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

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.

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.

Availability

Worksheet: Can be found here.

Languages: English and Thai.

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; ASIA A-D; n=187 spinal column fracture; n=213 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)

(Noonan et al. 2010a; n=545; 145 with SCI, 79 males; ASIA A-D; n=187 spinal column fracture; n=213 spinal degenerative disease)

Measurement Properties

Validity – **Low** to **High**

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

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

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

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

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

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

Number of studies reporting validity data: 7

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: α = 0.94
Family Role: α = 0.95
Autonomy Outdoors: α = 0.95
Social life and relationships: α = 0.90
Work and Education: α = 0.96

(Noonan et al. 2010a; n=545; 145 with SCI, 79 males; ASIA A-D; n=187 spinal column fracture; n=213 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, 60 females; mean age: 52 years; 100 paraplegia, 61 tetraplegia)

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 males; mixed diagnoses; median duration of disease = 2 years)

Number of studies reporting responsiveness data: 1