

**Supplementary Table 2. Comparison of English language and Thai Exploratory Factor structures for Parts I- IV of the MDS-UPDRS**

Factor	Item	Item factor loading	
<b>Part I: Non-Motor Aspects of Experiences of Daily Living</b>			
<b>(Section CFI* = 0.93, RSMEA† = 0.07)</b>			
		English <sup>‡</sup>	Thai
<b>Factor 1</b>	<i>Percent variance</i>	<i>34.0</i>	<i>36.1</i>
	Daytime sleepiness	0.53	0.50
	Sleep problems	0.35	0.58
	Cognitive impairment	0.55	xxxx
	Pain and other sensations	0.43	0.42
	Hallucinations and psychosis	0.56	0.43
	Urinary problems	0.61	0.65
	Constipation problems	0.46	0.60
	Light headedness on standing	0.46	xxxx
	Fatigue	0.47	0.40 <sup>§</sup>
<b>Factor 2</b>	<i>Percent variance</i>	<i>9.5</i>	<i>10.9</i>
	Depressed mood	0.81	0.67
	Anxious mood	0.68	0.74
	Apathy	0.55	0.69
	Fatigue	xxxx	0.41 <sup>§</sup>

**Part II: Motor Aspects of Experiences of Daily Living**

**(Section CFI=0.97, RSMEA =0.09)**

		<b>English<sup>‡</sup></b>	<b>Thai</b>
<b>Factor 1</b>	<i>Percent variance</i>	<i>53.10</i>	<i>55.65</i>
	Speech	0.79	0.41
	Saliva and drooling	0.45	0.84
	Chewing and swallowing	0.60	0.60
	Eating tasks	xxxx	0.59 <sup>§</sup>
	Dressing	xxxx	0.48 <sup>§</sup>
	Handwriting	0.46	xxxx
	Doing hobbies and other activities	0.46	0.47 <sup>§</sup>
	Turning in bed	xxxx	0.40 <sup>§</sup>
<b>Factor 2</b>	<i>Percent variance</i>	<i>7.70</i>	<i>7.29</i>
	Eating tasks	xxxx	0.42 <sup>§</sup>
	Dressing	0.64	0.62 <sup>§</sup>
	Hygiene	0.65	0.82
	Handwriting	xxxx	0.85
	Doing hobbies and other activities	xxxx	0.43 <sup>§</sup>
	Turning in bed	0.65	0.67 <sup>§</sup>
	Tremor	xxxx	0.76
	Getting out of bed	0.73	xxxx
	Walking and balance	0.82	0.77
	Freezing	0.76	0.70

<b>Factor 3</b>	<i>Percent variance</i>	8.70	9.00
	Eating tasks	0.68	xxxx
	Tremor	0.43	xxxx
	Getting out of bed	xxxx	0.71

**Part III: Motor Examination**

**(Section CFI = 0.97, RSMEA = 0.07)**

		English <sup>†</sup>	Thai
<b>Factor 1</b>	<i>Percent variance</i>	36.7	42.6
	Speech	0.60	0.45 <sup>§</sup>
	Facial expression	0.54	0.48 <sup>§</sup>
	Arising from chair	0.80	0.87
	Gait	0.87	0.81
	Freezing of gait	0.83	0.84
	Postural stability	0.80	0.82
	Posture	0.70	0.71
	Global spontaneity of movement	0.67	0.53
	Leg agility, right leg	xxxx	0.44 <sup>§</sup>
<b>Factor 2</b>	<i>Percent variance</i>	15.3	13.9
	Rest tremor amplitude, RUE	0.73	0.69 <sup>§</sup>
	Rest tremor amplitude, LUE	0.71	0.68
	Rest tremor amplitude, RLE	0.74	0.70

	Rest tremor amplitude, LLE	0.70	0.78
	Rest tremor amplitude, lip/jaw	0.60	0.69
	Constancy of rest tremor	0.88	0.87
<b>Factor 3</b>	<i>Percent variance</i>	6.6	7.3
	Rigidity, neck	0.68	0.60
	Rigidity, RUE	0.73	0.76
	Rigidity, LUE	0.74	0.75
	Rigidity, RLE	0.80	0.75
	Rigidity, LLE	0.82	0.77
<b>Factor 4</b>	<i>Percent variance</i>	6.2	6.2
	Finger tapping, right hand	0.67	0.74
	Hand movements, right hand	0.67	0.73 <sup>§</sup>
	Pronation/supination, right hand	0.70	0.70 <sup>§</sup>
	Leg agility, right leg	xxxx	0.64 <sup>§</sup>
	Toe tapping, right foot	xxxx	0.65
	Rigidity, RUE	xxxx	0.49 <sup>§</sup>
	Rest tremor amplitude, RUE	xxxx	0.42 <sup>§</sup>
<b>Factor 5</b>	<i>Percent variance</i>	4.9	5.6
	Finger tapping, left hand	0.67	0.80
	Hand movements, left hand	0.70	0.85
	Pronation/supination movements, left hand	0.65	0.81
	Toe tapping, left foot	xxxx	0.74

	Leg agility, left leg	xxxx	0.72
	Rigidity, LUE	xxxx	0.50 <sup>§</sup>
	Rigidity, LLE	xxxx	0.46 <sup>§</sup>
	Hand movements, right hand	xxxx	0.43 <sup>§</sup>
	Pronation/supination, right hand	xxxx	0.41 <sup>§</sup>
<b>Factor 6</b>	<i>Percent variance</i>	4.5	4.5
	Postural tremor, right hand	0.66	0.68
	Postural tremor, left hand	0.71	0.80
	Kinetic tremor, right hand	0.81	0.84
	Kinetic tremor, left hand	0.81	0.88
<b>Factor 7</b>	<i>Percent variance</i>	3.3	2.7
	Toe tapping, right foot	0.65	xxxx
	Toe tapping, left foot	0.62	xxxx
	Leg agility, right leg	0.62	xxxx
	Leg agility, left leg	0.60	xxxx
	Speech	xxxx	0.53 <sup>§</sup>
	Facial expression	xxxx	0.7 <sup>§</sup>

#### Part IV: Motor Complications

(Section CFI = 1.00, RSMEA <0.001)

		English <sup>‡</sup>	Thai
<b>Factor 1</b>	<i>Percent variance</i>	63.9	61.3

	Time spent in the OFF state	0.87	xxxx
	Functional impact of fluctuations	0.84	0.82
	Complexity of motor fluctuations	0.82	0.79
	Painful OFF state dystonia	0.5	0.75
<b>Factor 2</b>	<i>Percent variance</i>	<i>15.6</i>	<i>19.0</i>
	Time spent with dyskinesias	0.71	xxxx
	Functional impact of dyskinesias	0.95	0.99
	Time spent in the OFF state	xxxx	0.85
	Functional impact of fluctuations	xxxx	0.42 <sup>§</sup>
	Complexity of motor fluctuations	xxxx	0.46 <sup>§</sup>
	Painful OFF state dystonia	xxxx	0.43 <sup>§</sup>

\* CFI, comparative fit index

† RMSEA, root mean square error of approximation

‡ Results from M-Plus Version 7

§ Item load on more than one factor with factor loading  $\geq 0.40$

xxxx implies the listed item did not load on the Factor indicated.