

The Appraisals of DisAbility: Primary and Secondary Scale (ADAPSS)

Assessment Overview

Assessment Area

ICF Domain:

Body Functions

Subcategory:

General Functions

You Will Need

Length:

Original version: 33 items.

Short-form: 6 items.

Scoring:

For both versions, scores range from 1 (strongly disagree) to 6 (strongly agree).

For specific instructions about the scoring algorithm, see the ADAPPS worksheet or visit <https://drive.google.com/drive/folders/127XKXU3eerOmEDI25cG2es8YGknHsfQ7>

Summary

ADAPSS primary scale assesses 'an individual's initial evaluation of an event or situation'. Its secondary scale assesses 'an individual's evaluation of their own coping resources, the possibility of these resources being adequate, and the likelihood that these resources can be employed effectively'.

The scale consists of 6 subscales:

1. Fearful Despondency
2. Overwhelming Disbelief
3. Determined Resolve
4. Growth and Resilience
5. Negative Perceptions of Disability
6. Personal Agency

A short-form version was introduced in 2009 by Dean and Kennedy ([Dean and Kennedy 2009](#)).

Availability

Worksheet:

- The ADAPPS worksheet can be found [here](#).
- The ADAPPS scoring instructions and the scoring tool can be downloaded [here](#).

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI

Statistical Error

Not established in SCI

Typical Values

Mean (SD) scores reported for the ADAPSS-sf have varied from 13.94 to 19.21 (6.10-7.44)

(Eaton et al. 2018; n=371; 261 males, 110 females; non-traumatic and traumatic; injury level: Cervical-sacral; AIS A-D) (Mignogna et al. 2014; n=98; 94 males, 4 females; mean (SD) age: 18.3 (13.1) years; tetraplegia (low): n=14, tetraplegia (high, AIS A,B,C): n=6, AIS D: n=41; traumatic injury: yes (77), no (21))

(Deane et al. 2020; n=115; age: 18 years or younger at time of SCI, initially interviewed at age 19 or older, and followed annually)

(McDonald et al. 2018; n=262; 92% males; median age: 59 years; traumatic and non-traumatic SCI; 51% AIS D; paraplegia and tetraplegia)

Mean (SD) scores reported for the ADAPSS long form subscales are:

- Fearful Despondency: 31.27 (9.43).
- Overwhelming Disbelief: 13.18 (5.32)
- Determined Resolve: 8.36 (3.82)
- Growth and Resilience: 12.32 (4.79)
- Negative Perceptions of Disability: 17.59 (5.89)
- Personal Agency: 12.05 (4.37)

(Kennedy et al. 2016; n=44; 37 males, 7 females; mean age: 33.3 years; level of injury: 46% cervical, 34% thoracic, and 20% lumbar; AIS level: 60% complete and 40% incomplete injuries; mean (range) time since injury: 23.1 (21-24) years; 22/44 participants were deceased)

High scores on the Fearful Despondency, Overwhelming Disbelief, and Negative Perceptions of Disability subscales are more likely to appraise their injury in terms of loss and threat and to perceive their injury as unmanageable.

Low scores on the Determined Resolve, Growth and Resilience, and Personal Agency subscales were more likely to appraise their injury in terms of loss and threat and to perceive their injury as unmanageable.

The correlation between injury level and the ADAPSS-sf total score are low (β value = 0.153 [$p < 0.051$])

(Mignogna et al. 2014; n=98; 94 males, 4 females; mean (SD) age: 18.3 (13.1) years; tetraplegia (low): n=14, tetraplegia (high, AIS A,B,C): n=6, AIS D: n=41; traumatic injury: yes (77), no (21))

Threshold values: Research has suggested cut-off scores for the ADAPSS-sf ranging from ≥ 22 to ≥ 27 ; indicating catastrophic negative based on 85th percentile cutoff.

(Eaton et al. 2018; n=371; 261 males, 110 females; non-traumatic and traumatic; injury level: Cervical-sacral; AIS A-D)
(Deane et al. 2020; n=115; age: 18 years or younger at time of SCI, initially interviewed at age 19 or older, and followed annually)

Measurement Properties

Validity – Low to High

Low to Moderate Correlation between the Perceived Manageability Scale – Needs Assessment Checklist and ADAPSS subscales (Fearful Despondency):

Fearful Despondency: $p=-0.597$

Overwhelming Disbelief: $p=-0.468$

Determined Resolve: $p=-0.599$

Growth and Resilience: $p=-0.345$

Negative Perceptions of Disability: $p=-0.533$

Personal Agency: $p=-0.519$

Moderate Correlation between the Hospital Anxiety and Depression Scale – Anxiety subscale and ADAPSS subscales:

Fearful despondency: $p=0.649$ ($p<0.01$)

Low to Moderate Correlation between the Hospital Anxiety and Depression Scale – Anxiety subscale and ADAPSS subscales:

Overwhelming Disbelief: $p=0.597$ ($p<0.01$)

Determined Resolve: $p=0.347$ ($p<0.01$)

Negative Perceptions of Disability: $p=0.496$ ($p<0.01$)

Personal Agency: $p=0.393$ ($p<0.01$)

Low Correlation between the Hospital Anxiety and Depression Scale – Anxiety subscale and ADAPSS subscales:

Growth and Resilience: $p=0.187$ ($p<.001$)

(Dean & Kennedy 2009; n=237; 162 males, 75 females; mean age = 47 (range: 18-81); tetraplegia: 37%, paraplegia: 56%, unknown: 7%)

High Correlation between ADAPPS-sf total score and life satisfaction:

β value = -0.72 ($p<0.001$)

Low Correlation between ADAPPS-sf total score and controlling for depressive symptoms:

β value = 0.05 ($p<0.604$)

(Mignogna et al. 2014; n=98; 94 males, 4 females; mean (SD) age: 18.3 (13.1) years; tetraplegia (low): n=14, tetraplegia (high, AIS A, B, C): n=6, AIS D: n=41; traumatic injury: yes (77), no (21))

Low to Moderate correlations between all subscales of appraisals of disability and all the subscales of the

Reliability – High

High Internal consistency for the ADAPSS subscales:

Personal Agency: $\alpha=0.70$

Fearful Despondency: $\alpha=0.85$

High Test-retest reliability for the ADAPSS subscales

$\alpha=0.74-0.86$

(Dean & Kennedy 2009; n=237; 162 males, 75 females; mean age = 47 (range: 18-81); tetraplegia: 37%, paraplegia: 56%, unknown: 7%)

Number of studies reporting reliability data: 3

Multidimensional Acceptance of Loss Scale and the Heartland Forgiveness Scale:

$r = -0.244$ to -0.647 ($p < 0.01$)

(Byra et al. 2020; $n=163$; 100 males, 63 females; mean (SD) age: 39.6 (9.38) years; injury level: 26 C1-C4 nonambulatory, 104 C5-C8 nonambulatory, 33 non-cervical, nonambulatory; mean time since injury: 12.05)

Moderate to High correlations between the ADAPSS subscales and Beck Depression Inventory:

Fearful despondency: $r = 0.660$, $p = 0.001$

Overwhelming disbelief: $r = 0.697$, $p = 0.001$

Determined resolve: $r = 0.814$, $p = 0.001$

Negative perceptions of disability: $r = .509$, $p = .016$

Personal agency: $r = 0.627$, $p = 0.002$

(Kennedy et al. 2016; $n=44$; 37 males, 7 females; mean age: 33.3 years; level of injury: 46% cervical, 34% thoracic, and 20% lumbar; AIS level: 60% complete and 40% incomplete injuries; mean (range) time since injury: 23.1 (21-24) years; 22/44 participants were deceased)

Number of studies reporting validity data: 6

Responsiveness

Floor/Ceiling Effect:

Not established in SCI

Effect Size:

Not established in SCI

**Number of studies reporting
responsiveness data: 0**