Validity and Reliability Study of the Thai Version of WHO SCAN: Somatoform and Dissociative Symptoms Section

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Objectives: *To determine the validity and reliability of the Thai version of the WHO Somatoform and Dissociative Symptoms Section of the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) Version 2.1*
Material and Method: *The SCAN interview version 2.1 Somatoform and Dissociative Symptoms Section was translated into Thai. The content validity of the translation was verified by comparing a back-translation (to English) of the Thai version to the English original. Whenever inconsistencies were encountered, the Thai version was adapted so that it correctly conveyed the meaning of the original English version. The revised Thai version was then field-tested nationwide for the comprehensibility of the relatively technical language. Between October 2003 and August 2004, 30 persons were recruited for the reliability study (16 males; 14 females) Fifteen subjects had somatoform disorders and 15 were normal. The number of years of formal education varied widely and occupations were diverse. Subjects were interviewed by a psychiatrist competent in using the Thai version of SCAN. The interviews were recorded on video so that the material could be re-rated.*
Results: *Based on the response from Thai subjects and consultations with competent psychiatrists, the content validity was established. The time taken to interview a somatoform patient averaged 57.1 12.1 minutes while it was 42.1 13.9 minutes for a normal subject. The inter-rater reliability (kappa) of the 113 Items were: 0.81-1.0, 0.61-0.80 and 0.00-0.20 in 49.6, 30.0 and 8.9 percent, respectively. Kappas could not be calculated for 11.5% of the Items. The intra-rater reliabilities were: 0.81-1.0, 0.61-0.80 and 0.00-0.20 in 54.9, 26.5 and 2.7 percent, respectively. Kappas could not be calculated for 15.9% of the Items.*
Conclusion: *The Thai version of the Somatoform and Dissociative Symptoms Section of SCAN version 2.1 proved to be a valid and reliable tool for assessing somatoform and dissociative symptoms among Thai speakers.*

Keywords: *Dissociative symptoms, SCAN, Schedules for clinical assessment in neuropsychiatry, Reliability, Semi-structured interview, Somatoform symptoms, Validity*

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The purpose of a psychiatric diagnostic interview is to gather information that will enable diagnosis and plan treatment. Unlike most disciplines of physical medicine, psychiatry has no external validating criteria and no laboratory test to confirm or discard diagnostic impressions; diagnosis is, therefore, dependent on the skill, knowledge and experience of each psychiatrist. Consequently, the difficulty in psychiatric evaluation is that whether several persons or even the same observer rates/re-rates the same patient, the same symptoms and/or signs may be interpreted differently because of the manner in which the infor-

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mation was expressed by the patient and/or understood by the rater [1].

The ICD-10 is the internationally accepted diagnostic system for general medicine and psychiatry. It has both diagnostic reliability and communicability and has been adapted to several cultural contexts; thus, allowing cross-cultural, trans-national diagnostic comparisons[2].

The WHO Schedules for Clinical Assessment In Neuropsychiatry (SCAN) is a semi-structured diagnostic-interview protocol with validated inter-rater reliability to help psychiatrists interview, assess, measure and classify psychopathology and behaviour associated, according to the ICD-10, with the major psychiatric disorders among adults[3,4]. SCAN is the gold standard for verifying interview-diagnoses done through clinical trials and other forms of psychiatric research[5-7].

SCAN has a shell program, CATEGO, which is a set of programs for processing the SCAN data and generating output (diagnosis). SCAN is intended for use only by clinicians with an adequate knowledge of psychopathology who have taken the WHO-designated SCAN training. SCAN has broad international acceptability and has been translated into 26 major languages, including in the Peoples' Republic of China[8], Japan, Turkey and India[9].

Thailand has neither its own national nor a translated international standard psychiatric diagnostic instrument. Consequently, the validity and reliability of Thai psychiatrist-collected data and diagnoses have never been tested, either intra- or inter-rater level. In order to reduce inter- and intra-psychiatrist variability, the authors determined to translate SCAN into Thai and planned its establishment as the gold standard for psychiatric diagnosing in Thailand.

This particular sub-study focuses on the validity and reliability of the Thai version of the Somatoform and Dissociative Symptoms Section of SCAN because both disorders are prevalent somatoform between 1.6 and 16.1%[10-12] and dissociative ~10%[13]. Diagnosis of both types of disorders is difficult[14] and current treatments of somatoform, dissociative and fatigue disorders have but limited success[15,16]. Physicians often assume psychological factors account for the disorders' symptoms, but current theories of psychogenesis, somatization and amplification do not account for all of the symptoms. Since symptoms' etiologies are unclear, no useful paradigm exists with which to understand and treat them[15-18].

The authors' aim was to test the validity and reliability of the Thai version of the Somatoform and Dissociative Symptoms Section of SCAN.

Material and Method

The authors used a cross-sectional validity and reliability design. With permission from the WHO, the SCAN interview book version 2.1 was translated from English into Thai by SP. The content validity was tested by doing a back translation by a Thai fluent in English and familiar with medical terminology. Two psychiatrists well versed in SCAN arrived at a consensus on the original meanings of each item of SCAN and examined whether the back-translated English version and the primary Thai version conserved the original meaning. The Thai version was modified to eliminate discrepancies with the English original.

The comprehensibility of the language was then tested among Thais, representing all four regions of Thailand. Reflections, comments and suggestions were assessed then summarized during a consensus meeting[19]. The final Thai version was incorporated into the SCAN I-shell program (Figure 1) and used for general testing.

Between October 2003 and August 2004, the authors conducted semi-structured interviews with somatoform and/or dissociative patients and normal volunteers at Srinagarind Hospital, Khon Kaen, Thailand. The presented sample comprised 30 subjects (15 somatoform patients and 15 normal volunteers). The patients from our In-/Out-patient Departments were identified using ICD-10 or DSM-IV-TR criteria: all of the subjects had to be Thai, $\geq$ 14 years of age, and able to understand and speak Thai. Subjects were volunteers and gave informed consent before participating. Each subject was given 200 Baht to cover overland travel expenses.

A psychiatrist trained in SCAN did the specific SCAN somatoform and/or dissociative symptoms interviews with all of the patients and normal control subjects. The interviews were recorded on video with a focus on the interviewee, not the interviewer. To test the intra-rater reliability, a psychiatrist (trained in SCAN) used the Thai version of the Somatoform and Dissociative Symptoms Section of SCAN to re-rate the videotaped interviews two more times, two weeks apart. The inter-rater reliability study was accomplished by two psychiatrists re-rating the video material simultaneously or at different times and comparing the results.

The WHO-SCAN Somatoform and Dissociative Symptoms Section was subdivided according to

questions about: 1) general physical health and well-being (Items 2.001-2.009); 2) pain symptoms (Items 2.010-2.023); 3) gastrointestinal symptoms (GI) (Items 2.024-2.036); 4) cardiovascular symptoms (CVS) (Items 2.037-2.042); 5) urogenital symptoms (Items 2.043-2.053); 6) neurological symptoms (Items 2.054-2.067); 7) skin or gland symptoms (skin) (Items 2.068-2.073); 8) autonomic symptoms (ANS) (Items 2.074-2.081); 9) duration and severity of hypochondriasis (Items 2.082-2.086); 10) fatigue syndrome (Items 2.087-2.090); 11) system-based syndromes (Items 2.091-2.101); 12) pain syndrome (Items 2.098-2.099); 13) elaboration of physical symptoms (Items 2.100); 14) factitious disorder (Items 2.101); 15) dissociative symptoms (Items 2.102-2.117); 16) age at onset of first and present episode (Items 2.118-2.122); 17) interference with activities due to somatoform and dissociative symptoms (Item 2.113); 18) organic cause (Items 2.124-2.126); and 19) relation of somatoform symptoms to panic attack (Item 2.127).

When the authors reached the part of each question about attendant symptoms, the authors began with a general probe such as, "During the past 2 years or more have you had headache-like symptoms?" If the answer was 'No' the authors proceeded to the next probe for the next symptom; if the answer was 'Yes' the authors probed for the somatoform, dissociative and factitious characteristics. In order to rate a symptom as positive, following characteristics had to be established: 1) the symptom was not fully explained by any detectable organic pathology (*e.g.* subclinical infection or nutritional problem) or demonstrable cause(s) [*e.g.* delusional characteristics, depressive context or panic attack(s)][20]; 2) the symptom gave rise to multiple consultations with doctors or healers or self-medication; and 3) the symptom caused distress or a change in lifestyle.

A total of 127 questions probed the somatoform and dissociative symptoms. Whenever answers were unambiguous (*i.e.* a numerical length of time or a simple 'yes' or 'no'), the rater's judgement was not required. Consequently, the authors did not rate items that probed the duration of symptoms and age at onset (: finally, 113 items were rated). The authors used Rating Scale I and and an item-specific rating scale when rating the Somatoform and Dissociative Symptoms Section.

The Khon Kaen University Ethics Committee reviewed and approved the present study protocols and informed consent was obtained from the patients and normal volunteers before involving them in the interviews.

Statistical evaluation

The validity study involved: 1) translation of the English version of SCAN to Thai and back-translation from Thai to English; 2) examining the Thai version by two psychiatrists trained in the use of SCAN; and, 3) field testing by KT with psychiatric patients (until every item was understandable in Thai while conserving the original English meaning).

The inter- and intra-rater reliability were determined based on the agreement between raters and tested using the kappa ( ) statistic. All statistics were done using STATA 7.0. The defined level for the degree of agreement was: 'poor' (< 0); 'slight' (0-0.20); 'fair' (= 0.21-0.40); 'moderate' (= 0.41-0.60); 'substantial' (= 0.60-0.80) and 'almost perfect' agreement (= 0.81-1.0)[21-23]

Results

Two psychiatrists (PS and KT) evaluated the content validity of the Thai version of SCAN. They did some adaptation of the phraseology, wording, and sequencing of the sentences to make them 'Thai'. One of the researchers (KT) interviewed 80 Thai volunteers (20 volunteers from each of the four regions), and solicited their understanding of the terms used in the Thai version of SCAN. All of the comments and suggestions for comparable meanings using local idioms were gathered and the most appropriate (*i.e.* conserving the original meaning) chosen.

Thirty subjects (16 males; 14 females) were recruited for the reliability study and none of them dropped-out. Respondents averaged 42.2 $\pm$ 10.7 years of age (range, 19-69) and half of them had < 9 years of formal education (average, 9.6 $\pm$ 5.1; range, 4 years to a master's degree). Occupations included civil servants (9), farmers (8), homemakers (4), employees (2), merchants (2), unemployed (2), one monk and one student. The interview for a somatoform patient required an average 57.1 $\pm$ 12.1 minutes (range, 42.2-89.27) *versus* 42.1 $\pm$ 13.9 minutes (range, 23.3-71.0) for a normal subject

The kappas, means, medians, standard deviations (STD), minima and maxima for each subsection of the Somatoform and Dissociative Symptoms Section are presented in Table 1. Classification of the kappa values as 'almost perfect', 'substantial', 'moderate', 'fair', 'slight', 'poor' and 'unable to calculate' are presented in Table 2. More than half of the items in each subsection had 'almost perfect' kappas (Table 2).

In analysing inter-rater reliability of the 113 items, 56 (49.6%) had 'almost perfect' agreement (= 0.81-1.00) and 34 (30.0%) had 'substantial' agree-

Table 1. Subsection details of kappa value

Subsections	Items	Inter-rater reliability						Intra-rater reliability					
		Unable to compute Kappa (number)	Mean	Median	STD	Min	Max	Unable to compute Kappa (number)	Mean	Median	STD	Min	Max
1. General probing	6	-	0.82	0.80	0.11	0.68	1.0	-	0.84	0.83	0.13	0.68	1.00
2. Pain	14	-	0.83	0.81	0.15	0.63	1.0	-	0.85	0.81	0.12	0.69	1.00
3. GI	13	-	0.87	0.87	0.14	0.65	1.0	-	0.85	0.87	0.15	0.65	1.00
4. CVS	6	-	0.89	1.00	0.18	0.61	1.0	-	0.85	0.86	0.15	0.64	1.00
5. Urogenital	11	-	0.87	0.89	0.13	0.65	1.0	-	0.90	0.94	0.11	0.71	1.00
6. Neurological	14	3	0.79	0.86	0.29	0.00	1.0	3	0.86	0.83	0.15	0.65	1.00
7. Skin or gland	6	-	0.89	1.00	0.18	0.65	1.0	-	0.89	1.00	0.18	0.64	1.00
8. ANS	8	-	0.76	0.86	0.34	0.00	1.0	-	0.87	0.92	0.15	0.65	1.00
9. Severity of hypochondriasis	3	-	0.90	0.94	0.13	0.75	1.0	-	0.90	0.95	0.13	0.75	1.00
10. Fatigue	3	-	0.80	0.85	0.09	0.69	0.86	-	0.88	1.00	0.22	0.63	1.00
11. System based syndrome	6	-	0.87	0.87	0.05	0.79	0.93	-	0.93	0.93	0.04	0.87	1.00
12. Pain syndrome	1	-	0.89	0.89	-	0.89	0.89	-	0.90	0.90	-	0.90	0.90
13. Elaboration of physical symptoms	1	1	-	-	-	-	-	1	-	-	-	-	-
14. Factitious disorder	1	-	0	0	0	0	0	-	0	0	0	0	0
15. Dissociativeb symptoms	16	9	0	0	0	0	0	14	-	-	-	-	-
16. Interference with activities due to Section 2 symptoms	1	-	0.71	0.71	-	0.71	0.71	-	0.84	0.84	-	0.84	0.84
17. Organic cause of any Section 2 symptoms	2	-	1.00	1.00	-	1.00	1.00	-	1.00	1.00	-	1.00	1.00
19. Relation to panic attack	1	-	0.72	0.72	-	0.72	0.72	-	1.00	1.00	-	1.00	1.00
Total	113	13	0.77	0.86	0.29	0	1	18	0.85	0.9	0.20	0	1

Table 2. Subsection classification of kappa value of both intra-rater and inter-rater rating

Subsections	Items	Inter-rater rating (Items)							Intra-rater rating (Items)						
		Degree of agreement							Degree of agreement						
		Unable to compute Kappa	AP	Sb	M	F	S	P	Unable to compute Kappa	AP	Sb	M	F	S	P
1. General probing	6	0	3	3	0	0	0	0	0	3	3	0	0	0	0
2. Pain	14	0	7	7	0	0	0	0	0	7	7	0	0	0	0
3. GI	13	0	7	6	0	0	0	0	0	7	6	0	0	0	0
4. CVS	6	0	4	2	0	0	0	0	0	4	2	0	0	0	0
5. Urogenital	11	0	8	3	0	0	0	0	0	9	2	0	0	0	0
6. Neurological	14	3	7	3	0	0	1	0	3	7	4	0	0	0	0
7. Skin and gland	6	0	4	2	0	0	0	0	0	4	2	0	0	0	0
8. ANS	8	0	4	3	0	0	1	0	0	6	2	0	0	0	0
9. Severity of hypochondriasis	3	0	2	1	0	0	0	0	0	2	1	0	0	0	0
10. Fatigue	3	0	2	1	0	0	0	0	0	2	1	0	0	0	0
11. System based syndrome	6	0	5	1	0	0	0	0	0	6	0	0	0	0	0
12. Pain syndrome	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0
13. Elaboration of physical symptoms	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0
14. Factitious disorder	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0
15. Dissociative symptoms	16	9	0	0	0	0	7	0	14	0	0	0	0	2	0
16. Interference with activities due to Section 2 symptoms	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0
17. Organic cause of any Section 2 symptoms	2	0	2	0	0	0	0	0	0	2	0	0	0	0	0
18. Relation to panic attack	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0
Total	113	13	56	34	0	0	10	0	18	62	30	0	0	3	0

AP = almost perfect, Sb = substantial, M = moderate, F = fair, S = slight, P = poor

Table 3. Itemized degree of agreement in rating for both inter-rater and intra-rater reliability

Degree of agreement	Itemized degree of agreement (113 items)	
	Inter-rater rating	Intra-rater rating
Almost perfect (Kappa = 0.81-1.00)	2.001, 2.007, 2.008, 2.010, 2.012, 2.015, 2.016, 2.018, 2.021, 2.022, 2.024, 2.026, 2.030, 2.032, 2.033, 2.034, 2.036, 2.038, 2.040, 2.041, 2.042, 2.046, 2.047, 2.048, 2.049, 2.050, 2.051, 2.052, 2.053, 2.056, 2.057, 2.058, 2.059, 2.063, 2.064, 2.066, 2.068, 2.069, 2.072, 2.073, 2.074, 2.075, 2.076, 2.081, 2.083, 2.084, 2.087, 2.088, 2.091, 2.093, 2.094, 2.095, 2.096, 2.098, 2124, 2.126 Total = 56 items = 49.6%	2.001, 2.007, 2.009, 2.010, 2.011, 2.012, 2.015, 2.016, 2.021, 2.022, 2.024, 2.025, 2.026, 2.032, 2.033, 2.034, 2.036, 2.038, 2.039, 2.040, 2.041, 2.045, 2.046, 2.047, 2.048, 2.049, 2.050, 2.051, 2.052, 2.053, 2.054, 2.056, 2.057, 2.058, 2.059, 2.064, 2.066, 2.068, 2.069, 2.072, 2.073, 2.074, 2.075, 2.076, 2.077, 2.078, 2.081, 2.083, 2.084, 2.087, 2.089, 2.091, 2.092, 2.093, 2.094, 2.095, 2.096, 2.098, 2.123, 2.124, 2.126, 2.127 Total = 62 items = 54.9%
Substantial (Kappa = 0.61-0.80)	2.003, 2.004, 2.009, 2.011, 2.013, 2.014, 2.017, 2.019, 2.020, 2.023, 2.025, 2.027, 2.028, 2.029, 2.031, 2.035, 2.037, 2.039, 2.043, 2.044, 2.045, 2.054, 2.055, 2.060, 2.070, 2.071, 2.077, 2.048, 2.079, 2.086, 2.089, 2.092, 2.123, 2.127 Total = 34 items = 30.0%	2.003, 2.004, 2.008, 2.013, 2.014, 2.017, 2.018, 2.019, 2.020, 2.023, 2.027, 2.028, 2.029, 2.030, 2.031, 2.035, 2.037, 2.042, 2.043, 2.044, 2.055, 2.060, 2.063, 2.067, 2.070, 2.071, 2.074, 2.079, 2.080, 2.086, 2.088 Total = 30 items = 26.5%
Moderate (Kappa = 0.41-0.60)	-	-
Fair (Kappa = 0.21-0.4)	-	-
Slight (Kappa = 0.00-0.20)	2.067, 2.080, 2.101, 2.102, 2.103, 2.105, 2.108, 2.112, 2.116, 2.117 Total = 10 items = 8.8%	2.101, 2.116, 2.117, Total = 3 items = 2.7%
Poor (Kappa < 0)	-	-
Cannot compute Kappa value	2.061, 2.062, 2.065, 2.100, 2.104, 2.106, 2.107, 2.109, 2.110, 2.111, 2.113, 2.114, 2.115 Total = 13 items = 11.5%	2.061, 2.062, 2.065, 2.100, 2.102, 2.103, 2.104, 2.105, 2.106, 2.107, 2.108, 2.109, 2.110, 2.111, 2.112, 2.113, 2.114, 2.115 Total = 18 items = 15.9%

ment (= 0.61-0.80). The kappa for 10 items (*viz.* 2.067, 2.080, 2.101, 2.102, 2.103, 2.105, 2.108, 2.112, 2.116 and 2.117) had 'slight' agreement (= 0.00-0.20). Item 2.067 probed 'other neurological complaints'; 2.080 'other autonomic complaints'; and 2.101-2.117 'dissociative symptoms'.

The STATA program could not calculate the kappa values for 13 items (11.5%) (*viz.* 2.061, 2.062, 2.065, 2.100, 2.104, 2.106, 2.107, 2.109, 2.110, 2.111, 2.113, 2.114 and 2.115). Item 2.061 probed 'blindness'; 2.062 'deafness'; 2.065 'loss of consciousness other than fainting'; 2.100 'elaboration of physical symptoms'; and 2.102-2.115 'dissociative symptoms' (Tables 1-3).

In analysing the intra-rater reliability of the 113 items, 62 (54.9%) had 'almost perfect' agreement and 30 (26.5%) 'substantial' agreement. The kappa value for 3 items (*viz.* 2.101, 2.116 and 2.117) had slight agreement. The STATA program could not compute

Table 4. Details of items with low agreement in rating

Reliability and items	Rating	
1.Items with slight reliability	Inter-rater	Intra-rater
2.067 Other neurological complaints	/	
2.080 Other autonomic complaints	/	
2.101 Factitious disorder	/	/
2.102 Dissociative amnesia	/	
2.103 Amnesia centered around recent stress	/	
2.105 Dissociative stupor	/	
2.108 Possession experience combined with trance	/	
2.112 Association of dissociative symptoms with stress	/	
2.116 Extensive forgetfulness with inability to recall important personal information	/	/
2.117 Other dissociative states	/	/
2.Items with cannot compute kappa value due to constant rating		
2.061 Blindness	/	/
2.062 Deafness	/	/
2.065 Loss of consciousness other than fainting	/	/
2.100 Elaboration of physical symptoms	/	/
2.102 Dissociative amnesia		/
2.103 Amnesia centered around recent stress		/
2.104 Dissociative fugue	/	/
2.105 Dissociative stupor		/
2.106 Trance experience	/	/
2.107 Possession experience	/	/
2.108 Possession experience combined with trance		/
2.109 Dissociative convulsions	/	/
2.110 Dissociative sensory loss or anaesthesia	/	/
2.111 Dissociative disorder of voluntary movement	/	/
2.112 Association of dissociative symptoms with stress		/
2.113 Two or more discrete personalities	/	/
2.114 Each personality is complete	/	/
2.115 Each personality manifested by discrete periods of control of behaviour	/	/

the kappa value for 18 items (15.9%) (*viz.* 2.061, 2.062, 2.065, 2.100, 2.102, 2.103, 2.104, 2.105, 2.106, 2.107, 2.108, 2.109, 2.110, 2.111, 2.112, 2.113, 2.114 and 2.115).

Discussion

The authors found that respondents even with 4 years of elementary education were able to understand and respond to the SCAN interview; thereby confirming reports of SCAN's cross culture utility[7,8] and providing qualitative validation of the translation/back-translation process. The high inter- and intra-rater reliability in each subsection was perhaps due to the: 1) high validity, 2) comprehensibility, 3) strict adherence to the rating criteria, or 4) good training in the use of the SCAN Glossary.

Items which had but 'slight' agreement had a kappa value of '0'. Items 2.067 and 2.080 probed 'other complaints of that subsection'. Some patients described 'these other symptoms' when answering related questions. For example, while answering Item 2.013, a probe on 'muscular aches', some patients replied 'Yes, my muscles twitch a lot', which is the answer of item 2.067. However, when the interview reached Item 2.067, say 15 minutes later, that answer might have been forgotten. The psychiatrist needs to concentrate in making notes of answers that may be required further on in the interview.

The remaining 'slight' agreement items were

Items 2.101 (factitious disorder), 2.102 (dissociative amnesia), 2.103 (amnesia centered on recent stress), 2.105 (dissociative stupor), 2.108 (possession experience combined with trance), 2.112 (association of dissociative symptoms with stress), and 2.116 (extensive forgetfulness with inability to recall important personal information).

'Slight' agreement for the 'factitious disorder' question did not differ from other studies. Muhs et al reported only 53% agreement[24] and Dittmann reported a kappa of 0.33[25]. Amnesia, stupor and possessive trance in dissociative disorders will have specific characteristics. For example, dissociative amnesia is more likely to involve interruption of the episodic, autobiographical memory (*i.e.* of historical information). A dissociative possessive trance needs to be unwanted and troublesome while the diagnosis of a dissociative stupor must stress the occurrence of the stuporous state in association with stressful events, problem or needs. Making use of the glossary and correctly eliciting the patient's recall or answer will help to eliminate the 'low' level of agreement[26,27].

Regarding not being able to calculate a kappa, such questions received unambiguous answers (*e.g.* Items 2.061 and 2.062 on 'blindness'; 2.062 on 'deafness'; and 2.109 on 'dissociative convulsion'). Subjects in study were homogeneous, in that all of the patients answered in the negative; thus, STATA could not compute the kappa because both raters (in the inter-rater assessment) and both ratings (in the intra-rater assessment) repeatedly gave the same rating. This pattern of rating was perhaps due to too small a sample size or poor heterogeneity.

Were the authors to overlook the 'slight' agreements and 'cannot compute a kappa value due to a constant rating', the majority of both the inter- and intra-rater kappas would have had at least 'substantial' agreement (Table 3). Therefore, any well-trained rater would obtain similar results and/or measurements or the resulting ratings would be representative of the subject's score. The authors can therefore apply SCAN with substantial confidence for both inter- and intra-rater rating.

Some areas needing fine-tuning were: 1) questions that were too long and that interfered with reliability. For example, Item 2.004 was too long, so had to be broken into smaller questions and the patient's response heard before proceeding to the next part of the question. 2) In Item 2.105, the word 'voluntary' translated into Thai was difficult to understand, thus the authors had to explain that it meant 'in control' or 'intend to'. 3) Item 2.106 probes about the trance experience, but no single Thai word contains all the meaning of the English word 'trance'; consequently, the authors explained the symptoms instead of using a single word. It was also necessary to differentiate between the acceptable cultural practices of trance (*e.g.* meditation) from unintentional and pathological ones.

Conclusion

The Somatoform and Dissociative Symptoms Section of the Thai version of SCAN was tested for its validity and reliability. Both normal persons and somatoform patients were easily interviewed. The inter- and intra-rater assessments yielded 'almost perfect' kappas for ~50% of the items and 'substantial' kappas for ~30%. Items with only 'slight' reliability probed other complaints in the factitious disorder subsection. Some items in the dissociative subsection resulted in 'slight' agreement and these defects could be corrected by increasing the sample size and heterogeneity and/or by trying to get more of an understanding of the patient's answers vis- -vis SCAN glossary.

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References

1. Yager G, Gitlin MJ. Clinical manifestation of psychiatric disorders. In: Sadock BJ, Sadock VA, editors. Kaplan & Sadock's comprehensive textbook of psychiatry. 7th ed. Philadelphia: Lippincott Williams & Wilkins; 2000: 791-2.
2. World Health Organization. Multi axial presentation of ICD-10 for use in adult psychiatry. Cambridge: Cambridge University Press; 1997: 4.
3. World Health Organization. Schedules for clinical assessment in neuropsychiatry. Version 2.1 glossary. Geneva: World health organization; 1999: 6
4. Janca A, Ustun TB, Sartorius N. New versions of World Health Organization instruments for the assessment of mental disorders. Acta Psychiatr Scand 1994; 90: 73-83
5. Cooper JE, Oates M. The principles of clinical assessment in general psychiatry In: Galder MG, Lopez-Ibor JJ Jr, Andreasen NC, editors. New Oxford textbook of psychiatry. Vol. 1. New York: Oxford University Press; 2000: 81.

6. Fink P, Orbol E, Hansen MS, Sondergaard L, De Jonge P. Detecting mental disorders in general hospitals by the SCL-8 scale. J Psychosom Res 2004; 56: 371-5
7. Brugha TS, Jenkins R, Taub N, Meltzer H, Bebbington PE. A general population comparison of the Composite International Diagnostic Interview (CIDI) and the Schedules for Clinical Assessment in Neuropsychiatry (SCAN). Psychol Med 2001; 31: 1001-13.
8. Cheng AT, Tien AY, Chang CJ, Brugha TS, Cooper JE, Lee CS, et al. Cross-cultural implementation of a Chinese version of the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) in Taiwan. Br J Psychiatry 2001; 178: 567-72.
9. World Health Organization. Schedules for clinical assessment in neuropsychiatry Version 2.1. Glossary Geneva: World Health Organization; 1999: 249-56.
10. Lynge I, Munk-Jorgensen P, Pedersen AL, Mulvad G, Bjerregaard P. Common mental disorders among patients in primary health care in Greenland. Int J Circumpolar Health 2004; 63 Suppl 2: 377-83.
11. Korsum A, Moskvina V, Brewster S, Graddock N, Ferrero F, Gill M, et al. Familiality of symptom dimensions in depression. Arch Gen Psychiatry 2004; 61: 468-74.
12. Fink P, Ornbol E, Toft T, Sparle KC, Frostholm L, Olesen F. A new empirically established hypochondriasis diagnosis. Am J psychiatry 2004; 161: 1680-91.
13. Elmore JL. Dissociative spectrum disorders in the primary care setting. Prim Care Companion J Clin Psychiatry 2000; 2: 37-41.
14. Henningsen P, Jakobsen T, Schiltenwolf M, Weiss MG. Somatization revisited: diagnosis and perceived causes of common mental disorders. J Nerv Ment Dis 2005; 193: 85-92.
15. Ballas CA, Staab JP. Medically unexplained physical symptoms: toward an alternative paradigm for diagnosis and treatment. CNS Spectr 2003; 8(Suppl 3): 20-6.
16. Heinrich TW. Medically unexplained symptoms and the concept of somatization. WMJ 2004; 103: 83-7.
17. Kirmayer LJ, Groleau D, Looper KJ, Dao MD. Explaining medically unexplained symptoms. Can J Psychiatry 2004; 49: 663-72.
18. Mai F. Somatization disorder: a practical review. Can J Psychiatry 2004; 49: 652-62.
19. Paholpak S, Krisanaprakornkit T. WHO Schedules for clinical assessment in neuropsychaitry: Thai version. KhonKaen: Faculty of Medicine, KhonKaen University; 2003.
20. World Health Organization. Schedules for clinical assessment in neuropsychiatry. Version 2.1 interview. Geneva: World Health Organization; 1999: 35-53.
21. Altman DG. Practical statistic for medical research. London: Chapman and Hall; 1991: 403-9.
22. Feinstein AR. Principles of medical statistics. Washington, D.C.: Chapman & Hall/CRC; 2002: 415-8.
23. Portney LG, Watkins MP. Foundations of clinical research: applications to practice. 2nd ed. New Jersey: Prentice Hall Health; 2000: 568-75.
24. Muhs A, Ori C. Concepts of neurotic and personality disorders in ICD-10: results of the research criteria study. Psychother Psychosom 1995; 63: 99-111.
25. Dittmann V, Albus M, Grefe J. Disorders of adult personality and behavior (F6). Results from the ICD-10 field trial of the diagnostic criteria for research in German-speaking countries. Psychopathology 1996; 29: 301-5.
26. Steinberg M. Dissociative amnesia. In: Sadock BJ, Sadock VA, editors. Kaplan & Sadock's comprehensive textbook of psychiatry. 7th ed. Philadelphia: Lippincott Williams & Wilkins; 2000: 1945.
27. Simeon D, Hollander E. Dissociative disorders not otherwise specified. In: Sadock BJ, Sadock VA, editors. Kaplan & Sadock's comprehensive textbook of psychiatry. 7th ed. Philadelphia: Lippincott Williams & Wilkins; 2000: 1572-3.

การศึกษาความแม่นตรงและความเชื่อถือได้ของ WHO SCAN ฉบับภาษาไทยหมวด Somatoform และ Dissociative symptoms

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วัตถุประสงค์: เพื่อศึกษาความแม่นตรงและความเชื่อถือได้ของ WHO Schedules for Clinical Assessment in Neuropsychiatry (SCAN) Version 2.1 ภาคภาษาไทยหมวด somatoform and dissociative symptoms

วัสดุและวิธีการ: คณะผู้วิจัยได้แปลบทสัมภาษณ์เกี่ยวกับ somatoform and dissociative symptoms ของ SCAN version 2.1 เป็นภาษาไทย หลังจากนั้นมีการตรวจสอบและแก้ไขภาคภาษาไทยอีกครั้งหนึ่งเพื่อให้มีความหมายแม่นตรงกับความหมายเดิมด้วยการตรวจสอบความหมายในภาคภาษาอังกฤษที่แปลกลับจากภาคภาษาไทยว่ามีความหมายตรงกับภาคภาษาอังกฤษต้นฉบับหรือไม่ คณะผู้วิจัยได้นำ SCAN ภาคภาษาไทยที่ได้ไปสัมภาษณ์อาสาสมัครในภาคสนามทั้ง 4 ภาคของประเทศภาคละ 20 คน เพื่อตรวจสอบความถูกต้องของคำที่ใช้ และตรวจสอบความสามารถในการเข้าใจคำถาม จิตแพทย์ 2 คนจะช่วยกันนำความเห็นที่ได้รับจากอาสาสมัครที่ตอบแบบสัมภาษณ์มาประกอบการแก้ไข SCAN ภาคภาษาไทยจนคนไทยสามารถเข้าใจคำถามได้ง่าย การศึกษาเกี่ยวกับความเชื่อถือได้ของ SCAN ภาคภาษาไทยได้กระทำตั้งแต่เดือนตุลาคม พ.ศ. 2546 ถึงเดือนสิงหาคม พ.ศ. 2547 อาสาสมัครที่ตอบแบบสัมภาษณ์มี 30 คนโดยเป็นผู้ป่วย somatoform disorder 15 คน คนปกติ 15 คน กลุ่มตัวอย่างมีระดับการศึกษาและอาชีพที่แตกต่างกัน จิตแพทย์จะใช้ SCAN ภาคภาษาไทยหมวด somatoform and dissociative symptoms สัมภาษณ์กลุ่มตัวอย่าง มีการบันทึกวิดีโอด้วย ทั้งการสัมภาษณ์และการให้คะแนนแก่คำตอบตามที่ปรากฏในวิดีโอจะกระทำโดยจิตแพทย์ที่มีความชำนาญในการใช้ SCAN

ผลการศึกษา: จากคำตอบที่ได้รับจากกลุ่มตัวอย่างและจากการประเมินของจิตแพทย์ที่มีความชำนาญในการใช้ SCAN พบว่าSCAN ภาคภาษาไทยหมวด somatoform and dissociative symptoms มีเนื้อหาที่แม่นตรง ระยะเวลาที่ใช้ในการสัมภาษณ์ผู้ป่วยคือ57.1 $\pm$ 12.1 นาที คนปกติคือ 42.1.1 $\pm$ 13.9 นาที จากคำถามที่ใช้ในการตรวจสอบอาการทั้งหมด 113 คำถาม ค่า kappa สำหรับ inter-rater reliability อยู่ในช่วง 0.81-1.0, 0.61-0.80 และช่วง 0.00-0.20 ประมาณร้อยละ 49.6,30.0 และ 8.9 ของคำถาม และไม่สามารถคำนวณค่า kappa ได้มีร้อยละ 11.5 ค่า kappa สำหรับ intra-rater reliability อยู่ในช่วง 0.81-1.0, 0.61-0.80 และช่วง 0.00-0.20 ประมาณร้อยละ 54.9, 26.5 และ 2.7 ของคำถาม และไม่สามารถคำนวณค่า kappa ได้มีร้อยละ 15.9

สรุป: SCAN ภาคภาษาไทยหมวด somatoform and dissociative symptoms เป็นเครื่องมือที่มีความแม่นตรงและมีความเชื่อถือได้อย่างมากในการประเมินคนไทยที่มีอาการ somatoform และอาการ dissociation

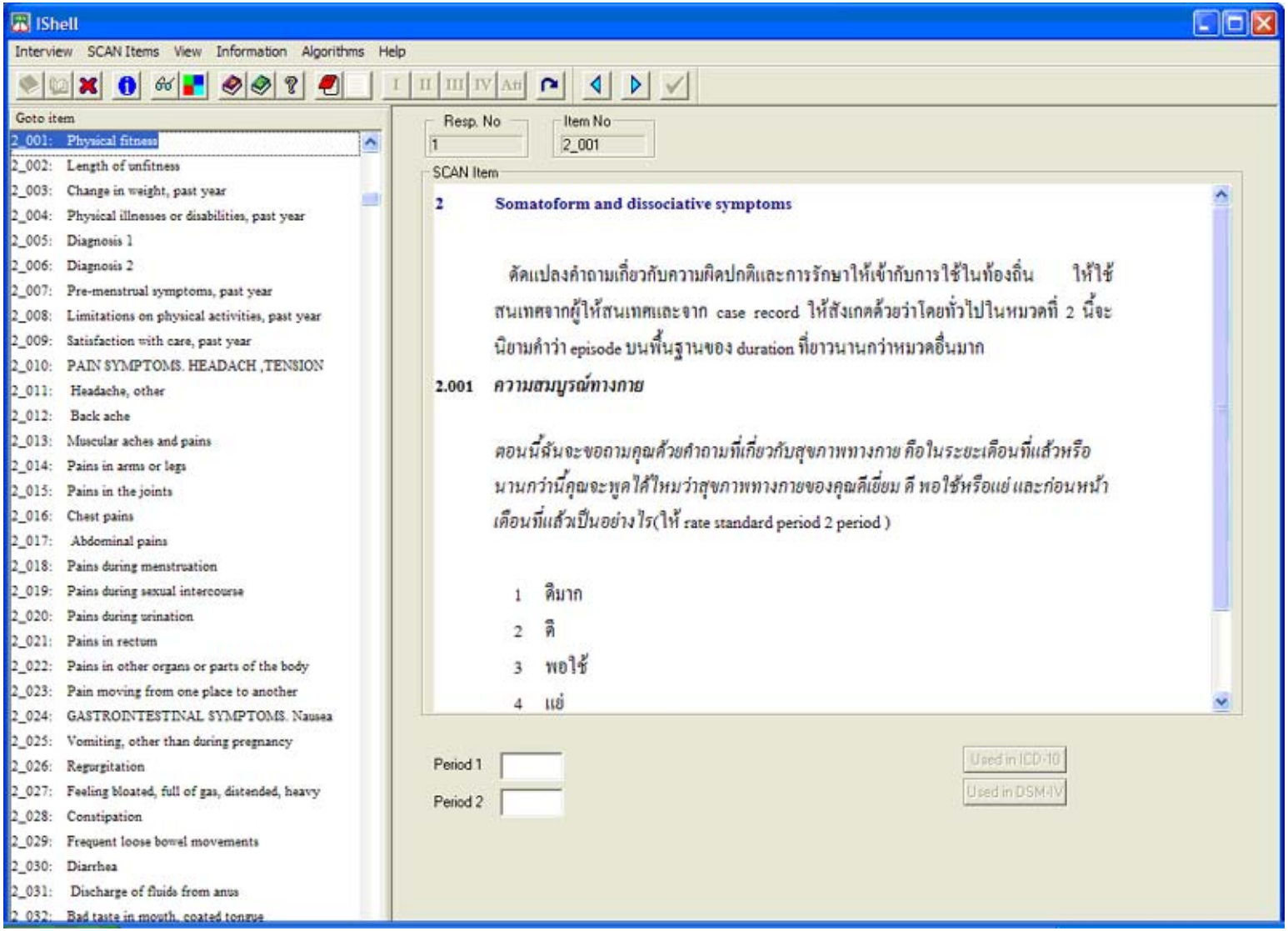

Fig. 1 SCAN Thai version Somatoform and Dissociative Symptoms Section