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Last updated: January 23rd, 2024

**Research Summary – Brief Pain Inventory (BPI) – Pain**

| Author Year Country Research Design Setting | Demographics and Injury Characteristics of Sample | Validity | Reliability | Responsiveness Interpretability |
|---|---|---|---|---|
| [Raichle et al.](#) 2006<br><br>Questionnaire to examine the psychometric properties of the Brief Pain Inventory (BPI) Interference Scale and the Graded Chronic Pain (GCP) Disability Scale as measures of pain-related interference.<br><br>US Northwest home survey questionnaire | N = 127<br>Male = 92<br>Female = 35<br><br>Age range = 21 to 88; Mean, 48.56 years (12.95)<br>Mean (SD) time post injury: 16.6(10.6) years<br><br>High tetraplegia = 18<br>Low tetraplegia = 40<br>High paraplegia = 14<br>Paraplegia = 42<br>Low paraplegia = 11<br>Missing data = 2 | Correlations (Spearman's rho) with pain intensities*:<br>7-item = 0.62<br>10-item = 0.63<br>12-item = 0.61<br><br>Individual items:<br>General activity = 0.51<br>Mood = 0.57<br>Mobility = 0.58<br>Normal work = 0.50<br>Relationship with others = 0.50<br>Sleep = 0.50<br>Enjoyment of life = 0.53<br>Self-care = 0.50<br>Recreational activities = 0.59<br>Social activities = 0.54<br>Communication = 0.43<br>Learning new information and skills = 0.44<br>*P<.01 | Internal consistency: All items show High Internal consistency (Cronbach's alpha)<br><br>Composite scores:<br>7-item = 0.92<br>10-item = 0.95<br>12-item = 0.96<br><br>Individual items*:<br>General activity = 0.95<br>Mood = 0.95<br>Mobility = 0.95<br>Normal work = 0.95<br>Relationship with others = 0.95<br>Sleep = 0.95<br>Enjoyment of life = 0.95<br>Self-care = 0.95<br>Recreational activities = 0.95<br>Social activities = 0.95<br>Communication = 0.95<br>Learning new | Mean (SD) BPI scores<br><br>（see table below） |

Mean (SD) BPI scores

| | Mean (SD) score: |
|---|---|
| *BPI composite scores* | |
| 7-item | 3.63 (2.60) |
| 10-item | 3.53 (2.62) |
| 12-item | 3.31 (2.58) |
| *BPI individual items* | |
| General activity | 3.30 (3.05) |
| Mood | 4.10 (2.96) |
| Mobility | 3.45 (3.09) |
| Normal work | 3.34 (3.08) |

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| | | All coefficients are significant and positively associated with pain intensity (Moderate to High).<br><br>Correlation (Spearman's rho) with SF-36's Mental Health scale*:<br>7-item = -0.62<br>10-item = -0.60<br>12-item = -0.61<br><br>Individual items:<br>General activity = -0.51<br>Mood = -0.65<br>Mobility = -0.44<br>Normal work = -0.48<br>Relationship with others = -0.63<br>Sleep = -0.30<br>Enjoyment of life = -0.64<br>Self-care = -0.41<br>Recreational activities = -0.49<br>Social activities = -0.58<br>Communication = -0.64<br>Learning new | information and skills = 0.93<br><br>*alphas represent the internal consistency with the removal of that item. | Relationships with others | 3.06 (2.95) |
| | | | | Sleep | 4.39 (3.34) |
| | | | | Enjoyment of life | 4.31 (3.46) |
| | | | | Self-care | 2.53 (2.82) |
| | | | | Recreational activities | 3.98 (3.51) |
| | | | | Social activities | 3.50 (3.44) |
| | | | | Communication | 2.36 (3.02) |
| | | | | Learning new information & skills | 2.36 (3.12) |

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| | | information and skills = -0.44<br>*P<.01<br><br>All coefficients are significant and negatively associated with the SF-36 subscale Mental Health. | | |
| [Soler et al.](#) 2013<br><br>Postal surveys; Validation of Spanish MPI-SCI (MPI-SCI-S)<br><br>Guttmann Institute, Barcelona, Spain | N=126, 78M 48F<br>Mean age 49.0±13.8<br>Mean time since injury 11.8±10.8 yrs<br>AIS-A/B/C = 78/20/28<br>43 traumatic, 83 nontraumatic<br>Chronic pain (>1yr) & SCI (>2yr) & pain rating of >=3 on Numerical Rating Scale | Pearson's r between:<br>MPI-SCI life interference subscale and BPI: 0.75, P<0.000<br>MPI-SCI pain interference with activities subscale and BPI: 0.50, P<0.000 | | |