

Research Summary – Multidimensional Pain Readiness to Change Questionnaire (MPRCQ) & MPRCQ2 – Pain

Author Year Country Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability
<p>Nielson et al. (2008)</p> <p>Postal survey (MPRCQ2)</p> <p>Research program on pain in persons with disabilities in the Department of Rehabilitation Medicine, University of Washington (UW), Seattle</p>	<p>N=127 SCI (29.6 Female)</p> <p>Mean age 44.82 ± 14.48</p> <p>88.8% Caucasian, 1.6% African-American, 4.0% Hispanic, 2.4% Asian, 4.0% Native American, 2.4% other</p>	<p>The validity of the MPRCQ2 was evaluated by correlating the MPRCQ2 scales with the questionnaires measuring the use of related coping behaviors (Chronic Pain Coping Inventory (CPCI), Catastrophizing and Ignoring Sensations scales of the Coping Strategies Questionnaire (CSQ) and Pain Stages of Change Questionnaire (PSOCQ))</p> <p>Moderate correlations were generally found between the MPRCQ2 scales and the corresponding CPCI scales. Readiness to</p>	<p>Cronbach’s alpha for MPRCQ2 subscales</p> <p>Exercise: 0.83 Task persistence: 0.75 Relaxation: 0.81 Pacing: 0.88 Avoid rest: 0.77 Avoid asking for assistance: 0.83 Assertive communication: 0.83 Body mechanics: 0.76 Cognitive control: 0.91 Divert attention: 0.77 Self-statement: 0.80 Reinterpret sensations: 0.84 Avoid catastrophizing: 0.83 Ignore pain: 0.91</p>	<p>Mean (SD) scores for the MPRCQ2: see table 1</p>

Author Year Country Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability
		<p>Avoid Guarding was not significantly correlated with the CPCI Guarding scale.</p> <p>Significant correlations ($p < 0.001$):</p> <p>MPRCQ2 Exercise and: CPCI Relaxation = 0.29 CPCI Pacing = 0.28 MPRCQ2 Task Persistence and: CPCI Persistence = 0.38 CPCI Ask Assistance = -0.35 CPCI Resting = -0.29 CPCI Support = -0.28 CSQ Catastrophizing = -0.34 CSQ Ignore Sensations = 0.45 MPRCQ2 Relaxation and: CPCI Relaxation = 0.54 CPCI Self-Statements = 0.40 CPCI Pacing = 0.42</p>		

Author Year Country Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability
		CPCI Resting = 0.28 CPCI Support = 0.28 MPRCQ2 Cognitive Control and: CPCI Self-Statements = 0.31 CPCI Pacing = 0.36 CSQ Catastrophizing = -0.26 CSQ Ignore Sensations = 0.43 MPRCQ2 Avoid Ask Assistance and: CPCI Persistence = 0.28 CPCI Ask Assistance = -0.41 MPRCQ2 Pacing & CPCI Pacing = 0.59 MPRCQ2 Avoid Rest & CPCI Rest = -0.40 MPRCQ2 Assertive and: CPCI Ask Assistance = 0.23 CPCI Support = 0.28 MPRCQ2 Body Mechanics & CPCI Pacing = -0.26		

Author Year Country Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability						
		<p>Significant correlations were obtained between 6 of the 9 MPRCQ2 scales and the same 3 PSOCQ scales. No significant correlations were found between MPRCQ2 scales and the PSOCQ Contemplation scale.</p> <p>Interscale variability significant correlations: SCI: $F(8,119) = 37.37, P < .0001$</p> <p>SCI mean (SD) for total MPRCQ2 – 38.82 (7.87)</p>								
Table 1										
<table border="1"> <thead> <tr> <th>MPRCQ2 scale:</th> <th>Mean (SD) score:</th> </tr> </thead> <tbody> <tr> <td>Exercise</td> <td>4.53 (1.62)</td> </tr> <tr> <td>Task persistence</td> <td>5.38 (1.59)</td> </tr> </tbody> </table>					MPRCQ2 scale:	Mean (SD) score:	Exercise	4.53 (1.62)	Task persistence	5.38 (1.59)
MPRCQ2 scale:	Mean (SD) score:									
Exercise	4.53 (1.62)									
Task persistence	5.38 (1.59)									

Author Year Country Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability
	Relaxation	3.12 (1.58)		
	Cognitive control	5.03 (1.41)		
	- Divert Attention	5.16 (1.86)		
	- Self-statement	5.01 (1.84)		
	- Reinterpret sensations	4.54 (2.06)		
	- Avoid catastrophizing	4.92 (1.76)		
	- Ignore sensations	5.52 (1.82)		
	Pacing	5.10 (1.89)		
	Avoid Contingent Rest	3.23 (2.07)		
	Avoid Asking for Assistance	3.61 (2.20)		
	Assertive Communication	4.53 (2.10)		
	Proper Body Mechanics	4.49 (1.81)		
	MPRCQ2 Total	38.82 (7.87)		

Author Year Country Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability
<p>Nielson et al. (2003)</p> <p>Development and validation of an assessment tool (MPRCQ)</p>	<p>N=43 SCI (65% Male)</p> <p>N=36 at/above T6 38,9 T6-conus 3; AIS-24 A, 7B, 4C, 13 D</p> <p>Mean age 47.84 ± 12.08yrs (range 22-79yrs)</p> <p>Must have had some chronic pain (≥1 on a 10-point scale). No details given for injury level or duration.</p>	<p>Two factors were derived – active coping (relaxation, cognitive control, pacing and assertive communication), which accounted for 32.1% of the variance, and perseverance (task persistence, avoid asking for assistance and exercise), which accounted for 23.5% of the variance.</p> <p>MPRCQ responses were compared to those of the Pain Stages of Change Questionnaire (PSOCQ) and Survey of Pain Attitudes (SOPA).</p> <p>PSOCQ:</p>	<p>Cronbach’s alpha levels were sufficiently high on all scales (Exercise, 0.84; Task persistence, 0.82; Cognitive control, 0.91; Avoid asking for assistance, 0.73; Assertive communication, 0.82); however, they were only marginal for Pacing (0.64) and Relaxation (0.68).</p>	

Author Year Country Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability
		<p>MPRCQ total scores correlated significantly with the PSOCQ subscales of contemplation ($r=0.29$, $P<.006$), action ($r=0.60$, $P<.0001$), and maintenance ($r=0.66$, $P<.0001$).</p> <p>MPRCQ perseverance scores correlated significantly with the contemplation ($r=0.39$, $P<.0001$), action ($r=0.59$, $P<.0001$) and maintenance ($r=0.61$, $P<.0001$) scales.</p> <p>MPRCQ active coping scores correlated significantly with the precontemplation ($r=-0.28$, $P<.01$), action ($r=0.26$, $P<.02$) and maintenance ($r=0.33$, $P<.002$) scales.</p>		

Author Year Country Research Design Setting	Demographics and Injury Characteristics of Sample	Validity	Reliability	Responsiveness Interpretability
		<p>SOPA: MPRCQ total scores correlated significantly with the SOPA subscales of control ($r=0.51$, $P=.0001$) and harm ($r=-0.24$, $P=.03$).</p> <p>MPRCQ active coping scores correlated significantly with the control scale ($r=0.46$, $P<.0001$), and the perseverance scores correlated significantly with all subscales (control, $r=0.26$, $P<.02$; harm, $r=-0.42$, $P<.0001$; disability, $r=-0.43$, $P<.0001$).</p>		