

Author Year Country Research Design Score Total Sample Size	Methods	Outcome
Kooijmans et al. (2020) Netherlands Observational N=268	<p>Population: Mean age: 47.7yr; Gender: males=197, females=71; Motor complete SCI=221; Mean time since injury: 24yr.</p> <p>No Intervention: Participants completed two questionnaires during an aftercare SCI check-up.</p> <p>Outcome Measures: Spinal Cord Independence Measure III (SCIM-III), Physical Activity Scale for Individuals with Physical Disabilities.</p>	<ol style="list-style-type: none"> Exercise self-efficacy was significantly related to the level of daily physical activity ($\beta=0.05$; 95% CI 0.04–0.07; 15% explained variance; $p<0.001$) based on a univariate regression analysis. There was a significant association between self-efficacy and performing sports activities (LOG $\beta = 0.04$, 95% CI 0.03–0.06), as well as daily activities that are not sports related (LOG $\beta = 0.01$, 95% CI 0.02–0.05).
Hansen et al. (2020) Denmark Observational N=181	<p>Population: Mean age: 48±14yr; Gender: males=86, females=95; Level of injury: tetraplegia=22, paraplegia=81, unknown=11; Level of severity: complete=59, incomplete=50, unknown=5.</p> <p>No Intervention: Manual wheelchair users (MWCUs) completed a 15-20min survey containing three sections: demographic information, self-reported physical activity level (PAL), and perception of barriers to physical activity participation.</p> <p>Outcome Measures: Barriers to Physical Activity Questionnaire for People with Mobility Impairments (BPAQ-MI).</p>	<ol style="list-style-type: none"> There were no significant differences in any demographic variables between participants ($p>0.162$). The 5 most prevalent barriers included 2 intrapersonal and 3 community barriers. The 5 most severe individual barriers included 1 organizational and 4 community barriers. PAL was inversely associated with total intrapersonal ($r=-0.487$, $p<0.01$) and overall ($r=-0.241$, $p<0.01$) impact and the intrapersonal “health” ($r=-0.477$, $p<0.01$) and “beliefs/attitudes” ($r=-0.307$, $p<0.01$) subdomains. The “health” subdomain impact score was independently associated with PAL ($p<.001$).
Postma et al. (2020) Netherlands Observational N _{Initial} =47, N _{Final} =38	<p>Population: Mean age: 54.5yr; Gender: males=25, females=22; Injury: Tetraplegia AIS C=1, Tetraplegia AIS D=22, Paraplegia AIS C=3, Paraplegia AIS D=21; Mean time since injury: 89.6d.</p> <p>No Intervention: Participants wore an Activ8 sensor and were evaluated 2wk prior to discharge and at 6mo and 1 year post discharge from inpatient rehabilitation to evaluate changes in duration of physical activity and sedentary behavior.</p> <p>Outcome Measures: Level of physical activity.</p>	<p>The duration of physical activity and sedentary behavior changed between discharge and 6mo by 21min/d ($p=0.004$) and -64min/d ($p<0.001$), respectively. It remained stable from 6mo to 1yr.</p> <p>Largest proportion of physical activity was walking which increased over time from 60% to 84%, while wheeling decreased from 24% to 3%.</p> <p>Mean physical activity at 1yr post discharge was 116±59min/d, with 21% being active <60min/d.</p> <p>Older age and lower ambulation level were associated with lower physical activity ($p<0.05$).</p> <p>Lower ambulation level with higher sedentary behavior and tetraplegia were associated with reduced increase in physical activity.</p>
Santino et al. (2020) Canada Observational N=170	<p>Population: Age: <55yr=54, >55yr=116; Gender: males=136, females=34; I Injury: Incomplete paraplegia=40, Complete paraplegia=40, Incomplete tetraplegia=58,</p>	<ol style="list-style-type: none"> The mean minutes per week of moderate and heavy leisure time physical activity was 255.25±457.59.

	<p>Complete tetraplegia=30, missing=2; Time since injury: <10yr=48, 10+yr=122.</p> <p>No Intervention: Participants completed various measures during a telephone interview.</p> <p>Outcome Measures: Leisure Time Physical Activity Questionnaire for People with SCI,</p>	
<p>Kazmierczak et al. (2018) Poland Observational N=75</p>	<p>Population: Mean age: 34.3yr; Gender: males=57, females=18; Level of injury: cervical=25, thoracic=25, lumbar=25; Mean time since injury: 7.2yr.</p> <p>No Intervention: Participants completed a custom questionnaire pertaining to their leisure time physical activities (LTPA). Medical charts were also used to extract injury data.</p> <p>Outcome Measures: Frequency of LTPA, Barthel Index.</p>	<ol style="list-style-type: none"> 1. From pre to post injury, 58.7% reported a decrease in LTPA, 24% no change and 17.3% an increase. 2. Based on level of injury, a decrease in LTPA was reported for 52% of the cervical group, 68% thoracic group and 56% lumbar group. 3. 65.3% of participants were currently practicing LTPA: 56% of cervical group, 60% of thoracic group and 80% of lumbar group. 4. 44% reported doing individual activities as LTPA, 16% both individual and group activities, and 5.3% group activities. 5. The time between SCI and commitment to LTPA was <1yr for 40%, 1-3yr for 20%, 4-5yr for 2.7% and >6 for 2.7% of participants. 6. 34.7% said it was their own decision to engage. 7. Frequency of LTPA for total sample was 3-4 times/wk for 32 and 2-4 times/wk for 11. 8. Of those working out 3-4time/wk, 9 were from the cervical group, 11 thoracic, and 12 the lumbar group. 9. Of those working 2-4 times/wk, 4 were from the cervical group, 1 thoracic and 6 lumbar. 10. Participants with higher physical independence (higher score in BI) engaged in physical exercises proportionality more often.
<p>Ferri-Caruana et al.(2020) Spain Observational N=106</p>	<p>Population: <i>Exercise Group (n=63):</i> Gender: males=58, females=6; Mean age=38.81yr; Level of injury: T2-L5; Severity of injury: AIS A-B; Mean time since injury: 173.8mo. <i>Non-Exercise Group (n=42):</i> Gender: males=32, females=10; Mean age=46.24yr; Level of injury: T2-T5; Severity of injury: AIS A-B; Mean time since injury: 171.61mo.</p> <p>No Intervention: Participants completed the exercise motivations inventory questionnaire which assesses predisposing reasons for the practice of physical exercise.</p> <p>Outcome Measures: Exercise Motivations Inventory (EMI-2).</p>	<ol style="list-style-type: none"> 1. Participants in both the exercise and non-exercise group showed similar motivation towards exercise. 2. The most important motive to practice or to adhere to exercise was ill health avoidance, the second was fitness. 3. Motives that distinguished the exercise group from non-exercise group included enjoyment and revitalization (p<0.05), competition (p<0.05), and health pressure (p<0.01). 4. Motivation was found to relate to the type of physical exercise performed. 5. Sports players showed a significantly higher score for competition and enjoyment and revitalization than physical exercisers (p<0.05).
<p>Taran et al. (2018) Canada Secondary analysis of Rocchi et al. 2017 N=56</p>	<p>Population: Age=53.8±11.2yr.; Gender: males=41, females=15; Level of injury: paraplegia=33, tetraplegia=23; Level of severity: ASIA A=46%, B=14%, C=18%, D=21%, E=1%; Time since injury=20.6±13.7yr.</p>	<ol style="list-style-type: none"> 1. After controlling for mobility, perception of the impact of pain was highly negatively associated with life satisfaction. 2. LTPA was associated with life satisfaction, accounting for an additional 13% of variance. 3. Standardized regression coefficient between perception of the impact of pain and life

<p>*Subset of population from Rocchi et al. 2017</p>	<p>No Intervention: Secondary analysis. Intervention completed in study being analyzed. Outcome Measures: Leisure Time Physical Activity Questionnaire (LTPAQ), Satisfaction with Life Scale (SWLS), Impact of pain.</p>	<p>satisfaction did not change after adding LTPA to the model, which shows the independent association of LTPA and perception of pain with life satisfaction.</p>
<p>Jorgensen et al. (2017) Sweden Observational N=119</p>	<p>Population: Mean Age=63.5±8.7yr; Gender: Males=84, Females=35; Level of Injury: C1-L5; Severity of Injury: AIS A-C=60, D=59; Mean Time Since Injury=23.9±11.7yr. No Intervention: Review of data from the Swedish Aging with SCI Study to assess participation in leisure time physical activity (LTPA) among older adults with long-term SCI. Outcome Measures: Physical activity recall assessment for people with Spinal Cord Injury (PARA-SCI), intensity, type and duration of physical activity.</p>	<ol style="list-style-type: none"> 1. Of the total population, 29% reported no LTPA, while 53% performed moderate-to-heavy intensity LTPA. 2. The mean minutes per day of total LTPA where 34.7, while moderate-to-heavy was 22.5. 3. The most frequently performed activities were walking (32%), wheeling (25%) and general fitness (24%). 6. Sociodemographic, injury characteristics and secondary health conditions explained 10.6% and 13.4% of the variance in total and moderate-to-heavy LTPA. Age and wheelchair use were significantly, negatively associated with total LTPA ($p<0.05$). Women, wheelchair users and employed participants performed significantly less moderate-to-heavy LTPA than men, those using walking devices/no mobility device and unemployed participants ($p<.05$).
<p>Perrier et al. (2017) Canada Observational N=695</p>	<p>Population: Mean age: 46.81±13.41yr; Gender: males=528, females=167; Injury etiology= Traumatic, Mean time since injury: 15.19yr±11.10yr. No Intervention: Cross sectional analysis to examine daily activity time. Outcome Measures: Daily self reported activity time across 36 different activities. Relationships between variables and activity time.</p>	<ol style="list-style-type: none"> 1. Participants reported significantly more minutes per day spent on mild-intensity than moderate-intensity ($p<0.0001$) or heavy-intensity activities ($p<0.0001$). More minutes per day were also spent in moderate- versus heavy-intensity daily activities ($p<0.0001$). 2. There were significant between-group differences for education groups with regard to minutes per day of mild-intensity daily activities, $p<0.01$. There were also between-group differences for injury severity categories with regard to minutes per day of heavy-intensity activities, $p< 0.01$. Participants with an injury classified as AIS A–C, C1–C4 or AIS A–C, T1–S5 reported significantly fewer minutes per day of heavy-intensity activities than those classified as AIS D.
<p>Rauch et al. (2017) Germany Observational N=485</p>	<p>Population: Mean age: 52.8yr; Gender: males=357, females=128; Injury: Incomplete paraplegia=169, Complete paraplegia=159, Incomplete tetraplegia=100, Complete tetraplegia=55, missing=2; Mean time since injury: 17.3yr. No Intervention: Secondary analysis of Swiss Spinal Cord Injury Cohort Study. Outcome Measures: Self-reported Spinal Cord Independence Measure, Physical Activity Scale for Individuals with Physical Disabilities, SF-36 five-item Mental Health Index, Nottwil Environmental Factors</p>	<ol style="list-style-type: none"> 1. Older age decreased, but being a manual wheelchair user increased the odds of being physically active and achieving the World Health Organization recommendations on physical activity. 2. Social support and self-efficacy increased odds of being physically active. 3. Use of intermittent catheter increased and dependency in self-care mobility and coping with emotions decreased odds for achieving the World Health Organization recommendations on physical activity.

	Inventory Short Form, Purpose in Life Test-Short Form.	
Rocchi et al. (2017) Canada Observational N=73	<p>Population: Mean age: 52.99yr; Gender: males=54, females=18, undisclosed=1; Level of injury: Paraplegia=41, Tetraplegia=28, undisclosed=4; Level of severity: AIS A=,33 AIS B=10, AIS C=13, AIS D=15; Mean time since injury: 19.99yr.</p> <p>No Intervention: Individuals completed a questionnaire by telephone. The questionnaire was completed twice, once in response to aerobic activities and one for resistance activity. Physical activity levels were compared to SCI specific physical activity guidelines. Aerobic guideline was at least 2 sessions (at least 20min each) of moderate to vigorous intensity aerobic activity in last 7 days. The resistance guideline was similar (2 sessions in last 7 days).</p> <p>Outcome Measures: Leisure Time Physical Activity Questionnaire for People with SCI (LTPAQ-SCI), Treatment Self-Regulation for Exercise Questionnaire.</p>	<ol style="list-style-type: none"> 1. Of the adults with SCI interviewed, 36% and 19% were meeting the aerobic and resistance guidelines, respectively. 2. 12% of the sample met both aerobic and resistance requirements. 3. 44% of the sample reported no physical activity at all. 4. No demographic or SCI characteristics predicted meeting the aerobic or resistance physical activity guidelines when compared with the no activity or some activity groupings. 5. Autonomous motivation was a significant correlate where individuals with an autonomous motivation for physical activity were more likely to meet the guidelines than not. 6. Manual wheelchair users were more likely to meet both the aerobic and resistance guidelines compared to those reporting some activity.
Rauch et al. (2016) Germany Observational N=485	<p>Population: Mean age: 52.9yr; Gender: males=357, females=128; Severity of SCI: Complete paraplegia=159, Incomplete paraplegia=169, Complete tetraplegia=55, Incomplete tetraplegia=100, missing=2; Mean time since injury: 17.3yr.</p> <p>No Intervention: Participants completed a survey examining physical activity levels.</p> <p>Outcome Measures: Four items from the Physical Activity Scale for Individuals with Physical Disabilities, Spinal Cord Independence Measure.</p>	<ol style="list-style-type: none"> 1. The median total time for all physical activities per week was 6.0hr. 2. Participants spent the most time (median 2.2hr) performing sports of light intensity. 3. Participants with complete paraplegia, manual wheelchair users, and time since injury 16-25yr spent the most median time on sports of moderate intensity. 4. Participation was lowest for strenuous sporting activities and muscle-strengthening exercises. 5. People 71 and older, women, people with complete tetraplegia and users of electric wheelchairs showed the lowest total physical activity times. 6. 18.6% of the sample was completely physically inactive. 7. 50.3% carried out muscle-strengthening exercises at least 1-2 days a week. 8. 48.9% of participants fulfilled the WHO recommendations for physical activity. 9. Women, people aged 71 and older, and people with complete tetraplegia had significantly lower odds of fulfilling the WHO recommendations than participants in the respective reference category (men, ages 17-30, incomplete paraplegia).
Zbogor et al. (2016) Canada Observational N=95	<p>Population: Gender: males=68, females=27; mean age=49yrs; level of injury: paraplegia=53, tetraplegia=42; severity of injury: AIS A=23, B=12, C=12, D=48.</p> <p>No Intervention: Physical activity level at admission and discharge were recorded by self-report questionnaire (PARA-SCI) and</p>	<ol style="list-style-type: none"> 1. There was no statistically significant change over time in self-reported physical activity (PARA-SCI) minutes outside therapy for both paraplegia and tetraplegia at lower and higher intensities (median mins of physical paraplegia- higher intensity: admission=555min, discharge=587min, lower

	<p>real-time accelerometers worn on the dominant wrist or hip if ambulatory.</p> <p>Outcome Measures: Actical accelerometers (physical activity measure), Physical Activity Recall Assessment for People with Spinal Cord Injury (PARA-SCI).</p>	<p>intensity: admission=532min, discharge=565min; tetraplegia- higher intensity: admission=533min, discharge=556min, lower intensity: admission=489min, discharge=497min) (ps>0.05).</p> <p>2. Significant increases in physical activity outside physical therapy and occupational therapy sessions from admission to discharge were found for wrist accelerometers for individuals with tetraplegia (from 62min at admission to 99min at discharge) and hip accelerometers for ambulatory individuals (from 0min at admission to 1097min at discharge; ps<0.0001).</p>
<p>Martin Ginis et al. (2017) Canada Observational N=347</p>	<p>Population: Mean age: 47.7yr; Gender: males=271, females=76; Level of injury: C1-C8=141, T1-S5=206; Mean time since injury: 16.1yr.</p> <p>No Intervention: Secondary analysis of Study of Health and Activity in Spinal Cord Injury (SHAPE-SCI) study. Participants completed a questionnaire at baseline pertaining to theory of planned behaviour constructs and at 6mo one for leisure time physical activity (LTPA).</p> <p>Outcome Measures: Theory of planned behavior constructs, the Physical Activity Recall Assessment for People with Spinal Cord Injury (PARA-SCI).</p>	<ol style="list-style-type: none"> 1. At baseline, ambulators had poorer attitudes towards LTPA than manual chair users (p=0.004). No other differences were significant. 2. Among ambulators, perceived behavioural control was negatively related to LTPA (p<0.05), meaning ambulators with the greatest sense of control over LTPA did the least activity. 3. Attitudes had a significant indirect relationship with LTPA through intentions (p<0.05). 4. Among manual chair users, perceived behavioural control was not directly associated with LTPA but attitudes (p<0.01), subjective norms (p<0.05) and perceived behavioural control (p<0.01) were significant indirect predictors of LTPA through intentions.
<p>Martin Ginis et al.(2013) Canada Observational N=238</p>	<p>Population: <i>Actors (n=105):</i> Mean age: 42.41±13.59yr; Mean time since injury: 11.29±8.60yr; Gender: males=80, females=25; Level of injury: paraplegia=53, tetraplegia=50; Level of severity: complete=34, incomplete=42. <i>Intenders (n=73):</i> Mean age: 45.07±11.69yr; Mean time since injury: 15.84±11.16yr; Gender: males=57, females=16; Level of injury: paraplegia=32, tetraplegia=41; Level of severity: complete=19, incomplete=32. <i>Nonintenders (n=58):</i> Mean age: 46.18±12.15yr; Mean time since injury: 17.02±9.75yr; Gender: males=42, females=16; Level of injury: paraplegia=20, tetraplegia=38; Level of severity: complete=13, incomplete=22.</p> <p>No Intervention: Individuals completed a questionnaire that assessed the following Health Action Process Approach (HAPA) constructs: leisure time physical activity (LTPA) outcome expectancies, self-efficacy, intentions, planning, and action control.</p>	<ol style="list-style-type: none"> 1. There was a significant difference in the number of years postinjury between the groups (p<0.001). Both intenders and nonintenders were injured longer ago than actors. 2. There was a significant difference in the highest level of education obtained between groups (p=0.004). A greater percentage of actors completed a postsecondary education as compared with intenders and nonintenders. 3. Actors had significantly more min/day of moderate and heavy intensity LTPA than intenders and nonintenders (p<0.001). 4. For all the measures, actors scored significantly higher than intenders who scored significantly higher than nonintenders (p<0.001).

	Outcome Measures: Physical Activity Recall Assessment for People with Spinal Cord Injury (PARA-SCI).	
Kroll et al. (2012) UK Observational N=612	<p>Population: Mean age: 48.5yr; Gender: males=386, females=226; Paraplegia=300; Complete SCI=356; Mean time since injury: 15.88yr.</p> <p>No Intervention: Participants completed mail-in surveys over 2yr examining exercise self-efficacy and exercise behaviour.</p> <p>Outcome Measures: Exercise frequency and intensity, Exercise Self-Efficacy Scale.</p>	<ol style="list-style-type: none"> 1. Self-efficacy beliefs were significantly related to frequency and intensity of resistance training (R^2 change=0.08 and 0.03, respectively; $P<0.01$ for all) and aerobic training (R^2 change = 0.07 and 0.05, respectively; $P<0.01$ for all). 2. Participants engaged in aerobic exercise, on average, 2.4 ± 2.3d/wk and resistance training 2.15 ± 2.14d/wk. 3. Participants, on average, rated their aerobic and resistance training intensity to be moderate. 4. For aerobic exercise frequency, leg use was positively associated and wheelchair use was negatively associated with exercise frequency. 5. For aerobic exercise frequency, no demographic or clinical variables were significant predictors. 6. No clinical or demographic variables contributed significantly to the prediction of resistance training intensity. Only sex demonstrated a significant association with resistance training intensity (men had higher frequency).
Perrier et al. (2012) Canada Observational N=695	<p>Population: Mean age: 47.1yr; Gender: males=531, females=164; Injury: C1-C4 ASIA A-C=75, C5-C8 ASIA A-C =184, T1-S5 ASIA A-C =255, ASIA D=172; Mean time since injury: 15.3yr.</p> <p>No Intervention: Participants completed a questionnaire regarding seasonal variation in total moderate-to-vigorous leisure time physical activity (LTPA), exercise and sport.</p> <p>Outcome Measures: Physical Activity Recall Assessment for People with Spinal Cord Injury (PARA-SCI).</p>	<ol style="list-style-type: none"> 1. On average, 28 ± 34min per day was spent in moderate-to-heavy intensity LTPA, 22.7 ± 28.1 min per day was spent in exercise and 46.5 ± 46.6 min per day in sport. 2. Season did not predict whether participants engaged in moderate-to-vigorous LTPA. 3. Season did not predict participation in sport or exercise. 4. Years post injury was the only variable that predicted exercise participation. Those injured more recently were more likely to exercise. 5. Participants who were younger were more likely to be active at any sport. 6. In the active sub-cohort, during the winter they reported engaging in less moderate to vigorous LTPA than those who were interviewed in summer. This pattern was observed for exercise as well.
Phang et al. (2012) Canada Observational N=54	<p>Population: Mean age: 47.7yr; Gender: males=43, females=11; Level of injury: Paraplegia=41, tetraplegia=13; Level of severity: Complete=27, Incomplete=27.</p> <p>No Intervention: Participants completed a questionnaire and a wheelchair skills test.</p> <p>Outcome Measures: Wheelchair skills Test V4.1 for manual wheelchair users, Wheelchair Use Confidence Scale, Barriers to leisure-time physical activity, Physical Activity Recall</p>	<ol style="list-style-type: none"> 1. A significant positive relationship was shown between wheelchair skills and leisure time physical activity ($p<0.05$). 2. Participants who were more skilled at using their manual wheelchairs reported more min/d of moderate-heavy leisure time physical activity. 3. There was a positive relationship between wheelchair skills and wheel-chair use self-efficacy ($p<0.05$).

	Assessment for People with Spinal Cord Injury (PARA-SCI).	<ol style="list-style-type: none"> 4. Wheelchair use self-efficacy was not significantly associated with leisure time physical activity. 5. Wheelchair-use self-efficacy does not mediate the skills leisure time physical activity relationship.
Martin Ginis et al. (2011) Canada Observational N=160	<p>Population: Mean age: 47.4±12.9yr; Mean time since injury: 16.2±10.1yr; Gender: males=118, females=42; Level of injury: tetraplegia=59%; Level of severity: incomplete=63%.</p> <p>No Intervention: Individuals completed a questionnaire that assessed the following Social Cognitive Theory variables: social support, task self-efficacy, self-regulatory efficacy, self-regulation, outcome expectations, and leisure time physical activity.</p> <p>Outcome Measures: Physical Activity Recall Assessment for People with Spinal Cord Injury (PARA-SCI).</p>	<p>Self-regulation had significant direct effects on physical activity ($p<0.05$).</p> <p>Self-regulatory efficacy had significant indirect effects on physical activity ($p<0.05$).</p> <p>Higher self-regulatory efficacy had significant effects on outcome expectations and use of self-regulation strategies ($p<0.05$).</p> <p>Self-regulatory efficacy had nonsignificant direct effects on physical activity ($p>0.05$).</p> <p>Task self-efficacy did not have significant total nor indirect effects on physical activity ($p>0.05$).</p> <p>Outcome expectations had nonsignificant total effects ($p>0.05$) on physical activity, but significant indirect effects ($p<0.05$).</p> <p>Social support had nonsignificant total and indirect effects on physical activity ($p>0.05$).</p>
de Groot et al. (2011) Observational Netherlands N=109	<p>Population: Gender: males=79, females=30; Mean age=40.4yr; Level of injury: tetraplegia=29, complete lesion=78; Severity of injury: AIS A-D; Mean time since injury=708 days.</p> <p>No Intervention: Participants completed questionnaires assessing wheelchair satisfaction, level of physical activity, time spent on eight vocational and leisure activities, and health status.</p> <p>Outcome Measures: Dutch version of the Quebec user evaluation of satisfaction with assistive technology (D-QUEST), physical activity scale for individuals with a physical disability (PASIPD), Uretch activity list (UAL), mobility range and social behavior subscales of the SIP68 (SIPSOC).</p>	<ol style="list-style-type: none"> 1. High level of satisfaction was reported with wheelchair related aspects (>80%). 2. Participants were less satisfied with the service-related aspects. 3. Those with an incomplete lesion were slightly more satisfied with wheelchair related aspects ($p=0.02$) and service-related aspects ($p=0.05$) than those with complete lesion. 4. Higher satisfaction regarding wheelchair dimensions and a higher overall satisfaction were related to a more active lifestyle.
Martin Ginis, Latimer, et al. (2010) Canada Cross-Sectional N=695	<p>Population: Mean age:47.1±13.5yr; Gender: males=531, females=164; Mean time post-injury: 15.3±11.1yr</p> <p>No Intervention: Data on physical activity and demographic/injury-related characteristics of SCI patients were collected through telephone interviews.</p> <p>Outcome Measures: Physical Activity Recall Assessment for Persons with Spinal Cord Injury (PARA-SCI).</p>	<ol style="list-style-type: none"> 1. Respondents reported a mean of 27.14±49.36 minutes of LTPA a day. 2. 50.1% of participants reported no LTPA whatsoever. 3. LTPA decreased as age and years post-injury increased. 4. Men were more active than women. 5. Manual wheelchair users were more active than power wheelchair users and persons using gait aids. 6. Participants with tetraplegia with C1–C4 and C5–C8, AIS grade A–C level injuries were significantly less active than participants with AIS grade D injuries and participants with paraplegia with AIS grade A to C injuries.

		<ol style="list-style-type: none"> Highest amounts of daily LTPA (≥ 21min/d) were associated with manual wheelchair use and T1 to S5, AIS grade A to C injury. Moderate LTPA (1–20min/day) was most associated with being female, 5 to 10 years post injury, and 21 to 33.8 years of age. Inactivity (0min/d) was most associated with being male, greater than or equal to 11 years post injury, and greater than or equal to 33.8 years of age.
<p>Arbour-Nicitopoulos et al. (2009) Canada Observational N=574</p>	<p>Population: Mean age: 46.89yr; Gender: males=448, females=126; Level of injury: tetraplegia=298, miscellaneous= 276; Level of severity: AIS B-D=344. No Intervention: Participants completed a questionnaire assessing aspects of neighborhood perceptions, and leisure time physical activity. Outcome Measures: Affective attitudes, instrumental attitudes, subjective norm, self-efficacy, sidewalks, esthetics: Neighborhood Environment Walkability Scale (NEWS), intentions, Leisure-time physical activity: Physical Activity Recall Assessment for People with Spinal Cord Injury (PARA-SCI).</p>	<ol style="list-style-type: none"> Theory of planned behavior constructs explained 57% of the variance in leisure time physical activity intentions and 12% of variance in behavior. Variance in intentions increased when neighborhood variables were included within the model. Esthetics exhibited significant positive relationships with theory of planned behavior variables ($p < 0.01$).
<p>Arbour et al. (2009) Canada Observational N=50</p>	<p>Population: Mean age: 43.5\pm12.7yr; Gender: males=35, females=15; Mean time post-injury: 13.8\pm10.4yr; Severity of injury: complete (15), incomplete (35); Wheelchair users: 52% manual No Intervention: Questionnaire Outcome Measures: Perceived proximity to a fitness center compared to time spent participating in leisure time physical activity</p>	<ol style="list-style-type: none"> There was no significant association between leisure time physical activity and perceived proximity to a fitness center ($p < 0.1$).
<p>Van den Berg-Emons et al. (2008) The Netherlands Observational N_{Initial}=36, N_{Final}=16</p>	<p>Population: T1: Mean age: 42.1yr; Gender: males=28, females=8. T5 (n=16): Mean age: 42.2yr; Gender: males=14, females=2. No Intervention: Participants' physical activity level was monitored 2 consecutive weekdays every assessment period using an activity monitor. Data was collected at the start of inpatient rehabilitation (T1), 3 months later (T2), at discharge from inpatient rehabilitation (T3), and 2 months (T4) and 1 year post discharge (T5). Outcome Measures: Physical activity level based on accelerometry-based activity monitor.</p>	<ol style="list-style-type: none"> Physical activity level increased significantly between T1 and T3 ($p < 0.01$). Duration of dynamic activities increased by 41% (20min per 24hr; $p < 0.001$) and average body motility by 19% ($p = 0.008$). Duration of dynamic activities significantly decreased from T3 to T4 (33%, $p < 0.001$). Age was significantly related to average body motility; an increase in 1yr was associated with a decrease of 7.8-10-5g average body motility. Sex and completeness of lesion were not significantly related with physical activity level. Those with paraplegia and with an incomplete lesion showed significantly more improvement in the duration of dynamic activities in the year after discharge than did those with tetraplegia and with a complete lesion, respectively. At T5 duration of dynamic activities was 49 minutes per day. No one had wheelchair

		driving periods that lasted more than 10 minutes.
O'Neill et al. (2004) UK Observational N=33	<p>Population: SCI=27, Guillain-Barre Syndrome=6. Gender: males=27, females=6.</p> <p>No Intervention: A telephone survey was completed capturing patients' perception of the effect of sport on rehabilitation.</p> <p>Outcome Measures: Sports participation.</p>	<ol style="list-style-type: none"> 45.5% of participants previously participated in regular sporting activity. During inpatient admission, at least one sport was tried by 72.7% of participants (bowling, archery, swimming, table tennis, basketball and darts). 14 participants reported regular sporting activity post discharge. Those who regularly exercised were mostly male, aged 16-35yr, had exercised previously. Cardiovascular training was the most popular exercise activity (training at a gym, n=6; swimming, n=3; bowling, n=2). The general benefit of sporting activity was recognized by 78.8% and the rehabilitation benefit by 69.7%. Self-reported benefits from participants (n=26) included increases in fitness, quality of life, confidence and social contact. Two top reasons for not exercising were poor accessibility (n=5) and not interested in sports (n=5).
Manns and Chad (1999) Canada Observational N=38	<p>Population: Mean Age=30.1±9.8yr; Gender: Males=20, Females=3; Level of Injury: Quadriplegic=17, Paraplegic=21; Severity of Injury=complete; Time Since Injury=2-30yr.</p> <p>No Intervention: Not applicable. Cross sectional analysis to determine the relationships among fitness, physical activity, subjective quality of life and handicap in individuals with SCI.</p> <p>Outcome Measures: Fitness level, leisure time exercise questionnaire, Quality of Life Profile: Physical and Sensory Disabilities Version, Craig Handicap Assessment Reporting Technique.</p>	<ol style="list-style-type: none"> Physical activity was significantly correlated with level of impairment in individuals with quadriplegia or paraplegia (p<0.05). Scores for physical independence, mobility and occupation were significantly correlated with physical activity in individuals with quadriplegia (p<0.05). There was no correlation between subjective quality of life scores and fitness/physical activity in individuals with paraplegia or quadriplegia (p>0.05). More active individuals were younger and has shorter durations of injury, although, only the difference in age was significant (p<0.05).
Foreman et al. (1997) Australia Observational N=121	<p>Population: <i>Sport participants (n=54):</i> Mean age: 31.93±8.23yr; Mean age at injury: 21.02±7.09yr; Gender: males=49, females=5; Level of injury: C=21. <i>Nonparticipants (n=67):</i> Mean age: 38.34±9.25yr; Mean age at injury: 25.02±9.40yr; Gender: males=53, females=14; Level of injury: C=45.</p> <p>No Intervention: Individuals completed a set of questionnaires including requests for demographic information and assessments of depression and anxiety.</p> <p>Outcome Measures: Centre for Epidemiological Studies Depression Scale, State Tait Anxiety Inventory.</p>	<p>There were significant differences in age, age at injury, level of lesion, and income between the groups (p<0.05).</p> <p>No significant differences were found for depression between the groups (p=0.099).</p> <p>Nonparticipants had a significantly higher score in trait anxiety than sport participants (p=0.048).</p>