## Reviewer ID: Christie Chan, John Zhu, Jeremy Mak, Matthew Querée, Risa Fox

### Type of Outcome Measure: Moorong Self-Efficacy Scale (MSES)

<table>
<thead>
<tr>
<th>Author ID Year</th>
<th>Study Design</th>
<th>Setting</th>
<th>Population (sample size, age) and Group</th>
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</thead>
</table>
Age: 48.5±15.1 years  
Level of injury: 86 paraplegic, 75 tetraplegic  
Time postinjury: 16.2±12.2 years  
Australia:  
N=82  
Age: 48.6±13.1 years  
Level of injury: 44 paraplegic, 38 tetraplegic  
Time postinjury: 15.8±13.7 years  
US:  
N=79  
Age: 48.5±13.1 years  
Level of injury: 42 paraplegic, 37 tetraplegic  
Time postinjury: 16.7±10.5 years |
| Kilic et al. 2013 | Cross-sectional Survey | Hampstead Rehabilitation Centre, South Australia | N=60 (19F, 41M)  
Age: 50.8 ± 17.0  
Time Since Injury (years): 5.7 ± 7.3  
Incomplete lesion: 41  
Complete: 18  
Missing data: 1 |
| Middleton et al. 2003 | Descriptive, correlational study, validation study of a new instrument | Moorong Spinal Unit of the Royal Rehabilitation Centre Sydney, Sydney, New South Wales, Australia. | Sample 1: People with SCI living in the community who previously were at in-patient rehabilitation  
N=36, 28 male  
Mean age 36.33 (SD = 9.52)  
Mean time post-trauma 11.23 (SD = 9.67) years  
11 paraplegia, 25 tetraplegia  
15 incomplete, 21 complete  
Sample 2: People who had recently sustained a SCI and were currently enrolled at in-patient rehabilitation  
N=31, 23 male  
Mean age 31.48 (SD = 10.46)  
Mean time post-trauma 2.01 (SD = 2.50) months  
21 paraplegia, 10 tetraplegia  
13 incomplete, 18 complete  
Sample 3: People with SCI living in the community who previously were at in-patient rehabilitation  
N=108, 30 male  
Mean age 45.26 (SD = 15.99)  
Mean time post-trauma 7.92 (SD = 9.83) years  
66 paraplegia, 42 tetraplegia |
Miller 2009  
Study examining factorial and concurrent validity  
Florida Brain and Spinal Cord Injury Program and the Florida Spinal Cord Injury Resource Centre  
162 SCI participants (68.5% male, 31.5% female)  
mean age: 45.8±13.4  
mean years post-injury: 9.2±8.6  
Ethnic background:  
73.5% European American  
14.2% African American  
7.4% Latino/Latina  
2.5% Native American  
2.5% Asian American.  
Injury level:  
54.3% cervical  
40.8% thoracic  
3.7% lumbar  
1.2% sacral

Munce et al. 2016  
Online Survey  
Rick Hansen Institute and an outpatient spinal clinic  
N=99  
Age: 50.5 ± 1.0  
Time Since Injury (years): 17.5 ± 12.3

### 1. RELIABILITY

<table>
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<tr>
<th>Author ID</th>
<th>Internal Consistency</th>
<th>Test-retest, Inter-rater, Intra-rater</th>
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| Middleto n et. al 2016 | Factor 1 (social function self-efficacy; 5 items): α=.77  
Factor 2 (general self-efficacy; 4 items): α=.81  
Factor 3 (personal function self-efficacy; 7 items): α=.80 | no data available |
| Middlet oon et al. 2003 | Item-total Spearman correlations (Sample 1 only, N=36): 6 of 8 items: 0.46-0.80 (P<0.01)  
Item 2 (bowel accidents): 0.17 (P>0.05)  
Item 4 (family relationships): 0.25 (P>0.05) |

### 2. VALIDITY

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| Middleto n et. al. 2016 | Negative correlation found between age and factor 1 (r=-.32, P<.01)  
No sex differences found in factors 2 and 3, but women scored higher in factor 1 than men (P<.05) |
| Kilic et al. 2013 | Negatively correlated with Depression portion of DASS-21 (Pearson r=-0.63, P< 0.01)  
Negatively correlated with Anxiety portion of DASS-21 (Pearson r=-0.54, P< 0.01) |
Negatively correlated with Stress portion of DASS-21 (Pearson r=-0.58, P< 0.01)

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| Middleto n et al. 2003 | Spearman correlations of MSES with (Sample 1 only, N=36):  
Hospital Anxiety and Depression Scale (HADS) anxiety: -0.58 (P<0.001)  
Functional Independence Measure (FIM) motor(N=34): 0.04 (P>0.05)  
FIM cognitive: 0.39 (P<0.05)  
Sickness Impact Profile (SIP-136) physical: -0.11 (P>0.05)  
Craig Handicap Assessment and Reporting Technique (CHART) physical (N=29): -0.07 (P>0.05)  
CHART mobility: 0.15 (P>0.05)  
CHART occupational: 0.47 (P<0.05)  
CHART social: -0.24 (P>0.05) |
| Miller 2009 | MSES scores were found to be significantly positively related to Satisfaction with Life Scale (SWLS) scores (r=0.51, P<.001) and Personal Resources Questionnaire-2000 (PRQ-2000) scores (r=0.56, P<.001). MSES scores were significantly negatively associated with Centre for Epidemiologic Diseases Depression Scale (CESD-10) scores (r=-0.54, P<.001). Employment status was found to be positively related to the total score of the MSES (r=0.23, P<.001). Years since disability, injury level and living situation were found to be unrelated to self-efficacy, as measured by the total score of the MSES.  
Correlations of Moorong Self-Efficacy Scale Factors with selected variables:  
MSES Factor 1 (Interpersonal):  
Years since injury: -.018  
Injury Level: -.051  
Living situation: .087  
Employment: .222 (P<.01)  
SWLS: .473 (P<.001)  
CESD-10: -.557 (P<.001)  
PRQ-2000: .625 (P<.001) |
| Munce et al. 2016 | Negatively correlated with Depression portion of HADS (Spearman rho=-0.560, P< 0.01)  
Negatively correlated with Anxiety portion of HADS (Spearman rho=-0.315, P< 0.01) |
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| Middleto n et al. 2003 | Wilcoxon signed-ranks tests (Sample 2 only, N=31):  
Test occasion 1 (T1) – 1-month post remobilization following acute treatment  
Test occasion 2 (T2) – 3-month post remobilization  
Test occasion 3 (T3) – 6-month post remobilization  
Significant improvement in between T1 & T2 in:  
Total score: z = -3.29, P<0.01  
Item 1 (personal hygiene): z = -3.34, P<0.001  
Item 3 (household participation): z = -3.34, P<0.05 |
| Item 8 (leisure): z = -3.09, P<0.01 |
| Item 12 (accomplishing things): z = -2.18, P<0.05 |
| Item 14 (meeting people): z = -1.99, P<0.05 |
| Item 15 (good health): z = -2.24, P<0.05 |

Significant improvement in between T2 & T3 in:
- Total score: z = -0.01, P>0.05
- Item 13 (persistence in learning things): z = -2.24, P<0.05

No significant difference found in total score between any test occasions comparing lesion levels or completeness of injury.

### 4. FLOOR/CEILING EFFECT – no data available

### 5. INTERPRETABILITY – no data available

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<thead>
<tr>
<th>Middleton et al. 2003</th>
<th><strong>Mean (SD) Scores</strong></th>
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<tbody>
<tr>
<td><strong>Sample 1:</strong></td>
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<td>Time 1 (in outpatient clinic) = 92.15 (16.57)</td>
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<td>Time 2 (6 weeks later) = 94.81 (14.95)</td>
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<td><strong>Sample 2:</strong></td>
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