Physical Activity Scale for Individuals with Physical Disabilities (PASIPD)

Assessment Overview

Assessment Area

ICF Domain:

Activity

Subcategory:

Self-Care

You Will Need

Approximately 15 minutes to complete 13 items.

Administration:

• Survey can be administered by mail, telephone, or in person.

Scoring:

- Participants rate their responses on a scale from 1 (never) to 4 (often) and duration responses range from 1 (less than 1 hour/day) to 4 (greater than 4 hours/day).
- The total PASIPD score is calculated by multiplying the time spent in each activity (hours per week) or participation (i.e., yes/no) in an activity, by a weight (the Metabolic Equivalent value or METS) and then adding the results together.
- Scores range from 0 (no activity) to >100 METS hr/day (very high).

Summary

The Physical Activity Scale for Individuals with Physical Disabilities (PASIPD) is a modified version of the Physical Activity Scale for the Elderly and was developed to assess individuals with visual/auditory and locomotor/SCI disabilities.

The PASIPD asks participants about the frequency (number of days a week) and duration (daily hours) their occupational, household, and leisure activities during a one-week period.

It may be useful to use the PASIPD to quantify the health benefits or risks of the activity level of people with physical disabilities.

Availability

Worksheet: Can be found here.

Languages: English, Malaysian, and Turkish.

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI

Statistical Error

Not established in SCI

Typical Values

Mean Intensity Score (SD):

10.9 (12.0) MET hours/day

(Van Den Berg-Emons et al. 2011; n=124 (21 SCI); 14 males, 7 females; mean (SD) age: 40.7 (14.3) years)

*MET = metabolic equivalent value

Measurement Properties

Validity - Low to High

Low to Moderate correlation with Activity Monitor duration:

Spearman's ρ = 0.31 (PASIPD duration score only; N=21 SCI) Spearman's ρ = 0.28 (PASIPD intensity score only; N=21 SCI) (Van Den Berg-Emons et al. 2011; n=124 (21 SCI); 14 males, 7 females; mean (SD) age: 40.7 (14.3) years)

Moderate correlation with Utrecht Activities List (UAL):

Spearman's $\rho = 0.51$

Moderate correlation with Subscales Mobility Range and Social Behaviour of SIP68 (SIPSOC):

Spearman's $\rho = 0.47$

(de Groot et al. 2010; n=139; 73% males; mean (SD) age: 41.5 (14.1) years; 68% paraplegia, 64% complete lesion; and mean time since injury: 705 days)

Moderate correlation with FIM:

r = 0.307 (p = 0.040)

Low to High correlation with CHART-SF subscales:

CHART-SF physical independence: r = 0.204 (p = 0.168) CHART-SF cognitive independence: r = 0.357 (p = 0.014)

CHART-SF mobility: r = 0.597 (p = 0.00) CHART-SF occupation: r = 0.393 (p = 0.006) CHART-SF social integration: r = 0.545 (p = 0.000) CHART-SF economic self sufficiency: r = 0.107 (p = 0.473)

Moderate correlation with NHP (Part 1 total score):

r = 0.443 (p = 0.002)

Moderate correlation with 20 Meters Propulsion test:

r = -0.404 (p = 0.005)

Moderate correlation with Slalom Test:

r = -0.305 (p = 0.037)

Moderate correlation with 6 min Propulsion test:

r = 0.456 (p = 0.001)

(Köce et al. 2022; n=47; 21 male, 26 females; mean (SD) age: 43.98 (13.50) years; ASIA A-D; 10 tetraplegia, 37 paraplegia; Turkish version)

Number of studies reporting validity data: 5

Reliability - Low to High

Low to Moderate Internal Consistency:

Cronbach's $\alpha = 0.37-0.725$

(Washburn et al. 2002; n=372; 227 males, 145 females; 56 paraplegia, 38 tetraplegia, 21 unspecified SCI)

(Mat Rosly et al. 2019; n=250; 177 males, 73 females; mean (SD) age: 42.6 (14.4) years; traumatic injury; mean (SD) time since injury: 13.2 (11.4) years; Malaysian version)

(Köce et al. 2022; n=47; 21 male, 26 females; mean (SD) age: 43.98 (13.50) years; traumatic and non-traumatic; 26 ASIA A, 6 ASIA B, 13 ASIA C, 2 ASIA D; 10 tetraplegia, 37 paraplegia; Turkish version)

Moderate to High Test-retest Reliability

ICC = 0.851 - 0.87

(Mat Rosly et al. 2019; n=250; 177 males, 73 females; mean (SD) age: 42.6 (14.4) years; traumatic injury; mean (SD) time since injury: 13.2 (11.4) years; Malaysian version)

(Köce et al. 2022; n=47; 21 male, 26 females; mean (SD) age: 43.98 (13.50) years; traumatic and non-traumatic; 26 ASIA A, 6 ASIA B, 13 ASIA C, 2 ASIA D; 10 tetraplegia, 37 paraplegia; Turkish version)

For a mixed population:

Spearman's $\rho = 0.77$

(van der Ploeg et al. 2007; n=45; 18 male, 27 female; participants were all wheelchair non-dependent, who had stroke, SCI, whiplash, and neurological, orthopedic- or back disorders)

Inter-rater and Intra-rater Reliability:

Not established in SCI

Number of studies reporting reliability data: 5

Responsiveness