# ORIGINAL ARTICLE Psychometric evaluation of the Spanish version of the MPI-SCI

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#### Study design: Postal surveys.

**Objectives:** To confirm the factor structure of the Spanish version of the MPI-SCI (MPI-SCI-S, Multidimensional Pain Inventory in the SCI population) and to test its internal consistency and construct validity in a Spanish population.

Setting: Guttmann Institute, Barcelona, Spain.

**Methods:** The MPI-SCI-S along with Spanish measures of pain intensity (Numerical Rating Scale), pain interference (Brief Pain Inventory), functional independence (Functional Independence Measure), depression (Beck Depression Inventory), locus of control (Multidimensional health Locus of Control), support (Functional Social Support Questionnaire (Duke-UNC)), psychological well-being (Psychological Global Well-Being Index) and demographic/injury characteristics were assessed in persons with spinal cord injury (SCI) and chronic pain (n = 126).

**Results:** Confirmatory factor analysis suggested an adequate factor structure for the MPI-SCI-S. The internal consistency of the MPI-SCI-S subscales ranged from acceptable (r=0.66, Life Control) to excellent (r=0.94, Life Interference). All MPI-SCI-S subscales showed adequate construct validity, with the exception of the Negative and Solicitous Responses subscales.

**Conclusions:** The Spanish version of the MPI-SCI is adequate for evaluating chronic pain impact following SCI in a Spanish-speaking population. Future studies should include additional measures of pain-related support in the Spanish-speaking SCI population.

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Keywords: psychometric properties; spinal cord injuries; chronic pain; Multidimensional Pain Inventory; validity

### INTRODUCTION

Longstanding pain is a major complication after spinal cord injury (SCI) affecting approximately 80% of patients,<sup>1</sup> which is associated with lower levels of psychological well-being<sup>2,3</sup> and decreased daily function.<sup>4</sup> Therefore, a reduction in pain's effects on functioning is an important goal of all pain interventions. Consequently, a comprehensive pain assessment taking multiple aspects of the psychosocial impact into account is integral to designing optimal treatments.

The West Haven-Yale Multidimensional Pain Inventory is a selfreport questionnaire measuring the impact of pain on an individual's life, how others respond to that person's pain and frequency at which the individual engages in specific daily activities.<sup>5</sup> The MPI has been used in numerous pain populations and has been found to have good psychometric properties including sensitivity to a variety of treatments. The IMMPACT group<sup>6</sup> has recommended this instrument for the assessment of individuals suffering from chronic pain and as an outcome measure in clinical trials.

In the original Spanish validation of the West Haven-Yale Multidimensional Pain Inventory,<sup>7</sup> the authors also concluded that the Spanish MPI was acceptable to measure important domains related to chronic pain such as perceptions of impact of pain on daily life, social support, self-control and activity levels. However, that version<sup>7</sup> was developed for Spanish chronic pain patients in general, and not for individuals with chronic pain and physical impairments such as SCI. Thus, it is inappropriate to assume that measures developed to be used with other chronic pain populations can be readily used in people with SCI.

Based on exploratory and confirmatory factor analyses, Widerström-Noga and colleagues revised the MPI for use in the SCI chronic pain population.<sup>4</sup> The reliability and validity of the MPI-SCI for most subscales were later demonstrated in a sample of individuals with SCI and chronic pain.<sup>2,8</sup> Despite the widespread use of the MPI in clinical pain practice in Spain to assess pain impact,<sup>7</sup> the psychometric properties of a Spanish version of the MPI-SCI (MPI-SCI-S) have not yet been evaluated. The primary purposes of the present investigation were to: (1) confirm the factor structure of the MPI-SCI-S; (2) test its internal consistency, and (3) construct validity.

#### MATERIALS AND METHODS

Individuals who received an annual assessment at the outpatient SCI clinic (April 2005–July 2007) were informed about the study. Those who agreed to participate were given a questionnaire package including the MPI-SCI-S (Appendix) that was sent back by mail. Demographic and injury information

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was collected from patient's medical records. Participants were: (1) over 18 years old, (2) had chronic pain (>1 year), (3) chronic SCI (>2 years) and (4) average pain intensity of three or more on a Numerical Rating Scale (NRS). The Ethics Committee of the Hospital of Neurorehabilitation Institut Guttmann approved the study.

#### MPI-SCI

The MPI is a 60-item questionnaire<sup>5</sup> based on the cognitive-behavioral perspective on chronic pain answered on a 7-point Likert scale. It comprises Section 1 (pain impact), Section 2 (responses by significant others) and Section 3 (common activities) with subscales assessing pain severity, pain interference, affective distress, control over life, support from significant others, responses by significant others (negative, distracting and solicitous responses) and the performance of common, general activities (Table 1). The MPI-SCI<sup>2,8</sup> is a modified version of the MPI developed to be used in persons with SCI where Section 3 asks about pain-specific interference.

#### Translation of the MPI-SCI

The development of the MPI-SCI-S and evaluation of its psychometric properties were performed according to recommendations for adaptation and validity of health questionnaires and diagnostic tests.<sup>9</sup> The original English version of the MPI-SCI was translated by a co-author (Yenisel Cruz-Almeida). The translation was reviewed by three experts including two specialists in pain management and a clinical pain researcher. As the original version of the questionnaire was well defined and structured, the expert panel did not consider it necessary to redefine its sections or reformulate any of the original questions. No cultural bias that could be equivocal or non-translatable was detected in the original instrument. This intermediate version was then tested in a sample of seven patients to assess initial feasibility and other potential comprehension problems. The final version was back-translated into English by two other professional translators (different from the first translator and English natives) and again reviewed and approved by the panel experts. The MPI-SCI-S is presented in the Appendix.

#### NRS

Participants rated their average pain intensity during the past week on a 0–10 NRS, with anchors 0 (no pain) and 10 (pain as bad as could be). The NRS<sup>10</sup> was recommended by the IMMPACT group for use in pain clinical trials<sup>6</sup> and by the 2006 NIDRR SCI Pain outcome measures group.<sup>11</sup>

# Table 1 Scales, subscales used in the present study and their abbreviations

Scales and subscales	Abbreviations
MPI-SCI pain severity	PS
MPI-SCI life interference	LI
MPI-SCI life control	LC
MPI-SCI affective distress	AD
MPI-SCI support	S
MPI-SCI negative responses	NR
MPI-SCI solicitous responses	SR
MPI-SCI distracting responses	DR
MPI-SCI general activity	GA
MPI-SCI pain interference with activities	PA
Numerical rating scale	NRS
Brief pain inventory	BPI
Beck depression inventory	BDI
Duke-UNC functional social support questionnaire	Duke-UNC
Internal health locus of control	IHLC
Powerful others health locus of control	PHLC
Chance health locus of control	CHLC
Functional independence measure	FIM

#### Brief Pain Inventory (BPI) interference

The 12-item subscale measures the interference with general activity, sleep, mood and enjoyment of life, walking ability, ability to work and perform daily tasks, and relationship with other people. The BPI was adapted for people with physical impairments and SCI, and it has shown excellent psychometric properties in this population.<sup>12</sup>

#### Beck Depression Inventory (BDI)

The BDI is a 21-item scale measuring symptoms indicative of clinical depression. The measure is considered to be reliable in the SCI population.<sup>8,13</sup>

#### Multidimensional Health Locus of Control (MHLC)

The MHLC<sup>14</sup> consists of three subscales: (1) the internal health locus of control subscale that assesses the extent to which one believes that internal factors are responsible for health and illness; (2) the chance health locus of control (CHLC) subscale that assesses the extent to which one believes that health and illness are a matter of fate, luck or chance; and (3) the powerful other health locus of control subscale assessing the belief that one's health is determined by powerful others. Previous research has supported its use in SCI.<sup>14</sup>

#### Functional Independence Measure (FIM)

The FIM<sup>15</sup> quantifies severity of activity limitation by assessing performance in six areas: self-care, locomotion, mobility, sphincter control, communication and cognition. In the current study, only FIM scores related to motor independence were analyzed. This subscale has shown excellent internal consistency<sup>8</sup> and can be administered in-person or via telephone format.<sup>16</sup>

#### Duke-UNC

The Duke-UNC Functional Social Support Questionnaire<sup>17</sup> is a selfadministered instrument designed for use in primary care settings. It measures two components of perceived emotional support: confidant and affective support. Moderate-to-excellent reliability and validity of the scale are supported by a previous study in Spain.<sup>17</sup>

#### Psychological Global Well-being Index (PGWBI)

The PGWBI was developed to measure subjective psychological well-being or distress in the general population. The Spanish version of the PGWBI has shown satisfactory psychometric properties.<sup>18</sup> The questionnaire contains 22 items grouped into six dimensions, but for the present study the 'positive well-being' dimension was used for analyses.

#### Statistical analysis

Using SPSS 20.0, Pearson correlations and paired *t*-tests were used for continuous variables and  $\chi^2$  tests were used for dichotomous variables. All tests were two-tailed and a *P*-value less than 0.05 was considered statistically significant. Cronbach's alpha correlations were used to assess internal reliability. To assess the ability of the MPI-SCI-S to predict positive well-being, two separate stepwise multiple regression analyses were performed with positive well-being as the dependent variable. In order to confirm the factor structure of the MPI-SCI-S, a confirmatory factor analysis (CFA) was performed for each subsection of the MPI-SCI-S (that is, pain impact, interpersonal support and activities). The CFA was conducted using analysis of moment structures (AMOS)<sup>19</sup> as previously described.<sup>8</sup>

## RESULTS

### Participants

The study postal packages containing consent forms and questionnaires were given to a total of 558 subjects with a 22.6% response rate (n = 126). Detailed demographic and injury-related characteristics are presented in Table 2. No significant differences were found between responders and non-responders with the exception of educational level. Table 2 Demographic and injury characteristics of participants with chronic pain duration greater than 6 months who were invited to participate in the study (n = 558)

	Respondents $(n = 126)$	Non-respondents $(n = 432)$	P-value
Age (years), mean±s.d.	49.0±13.8	49.6±17.5	0.714
Time since injury (years), mean $\pm$ s.d.	$11.8 \pm 10.8$	$11.8 \pm 9.9$	0.989
Gender. n (%)			
Men	78 (61.9)	298 (69.0)	0.136
Women	48 (38.1)	134 (31.0)	
Neurological level of injury, n (%)			
ASIA A complete	78 (61.9)	241 (64.8)	
ASIA B incomplete	20 (15.9)	42 (11.3)	0.379
ASIA C incomplete	28 (22.2)	85 (22.8)	
ASIA D incomplete	0 (0)	4 (1.1)	
SCI etiology, n (%)			
Traumatic	43 (34.1)	172 (39.8)	0.248
Non-traumatic	83 (65.9)	260 (60.2)	
<i>Marital status,</i> n (%)			
Married	79 (62.7)	244 (58.4)	
Single	36 (28.6)	138 (33.0)	
Separated	6 (4.8)	7 (1.7)	0.074
Divorced	3 (2.4)	6 (1.4)	
Widowed	2 (1.6)	23 (5.5)	
Education level, n (%)			
Elementary school or less	59 (46.8)	261 (60.4)	
High school completion	45 (35.7)	95 (22.0)	0.005
At least college	22 (17.5)	63 (14.6)	

Abbreviation: ASIA, American Spinal Injury Association (ASIA) impairment scale; SCI, spinal cord injury.

#### Reliability internal consistency

The Cronbach's alpha of the MPI subscales averaged 0.81 and ranged from 0.66 (LC) to 0.94 (LI). The validation instruments displayed coefficients ranging from 0.61 (internal health locus of control) to 0.92 (BPI; Table 3).

#### Convergent validity

All subscales, except the NR and the SR, were strongly correlated with the hypothesized-related construct (Table 4). The PS subscale was highly (r = 0.67) correlated with the NRS, whereas LI was strongly (r = 0.75) correlated with the BPI. Although the S (r = 0.36) and DR subscales (r = 0.35, P < 0.001) were significantly correlated with the Duke-UNC, the NR and the SR subscales were not significantly correlated with the Duke-UNC.

#### Discriminant validity

To examine discriminant validity, the LC, S, DR, NR and the SR subscales were compared with the MHLC chance orientation, whereas all other MPI subscales were compared with the powerful other orientation of the MHLC, a construct hypothesized to correlate only moderately or minimally with the MPI subscales. There were trivial correlations between the MPI subscales and the MHLC (Table 4).

# Table 3 Internal consistencies of the MPI-SCI subscales and validation instruments

MPI-SCI scales	Cronbach's alpha MPI-SCI	Cronbach's alpha Validation instruments		
Pain severity	0.79 (3)	NRS, NA		
Life interference	0.94 (8)	BPI, 0.92 (7)		
Life control	0.66 (3)	IHLC, 0.61 (6)		
Affective distress	0.80 (3)	BDI, 0.85 (18)		
Support	0.88 (3)	Duke-UNC, 0.87 (11)		
Negative responses	0.77 (3)	Duke-UNC, 0.87 (11)		
Solicitous responses	0.69 (5)	Duke-UNC, 0.87 (11)		
Distracting responses	0.74 (4)	Duke-UNC, 0.87 (11)		
General activity	0.88 (18)	FIM, 0.88 (13)		
Pain interference with activities	0.93 (18)	BPI, 0.92 (7)		

Abbreviations: BDI, Beck Depression Inventory; BPI, Brief Pain Inventory; Duke-UNC, Functional Social Support Questionnaire; FIM, Functional Independence Measure; IHLC, internal health locus of control; NRS, Numerical Rating Scale.

# Table 4 Construct validity of the MPI-SCI subscales and validation instruments

Spanish MPI-SCI scales	Convergent validity Instrument, r, probability	Discriminant validity Instrument, r, probability
Pain severity	NRS, 0.67, P<0.000	PHLC, 0.18, P=0.054
Life interference	BPI, 0.75, P<0.000	PHLC, 0.14, P=0.119
Life control	Self-control, 0.35 P<0.000	CHLC, -0.09, P=0.312
Affective distress	BDI, 0.48, P<0.000	PHLC, -0.05, P=0.556
Support	Duke-UNC, 0.36, P<0.000	CHLC, 0.12, P=0.214
Negative responses	Duke-UNC, -0.19, P=0.056	CHLC, 0.13, P=0.161
Solicitous responses	Duke-UNC, 0.17, P=0.076	CHLC, 0.10, P=0.289
Distracting responses	Duke-UNC, 0.35, P<0.000	CHLC, 0.11, P=0.254
General activity	FIM, 0.35, P<0.05	PHLC, -0.06, P=0.517
Pain interference with activities	BPI, 0.50, P<0.000	PHLC, 0.02, P=0.979

Abbreviations: BDI, Beck Depression Inventory; BPI, Brief Pain Inventory; CHLC, Chance health Locus of Control; Duke-UNC, Functional Social Support Questionnaire; FIM, Functional Independence Measure; NRS, Numerical Rating Scale; PHLC, Powerful Other Health Locus of Control.

#### Predictive validity

To examine the ability of the MPI-SCI-S to predict a person's perception of positive well-being, all MPI-SCI-S subscales were entered as independent variables in a stepwise multiple regression analysis with the well-being subscale of the PGWB score as the dependent variable (Table 5). High levels of S (P < 0.01), low levels of AD (P < 0.001) and a high degree of GA (P < 0.01) were significantly (P < 0.001) associated with higher scores on the well-being subscale of the PGWB. Similarly, when all the validation measures were entered in a second regression, overall perception of well-being was significantly (P < 0.001) predicted by low scores on the BDI (P < 0.01), and higher scores on the Duke-UNC (P < 0.01) (Table 5).

#### CFA

In order to assess the fit of the hypothesized model in each section of the MPI, fit indices greater than 0.75 were deemed appropriate similar to criteria used in previous studies using the MPI-SCI.<sup>6,8</sup> All indexes supported adequate fit of the hypothesized models in Section 1

 Table 5 Stepwise regression analysis predicting a person's perception of well-being

Standardized coefficient	t-value	Probability
-0.308	-3.68	0.000
0.264	3.16	0.002
-0.263	-3.15	0.002
-0.293 0.272	-2.92 2.71	0.004 0.008
	Standardized coefficient -0.308 0.264 -0.263 -0.293 0.272	Standardized coefficient         t-value           -0.308         -3.68           0.264         3.16           -0.263         -3.15           -0.293         -2.92           0.272         2.71

Abbreviations: BDI, Beck Depression Inventory; Duke-UNC, Functional Social Support

Questionnaire; PGWB, Psychological Global Well-Being. <sup>a</sup>Dependent variable: well-being subscale of the PGWB (n=126); multiple  $R^2$ =0.30; adjusted multiple  $R^2$ =0.28; F-ratio=14.7; P<0.000.

<sup>b</sup>Dependent variable: well-being subscale of the PGWB (n=126); multiple  $R^2$ =0.24; adjusted multiple  $R^2$ =0.24; F-ratio=15.7; P<0.000.

(NFI = 0.81, CFI = 0. 89) and Section 2 (NFI = 0.77, CFI = 0.86). However, fit indices of the 18 items in Section 3 suggested that the model could be significantly improved (NFI = 0.72, CFI = 0.73). After re-inspecting the data, four items did not apply to many participants. These were: 'How often do you mow the lawn?' (17.4%); 'How often do you work in the garden?' (31.4%), 'How often do you wash the car?' (60%) and 'How often do you work on the car?' (60%). Therefore, these items were removed to reassess model fit within Section 3 and the new model indices supported an improved and adequate fit (NFI = 0.88, CFI = 0.89).

#### DISCUSSION

The results of the present study suggest that the MPI-SCI-S is a reliable and valid measure for use in the Spanish SCI chronic pain population with the exception of the Negative and Solicitous responses subscales. The subscales of the MPI-SCI-S demonstrated acceptable reliability coefficients (0.66 to 0.94). High Cronbach's alpha coefficients indicate that the items of the MPI-SCI-S are consistent in the domains they measure. Coefficients below 0.60 indicate inadequate reliability, and coefficients greater than 90 indicate excellent reliability useful for making individual treatment decisions. Our results are also similar to those obtained for the original MPI-SCI, which were reported to be consistently greater than 0.60.<sup>8</sup>

The present study also demonstrated that the MPI-SCI-S has acceptable construct validity across the pain intensity, pain interference, locus of control, social support and functional independence domains with the exception of the negative responses and solicitous responses. Unlike reliability, it is uncommon for a correlation (that is, validity) coefficient to be greater than 0.50, and rarely exceeding 0.50. Moreover, a recent review of depression and anxiety measures in the SCI population,<sup>13</sup> used the following criteria for validity coefficients: (1) excellent ( $\geq 0.60$ ); (2) adequate (0.30–0.59); and (3) 'poor' ( $\leq 0.29$ ). According to these criteria the PS and LI subscales had excellent validity, the LC, AD, S, DR, GA and PA had adequate validity, whereas the NR and SR subscales had poor validity. The poor validity coefficients for the NR and SR subscales using the Duke-UNC scale might be related to the wording of the items. Although the MPI-SCI-S significant other subscales ask specifically about the perceptions of the person who suffers from pain regarding social support from one person identified as the 'significant other', the Duke-UNC items are concerned with the perceived social support network. It is also possible that this result indicates cultural and socio-demographic differences between Spanish and American people. For example, in the original version developed by Widerström-Noga,<sup>8</sup> only 31% of the subjects were married, whereas the marriage frequency was doubled (62%) in our sample. Having high levels of social support does not necessarily imply high levels of support from spouses or significant others or conversely having high levels of support from significant others does not guarantee high levels of social support.

The present results also support the discriminant validity of the MPI-SCI-S subscales. It was hypothesized that the internal health locus of control (IHLOC) would correlate more highly with a similar construct, namely, life control, and lower with the less related subscales of the MPI-SCI. Consistent with previous research we found only minimal to no relationships between MPI-SCI-S subscales and the MHLC.<sup>8</sup>

The CFA of the activity subscales of the MPI-SCI-S suggested that several items had to be removed to improve the factor structure. In particular, items infrequently endorsed, such as, activities involving work in the garden or on the car were removed. This may reflect cultural differences relating to different ways of life.

In the original MPI-SCI, the authors hypothesized that the subscales of the MPI-SCI and the set of measures used for testing the convergent validity should be able to predict satisfaction with life in a person with SCI. In the present study, we used a person's perception of well-being, which is a dimension of the PGWBI and another measure of quality of life. Similar to the study by Widerström-Noga *et al.*,<sup>8</sup> we confirmed the hypothesis that having a combination of lower levels of affective distress, higher levels of general activity and lower levels of negative support predicted positive well-being. A previous study involving SCI patients with and without chronic pain, showed statistically significant differences between the pain prevalence and the perception of psychological well-being; those who suffered chronic pain were the ones with more psychological distress.<sup>3</sup>

Several limitations to this study should be noted. At the time of study design, we did not include measures to analyze test-retest stability of the MPI-SCI-S. Future research is needed to test the stability of the MPS-SCI-S over time in the Spanish population. However, the MPI-SCI-S showed excellent internal consistency indicating adequate reliability. Another potential limitation is that the instruments used in this study were administered via postal surveys and the return rate was very low 22.6%. A possible explanation for this low response rate could be the lack of motivation of the participants to complete the questionnaires. Unlike many other studies, subjects did not receive any kind of financial reward to answer the questions. In addition, the set of questionnaires was quite long and required a relatively long time to be completed. Another possible explanation could be that the educational level was a limitation to understand the content of the questions. Many participants who never returned the questionnaires (60.4%) reported an educational level of elementary school or less compared with our participants (46.8%). Finally, future psychometric studies in different Spanish speaking populations with SCI should be performed to assess transcultural validation.

In conclusion, the MPI-SCI-S subscales with the exception of the NR and SR subscales were found to have satisfactory criterion-related validity and internal consistency confirming its usefulness as a measure for assessing multidimensional pain in individuals with SCI. Future studies should include additional measures of social support to adequately assess this domain.

#### DATA ARCHIVING

There were no data to deposit.

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### **CONFLICT OF INTEREST**

The authors declare no conflict of interest.

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APPENDIX

# INVENTARIO MULTIDIMENSIONAL DE DOLOR (Para personas con lesión medular)

### .ño: \_\_\_\_\_

## Instrucciones

Uno de los factores más importantes de nuestra evaluación incluye el examen de su dolor desde <u>su</u> punto de vista porqué obviamente usted es la persona que mejor puede identificar su dolor. Las siguientes preguntas están diseñadas para detallar aspectos de su dolor y la manera en

que este le afecta en su vida. **El cuestionario tiene tres secciones**. Debajo de cada pregunta hay una escala donde usted puede marcar su respuesta. Lea cada pregunta con atención y *haga un círculo alrededor del número* que correctamente se adapte a su condición en la escala. Si encuentra que la pregunta no le implica a usted, por favor *haga un círculo alrededor* del número que está *delante de la pregunta*. Cuando haya completado el cuestionario, revise sus respuestas para verificar que haya respondido a todas las preguntas. Use la última pagina para añadir información o comentarios adicionales que nos puedan ayudar a entender mejor su problema con el dolor.

## Antes de comenzar, conteste las dos siguientes preguntas de pre-evaluación.

1. Algunas preguntas del cuestionario se refieren a la persona a quien usted se siente más apegada. Esta persona puede ser su esposo o esposa, o puede estar relacionada con usted de otra manera. Es muy importante que usted identifique a alguien en esta capacidad. Indique con cual de las siguientes personas usted considera que tiene dicha relación (por favor, escoja solamente una):

Esposo / Esposa	Compañero / Compañera	Compañero de casa o de cuarto
Amigo / Amiga	Vecino	Padre, Madre, Hijo, Hija u otro familiar
Otra persona:	 	

- 2. ¿Vive usted actualmente con esta persona?
  - □ Sí □ No

Cuando conteste las preguntas que refieren a su esposo o esposa, siempre responda en referencia a esta persona que usted acaba de indicar.

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# Sección I

Esta parte le hace preguntas para ayudarnos a conocer más acerca de su dolor y como este le afecta en su vida. Debajo de cada pregunta hay una escala para que usted pueda contestar. Lea cada pregunta con atención y *haga un círculo alrededor del número* que correctamente se adapte a su condición en la escala. El siguiente ejemplo puede ayudarle a comprender mejor como debería contestar estas preguntas.

<u>Ejemplo</u>	• • • • • • • • • • • • • • • • • • •	•				1
¿ En que medio	la se siente ne	ervioso cuano	lo va en coci	ie y el trafico	es abunc	lante ?
0.	1	2	3	4	2	6
nada nerv1080					extrema	damente nervioso
Si usted no se siente del número 0. Si ust pondría un círculo al	nervioso cuan ed se siente ex rededor del ní	do viaja en co stremadament	oche con tráfi e nervioso cu úmero 0, serí	co abundante, lando viaja en	pondría coche co	un círculo alrededor n tráfico abundante, e usted no se pone
nada nervioso v el ní	imero 6. sería	usado para in	dicar que ust	ed se pone ext	remadam	ente nervioso.
			1			
1. Indique el nivel de	e su dolor <u>en e</u>	<u>este momento</u>				
0	1	2	3	4	5	6
ningún dolor					C	lolor muy intenso
2. Por lo general, ¿En	n que medida	interfiere el d	olor en sus ac	ctividades diar	ias?	
0	1	2	3	4	5	6
no interfiere					i ex	nterfiere tremadamente
3. Desde que le come	enzó el dolor,	¿En que med	ida este ha ca	mbiado su hat	oilidad pa	ra trabajar?
0 no ha cambiado	1	2	3	4	5 hc	6 a cambiado mucho
4. ¿En que medida ha o de recreo?	a cambiado el	dolor la satis	facción o el p	lacer que recil	be de sus	actividades sociales
0 ningún cambio	1	2	3	4	5 extr	6 ha cambiado remadamente
5. ¿Recibe apoyo o a	yuda de su es	poso(a) en rel	ación a su do	lor?		
0	1	2	3	4	5	6
no me ayuda en nada						me ayuda en todo lo posible
6. Indique su estado	emocional dui	rante <u>esta últi</u>	ma semana.			-
0 extremadamente baio o deprimido	1	2	3	4	5	6 extremadamente alto
7 $i$ En que medida ha	a interferido e	l dolor en su o	canacidad nai	a descansar de	e forma si	uficiente?
	1	2	3	4	5	6
no ha interferido	1	2	5	·	5	ha interferido
8. Más o menos, 7 gu	é intensidad h	a tenido su do	olor durante <i>l</i>	a última sema	na?	emienneumenne
0	1	2	3	4	5	6
nada intenso					-	extremadamente intenso

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9. ¿En que medid	la puede uste	ed anticipar cua	indo su dolor	comenzará, m	ejorará, o	aumentará?
0	1	2	3	4	5	6
nunca puedo						frecuentemente
anticinar						nuedo anticinar
10 :En que medi	da ha cambi	ado el dolor su	habilidad na	ra participar e	n activida	des sociales o de
recreo?			. naomuau pa	ra participai ei		ues sociales o de
0	1	2	3	4	5	6
ningún cambio						ha cambiado
						extremadamente
11. $i$ En que med	ida limita us	sted sus activid	ades para pre	venir un aume	nto en su	dolor?
0	1	2	3	4	5	6
nada	*	-	5		U	mucho
$12 \cdot \text{En que mod}$	ide al dalar	ha combiado la	satisfaqqián	o ol placor qui	a raaiba d	mucho
familiares?			i satisfaccion	o el placel que		e sus actividades
0	1	2	3	4	5	6
ningún cambio						ha cambiado
Ū						extremadamente
13. $\therefore$ En que med	ida su espos	o(a) se preocur	ha por usted a	i causa de su d	olor?	
0	1	2	3	4	5	6
no astá	1	2	5	•	5	ostá ortromadamente
preocupado	,•		4 .1 1	4 1 1	1.0	preocupado
14. Durante $\underline{la\ ult}$	<u>tima semana</u>	, ¿ siente que n	ia tenido el co	ontrol sobre su	vida?	
0	1	2	3	4	5	6
ningún control						mucho control
15. En un día típi	co, ¿ En que	medida cambi	a su dolor (a	umenta o mejo	ra)?	
0	1	2	3	4	5	6
no cambia						cambia bastante
16. ; En que med	ida sufre a c	ausa de su dolo	or?			
0	1	2	3	4	5	6
no sufro	*	-	5		U	sufro extremadamente
17 : Con qué free	uencia nued	le hacer algo di	ie reduzca su	dolor?		supro extremadamente
				A 40101 :	5	6
0	1	2	5	+	5	
nunca	• 1 1 1		1 '		() $()$ $(1)$	muy frecuentemente
18. ¿ En que med	ida na camb	iado el dolor si	is relaciones	con su esposo	(a), famili	a u otra gente?
0	1	2	3	4	5	6
no ha cambiado	)					ha cambiado
						extremadamente
19. ¿ En que med usted actualr	ida ha camb nente no trał	iado el dolor la paia)	a satisfacción	que recibe de	su trabajo	(marque aquí si
0	1	2	3	4	5	6
no ha cambi	ado	2	5		5	ha cambiado
no na cambia	iuo					
<b>2</b> 0 E	• 1 1 .		( )	1 11	0	extremadamente
20. ¿ En que med	ida le presta	atencion su es	poso(a) a cau	isa de su dolor	? _	
0	1	2	3	4	5	6
no me presta						me presta mucha
atención						atención
21. Durante la úli		<b>D</b>		1 111	C (	1.1 0
	<u>tima semana</u>	ر, ¿ En que med	lida siente qu	e se ha podido	entrentar	a sus problemas?
0	<u>tima semana</u> 1	, ¿ En que med 2	lida siente qu 3	e se ha podido 4	entrentar 5	a sus problemas? 6

22. ¿ En que medie	da siente qu	e tiene contro	l sobre su dol	or?		
0	1	2	3	4	5	6
no tengo ningún						tengo mucho
control						control
23. ¿ En que medie	da ha camb	iado el dolor s	u habilidad p	ara hacer las ta	areas de la o	casa?
0	1	2	3	4	5	6
no ha cambiado						ha cambiado mucho
24. Durante <i>la últi</i>	<u>ma semana</u>	, ¿En que me	dida ha tenid	o éxito al enfr	entarse con	situaciones
problemáticas	en su vida	?				
0	1	2	3	4	5	6
ningún éxito						mucho éxito
25. ¿ En que medie	da ha interf	erido el dolor	en su habilida	ad para planea	r actividade	s?
0	1	2	3	4	5	6
no ha interferido						ha interferido
$\mathcal{O}(\mathbf{D}) = (1 - 1)^{\prime}$		F	1.1 1	. 1 11 0		extremadamente
26. Durante <u>la ulti</u>	<u>ma semana</u> 1	, ¿ En que mec	aida se ha ser	itido irritable?	5	(
	1	2	3	4	3	6
nada irritable						extremadamente irritable
27. ¿ En que medie	da el dolor l	ha cambiado o	interferido e	n sus amistade	es con perso	onas fuera de su
familia?					1	
0	1	2	3	4	5	6
ningún cambio						ha cambiado
						extremadamente
28. Durante <i>la últi</i>	<u>ma semana</u>	, ¿ En que mea	dida se ha ser	ntido tenso o an	nsioso?	
0	1	2	3	4	5	6
nada tenso o					Ez	ctremadamente tenso
ansioso						o ansioso

# <u>Sección II</u>

En esta sección estamos interesados en saber como su esposo(a) (u otra persona con la que usted vive o pasa la mayoría de su tiempo) responde cuando sabe que usted tiene mucho dolor. En la escala debajo de cada pregunta, haga un círculo alrededor del número que indique con que frecuencia su esposo(a), u otra persona, le responde de este modo cuando su dolor es muy fuerte.

1. M	e ignora.									
	0 nunca	1	2	3	4	5	6 muy frecuentemente			
2. M	2 Me prequipta si me puede avaidar v como									
	0 nunca	1	2	3	4	5	6 muy frecuentemente			
3. M	e lee.									
	0 nunca	1	2	3	4	5	6 muy frecuentemente			
4. Se	irrita conmigo.									
	0 nunca	1	2	3	4	5	6 muy frecuentemente			
5 He	ace el trabajo o la	as tareas que s	vo debería hac	<b>Nor</b>						
5.110	0 nunca	1	2	3	4	5	6 muy frecuentemente			
6 M	e habla de otras i	cosas nara dis	traerme del de	olor						
0. 141	0 nunca	1	2	3	4	5	6 muy frecuentemente			
7 Se	frustra conmigo	, ,								
7.50	0 nunca	1	2	3	4	5	6 muy frecuentemente			
8. Tr	ata de que yo de	scanse.								
	0 nunca	1	2	3	4	5	6 muy frecuentemente			
9. Tr	ata de que vo pa	rticine en una	actividad							
<b>J</b> , II	0 nunca	1	2	3	4	5	6 muy frecuentemente			
10 5	e enfada conmic	10								
10. 5	0 <i>nunca</i>	1	2	3	4	5	6 muy frecuentemente			
11 1	la da madiaama	ntos nora al d	alor							
11. N	0 <i>nunca</i>	1	2	3	4	5	6 muy frecuentemente			

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	12. Me anima par	a que yo tral	oaje en un pasa	atiempo.			
	0	1	2	3	4	5	6
	пипса						muy frecuentemente
	13. Me proporcio	na algo de co	omer o beber.				
	0	1	2	3	4	5	6
	nunca						muy frecuentemente
	14. Enciende la te	elevisión para	a distraerme d	el dolor.			
	0	1	2	3	4	5	6
	пипса						muy frecuentemente

Abajo hay una lista de 18 actividades diarias. Por favor indique *con qué frecuencia* usted participa en estas. En la escala debajo de cada pregunta haga un círculo alrededor del número que indique mejor *cómo el dolor* afecta su participación en dichas actividades.

1. Lavar los platos:									
a. ¿Con qué frecuencia realiza esta actividad?									
	0	1	2	3	4	5	6		
nu	пса						muy frecuentemente		
							<i>v v</i>		
<b>b. E</b>	l dolor redu	ce mi partici	pación en est	a actividad:					
	0	1	2	3	4	5	6		
nu	пса						muy frecuentemente		
2. Cortar el césped ( marque aquí, si usted no tiene césped):									
a. ¿Con qué frecuencia realiza esta actividad?									
	0	1	2	3	4	5	6		
nu	пса						muy frecuentemente		
							<i>v v</i>		
b. E	b. El dolor reduce mi participación en esta actividad:								
	0	1	2	3	4	5	6		
nu	пса						muy frecuentemente		
3. Comer	fuera de cas	a:					2.5		
a. 2	Con qué fre	cuencia reali	iza esta activi	idad?					
	0	1	2	3	4	5	6		
nu	пса						muv frecuentemente		
							2.5		
<b>b. E</b>	l dolor redu	ce mi partici	pación en est	a actividad:					
	0	1	2	3	4	5	6		
nu	пса			-		-	muv frecuentemente		
4. Jugar a	a las cartas u	otros juegos:					<i>v v</i>		
a. 2	Con qué fre	cuencia reali	iza esta activi	idad?					
	0	1	2	3	4	5	6		
nu	пса						muv frecuentemente		
b. F	l dolor redu	ce mi nartici	nación en est	a actividad:					
	0	1	2	3	4	5	6		
nu	° nca		-	0	·	U	muv frecuentemente		
							, sector se		
5. Ir de compras al supermercado:									
a. Con qué frecuencia realiza esta actividad?									
,	0	1	2	3	4	5	6		
nu	nca						muv frecuentemente		
b. F	l dolor redu	ce mi nartici	nación en est	a actividad.					
L	0	1	2	3	4	5	6		
nu	пса		_	-		C	muv frecuentemente		
							<i>J J</i>		

6. Trat	ajar en el jardí	n ( marqu	ie aquí si uste	d no tiene jaro	dín):			
a.	¿Con qué fre	ecuencia real	iza esta activ	idad?		_		
	0	1	2	3	4	5	6	
,	пипса						muy frecuentemente	
b.	El dolor redu	ice mi partici	ipación en est	ta actividad:				
	0	1	2	3	4	5	6	
7 Ir al	nunca						muy frecuentemente	
7. II al a.	Con qué fre	ecuencia real	iza esta activ	idad?				
	0	1	2	3	4	5	6	
1	nunca						muy frecuentemente	
h	Fl dolor redu	ice mi nartici	inación en est	ta actividad.				
0.	0	1	2	3	4	5	6	
1	nunca						muy frecuentemente	
8. Visi	tar amigos:		• · · · •					
a.	¿Con qué fre	ecuencia real	iza esta activ	idad?	4	5	6	
	0 nunca	1	2	3	4	3	0 muv frecuentemente	
,	milleu						may freedeniemenie	
b.	El dolor redu	ice mi partici	ipación en est	ta actividad:				
	0	1	2	3	4	5	6	
9 Avii	<i>nunca</i> dar con la limn	vieza de la cas	a.				muy frecuentemente	
9. Ayu a.	Con qué fre	ecuencia real	a. iza esta activ	idad?				
	0	1	2	3	4	5	6	
1	nunca						muy frecuentemente	
h	El deles seda			(				
D.	El dolor reau	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	pacion en es		4	5	6	
1	nunca	1	2	5	1	5	muy frecuentemente	
10. Rej	parar el coche (	( marque	aquí si usted	no tiene coch	e):		v	
a.	¿Con qué fre	ecuencia real	iza esta activ	idad?		~	<i>,</i>	
	0	1	2	3	4	5	6	
,	nuncu						muy frecuentemente	
b. El dolor reduce mi participación en esta actividad:								
	0	1	2	3	4	5	6	
11 Vie	nunca	on outobus:					muy frecuentemente	
a. Con qué frecuencia realiza esta actividad?								
	0	1	2	3	4	5	6	
1	nunca						muy frecuentemente	
b.	El dolor redu	ice mi partici	pacion en est	a actividad:	4	5	6	
1	nunca	1	~	5	7	5	muy frecuentemente	
							* *	

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12.	12. Visitar familia ( marque aquí si usted no tiene familia más cerca que 150 Km):							
	a. ¿Con qué fr	ecuencia rea	liza esta activ	vidad?				
	0	1	2	3	4	5	6	
	nunca						muv frecuentemente	
	minea						may ji cettemememe	
	h El dolor rod	uso mi nortic	inación on oc	ta actividad.				
	D. El ubiol l'eu				4	5	C	
	0	1	2	3	4	3	6	
	пипса						muy frecuentemente	
13.	Hacer la comida:							
	a. ¿Con qué fr	ecuencia rea	liza esta activ	vidad?				
	0	1	2	3	4	5	6	
	nunca						muy frecuentemente	
	b. El dolor red	uce mi partic	cipación en es	ta actividad:				
	0	1	2	3	4	5	6	
	nunca	-	-	0		c.	muv frecuentemente	
14.	Lavar el coche (	marque a	aquí si usted n	o tiene coche)	•			
1 11	a :Con qué fr	ecuencia rea	liza esta activ	vidad?	•			
		1	$\gamma$	2	1	5	6	
	0	1	2	5	+	5		
	пипса						muy frecuentemente	
	b. El dolor red	uce mi partic	cipación en es	ta actividad:		_		
	0	1	2	3	4	5	6	
	пипса						muy frecuentemente	
15.	Ir de viaje:							
	a. ¿Con qué fr	ecuencia rea	liza esta activ	vidad?				
	0	1	2	3	4	5	6	
	nunca						muv frecuentemente	
							2.5	
	b El dolor red	uce mi nartic	rinación en es	ta actividad.				
	0	1	$\gamma$	3	1	5	6	
	nunca	1	2	5	7	5	www.fracyantamanta	
16	Ir o un norquo o	a una plava:					muy frecuentemente	
ro. In a un parque o a una playa:								
	a. ¿Con que n				4	F	6	
	0	1	2	3	4	5	6	
	пипса						muy frecuentemente	
	b. El dolor red	uce mi partic	cipación en es	ta actividad:				
	0	1	2	3	4	5	6	
	nunca						muy frecuentemente	
17.	Lavar la ropa:							
	a. ¿Con qué fr	ecuencia rea	liza esta activ	vidad?				
	0	1	2	3	4	5	6	
	nunca	-	_				muv frecuentemente	
	mmea							
h Fl dolor reduce mi participación en este actividad:								
	D. ET UDIOT T'eu		npacion en es		4	5	6	
	U	1	2	5	4	5	U Man fraction outo	
	пипса						muy precuentemente	