

Quick Review of Model System Research

Spinal Cord Injury-Functional Index: Item Banks to Measure Physical Functioning in Individuals With Spinal Cord Injury

What is the study about?

This study was conducted to develop a set of items to measure physical functioning in people with spinal cord injury (SCI). The goal of the new assessments is to develop an improved SCI-Functional Index (SCI-FI).

Who participated in the study?

Subjects had experienced an SCI, were at least 18 years old, and could speak and understand English fluently. The sample included people with varying levels of injury, completeness of injury, and lengths of time since injury.

How was the study conducted?

Twelve group interviews were held with people with SCI, and six group interviews were held with clinicians who treat people with SCI. The groups' feedback was used to find important domains of physical function. These included several categories of mobility, self-care and upper limb functioning, sexual functioning, and use of communication devices. Researchers looked at interview data to identify potential activities, skills, and tasks to be included in the SCI-Functional Index.

Content that overlapped from related databanks were included in the items of the SCI-FI measure where appropriate. The research team developed, refined, and field-tested items measuring physical function with a sample of individuals with SCI (N= 855). Participants were asked to respond to each item based on how well they performed the activity without special equipment or help.

What did the study find?

The results of the study indicate that a 5-factor model would be most effective at measuring physical functioning. The model includes basic mobility, ambulation, wheel chair mobility, self-care, and fine motor function. This model best aligned with the feedback received from individuals with SCI and SCI clinicians. The research suggests that measuring physical function in people with SCI is more complex than for the general population. The researchers propose that the 5-factor solution allows for comprehensive assessment of key domain areas of physical functioning.

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