Moorong Self-Efficacy Scale (MSES)

Assessment Overview

Assessment Area

ICF Domain:
Body Function
Subcategory:
General Function
Subscales (Factors):
Daily Activities / Instrumental Self-efficacy
Social Functioning / Interpersonal Self-efficacy

You Will Need

Length:
5 minutes, 16 items
Scoring:
Items rated 1-7 (1 = "very uncertain", 7 = "very certain"), total score (16-112) as sum of item scores
Each factor scored as sum of select items
Higher scores mean great self-efficacy

Summary

The Moorong Self-Efficacy Scale (MSES) is a self-report questionnaire developed to measure self-efficacy in performing functional activities of daily living in people with SCI.

It consists of three factors (social function self-efficacy, general self-efficacy, and personal function self-efficacy) and sixteen items. Monitoring specific areas of higher or lower self-efficacy may assist a person's rehabilitation.

Availability

Worksheet: Can be found here.

Languages: English, Chinese, Swedish, French, and Italian

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI

Statistical Error

Not established in SCI

Typical Values

Mean (SD) scores:
1 month after re-mobilization following acute treatment = 84.10 (19.72)
3 months after re-mobilization following acute treatment = 91.90 (16.95)
6 months after re-mobilization following acute treatment = 91.55 (18.92)
(Middleton et al. 2003; N=31; 23 males, paraplegia and tetraplegia, complete and incomplete injuries; inpatient, mean (SD) time since injury: 2.01 (2.50) months)

Post-discharge from inpatient rehabilitation = 84.14 (21.72)
(Middleton et al. 2003; N=108; 30 males; paraplegia and tetraplegia, complete and incomplete injuries; community living; mean (SD) time since injury: 7.92 (9.83) years)

Measurement Properties

Validity – Moderate to High

High correlation with Sickness Impact Profile-68 (SIP-68) Psychosocial Subscale:

ρ = -0.80

(Middleton et al. 2003; N=36; 28 males, paraplegia and tetraplegia, complete and incomplete injuries; mean (SD) time since injury: 11.2(9.7) years)

Moderate to High correlation with Depression Anxiety Stress Scale - 21 (DASS-21) Subscales:

r = -0.58 to -0.63

(Killic et al. 2013; N=60; 41 males, 41 incomplete, 18 complete; mean (SD) time since injury: 5.7(7.3) years)

Moderate correlation with Centre for Epidemiologic Diseases Depression Scale (CESD-10) and correlation with Satisfaction with Life Scale (SWLS):

CEDS: r = -0.54; SWLS: r = 0.51

(Miller 2009; N=162; 68.5% males; injury level: Cervical-sacral; mean (SD) time since injury: 9.2(8.6) years)

Moderate correlation with Hospital Anxiety and Depression Scale (HADS) Subscales:

ρ = -0.31 to -0.56

(Munce et al. 2015; N=99; traumatic SCI; outpatient; mean (SD) time since injury: 17.5 (12.3) years)

Moderate correlation with age and Factor 1 (Social Function Self-Efficacy):

r =-0.32 (P<.01)

(Middleton et al. 2016; N=161; 118 males; age: 48.5±15.1 years; level of injury: 86 paraplegia, 75 tetraplegia; time postinjury: 16.2±12.2)

High correlation with the Life Satisfaction Questionnaire (LiSat-11):

r = 0.72, p < 0.001

High correlation with the Connor Davidson Resilience Scale (CD-RISC):

r = 0.76, p < 0.001

(Mangold et al. 2024; N=92; 58 males, 24 females; median age = 47; Swedish version of MSES)

High correlation with General Self-Efficacy Scale:

r = 0.660, p < 0.001

(Jia et al. 2022; N=176; 129 males, 47 females; mean age = 39.51; 76 complete, 90 incomplete; injury level: cervical-lumbosacral; mean time since injury: 10.32 months; Chinese version of MSES)

Number of studies reporting validity data: 8

Reliability – Low to High

Low to High internal consistency for the item-total correlation:

6 of 8 items: 0.46-0.80

2 of 8 items (item 2 and item 4): 0.17 and 0.25

(Middleton et al. 2003; N=36; 28 males, paraplegia and tetraplegia, complete and incomplete injuries; mean (SD) time since injury: 11.2(9.7) years)

Moderate internal consistency for Factor 1 (social function self-efficacy; 5 items):

α = 0.77

High internal consistency for Factor 2 (general self-efficacy; 4 items):

α = 0.81

High internal consistency for Factor 3 (personal function self-efficacy; 7 items):

α = 0.80

(Middleton et al. 2016; N=161; 118 males; age: 48.5±15.1 years; level of injury: 86 paraplegia, 75 tetraplegia; time postinjury: 16.2±12.2)

High internal consistency for full scale

α = 0.92

High internal consistency for the general sub-scale

α = 0.83

(Mangold et al. 2024; N=92; 58 males, 24 females; median age = 47; Swedish version of MSES)

High internal consistency

Total items: α = 0.892

Factor 1: α = 0.862

Factor 2: α = 0.817

Factor 3: α = 0.739

(Jia et al. 2022; N=176; 129 males, 47 females; mean age = 39.51; 76 complete, 90 incomplete; injury level: cervical-lumbosacral; mean time since injury: 10.32 months; Chinese version of MSES)

High internal consistency:

α = 0.87

(Marquez et al. 2022: n=65, 41 males, 24 females; tetraplegia and paraplegia; ASIA A-D; mean time since injury = 26 years; Italian version)

High internal consistency for the general sub-scale

α = 0.87

(Gounelle et al. 2022; N=201; 157 males, 44 females; mean age: 48 years; ASIA level: 114A, 17B, 29C, 38D; French version of MSES)

High Test-retest reliability

ICC = 0.74-0.99

(Jia et al. 2022; N=176; 129 males, 47 females; mean age = 39.51; 76 complete, 90 incomplete; injury level: cervical-lumbosacral; mean time since injury: 10.32 months; Chinese version of MSES)

(Marquez et al. 2022: n=65, 41 males, 24 females; tetraplegia and paraplegia; ASIA A-D; mean time since injury = 26 years; Italian version)

(Gounelle et al. 2022; N=201; 157 males, 44 females; mean age: 48 years; ASIA level: 114A, 17B, 29C, 38D; French version of MSES)

Number of studies reporting reliability data: 6

Responsiveness

Floor/Ceiling Effect:
No program participant scored the lowest possible score in any subscale.
Ceiling effects were noted in the social sub-scale where 17.6% scored the highest possible score. In total, 4.3% of the participants scored the highest possible score on the full scale.

(Mangold et al. 2024; N=92; 58 males, 24 females; median age = 47; Swedish version of MSES)

Effect Size:
Not established in SCI

Detection of Change:
Wilcoxon signed-ranks tests found significant changes in:

Total score and 6/8 items between 1 and 3 months post-re-mobilization.

1/8 items between 3 and 6 months post-remobilization.

(Middleton et al. 2003; N=31; 23 males, paraplegia and tetraplegia, complete and incomplete injuries; inpatient; mean (SD) time since injury: 2.01 (2.50) months)

Number of studies reporting responsiveness data: 1