, complete/incomplete status of patients, depression level or disease duration in either group. 2. For WHOQOL-Bref, only environmental area scores were significantly higher in Group 2 than Group 1 ($p<0.05$). 3. There was no difference in BDI scores between the two groups, and 79% of patients in both groups were within a normal range.
(Morrison et al., 2017) USA Observational N=178 Caregivers of children with SCI	**Population:** *Group 1 (Caregivers with children 1-18 yr; n=178):* Child age at injury: 5.8±5.6 yr; Child age at interview: 11.1±5.2 yr; Child gender: males=100, females=78; Level of injury: paraplegia=121, tetraplegia=57; Severity of injury: AIS A=87, AIS BCD=91. *Group 2 (just the children 7-18 yr from the above sample; n=134)*: Child age at injury: 7.3±5.7 yr; Child age at interview: 13.4±3.5 yr; Child gender: males=80, females=54; Level of injury: paraplegia=88, tetraplegia=46; Severity of injury: AIS A=66, AIS BCD=68. **Intervention:** None. Mixed methods. Caregivers answered an open-ended question (qualitative) and completed a survey (quantitative). Children completed surveys only. **Outcome Measures:** *Caregivers*: What has been the most rewarding parenting a child with a SCI. *Children with SCI*: Revised Children's Manifest Anxiety Survey (RCMAS-2-SF), Children's Depression Inventory (CDI-2-SF), Pediatric Quality of Life Inventory 4.0 (PedsQL; Generic Core Scales), Children's Assessment of Participation and Enjoyment (CAPE).	*Group 1: Data from Caregivers with children 1-18 yr* 1. Caregivers derive a variety of rewards from parenting their children with SCI including: A. Enhanced Resilience in Child and Self (71.9%) – child's accomplishments, improvement/recovery, school/academic achievements and having a positive/optimistic attitude, etc. B. Stronger Caregiver–Child Relationship (18%) – spending time together, growing close and providing child with emotional assistance. C. Connecting with Others (11.2%) – building relationships with and receiving support with from children and families, with providers and with organizations. D. Learning (9.6%) – learning about new experiences, learning about SCI, learning about the child, learning from the child, the caregiver and child learning from each other and learning to advocate. 2. Just 3.4% of caregivers reported that parenting a child with SCI was like parenting any other child. 3. Just 2.2% reported that there were no rewards to parenting their child with SCI. 4. Caregivers who had children who were older at the time of injury ($p<0.001$) and interview ($p=0.017$) were more likely to report having an enhanced Caregiver–Child Relationship. 5. Caregivers without college exposure ($p=0.034$) and those who were unemployed ($p=0.029$) were more likely to cite Learning as a reward. 6. No other significant relationships emerged between caregiver rewards and sociodemographic variables were found. *Group 2: Caregivers of children 7-18 yr who completed quantitative surveys:*

		7. Caregivers whose children scored lower on self-reported school and psychosocial HRQOL were more likely to report 'Resilience in my Child' as a reward (p<0.05 for both). 8. Caregivers whose children participated in fewer community activities and participated less often and had lower levels of depressive symptoms reported experiencing an Enhanced Caregiver–Child Relationship (p<0.05 for all). 9. Caregivers whose children participated in activities further from home and with a broader group (p<0.05 for both) and had higher self-reported psychosocial HRQOL (p<0.05) and self-reported and parent-reported school HRQOL (p<0.001) were more likely to report a Connecting with Others as a reward. 10. No other significant relationships emerged between caregiver reward type and child anxiety, depression, activity participation or quality of life.
(Kelly et al., 2016) USA Observational N=40	**Population:** *Children with SCI:* Age at interview: 11.5±3.2 yr; Age at injury: 4.3±4.2 yr; Gender: males=25, females=15; Time since injury: 6.9±3.9 yr; Level of injury: paraplegia=30, tetraplegia=10; Severity of injury: AIS A=25. *Caregivers:* mothers=34, fathers=3, grandmothers=1, grandfathers=1, aunt=1. **Intervention:** None. Survey. **Outcome Measures:** *Children:* Pediatric Quality of Life Inventory for Health-Related Quality of Life (HRQOL). *Caregivers:* Hospital Anxiety and Depression Scale (HADS), Pennebaker Inventory of Limbic Languidness (PILL), Revised Caregiver Burden Interview, short Form (RCBI), Social Problem-Solving Inventory, revised, short form (SPSI-R:S).	1. Caregiver problem solving alone was related to child physical HRQOL (p<0.01). 2. Caregiver mental health (p<0.01), burden (p<0.05), and problem solving were related to child psychosocial HRQOL (p<0.01). 3. Regression analyses controlling for child age and injury level revealed effective caregiver problem solving (p<0 .001) was significantly related to greater child physical HRQOL. 4. Regression analyses controlling for child age and injury level revealed effective caregiver problem solving (p<0.01) was significantly related to greater psychosocial HRQOL. 5. Problem solving orientation was related to both child physical (p<0.01) and psychosocial HRQOL (p<0.001); having a caregiver who demonstrated a positive, as opposed to negative, problem-solving orientation was related to greater child HRQOL. 6. Problem solving style was related to both physical (p<0.01) and psychosocial HRQOL (p<0.001); caregivers who demonstrated being rational resulted in greater HRQOL among children whereas caregivers who were avoidant resulted in lower HRQOL among children. 7. Caregivers demonstrating impulsivity and/or carelessness was related to kids having lower psychosocial HRQOL (p<0.05) but was not significantly associated with physical HRQOL.
(Ma et al., 2016) Canada Observational N=174	**Population:** *Pediatric-sustained SCI (<19 yr; n=87):* Age: 38.6±12.3 yr; Gender: males=61, females=26; Time post-injury: 24.1±14.0 yr; Level of Injury: C1-4=6, C5-8=35, T1-5=12, T6-L5=34; Severity of injury: complete=41, incomplete=46. *Adult-sustained SCI (19+ yr; n=87):* Age: 39.5±10.9 yr; Gender: males=62, females=25; Time post injury: 12.8±10.0 yr; Level of injury: C1-4=8, C5-8=33, T1-5=11, T6-L5=35. Severity of injury: complete=40, incomplete=45.	1. Compared to adult-sustained SCI, participants with paediatric-sustained SCI reported significantly greater functional independence (FIM motor subscore; p=0.03), less pain (SF-36 pain subscore; p=0.02), and fewer visits to the doctor in the past year (p=0.04). 2. There were no significant differences between adult- or pediatric-sustained SCI groups with respect to perceived health status (SF-36 general health subscore) or depressive symptoms (PHQ-9). 3. Compared to adult-sustained SCI, those with pediatric-sustained SCI reported more

	Intervention: None. Secondary analysis of data from the *Study of Health and Activity in People with SCI (SHAPE-SCI)* (Martin Ginis et al., 2008). **Outcome Measures:** Functional Independence Measure (FIM) motor subscale, Short Form 36 (SF-36), number of physician visits, Patient Health Questionnaire 9-item (PHQ-9), Physical Activity Recall Assessment for People with Spinal Cord Injury (PARA-SCI), Craig Handicap Assessment and Reporting Technique (CHART), Satisfaction with Life Scale (SWLS)	minutes of moderate–heavy leisure time physical activity (PARA-SCI; p=0.05), and scored higher on measures of social and occupational participation (CHART; p=0.04 and p=0.03, respectively). 4. There were no significant differences between adult- or pediatric-sustained SCI groups with respect to life satisfaction.
(M. Hwang et al., 2015) USA Observational N=159	**Population:** Age at interview: 35.0±6.2 yr; Time since injury: 21.2±7.2 yr; Gender: males=100, females=59; Level of injury: C1-4=24, C5-C8=57, T1-S5=62, other=16; Severity of injury: paraplegia=67, tetraplegia=92. **Intervention:** None. Survey. **Outcome Measures:** Routine medication use, polypharmacy (use of 5+ different medications), secondary health conditions (SHC), Functional Independence Measure, Short Form-12 Health Survey (SF12v2), Craig Handicap Assessment and Reporting Technique (CHART), Patient Health Questionnaire 9-item (PHQ-9).	1. There were no significant differences in the frequency of polypharmacy between men and women (p=0.418), between Caucasians and non-Caucasians (p=0.756) or between those with complete and incomplete injuries (p=0.898). 2. There were significant differences in polypharmacy frequency among the AIS severity groups: C1-4 ABC, 54.2%; C5-8 ABC, 35.1%; T1-S5 ABC, 19.4%; AIS D, 25.0% (p=0.014); polypharmacy was more prevalent in tetraplegia than in paraplegia (p=0.003). 3. Individuals with polypharmacy had significantly older age (p=0.034), longer duration of injury (p=0.017), greater number of SHCs (p<0.001), and higher PHQ-9 total score (p=0.001), but significantly lower FIM motor score (p<0.001), SF12v2 physical component score (p<0.001), CHART physical independence, mobility, occupation and social integration scores (p=0.009, p<0.001, p=0.001, and p=0.037, respectively). 4. Greater number of SHCs, increasing duration of injury and tetraplegia increased odds of polypharmacy (p<0.001, p=0.028, and p=0.010, respectively. 5. Polypharmacy was predictive of decreased CHART mobility scores (p<0.001), decreased SF12v2 physical component scores (p<0.001) and increased PHQ-9 scores (p<0.001) when controlling for the number of SHCs, age, duration of injury and AIS severity.
(January et al., 2015) USA Observational N=177	**Population:** *Pediatric-onset SCI*: Age at interview: 33.5±7.1 (19-50) yr; Age at injury: 13.5±4.6 (0-18) yr; Time since injury: 19.5±8.2 (1-43) yr; Gender: males=110, females=67; Severity of injury: tetraplegia=100, complete=125. **Intervention:** None. Survey. **Outcome Measures:** Pittsburgh Sleep Quality Index (PSWI), Short-Form 12 (SF-12) physical subscore, Beck Anxiety Inventory (BAI), Patient Health Questionnaire 9 item (PHQ-9), Satisfaction with Life Scale (SWLS).	1. Half the subjects (51.4%) self-reported poor sleep quality within the last month (51.4%) demonstrating significantly more difficulties than control group norms, but significantly fewer than sleep-disordered patient norms. 2. Subjects with pediatric-onset SCI were comparable to controls in the area of sleep disturbances, and also similar to the sleep-disordered patient group on sleep efficiency and sleep latency scores. 3. Subjects with pediatric-onset SCI were most likely to report difficulty getting to sleep (67.8%) and/or staying asleep (65%) at least once in the last month; bathroom use (40.1%) and sleep interference due to pain (40.1%) were also reported. 4. Older age (p=0.008) and tetraplegia were associated with lower sleep quality (p=0.011)

		whereas injury etiology, completeness of injury, sex, ethnicity, injury duration, and age of injury were not. 5. Low sleep quality was strongly related to physical functioning (SF-12), both in activity-interfering pain (p<.001) and general health (p<0.001). 6. After controlling for age, injury severity, and physical health components, sleep quality explained a significant portion of the variance in depression (p<0.001) and anxiety (p=0.005), but not in life satisfaction.
(Riordan et al., 2015) USA Observational N=340	**Population:** Age: 13.2.2±3.9 yr; Gender: males=194, females=146; Age at Injury: 8.2±5.8 yr; *Three Level/ Severity Injury Groups:* tetraplegia AIS ABC=96, paraplegia AIS ABC=191, AIS D=53. **Intervention:** None. Survey. **Outcome Measures:** Children's Assessment of Participation and Enjoyment (CAPE), Pediatric Quality of Life Inventory (PedsQL), Revised Children's Manifest Anxiety Scale (RCMAS), Children's Depression Inventory (CDI).	1. Subjects with paraplegia ABC and AIS D injuries participated in more activities than those with tetraplegia ABC (p=0.002 and p=0.018, respectively). 2. There were no significant differences between the participation frequency of subjects with paraplegia ABC and those with AIS D injuries. 3. Subjects with paraplegia ABC reported higher social QOL than those with tetraplegia ABC (p=0.001) and AIS D injuries (p=0.002). 4. There were no differences between subjects in the three neurological impairment categories when examining scores exceeding the clinical cut-off for anxiety or depression.
(Klaas et al., 2014) USA Observational N=236	**Population:** Age: 15.6±2.0 yr; Gender: males=137, females=99; Age at Injury: 10.6±5.5 yr; Level and Severity of Injury: C1-4 AIS ABC=26, C5-8 AIS ABC=47, paraplegia AIS ABC=120, AIS D=28, missing=15. **Intervention:** None. Survey. **Outcome Measures:** Children's Depression Inventory (CDI), Beck Depression Inventory-II (BDI-II), Revised Children's Manifest Anxiety Scale (RCMAS).	1. Girls were significantly more anxious than boys (p=0.030). 2. There was a significant interaction for child anxiety by child age and sex (p=0.020); older adolescent girls were more anxious than younger adolescent girls and boys and older adolescent boys. 3. Older adolescents (16-17 yr) were significantly more depressed than younger 4. adolescents (12-15 yr) (p=0.040). 5. Regarding depression, there was no significant interaction between child age and sex. 6. Among adolescents (12-17 yr), 16% reported that they think about suicide but would not follow through and 1.1% indicated they wanted to commit suicide. 7. Among 18-yr-olds, 10.9% indicated that they have thought about suicide but would not carry it out, and none responded that they wanted to kill themselves. 8. Among youth overall, 12.4% were receiving counseling services; 17.4% were taking medications for emotional, psychological, or behavioral reasons; and 23.3% were enrolled in counseling and/or taking medications. 9. Older adolescents (23.5%) were significantly more likely to be on medications than younger adolescents (10.1%) (p=0.009].
(Hwang et al., 2014b) USA Observational N=283	**Population:** *Pediatric-onset SCI:* Age: 27.3±3.7 (21-37) yr; Age at injury: 14.5±4.3 (0-18) yr; Time since injury: 12.7±5.0 (4-30) yr; Gender: males=182, females=101; Level of injury: tetraplegia=174; Severity of injury: complete=195; C1-4 AIS ABC=46, C5-8 AIS ABC=110, T1-S5 AIS ABC=99, AIS D=28.	1. Those attaining a bachelor's degree or higher had increased from 33.2% at the first interview to 47.0% at the last interview; 2. There was no change in the proportion of employed versus unemployed from the first (56.8% versus 43.2%) to last interview (58.1% versus 41.9%) (less than general population estimates); 3. At the last interview, the proportion of employed participants was significantly

	Intervention: None. Annual interviews. **Outcome Measures:** Satisfaction with Life Scale (SWLS), Short-Form 12 Health Survey (SF-12), Patient Health Questionnaire-9 (PHQ-9), and Craig Handicap Assessment and Recording Technique (CHART).	higher in those with a baccalaureate and post-baccalaureate degrees, whereas the proportion of unemployed individuals was higher in those with a high school diploma. 4. Women and married participants also had higher rates of employment at the last interview than men and single participants, respectively. 5. There was no significant change in employment status over time (OR 1.01, confidence interval (CI) 0.98-1.04). 6. Odds of employment increased over time in participants who were women (1.04, CI 1.00-1.08), married (1.05, CI 1.02-1.08), attained a baccalaureate degree (1.03, CI 1.00-1.07), or post-baccalaureate degree (1.05, CI 1.02-1.08). 7. Odds of employment decreased over time in participants with occurrence of autonomic dysreflexia (0.80, CI 0.65-0.99), spasticity (0.80, CI 0.59-0.99) or chronic medical condition (0.83, CI 0.71-0.98). 8. Life satisfaction (SWLS) scores increased over time in those who remained employed (1.11, CI 1.01-1.22). 9. Odds of depression (PHQ-9) increased over time in those who remained unemployed (1.13, CI 1.04-1.23).
(January et al., 2014) USA Observational N=214	**Population:** *Pediatric-Onset Adult SCI*: Age: 29.5±5.2 (24-42) yr; Mean age at injury: 13.9±4.4 yr; Gender: males=133, females=81); Level of Injury: tetraplegia=124, paraplegia=90; Severity of Injury: complete=150, incomplete=64. **Intervention:** None. Survey. **Outcome Measures:** Craig Handicap Assessment and Reporting Technique (CHART), Patient Health Questionnaire – 9 Item (PHQ-9), Functional Independence Measure (FIM), Short Form 12 Item Version 2 (SF12v2), Alcohol Use Disorders Identification Test (AUDIT-C).	1. Overall, mean PHQ9 was low at baseline (3.07±0.24); only 8% met the criteria for MDD at any given time point. 2. A much higher percentage reported at least mild symptoms (38%), and 12% endorsed suicidal thoughts at any given time point. 3. Multilevel growth modeling analyses were used to explore depression symptoms across time; several factors emerged as significant predictors of depressive symptoms in the final model: • less community participation (p<0.01); • incomplete injury (p=0.02); • hazardous drinking (p=0.02); • bladder incontinence (p=0.01); • pain (p=0.03) 4. Marriage resulted in decreases in depression scores for individuals (p=0.02).
(Schneider et al., 2014) Switzerland Cohort N=12	**Population:** Age: 7.5 yr; Gender males=10, females=2; Time post diagnosis: 4.2 yr (high grade=2.4 yr, low grade=5.9 yr). **Intervention:** None. Survey sent after patients had microsurgical removal of a primary intramedullary spinal cord tumours (total resection=5, subtotal resection=7). **Outcome Measures:** Pediatric Quality of Life Inventory (PedsQL).	1. Among 10 patients who completed the survey, there were no significant differences in PedsQL scores (child or parent proxy) between the study cohort and values for a normative (healthy) control sample population. *Not significantly powered; authors' power analysis demonstrates a sample of 57 patients is required.
(Harder et al., 2013) USA Observational N=24	**Population:** Age: 11.5±3.4 (5-18) yr; Age at injury: 9.7±4.8 (1-17) yr; Gender: males=9, females=15; Injury etiology: Transverse Myelitis; Level of injury: cervical (N=13); Ambulation: normal=46%, abnormal but ambulated independently=79%, bilateral support (i.e., crutches) =29%, wheelchair-bound=8.3%.	1. According to parent report on the BASC-2, subjects experienced subclinical (21.7%) or clinical (8.7%) levels of depression in a total of 29% of participants. 2. Of the seven participants who showed elevated symptoms of depression based on parent report, two received referrals for additional cognitive testing. 3. Of the 11 participants who were prescribed medication (i.e., SSRIs, GABAergic

	Intervention: None. Neuropsychological evaluation, patient and caregiver surveys. **Outcome Measures:** Behavior Assessment System for Children, Second Edition (BASC-2; 5–18 yr).	medications, tricyclic antidepressants, and anticholinergic agents), only two were referred for further cognitive testing. 4. No clear association between cognitive dysfunction and mood-related factors or adverse medication side effects.
(Smith et al., 2013) USA Observational N=182	**Population:** Age: 15.9±1.7 (13-18) yr; Gender: males=104, females=78; Level of injury: paraplegia=115, tetraplegia=67; Severity of injury: complete=98, incomplete=84. **Intervention:** None. Survey. **Outcome Measures:** Kidcope, Children's Depression Inventory (CDI), Revised Children's Manifest Anxiety Survey (CMAS), Quality of life (PedsQL). *Note:* "Escape-Oriented Factor" includes distraction, social, withdrawal, self-criticism, blaming others, wishful thinking, resignation and emotion regulation yelling	1. Cognitive restructuring and resignation were the two most frequently used coping strategies reported. 2. In contrast, blaming others and self-criticism were used least frequently. 3. Social support and emotional regulation (calming) were seen as the most effective coping strategies, whereas self-blame and wishful thinking were perceived as least effective. 4. Increased SCI injury duration was associated with lower use of escape-oriented coping strategies. 5. Increased age was associated with increased social withdrawal. 6. Participants with tetraplegia used distraction more often than participants with paraplegia. 7. After controlling for current age, age at injury, sex and injury level, hierarchal linear regression models showed increased scores on the escape-oriented factor were associated with increased anxiety and depressive symptomatology and lower psychosocial QOL ($p<0.001$ for all).
(Castello et al., 2012) USA Pre-Post N=6	**Population:** Age: 16.6±4.4 yr; Gender: males=3, females=3; Time since injury: 3.9±3.1 yr; Level of injury: Cervical=4, Thoracic=2; Severity of injury: AIS A=3, AIS B=1, AIS C=1, AIS D=1. **Intervention:** Functional Electrical Stimulation (FES) cycling. Stimulators were placed on hamstrings, quadriceps and gluteal muscles (45-50 rpm, 250 μs, 33.3 Hz, 70-120 mA). Sessions were 30 min, 3 times per wk over 9 mo. **Outcome Measures:** Pediatric Quality of Life Inventory (PedsQL).	1. Four of the six participants completed the PedsQL on at least 2 occasions. 2. Mean Psychosocial Health Summary Score for 4 participants at their initial evaluation was 66.67±7.82 (range 61.67-78.33). 3. Post intervention, quality of life increased for 3 of 4 subjects (mean=73.75±11.41, range=60.00-86.67). 4. The mean change from initial to final PedsQL was 7.08±8.21, although change scores ranged from −3.33 to 16.67 (non-significant). 5. Non-significant, positive, correlations were found between change in QOL and both total biking sessions and number of months biked ($r_s = 0.60$ and $r_s = 0.74$, respectively). 6. Non-significant, positive, correlations were found between initial and final QOL ($r_s = 0.60$ and $r_s = 0.80$) and the months post injury.
(Hwang et al., 2012) USA Observational N=215	**Population:** *Pediatric-onset SCI*: Age at interview: 23.3±0.9 yr; Age at injury: 13.2±4.9 yr; Time since injury: 10.3±5.0 yr; Gender: males=126, females=89. Level of injury: tetraplegia=51.6%; Severity of injury: complete=73.5%, C1-4 AIS ABC=11.2%, C5-8 AIS ABC=35.3%, T1-S5 AIS ABC=43.3%, AIS D=8.8%, missing=1.4%. **Intervention:** None. Survey. **Outcome Measures:** Functional Independence Measure (FIM), Satisfaction with Life Scale (SWLS), Short-Form 12 Health Survey (SF-12), Patient Health Questionnaire-9 (PHQ-9) Depression Scale, and Craig Handicap Assessment and Recording	1. Prevalence rates of regular substance use were 27.9% for tobacco, 55.4% for alcohol and 10.7% for marijuana (Table 2). These rates are considerably lower than the age-matched general population values. 2. Tobacco use was higher in participants who were unemployed than those employed either full- or part-time (38% versus 21%). 3. Alcohol use was higher in participants who were Caucasian (60 versus 26% non-Caucasian), had a college degree (80% versus 47% no college degree), were employed (70% versus 45% unemployed), had higher annual income (44%, $10 000 versus 65%, $10000-29999 versus 77%, >$30000), were single (59% versus 31% married) and able to drive independently (67% versus 35% cannot drive independently).

	Technique (CHART), use of tobacco, alcohol, and marijuana.	4. Marijuana use was more prevalent in males (14% versus 6% female) and those without a college degree (13% versus 2% college degree). 5. There was no significant difference in the prevalence of substance use between those living independently, or in relation to any injury-related factors such as level, severity or duration of injury. 6. Individuals with regular alcohol use had significantly lower incidence of urinary tract infections (64 versus 82%) and chronic medical conditions (11 versus 22%) compared with individuals with no use. 7. Tobacco use was significantly associated with depressive symptoms (PHQ-9; $p<0.05$). 8. Alcohol use was associated with higher socio-cognitive independence (FIM; $p<0.01$), better perceived physical health (SF-12 physical, CHART physical, CHART mobility; $p<0.05$ for all), and increased community participation (CHART social; $p<0.05$). 9. Marijuana use was not associated with any outcome measure. 10. There was no association between SWLS and substance use of any type. 11. Logistic regression indicated that both unemployment and the presence of depressive symptoms contribute independently to tobacco use ($p<0.05$) 12. Logistic regression indicated that having a college degree ($p<0.05$) and being single were found to contribute most in predicting regular alcohol drinking ($p<0.01$), while independent mobility ($p<0.01$) was also a significant predictor for use. 13. Logistic regression indicated those with a college degree were less likely to use marijuana ($p<0.05$).
(Boyer et al., 2012) USA Observational N=109	**Population:** *Pediatric-onset SCI*: Age at interview: 17.8±3.7 (11-24) yr; Age at injury: 11.2±5.7 (0-19) yr; Gender: males=59, females=50; Time since injury: 6.6±4.9 (1-23) yr. **Intervention:** None. Survey. **Outcome Measures:** Post Traumatic Stress (PTS) via Post-traumatic Diagnostic Scale and the Child Post Traumatic Stress Disorder Symptom Scale; Family Functioning (FF) via Family Assessment Device; and Functional Independence (FI) via Pediatric Orthopedic Surgeons of North America Pediatric Musculoskeletal Functional Health Questionnaire.	1. Structural equation modeling path analyses were used to test and confirm 3 hypothesized models: A. PTS mediated the relationship between FF and FI; B. The Avoidance symptom cluster of PTS mediated the relationships between PTS reexperiencing symptoms and FI, and between the PTS Arousal symptom cluster and FI; and C. The previous 2 models showed adequate fit to the data when integrated into an overarching model depict the interrelationship of level of SCI (tetraplegia v. paraplegia), FF, PTS symptom clusters, and FI.
(Kelly, Klaas, et al., 2012) USA Observational N=340	**Population:** Group: Children (6-12 yr) =133, Adolescents (13-18 yr) =207. Age: 13.3±3.8 yr. Time since injury: 5.1±4.3 yr, Level of injury: paraplegia=224; Severity of injury: complete=187. **Intervention:** None. Survey. **Outcome Measures:** Children's Assessment of Participation and Enjoyment (CAPE; i.e., participation, diversity, frequency, intensity,	1. For children (6-12 yr), Regression analysis showed that *where* children participate (i.e., further from home) positively and significantly predicted QOL subscales after controlling for age, sex, injury level, and injury duration. 2. For adolescents (13-18 yr), regression analysis showed that subject characteristics "*who*" (i.e., being male, having paraplegia, and participating with a more diverse group)

	context), Pediatric Quality of Life Inventory – Psychosocial Health Scale (PHS) (only emotional, social, school subscales).	positively, and significantly predicted QoL after controlling for child age, sex, injury level, and injury duration.
(Chlan et al., 2011) USA Observational N=298	**Population:** Age: 31.1±5.5 (24-45) yr; Gender: males=184, females=114, Time since injury: 16.6±6.5 (6-38) yr; Level of injury: tetraplegia=165; Severity of injury: AIS A=210. **Intervention:** None. Survey. **Outcome Measures:** Brief Coping with Problems Experienced (Brief COPE), Functional Independence Measure (FIM), Craig Handicap Assessment and Reporting Technique (CHART), Short-Form Health Survey 12 (SF-12) and Satisfaction with Life Scale (SWLS), Importance of Religion (5-pt scale).	1. Approximately half (141) of the participants reported that religion is 'important to very important' to them. 2. Mean spirituality coping score was 5.14±2.32, range 2-8), with 55% (163) of respondents using spiritual coping 'a medium amount to a lot'. 3. Importance of religion was positively correlated with age ($p<0.01$), duration of injury ($p<0.01$), mental component summary (SF-12; $p<0.05$) and life satisfaction (SWLS; ($p<0.05$). 4. Spiritual coping (Bref-COPE) was positively correlated with age ($p<0.01$), duration of injury ($p<0.01$) and life satisfaction (SWLS; ($p<0.01$). 5. Spiritual coping (Bref-COPE) was negatively correlated with FIM motor and CHART occupation ($p<0.01$ for both). 6. A stepwise regression analysis with life satisfaction (SWLS) as the outcome variable showed the following significant predictors: greater perceived mental health, being married/having domestic partner, greater occupational participation, lower incidence of pain and greater motor functioning ($p<0.05$ for all; 40% variance explained).
(Garma et al., 2011) USA Observational N=197	**Population:** Age at interview: 12.8±3.7 yr; Age at injury: 6.8±5.6 yr; Gender: males=107, females=90; Time since injury: 6.0±4.7 yr; Level of injury: paraplegia=136, tetraplegia=61. Caregivers: mothers=158, fathers=39 **Intervention:** None. Survey. **Outcome Measures:** Pediatric Quality of Life Inventory (PedsQL) – only the Psychosocial Health Summary Subscale (PHSS) (i.e., emotional, social, school functioning), Revised Children's Manifest Anxiety Survey (RCMAS), Children's Depression Inventory (CDI), Beck Anxiety Inventory (BAI) I or II.	1. Child- and caregiver-report scores on each of the PedsQL subscales and the PHSS from the SCI sample were significantly lower than child- and caregiver-report scores from a normative sample of youth without chronic health conditions ($p<.001$). 2. With respect to the PedsQL, there was a moderate degree of association between child- and caregiver-reports (.34 - .54); there were small effect sizes for the Emotional (.31) and School (.19) child-caregiver comparisons, and medium effect sizes for the Social (.66) and Overall PHSS (.51) child-caregiver comparisons where children consistently rated their QOL of life as better than did the caregiver-reporters. 3. Younger age at interview was associated with higher Emotional QoL (PedsQL) in the caregiver-reports ($p<0.05$), but lower social QoL (PedsQL) in the child-reports ($p<p<0.001$). 4. Younger age at injury was associated with higher Emotional QoL (PedsQL) ($p<0.05$). 5. Child and parent-reported anxiety and caregiver depression were significantly related to all aspects of child- and caregiver-report QoL (PedsQL) ($p<0.01$ for all). 6. QoL (PedsQL) did not vary by gender; however, those with paraplegia had higher social QoL than those with tetraplegia ($p=0.046$). 7. Regression analyses showed that child mental health significantly predicted child-report QoL (PedsQL) ($p<.001$), whereas child ($p<.001$) and caregiver ($p<.001$) mental health both significantly predicted caregiver-report QoL (PedsQL).

(Kelly et al., 2011) USA Observational N=203	**Population:** *Children:* Age at interview: 12.7±3.2 yr; Age at injury: 7.0±5.4 yr; males=108, females=95; Level of injury: paraplegia=142, tetraplegia=61; Severity of injury: complete=102, incomplete=101. *Caregivers*: mothers=158, fathers=29, stepmothers=2, grandmothers=10, aunts=2, grandfathers=2. **Intervention:** None. Survey. **Outcome Measures:** *Caregivers Measures:* Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI). *Child Measures:* Revised Children's Manifest Anxiety Survey (RCMAS), Children's Depression Inventory (CDI), Pediatric Quality of Life Inventory (PedsQL).	1. Caregiver mean BAI score was 8.45±8.43 (0-45) representing the mild range; 16% of caregivers scored in the moderate/severe range. 2. Caregiver mean BDI was 11.37±10.07 (0-49.50) representing the minimal range; 21% of caregivers scored in the moderate/severe range. 3. Among caregivers, 9% scored in the moderate/severe range for both anxiety and depression. 4. Caregiver depression (19% of the variance) was associated with caregivers being female, older child age at injury, and having a child with anxiety and depression ($p<0.001$). 5. Caregiver anxiety (14% of the variance) was associated with caregivers being female and having a child with anxiety and depression ($p<0.001$). 6. Child anxiety and depression were each significantly related to less caregiver education, lower-rated child social relationships and increased caregiver anxiety and depression ($p<0.01$ for all); child anxiety was also related to younger current age and shorter injury duration ($p<0.05$ for both). 7. Hierarchical regression showed that significant predictors of anxiety (36% of the variance) and depression (26% of the variance) included poor social relationships, caregiver mental health problems and less caregiver education.
(Gorzkowski et al., 2010) USA Observational N=97	**Population:** *Pediatric-onset SCI:* Age at interview: 12.5±3.2 yr; Age at injury: 6.8±5.3 yr; males=0, females=97; Level of injury: paraplegia=79, tetraplegia=18; Severity of injury: complete=50, incomplete=47. **Intervention:** None. Survey. **Outcome Measures:** Children's Assessment of Participation and Enjoyment (CAPE), Children's Depression Inventory (CDI), Pediatric Quality of Life Inventory (PedsQL).	1. On average, subjects participated in 77% of the assessed social activities and 59% of job-related activities; social activities were completed more frequently, further from home, and with a broader group of people than job-related activities. 2. The relationship between social participation context (CAPE social diversity, intensity, with whom, where) and QOL (PedsQL) was mediated by depression (CDI) ($p<0.05$); a greater social participation context was associated with decreased depression, which was then associated with greater QOL. 3. The relationship between job participation (CAPE diversity and intensity) frequency and QOL (PedsQL) was mediated by depression (CDI) ($p<0.05$); a greater job participation frequency was associated with decreased depression, which was then associated with greater quality of life.
(Anderson et al., 2009) USA Observational N=118	**Population:** Age: 12.3±3.0 yr; Gender: males=61, females=57; Time since injury: 6.4±4.3 (0-16) yr; Level of injury: tetraplegia=89 participants, paraplegia=29; Severity of injury: AIS A=57, AIS B=13, AIS=22, AIS D=17. **Intervention:** None. Interview Survey. **Outcome Measures:** Functional Independence Measure (FIM), Children's Depression Inventory (CDI), Revised Children's Manifest Anxiety Scale (RCMAS), Pediatric Quality of Life Inventory (PedsQL), Children's	1. Mean RCMAS score=9.47±6.31 (13% with clinically significant symptoms of anxiety). 2. Mean CDI score=7.57±6.87 (6% with clinically significant symptoms of depression). 3. Neither anxiety (RCMAS) nor depression (CDI) was statistically associated with demographic factors. 4. Anxiety (RCMAS) was associated with a shorter duration of injury. 5. Depression (CDI) was not associated with injury-related factors but was associated with lower FIM scores. 6. When compared with the outcomes of community participation (CAPE) and quality

	Assessment of Participation and Enjoyment (CAPE).	of life (PedsQL), anxiety (RCMAS) and depression (CDI) were each only associated with community participation, in that the more anxious or depressed children were more apt to do activities closer to their homes rather than at someone else's house or in the community. 7. Lower total quality-of-life (PedsQL) ratings for all subscales were associated with both anxiety (RCMAS) and depression (CDI). 8. Regression showed that anxiety (RCMAS) alone accounted for 56% of the variance in quality of life, whereas depression (CDI) accounted for 3% of the variance in quality of life after controlling for anxiety.
(Chen et al., 2008) USA Observational N=278	**Population:** *Pediatric-onset SCI* (<18 yr): Age: 27.1±3.4 yr; Gender: males=184, females=94; Time since injury: 12.8±4.9 yr; Level of injury: C1-T6=210, T7-S5=68; Severity of injury: complete=189, incomplete=88. **Intervention:** None. Survey at multiple time points over 10 yr. **Outcome Measures:** Functional Independence Measure (FIM), Craig Handicap Assessment and Reporting Technique (CHART), Short-Form 12 (SF-12), and Satisfaction with Life Scale (SWLS).	1. Mean SWLS score for the study population (24.8) was somewhat higher than the mean of 19.4-21.6 from a normative study of persons with adult-onset SCI. 2. Initial life satisfaction (SWLS) was significantly higher for women (p=0.01), those who were married or living with a partner (p<0.01); had college or higher education level (p=0.04); were employed or students (p<0.01); did not use illicit drugs (p<0.01); were free of medical complications in the past year (p=0.02); had higher FIM scores (p<0.01); had higher self-perceived mental health (SF-12; p<0.01)); and had a perfect score in CHART mobility, occupation, and social integration (p<0.01 for all), compared with their counterparts. 3. Initial life satisfaction (SWLS) did not differ by age, race, living situation, age at injury, duration of injury, level and completeness of injury, FIM sphincter control, FIM locomotion, SF-12 physical health, or CHART physical independence. 4. On average, SWLS scores increased by 0.14 per year over the course of follow-up (p=0.10), which was significant for those who were employed or students (0.25/yr, p=0.02), lived independently (0.21/yr, p=0.05), had injury level at T7-S5 (0.49/yr, p=0.006), and had medical problems in the past year (0.22/yr, p=0.02). 5. The rate of change in SWLS was not significantly different by sociodemographic variables, presence of medical complications, or physical and psychosocial functioning. 6. Multivariable analysis showed that initial SWLS was significantly associated with sex, marital status, employment status, illicit drug use, FIM motor score, SF-12 mental health, and CHART social integration subscale (p<0.05); rate of change in SWLS was not significantly associated with any factors under investigation.
(Anderson et al., 2007) USA Observational N=232	**Population:** *Pediatric-Onset Adult SCI*: Age: 30.8±5.1 (24-42) yr; Gender: males=145, females=86; Time since injury: 16.1±6.2 yr; Level of injury: tetraplegia=136, paraplegia=96; Severity of injury: complete=159, incomplete=73. **Intervention:** None. Interview Survey.	1. PHQ-9 Depressive Symptom Categories: None=20.7%, Minimal=52.5%, Mild=19.8%, Moderate=5.6%, Moderate-Severe=1.3%, Severe=0.4% 2. There were no significant differences in PHQ-9 based on gender, race, age at injury, age at interview, or duration of injury. 3. There was a significant difference in PHQ-9 between those with complete and

	Outcome Measures: Functional Independence Measure (FIM), Short-Form-12 (SF12), Craig Handicap Assessment and Reporting Technique (CHART), Satisfaction with Life Scale (SLS), Patient Health Questionnaire 9 Item (PHQQ9).	incomplete injuries (p=0.013); those with incomplete injuries showed significantly greater PHQ-9 scores than those with complete injuries did. 4. Among those with tetraplegia, individuals with incomplete injuries had significantly greater PHQ-9 scores than those with complete injuries (p=0.036). 5. Among those with paraplegia, there was no significant difference in PHQ-9 scores between those with complete and incomplete injuries. 6. Except for the CHART subscale of physical independence, all the other CHART subscales and total score show significant differences based on PHQ-9 score (p<.05 for all). 7. Greater PHQ-9 scores were associated with less employment, less income, less health-related quality of life as measured by the mental component summary score, and less life satisfaction (p<0.05 for all). 8. Medical complications including pressure ulcers, shoulder pain, and pain at any site were associated with greater PHQ-9 scores (p<0.05 for all). 9. Regression analysis showed that factors most predictive of depression were perceived mental health (SF-12), incomplete injuries, and CHART cognition and occupation subscales which accounted for 50% of the variance.
(Abresch et al., 2007) USA Observational N=163 (N=61 SCI)	**Population:** SCI (N=61): Gender: males=24, females=37. Time since injury: >12 mo. Level of injury: T-L2. *Spina Bifida (SB; N=42):* Gender: males=19, females=23. *Obese Controls (N=21):* Gender: males=8, females=13. *Non-Obese Controls (N=39):* Gender: males=19, females=20). **Intervention:** None. Survey. **Outcome Measures:** Pediatric Quality of Life Inventory (PedsQL).	1. SCI and SB subjects had significantly lower sub-scores than CTRL subjects on total (p<0.001), physical (p<0.001), emotional (p<0.01), social (p<0.001), and school (p<0.001) PedsQL domains. 2. Compared to non-obese CTRL subjects, those who were obese had lower sub-scores on the physical (p<0.001), social (p<0.001), and psychosocial (p<0.001) PedsQL domains; there were no significant differences in sub-scores from the emotional and school domains. 3. There were no significant differences between the sub-scores of obese and non-obese subjects with SCI or SB. 4. Total mean PedsQL score of non-obese CTRL subjects was significantly higher than that of the obese control group (p<0.02), which in turn was significantly higher than the SCI group (p<0.02) and the SB group (p<0.02). 5. In comparison with the SB group, the SCI group had significantly higher sub-scores on the social (p<0.001) and school (p<0.001) domains, but similar scores on emotional functioning and total HRQL.
(Anderson et al., 2006) USA Observational N=166	**Population:** Age at injury=14.2±4.0 yr; Gender: males=115, females=51; Level of injury: tetraplegia=106; Severity of injury: AIS A=105. **Intervention:** None. Interview at three different time points. **Outcome Measures:** Craig Handicap Assessment and Reporting Technique (CHART), Short-Form 12	**Living Status** 1. A total of 106 (64%) subjects lived independently at the initial interview and 95 continued to live independently for the remaining 2 follow-up interviews. 2. Of the 60/166 who were not living independently at the first interview, 48/60 (80%) did not live independently at any interview.

	(SF-12), and Satisfaction with Life Scale (SWLS).	3. There were no significant differences between those living independent or dependently with respect to demographic, or body structure and function factors. 4. Those living independently were more functionally independent and have high community participation (CHART total and all subscales except economic self-sufficiency), more likely to be employed, more satisfied with their lives ($p<0.030$ for all), more likely to be married ($p<0.001$), less likely to have the medical complications of spasticity, pressure ulcers, and severe UTIs ($p<0.050$ for all). 5. Factors most predictive of consistent independent living in the regression were CHART physical independence, mobility, and occupation scores (39% variance). **Employment** 6. Excluding students and homemakers, there were 113 individuals who completed 3 interviews of which 72 (64%) were employed at the first interview; 60 continued to be employed at the remaining 2 interviews. 7. Of the 41 who were not employed at the first interview, 34 (83%) remained unemployed at all interviews. 8. Those employed at all 3 interviews included a larger percentage of women (81%) than men (57%), a larger percentage of those who were Caucasian (68%) versus other (17%), a larger percentage of those with paraplegia (82%) than tetraplegia (54%), and a larger percentage of those with college degrees (80%) than those with less education (20%). 9. Those employed were more functionally independent and participated more in the community (CHART subscales physical independence, cognitive independence, mobility, and social integration). 10. Those consistently employed were also more likely to be married, to live independently, to have greater life satisfaction, less likely to have spasticity ($p<0.050$ for all). 11. Factors most predictive of stable employment were being female, being Caucasian, having greater cognitive independence and community mobility (CHART), and living independently (71% variance). *Life Satisfaction:* 12. Of the 166 participants, 80 (48%) had good life satisfaction at the first interview, and 64 (84%) continued at the 2 follow-up interviews. 13. A total of 86/166 (52%) had poor life satisfaction at the first interview and 56 (65%) remained dissatisfied at the 2 follow-up interviews. 14. There were differences between those with good or poor life satisfaction with respect to demographic, or body structure and function factors. 15. Factors significantly associated with high life satisfaction scores included functional independence, perceived mental health,

		participation in the community (CHART total and mobility, occupation, and economic self-sufficiency subscales), fewer medical complications (i.e., pressure ulcers, UTIs, and pain), being married, living independently, and being employed. 16. Predictive factors of life satisfaction in a regression were show to be CHART occupation subscale and fewer pressure ulcers (56% variance).
(Anderson & Vogel, 2003) USA Observational N=216* *Same subjects as in (Anderson et al., 2002)	**Population:** *Pediatric-onset* SCI: Age at injury: 14.1±4.0 yr, Age at interview: 28.6±3.4 yr, Time since injury: 14.2±4.6 yr; Gender: males=150, females=66; Level of injury: tetraplegia=22, paraplegia=194. Severity of injury: complete=137, incomplete=78. **Intervention:** None. Survey. **Outcome Measures:** 5-pt rating scale of level of satisfaction on the following domains: transportation in the community, educational achievements, job opportunities, income, recreation and social opportunities, dating opportunities, and sexual experience; Functional Independence Measure (FIM), Craig Handicap Assessment and Reporting Technique (CHART), Short-Form 12 (SF-12), and Satisfaction with Life Scale (SWLS).	1. Highest satisfaction ratings occurred for the domains of transportation, education, and social/recreation; lowest satisfaction ratings occurred for income, job opportunities, and dating opportunities. 2. There were no significant differences in satisfaction ratings for any of the domains with respect to injury severity and gender. 3. In regression modelling, the only demographic factors associated with satisfaction domains were age at interview and gender; women were more satisfied with both income and sexual experiences, and younger age at interview was associated with greater satisfaction with dating opportunities. 4. In regression modelling, perceived health status (SF-12) was predictive for three satisfaction domains (i.e., education, social/recreational opportunities, and sexual experiences). 5. Independent living was associated with three satisfaction domains (i.e., satisfaction with job opportunities, dating, and sexual experiences). 6. Community mobility, frequency of social and recreational activities, and income were each associated with satisfaction in two satisfaction domains. 7. Global life satisfaction, as measured by SWLS, was significantly associated with each of the domain satisfaction ratings ($p<0.001$) with regression modelling showing the following domains as significant predictors: dating, job opportunities, education, and income ($p<0.05$ for all).
(Anderson & Vogel, 2002) USA Observational N=195	**Population:** *Pediatric-onset* SCI: Age at injury: 14.1±4.0 yr, Age at interview: 28.7±3.4 yr, Time since injury: 14.6±4.3 yr. Gender: males=134, females=61; Level of injury: tetraplegia=112, paraplegia=194. Severity of injury: complete=83, incomplete=78. **Intervention:** None. Survey. **Outcome Measures:** Functional Independence Measure (FIM), Craig Handicap Assessment and Reporting Technique (CHART), Short-Form 12 (SF-12), Satisfaction with Life Scale (SWLS).	1. Among the sample, 40% (n=78) were unemployed, 51% (n=99) were employed, 6% (n=12) were students, and 3% (n=6) were homemakers. 2. Compared to those unemployed, those who were students, homemakers or employed were significantly less injured ($p=0.010$), more likely to be living independently ($p=0.002$), had higher total FIM scores and sub-scores ($p=0.001$), higher total CHART score and sub-scores (except for social integration) ($p<0.05$ for all), greater SWLS scores ($p<0.001$); there was no significant difference between all groups on SF-12. 3. Compared to those employed, those unemployed had lower FIM (total and subscores) ($p<0.006$ for all), CHART (total and subscores) ($p<0.050$ for all), SF-12 physical score ($p=0.011$), SWLS ($p<0.001$) but not SF-12 mental score.

(Vogel et al., 2002a) Part III USA Observational N=216	**Population:** Age at interview: 28.6±3.4 yr; Age at injury: 14.1±4.0 yr; Time since injury: 14.2±4.6 yr; Gender: males=149, females=67; Level of injury: tetraplegia=57%. **Intervention:** None. Survey. **Outcome Measures:** Functional Independence Measure (FIM), Craig Handicap Assessment and Reporting Technique (CHART), Short-Form 12 (SF-12), Satisfaction with Life Scale (SWLS).	1. Pressure ulcers were statistically associated with employment (p<0.001), independent living (p=0.012), driving (p<0.001), marriage (p=0.020), total CHART score (p=0.007), CHART subscales of economic self-sufficiency, mobility, occupation, physical and social integration (p=0.040, p<0.001, p<0.001, p=0.001 and p=0.002, respectively), mental SF-12 scores (p=0.030), and life satisfaction (p=0.001). 2. Severe UTI was statically associated with employment (p=0.001), independent living (p=0.018), driving (p=0.011), total CHART score (p<0.001), CHART subscales of cognitive, economic self-sufficiency, mobility, occupation and physical (p=0.003, p=0.005, p<0.001, p=0.007 and p=0.001, respectively), SF-12 physical score (p=0.0016), and life satisfaction (p=0.001). 3. Spasticity was statistically associated with employment (p<0.001), independent living (p=0.009), driving (p=0.010), total CHART score (p=0.005), CHART subscales of mobility, occupation and physical (p=0.003, p<0.001 and p=0.001, respectively) SF-12 physical score (p=0.001), and SF-12 mental score (p=0.043). 4. Pain was statistically associated with employment (p=0.030), cognitive CHART subscale (p=0.009), SF-12 mental score (p<0.001), SF-12 physical score (p=0.019), and life satisfaction (p<0.001). 5. Hyperhidrosis was statistically associated with driving (p=0.041), marriage (p=0.043), total CHART score (p=0.025), and occupation CHART subscale (p=0.037). 6. Respiratory complications were statistically associated with employment (p=0.023), physical CHART subscale (p=0.008), and life satisfaction (p=0.030). 7. Shoulder pain was statistically associated with CHART subscales of occupation and physical (p=0.009 and p=0.033, respectively), SF-12 physical score (p=0.002), SF-12 mental score (p<0.001), and life satisfaction (p=0.003). 8. Back pain was statistically associated with economic self-sufficiency CHART subscale (p=0.019), SF-12 physical score (p=0.025), SF-12 mental score (p=0.008), and life satisfaction (p=0.002). 9. Urinary incontinence was statistically associated with cognitive CHART subscale (p=0.013), SF-12 physical score (p=0.045), and SF-12 mental score (p=0.010). 10. Elbow contractures were statistically associated with employment (p=0.049) and driving (p=0.016). 11. Hospitalizations were statistically associated with employment (p=0.047) and CHART subscales of cognitive and economic self-sufficiency (p=0.043 and p=0.017, respectively). 12. Bowel incontinence was statistically associated with independent living (p=0.026). 13. Autonomic dysreflexia was statistically associated with SF-12 physical score (p=0.004).

		14. Hip contracture was statistically associated with physical CHART subscale (p=0.044). 15. Ankle pain was statistically associated with SF-12 physical score (p=0.011) and SF-12 mental score (p=0.038). 16. Elbow pain was statistically associated with independent living (p=0.045). 17. Heterotopic ossification was statistically associated with physical CHART subscale (p=0.019).
(Anderson et al., 2002) USA Observational N=216	**Population:** *Pediatric-onset* SCI: Age at injury: 14.1±4.0 yr, Age at interview: 28.6±3.4 yr, Time since injury: 14.2±4.6 yr. Gender: males=150, females=66; Level of injury: tetraplegia=22, paraplegia=194. Severity of injury: complete=137, incomplete=78. **Intervention:** None. Survey. **Outcome Measures:** Functional Independence Measure (FIM), the Craig Handicap Assessment and Reporting Technique (CHART), the Short-Form 12 (SF-12), and the Satisfaction with Life Scale (SWLS).	1. SWLS was not significantly associated with gender, duration of injury, or race/ ethnicity. 2. SWLS was significantly associated with both age at injury (p=0.017) and age at interview (p=0.033); SWLS scores for those injured as older adolescents was significantly lower than for those injured at younger ages (p<0.009). 3. Those with paraplegia showed significantly higher SWLS scores than those with tetraplegia (p=0.032). 4. FIM total, motor and cognitive sub-scores were significantly related to SWLS (p<0.001). 5. The total CHART score and all subscale scores (except social integration) were significantly associated with SWLS (p<0.05 for all). 6. Other outcomes statistically associated with higher SWLS scores include higher education, being employed, higher income, living independently, being married, and driving independently (p<0.05 for all). 7. Use of illegal drugs was negatively associated with SWLS (p<0.001). 8. Greater perceived health status (SF-12) was associated with greater SWLS (p<0.001). 9. A greater number of medical complications was associated with less SWLS (p<0.001). 10. Multiple linear model with life satisfaction as the outcome showed the following predictors to be significant: age at injury (p=0.008), CHART mobility (p=0.004), marriage (p<0.001), drug use (p<0.001), medical complications (p<0.05), and SF-12 mental health (p<0.001).
(Kannisto & Sintonen, 1997a) Finland Observational N=408 (N=36)	**Population:** *Pediatric-Onset SCI (N=36):* Age at Injury: 11.3±5.1 yr; Age at evaluation: 31.3±9.9 yr; Time since injury: 20.0±11.2 yr; Gender: males=25, females=11; Severity of injury: complete=28, incomplete=8; Injury etiology: traumatic=30, medical=5, iatrogenic=1. *Controls (N=372):* Age: 16-46 yr. **Intervention:** None. Survey. **Outcome Measures:** 15 Dimensions of Health-Related Quality of Life (15D HRQL): moving, seeing, hearing, breathing, sleeping, eating, communicating, urinary continence, working, social participation, mental functioning, pain, depression, distress and perceived health (level of health status in each); Overall health status measures with the Visual Analogue Scale (VAS).	1. Subjects with SCI assigned higher importance to the 15DHRQL dimensions of mental functioning, communicating, social participation and seeing than the control subjects (p<0.05 for all). 2. The control subjects assigned higher importance to the 15DHRQL dimensions of moving, working, sleeping and eating (p<0.05 for all). 3. The average level of health status score on 15DHRQL for the SCI group was, on average, 0.906±0.058 (range 0.726-0.996, which was significantly different than controls (0.929±0.083; p<0.05); the most marked deviations from the best level of functioning for subjects with SCI occurred on the dimensions of continence, moving, working and pain. 4. The average overall health status scores on the VAS, for subjects with SCI, was 82.3±15.5 (range 35-100); a significant correlation between the HRQL and VAS scores was found (r=0.33; p=0.044).