Impact on Participation and Autonomy Questionnaire (IPAQ)

Assessment Overview

Assessment Area

ICF Domain: Participation
Subscales: Participation Domain
  - Autonomy Outdoors
  - Autonomy Indoors
  - Family Role
  - Social Relations
  - Paid Work and Education
Problem Experience Domain

Summary

The IPAQ is a self-administered questionnaire developed using the ICF model of human functioning and disability. It assesses autonomy and participation as perceived by the individual. It measures two different aspects of participation: perceived participation and the experience of problems of participation.

You Will Need

Length: 20 minutes, 39 items
Scoring: Items rated 0-4, subscale scores are means of respective items. Each domain can also be summed to create domain scores (Participation = 30-155, Problem Experience = 0-16). Higher scores indicate lower autonomy.

Availability

http://www.scireproject.com/sites/default/files/worksheet_impact_on_participation_and_autonomy_questionnaire_ipaq.docx
Languages: English

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI

Statistical Error

Standard Error of Measurement:
  - Autonomy Indoors = 0.25
  - Family Role = 0.30
  - Autonomy Outdoors = 0.42
  - Social Life & Relationships = 0.28
  - Work & Education = 0.35

Minimal Detectable Change:
  - Autonomy Indoors = 0.70
  - Family Role = 0.83
  - Autonomy Outdoors = 1.18
  - Social Life & Relationships = 0.76
  - Work & Education = 0.96

(Noonan et al. 2010a; n=545, 145 with SCI, 79 males, mixed injury types, no info on chronicity; n=187 with spinal column fracture; n=213 with spinal degenerative disease)

Typical Values

Mean (SD) Subscale Scores:
  - Autonomy Indoors = 0.55 (0.77)
  - Family Role = 0.99 (0.97)
  - Autonomy Outdoors = 1.14 (1.14)
  - Social Life & Relationships = 0.62 (0.70)
  - Work & Education = 0.99 (1.12)

Higher scores indicate lower autonomy

(Noonan et al. 2010a; n=545, 145 with SCI, 79 males, mixed injury types, no information on chronicity; n=187 with spinal column fracture; n=213 with spinal degenerative disease)
Measurement Properties

Validity – Low to High

**Moderate** to **High** correlation between IPAQ Autonomy Indoors and:
London Handicap Scale = -0.31 to -0.68
Functional Limitations Profile = 0.43 to 0.63
SF-36 = -0.43 to -0.57

**Moderate** to **High** correlation between IPAQ Family Role and:
London Handicap Scale = -0.37 to -0.70
Functional Limitations Profile = 0.50 to 0.66
SF-36 = -0.42 to -0.68

**Moderate** correlation between IPAQ Social Life and Relationships and:
London Handicap Scale = -0.32 to -0.58
Functional Limitations Profile = 0.45 to 0.53
SF-36 = -0.43 to -0.46

**Low** to **High** correlation between IPAQ Autonomy Outdoors and:
London Handicap Scale = -0.29 to -0.74
Functional Limitations Profile = 0.45 to 0.66
SF-36 = -0.45 to -0.65

**Low** to **Moderate** correlation between IPAQ Work and Education and:
London Handicap Scale = -0.19 to -0.51
Functional Limitations Profile = 0.42 to 0.50
SF-36 = -0.40 to -0.49

(Sibley et al. 2006; n=213 (42 SCI); 89 male, outpatient)

Reliability – High

**High** Test-retest Reliability:
Autonomy Indoors: ICC = 0.84
Family Role: ICC = 0.88
Autonomy Outdoors: ICC = 0.85
Social life and relationships: ICC = 0.83
Work and Education: ICC = 0.86

**High** Internal Consistency:
Autonomy Indoors: \( \alpha = 0.94 \)
Family Role: \( \alpha = 0.95 \)
Autonomy Outdoors: \( \alpha = 0.95 \)
Social life and relationships: \( \alpha = 0.90 \)
Work and Education: \( \alpha = 0.96 \)

(Noonan et al. 2010a; n=545, 145 with SCI, 79 males, mixed injury types, no information on chronicity; n=187 with spinal column fracture; n=213 with spinal degenerative disease)

Number of studies reporting reliability data: 5

Responsiveness

Floor/Ceiling Effect:
There are significant ceiling effects (>20% have best possible score) in all the IPAQ subscales.

(Lund et al. 2007; n=161, 101 males, mixed injury types, no information on chronicity)

Effect Size:
Standardized Response Mean:
Not established in SCI. For patients with various neurological diagnoses:
  - Autonomy Indoors (0.4)
  - Family Role (0.8)
  - Autonomy Outdoors (1.2)
  - Social Relations (0.1)
  - Work and Education (1.3)

(Cardol et al. 2002; n=49, 13 male; mixed diagnoses; median duration of disease = 2 years)

Number of studies reporting responsiveness data: 1