



# The Development of the Thai Stress Test

*Sucheera Phattharayuttawat, Ph.D.\**

*Thienchai Ngamthipwattana, M.D.\**

*Kanokrat Sukhatungkha, M.Sc.\**

---

## **Abstract**

**Objective** The purpose of this study was to develop the Thai Stress Test , having adequate construct validity, reliability, and sufficient discriminant power.

**Method** The subject were two groups; (1) pilot study samples: 60 samples and (2) survey samples were 800 samples consisted of normal and psychiatric patients. Data collected from the Thai Stress Test was developed from criteria based on stress definition.

**Results** The results of this study showed that the final test composed of 24 items - was found to be significantly different at the .001 level between those people with mental disorders and normal people. The construct validity of this test consists of two factors: negative scales, and positive scales. The reliability coefficients for the Alpha coefficients of the Thai Stress Test total test was 0.84. The values of the two scales were from 0.83 to 0.86. The Split Half reliability coefficients of the Thai Stress Test total test was 0.88. Alpha were range from 0.85 to 0.91.

**Conclusions** This study was directed at developing an effective mental health questionnaire survey which has high construct validity and reliability. The result will be a more direct and meaningful application of an instrument to detect the mental health illness in Thai community.

**J Psychiatr Assoc Thailand 2000; 45(3): 237-250.**

**Key words :** development, Thai Stress Test.

---

\* Department of Psychiatry, Faculty of Medicine Siriraj Hospital, Bangkok 10700, Thailand.

## Introduction

Stress is a bodily or mental tension resulting from factors that tend to alter an existent equilibrium<sup>1</sup>. A stress response is the compensatory reaction the body makes to the disturbance caused by the stressor. Stress is also defined as the process of appraising events (as harmful, threatening, or challenging), of assessing potential responses, and of responses which may include not just physiological but also cognitive and behavioral changes<sup>2</sup>. Hans Selye<sup>3</sup> described on organism's physiological responses to stress and formulated the general adaptation syndrome (GAS), composed of three phases: alarm, resistance, and exhaustion. The alarm phase is characterized by a flood of stress hormones that prepare the body for "fight or flight." In the resistance stage the body returns to a less aroused state, but one in which it continues to draw upon resources at an above normal rate. If the stress is not alleviated, an organism is likely to enter the third state of exhaustion in which its body tissues begin to show signs of wear and tear, and susceptibility to disease increases.

In recent years there has been increased attention directed to assessing not only how our bodies react to stress, but also how we think, feel and behave in stressful situations. Typical cognitive responses to stress include reduced ability to concentrate, distractibility, impaired performance on cognitive tasks, and a tendency to be plagued by disruptive or morbid thoughts. The emotional responses to stress include such feelings as anxiety, irritability, anger, embarrassment, depression, and hostility.

Thailand is facing problems of rapid social and

cultural changes that are responsible for increasing mental health problems. Meanwhile, the proportion of mental health professionals to the population is inadequate<sup>4</sup>. So, a future mental-health policy must be well thought out. Because mental-health treatment in the hospitals is neither sufficient nor effective, health promotion and education in the community must be considered in order to find ways to prevent mental illness before professional treatment is required. Moreover, psychiatric instruments which can be easily used in the community must also be considered.

In Thailand, research in psychiatric epidemiology is quite limited due to the lack of a proper instrument of measurement<sup>5</sup>. Most psychiatric epidemiology studies in Thailand used the instruments which were translated from western version. Otruluk et al<sup>6</sup> surveyed the people in a district of Bangkok, using the translated form of the Cornell Medical Index<sup>7</sup> to assess the mental health problems of people above 15 years old. 30 per cent were found to have a mental health problem.

Jaisin et al<sup>8</sup> studied the mental health problems of people in Chonburi province. In this study, the translated version of the Health Opinion Survey<sup>9</sup> was used to screen people with stress in the population. Then, the group of those with stress randomly identified for psychiatric illness using Symptom Distress Checklist-90<sup>10</sup>. The result revealed that 28 per cent was found to have a mental problem.

Tanchaisawat and Wongchaowat<sup>11</sup> conducted a psychiatric epidemiological study in a village of Hadyai district. The translated Thai version of Present State Examination<sup>12</sup> was used as a

screening instrument. The results revealed that about 1/3 of the studied population was identified as having anxiety neurosis and depressive neurosis.

Meksupa et al<sup>13</sup> reported the prevalence of psychiatric problems of people in Bangkok. In this study, the translated version of the Psychological Well-Being Index<sup>14</sup> was used. It found the prevalence of mental health problem was 17.4 per cent.

Nilchaikowit et al<sup>15</sup> reported the demographic and psychosocial factors correlated with psychiatric illness in a Thai community in Bangkok. In this study, the translated version of General Health Questionnaire-60<sup>16</sup> was used to screen for psychiatric illness. It was found that 19.1 per cent of the studied sample had a mental problem.

The use of rating scales to detect stress level is useful. The standard in psychiatric practice is usually a class of persons, such as psychotic, neurotic, normal or other reference group. Many clinicians have found that a schedule of items covering a variety of observable symptoms and relevant questions concerning patients' attitudes, feelings, and behaviors helps to assure a more thorough and complete psychiatric interview or examination. There is less likelihood that possibly significant phenomena may be omitted or overlooked. This is useful, whether or not the information so derived is later reduced to numerical form for another purpose. Also, ratings are more likely to be interpreted within the same semantic frame of reference. Clinicians with different backgrounds and holding different theoretical views find it valuable to have on record information gathered in a systematic and common format<sup>17</sup>. In addition,

rating scales are very easy to use and their flexibility and face validity recommend them highly<sup>18</sup>.

This study was directed at developing an effective stress test which has high construct validity and reliability. The result will be a more direct and meaningful application of an instrument to detect mental health illness in the Thai community.

## **Methods and materials**

The index items developed by this research were designed to indicate the psychological reactions (both positive and negative) of Thai people in the general population to events in their daily lives. These scales are indicators of stress or non-stress of general psychological well-being: these terms denote an individual's ability to cope with the stresses of everyday living. The scale is not concerned with detecting psychiatric or psychological disorder, which Bradburn viewed as reactions that persist after removal of the stressful conditions or that are out of proportion to the magnitude of the stress<sup>19</sup>.

A pilot study was used to evaluate the testing administration, and wording of the question items.

The final stage was collecting data from the survey samples. Results were summarized and then the completed Thai Stress Test was printed. This included the Test Administration, Test Items, and Scoring Summary.

### **Samples:**

1. Pilot study samples: 60 samples were composed of three populations : normal people,

psychiatric inpatients and outpatients. Each group composed of 30 samples from each different group.

2. Survey samples : The total survey samples were 800 (normal = 400; psychiatric inpatients = 200; psychiatric outpatients = 200)

The sample was stratified on the variables of sex, age, occupation, and education.

#### **Instruments:**

The Thai Stress Test (TST) was developed from designs to record the presence of almost any stress or non-stress. It was based upon a system analytic model of the Conceptual Basis as described below.

*The subjective feelings of stress could be indicated by a person's position on two independent dimensions, termed "positive" and "negative affect". Overall stress is expressed as the balance between these two compensatory forces: and "individual will be high in psychological well-being in the degree to which he has an excess of positive over negative affect and will be low in well-being in the degree to which negative affect predominates over positive"<sup>20</sup> Positive factors (e.g., being complimented) can compensate for the negative feelings to keep the overall sense of well-being at a constant level. The "affect balance score" represents this theme.*

*Beyond simply compensating for each other, positive and negative feelings were found empirically to be relatively independent of one another; they were not simply the opposite ends of a single dimension of well-being.*

## **Results**

The results of the study are presented as follows: The general description of the sample followed by the results of the data relating to the preliminary development of the sources of the TST items, and each of the research questions.

#### **Characteristics of the Samples**

Subjects comprised 800 samples from two main groups: 400 normal and 400 psychiatric patients, includes 371 males and 449 females aged between 12 to 60+years. The samples were distributed by sex, age, occupation, income, and education.

#### **Preliminary development of the sources of the TST items**

The Thai Stress Test (TST) was developed from designs to record the presence of almost any stress or non-stress.

For the preliminary review, it was composed of 40 items -20 negative and 20 positive -and the frequency with which they are reportedly experienced by each respondent. The items were introduced by the statement: "Here is a list that describes some of the ways people feel at different times. How often do you feel each of these ways? Never? Sometimes? Often?" The 40 items were grouped in negative and positive categories.

In the pilot study, to test the testing administration and wording of the test items, it was found that some items were not clear. After the pilot study, 8 of the 40 items were excluded because their meaning was not clear.

The final stage was to collect data from the

survey samples using the TST 32 item-form. The 32 items were analyzed by factor analysis. A subsequent principal components analysis performed by the varimax rotation revealed two factors. The factor loading criteria was 0.40<sup>21</sup>. Of the 32 items, 8 were excluded, because their question comprising items were less than 0.40. Table 1 presents the varimax rotation of first factors according to a factor loading of 0.40.

Exploratory factor analysis of the TST items which initially included 32 items and was extracted into 2 factors is shown in Table 1.

Remaining items ( 24 from 32) to be used for assessing stress of the normal and psychiatric

patients. The discriminant power of the TST was analyzed by comparing the mean of the 27% of the normal and psychiatric group with independent t-test. All TST items were found to be significantly different at  $p \leq .001$ . That means the TST has sufficient power to discriminate between those with stress disorders and non-stress people. It is shown in Table 2.

The construct validity of the TST was analyzed by factor analysis. The first step was an unrotated principal axes analysis on 24 items. It was found that two factors could be readily conceptualized. These factors account for 59.16 per cent of the total variance. All factors had eigenvalues > 1, as shown

**Table 1** Factor loading of each item used for assessing the TST

TST Item	Factor 1	Factor 2	TST Item	Factor 1	Factor 2
1	.61	.18	17	.62	.14
2	.34	.21	18	.44	.24
3	.47	.09	19	.07	.52
4	.41	.16	20	.11	.44
5	.50	.05	21	.19	.47
6	.39	.15	22	.21	.50
7	.33	.23	23	.09	.33
8	.42	.11	24	.18	.42
9	.59	.08	25	.08	.56
10	.51	.10	26	.16	.39
11	.39	.09	27	.18	.68
12	.33	.18	28	.08	.44
13	.53	.07	29	.10	.52
14	.49	.15	30	.31	.61
15	.24	.11	31	.21	.50
16	.67	.03	32	.19	.41

**Table 2** Mean, Standard deviation, and t-test between the high and low groups

TST Item	Normal		Psychiatric		t	p-value
	Mean	SD	Mean	SD		
1	1.17	.76	2.32	.73	-19.17	.000
2	1.05	.69	2.81	.77	-12.67	.000
3	2.08	.75	2.98	.68	-15.00	.000
4	1.18	.73	2.92	.78	-12.33	.000
5	2.02	.80	2.62	.68	-10.00	.000
6	2.24	.70	2.58	.96	-12.88	.000
7	2.22	.81	2.63	.63	-4.71	.001
8	2.06	1.00	2.62	.72	-6.83	.001
9	2.18	.67	2.87	.85	-19.71	.000
10	2.19	.76	2.75	.85	-8.00	.001
11	1.93	1.06	2.70	.63	-13.86	.000
12	1.18	.73	2.92	.78	-12.33	.000
13	2.58	.82	1.10	1.21	17.42	.000
14	2.56	.83	1.36	1.52	12.40	.000
15	2.53	.90	1.20	1.38	13.09	.000
16	2.48	.94	1.55	1.49	8.75	.000
17	2.54	.84	1.50	1.51	10.29	.000
18	2.60	.80	1.15	1.39	14.54	.000
19	2.22	1.03	1.29	1.43	8.73	.000
20	2.55	.88	1.50	1.54	9.83	.000
21	2.56	.84	1.63	1.47	9.92	.000
22	2.85	.76	1.09	1.21	18.96	.000
23	2.15	1.06	1.48	1.54	5.76	.000
24	2.29	1.03	1.61	1.46	6.35	.000

**Table 3** Unrotated principal axes analyzed of the TST

Factor No.	Eigenvalue	Name of Factor
1	44.1433	Negative Scales
2	14.1480	Positive Scales

**Table 4** Varimax rotation of two factors accounting for 59.16 percent of variance

Factor No.	Name of Scale	Questions comprising scale
1	Negative Scales	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
2	Positive Scales	13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

**Table 5** Reliability coefficients by Cronbach's Alpha and Split Half method

Subscale	Reliability coefficients	
	Alpha coefficient	Split Half coefficient
1. Negative Scales	.83	.85
2. Positive Scales	.86	.91
<b>Total test</b>	<b>.84</b>	<b>.88</b>

in Table 3.

When these factors were subjected to a varimax rotation, it became easier to conceptualize the factors.

The names of the scale after varimax rotation of the two factors (accounting for 59.16 per cent of variance) are negative items, and positive items respectively. These factors and their questions comprising scale are as shown in Table 4.

The TST is a two dimensional rating scale. Each scale is composed of 12 items. The reliability analyses were conducted for the two scales and the total scale of the TST by using Cronbach's Alpha and Split Half Method (Odd-Even technique). The Alpha coefficient of the TST total test was 0.84. The values of the two scales were from 0.83 to 0.86.

The Split Half coefficient of the TST total test was 0.88. The values of the two scales were from 0.85 to 0.91 are as shown in Table 5.

Separate scores of negative scales and positive scales, respectively, were combined to form the Index. Weight of 0, 1, and 3 respectively, were assigned to responses, "never," "sometimes," and "often," and these weights were cumulated into negative and positive scores, ranging from 0 to 36 for each negative and positive scales. The following matrix in Table 6 shows how the two scores were then combined to form the Index of TST.

Values of the Index appear in the cells, ranging from "1" for individuals reporting all or almost all positive feelings exclusively, through "4" for

**Table 6** Matrix table for the index of TST

Negative Scales score (Sum of Item 1-12)	Positive Scales score (Sum of Item 13-24)				
	12-36	9-11	6-8	3-5	0-2
0-1	1	2	3	4	5
2-3	2	3	4	5	6
4-5	3	4	5	6	7
6-7	4	5	6	7	8
8-36	5	6	7	8	9

**Table 7** The distribution of the samples of the index of TST

Scoring Group	Stress indicator
1	Excellent mental health (if not faking)
2, 3, 4	Normal mental health
5, 6	Mild stress
7, 8, 9	Stressful

individuals reporting about as many positive as negative feelings, to “7” for individuals reporting all or almost all negative feelings, respectively, is by per centage: 4.6; 10.9; 22.5; 22.3; 9.4; 3.5. The Index measures the general balance between the relative frequencies with which the given positive and negative feelings are typically experienced by the respondents. Then, the Matrix table for the Index of TST from Table 6 was grouped into the distribution of the samples to identify the stress indication as shown in Table 7.

## Discussion

### Reliability

The reliability analyses were conducted for the two scales and the total scale of the TST by using Cronbach’s Alpha and Split Half Method (Odd-Even technique). The Alpha coefficient of the TST total test was 0.84. The values of the two scales were from 0.83 to 0.86. The Split Half coefficient of the TST total test was 0.88. The values of the two scales were from 0.85 to 0.91. This showed that the reliability coefficients are in the middle to high values<sup>22</sup>. The acceptable internal consistency of a psychological instrument should be 0.7<sup>23,24</sup>. Alpha reliability Split Half Method coefficients

are an index of the homogeneity of the measuring instrument and also exhibit acceptable internal consistency<sup>24</sup>.

In addition, when an instrument has an adequate reliability it means that the items are tapping a similar domain, and, hence, that the instrument is internally consistent<sup>22</sup>.

### **Validity**

#### **a) Construct validity**

The TST was designed to assess a domain of functioning. It is factor-analyzed to identify separable dimensions, representing theoretical constructs, within the domain. Psychometricians strongly recommend that test developers should begin by factor analyzing the items<sup>25-28</sup>. The specific information was obtained through the use of factor analytically divided subscale scores. Then these factors were obtained logically and empirically by using exploratory approaches: principal components, extracting factors, varimax rotating factors procedures<sup>29-32</sup>. The factor-analytically derived dimensions then serve as subscales. The factor analysis was used to deduce the 32 items on the TST by eliminating items that fail to load on any factor. After this procedure, the items were deduced into items which loaded into two factors. The two factors are Negative Scales, and Positive Scales. The factors were estimated to explain the covariances among the items. The two factors account for 59.16 per cent of the total variance with confirm Streiner's view point<sup>32</sup> that factors should explain at least 50% of the total variance. Therefore, the TST is a dimensional scale to assess psychological distress.

Fisher and Corcoran<sup>17</sup> suggested that using items that group together empirically on the basis of factor analysis will make all subdimensions of a dimensional measure have good reliability and validity.

#### **b) Discriminant power**

All the TST items exhibited a reasonable spread of responses to discriminate between those with stress disorders and normal people. In the assessment of psychological distress, a primary indicator of mental health should be discriminated between the mental disorders from normal people<sup>21</sup>. In this study, all of the TST items were found to be significantly different between the normal people and psychiatric patients response group. Therefore, the 24 items of the TST met the criteria for discriminant validity.

### **Conclusion**

The Thai Stress Test (TST) has adequate reliability, adequate construct validity, and sufficient discriminant power. The result will be a more direct and meaningful application of an instrument to detect mental health illness in the Thai community.

### **Acknowledgements**

This study was supported by Mahidol University research grant, 1999. The researchers would like to thank Professor Dr. Nancy Jones for her advice on research methodology.

## References

1. Webster's ninth new collegiate dictionary, NeXT digital ed. Springfield, MA: Merriam-Webster, 1988.
2. Taylor S. Health psychology. New York : Ramdon House, 1986.
3. Selye H. The stress of life. New York : McGraw-Hill, 1956.
4. Technical report on situational analysis of mental health problems in Thailand 1986-1987. Bangkok: Thailand, 1987:170-6.
5. Otrakul A, et al. The development of mental health indicator. Faculty of Public Health, Mahidol University. Bangkok: Thailand, 1995-1997:2.
6. Otrakul A, Tangsuwan J, Porapakkarm Y. A survey of mental health problems in Bangkok. Journal of the Psychiatric Association of Thailand 1982; 27:121-33.
7. Brodman K. Cornell Medical Index the evaluation of emotional disturbance. J Clin Psychol 1952; 8:119-24.
8. Jaisin S, et al. The survey of mental health problems of people in Cholburi province. Bulletin of the Department of Medical Services 1985;10:247-59.
9. McMillan AM. The Health Opinion Survey Technique for estimating the prevalence of psychometric and related types of disorder in community. Psychological Reports 1967; 3: 325-39.
10. Derogatis LR, Lipman PS, Colvi L. SCL-90 : An outpatient psychiatric rating scale preliminary report. Psychopharmacol Bull 1973; 9:13-28.
11. Tanchaisawat W, Wongchaowat B. A survey of epidemiological study of mental disorders in a village in the southern part of Thailand. Journal of the Psychiatric Association of Thailand 1983; 28:115-26.
12. Dechatiwong S, Panpricha C, Vanichanond P. Present State Examination (Thai version). Somdejchaopraya Hospital, Department of Medical Service. Ministry of Public Health, 1992.
13. Meksupa O, Otrakul A, Srisorrachatr S. Prevalence of Mental Disorders of People in Bangkok. Journal of the Psychiatric Association of Thailand 1987;32:97-110.
14. Berkman PL. Measurement of Mental Health in General Population Survey. AmJEpidemiol 1971; 94:105-11.
15. Nichaikowit T, Sukying C, Silpakit C. Demographic and psychosocial factors correlated with psychiatric illness in a Thai community in Bangkok. Journal of the Psychiatric Association of Thailand 1996; 41:191-202.
16. Goldberg D. The General Health Survey in McDowell and Newall C. Measuring Health: A Guide to Rating Scales and Questionnaire. New York: Oxford University Press, 1987.
17. Fischer F, Corcoran K. Measures for clinical practice: A Source Book, Volumn 1. 2nd ed. New York: The Free Press, 1994.
18. Goldberg DP, Williams P. A user's guide to the general health questionnaire. London: Nfer-Nelson, 1988; 38:50-65.
19. Bradburn NM. The structure of psychological well-being. Chicago: Aldine, 1969.

20. Bradburn NM, Caplovitz D. Reports on happiness: a pilot study of behavior related to mental Health. Chicago: Aldine, 1965.
21. Briggs SR, Cheek JM. The role of factor analysis in the development and evaluation of Personality scales. *J Personality* 1986; 54:106-48.
22. Aiken LR. Psychological testing and assessment. 2nd ed. Boston: Allyn and Bacon, 1994.
23. Bech P, et al. Scales for assessment of diagnosis and severity of mental disorders. *Acta Psychiatr Scand* 1993; 16:372.
24. Nunnally J. Psychometric theory. New York. McGraw-Hill; 1978.
25. Stewart AL, John EW. Measuring functioning and well-being: The Medical Outcomes Study Approach. London: Duke University Press, 1992.
26. Jansen B, Haynes S. Self-report Questionnaires and Inventories. Handbook of Behavioral Assessment. 3rd ed. New York: John Wiley & Sons, 1989.
27. Comrey AL. Factor analysis methods of scale development in personality and clinical psychology. *J Consult Clin Psychol* 1988; 56:754-61.
28. Gorsuch RL. Factor analysis. 2nd ed. Hillsdale, New Jersey: Erbaum, 1983.
29. Cole DA. Utility of confirmatory factor analysis in test validation research. *J Consult Clin Psychol* 1987; 55:584-94.
30. Bollen KA. Structural equations with latent variances. New York: Wiley, 1989.
31. Kenny DA, Kashy DA. Analysis of the multitrait-multimethod matrix by confirmatory factor analysis. *Psychol Bull* 1992; 112: 165-72.
32. Streiner DL. Figuring out factors: The use and misuses of factor analysis. *Can J Psychiatry* 1994; 39:135-40.

## ภาคผนวก

### แบบวัดความเครียดสำหรับคนไทย

พัฒนาโดย ผศ.ดร.สุชีรา ภัทรายุทธวรรณ และคณะ ภาควิชาจิตเวชศาสตร์ คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล

สงวนสิทธิ์ตาม พ.ร.บ ลิขสิทธิ์ 2543 ผู้ที่ต้องการขอใช้แบบสำรวจนี้ในงานวิจัย โปรดติดต่อขออนุญาต  
การใช้ได้จากผู้วิจัยที่ภาควิชาจิตเวชศาสตร์ คณะแพทยศาสตร์ศิริราชพยาบาล โทร. 411-3430

### แบบวัดความเครียดสำหรับคนไทย (Thai Stress Test)

คำถามต่อไปนี้ เป็นความรู้สึกที่ท่านอาจมีในชีวิตประจำวัน ซึ่งแต่ละท่านจะมีความรู้สึกที่แตกต่างกัน ขอให้ท่านเลือกข้อที่ตรงกับความรู้สึกของท่านที่เป็นอยู่ในขณะนี้ โดยกาเครื่องหมาย X ในแต่ละช่องที่ ต้องการ			
ข้อความ	รู้สึก บ่อย ๆ	รู้สึกเป็น ครั้งคราว	ไม่เคย รู้สึกเลย
1. ท่านรู้สึกเหงาและว้าเหว่			
2. ท่านรู้สึกไม่มีความสุขเลย			
3. ท่านมีความรู้สึกเบื่อหน่าย ท้อแท้ ไม่อยากทำอะไรเลย			
4. ท่านรู้สึกกระวนกระวายเกือบตลอดเวลา			
5. ท่านรู้สึกกังวลเกือบตลอดเวลา			
6. ท่านรู้สึกไม่สบายใจโดยหาสาเหตุไม่ได้			
7. ท่านรู้สึกไม่ค่อยมีสมาธิในการกระทำสิ่งต่าง ๆ			
8. ท่านรู้สึกไม่อยากทำในสิ่งที่เคยสนใจทำเป็นประจำ			
9. ท่านอยากจะถอยหนี ไม่อยากพบปะพูดคุยกับคนอื่น			
10. ท่านรู้สึกหมดกำลังใจ			
11. ท่านรู้สึกสิ้นหวัง			
12. ท่านรู้สึกว่าตนเองไม่มีคุณค่า			
13. ท่านรู้สึกภาคภูมิใจว่า ท่านเป็นคนเก่ง			
14. ท่านรู้สึกภาคภูมิใจว่า ท่านเป็นคนที่มีความสามารถ			
15. ท่านรู้สึกภาคภูมิใจว่าท่านไม่ได้ด้อยไปกว่าใคร			
16. ท่านรู้สึกพอใจกับชีวิตความเป็นอยู่ในขณะนี้			

17. ท่านรู้สึกว่สิ่งต่าง ๆ รอบตัวท่าน ยังมีอะไรบางอย่างที่ทำให้ท่านมีความสนใจเป็นพิเศษอยู่			
18. ท่านรู้สึกยินดีและพึงพอใจกับการที่ตนเองได้รับความสำเร็จในบางสิ่งบางอย่าง			
19. ท่านรู้สึกกระตือรือร้นในการกระทำสิ่งต่าง ๆ ในชีวิตประจำวัน			
20. ท่านยังรู้สึกสนุกสนานกับการพบปะพูดคุยกับคนอื่นที่อยู่รอบตัวท่าน			
21. การคิดและการตัดสินใจของท่านยังเป็นปกติเหมือนก่อน			
22. ท่านรู้สึกว่าชีวิตนี้ยังมีความหวัง			
23. ท่านรู้สึกมีกำลังใจที่จะปรับปรุงเปลี่ยนแปลงตนเองในทางที่ดีหรือก้าวหน้าขึ้น			
24. ท่านรู้สึกว่าจิตใจของท่านเป็นปกติ			

รวมคะแนนข้อ 1-12   
ได้คะแนนอยู่ในระดับ

รวมคะแนนข้อ 13-24   
การแปลผลอยู่ในระดับ.....

©สงวนสิทธิ์ตามพ.ร.บ.ลิขสิทธิ์ 2543©



# การพัฒนาแบบวัดความเครียด ในคนไทย

สุชีรา ภัทรายุตวรรตน์ ปร.ด.\*

เอียรชัย งามทิพย์วัฒนา พ.บ.\*

กนกรัตน์ สุชะตุงคะ วท.ม.\*

## บทคัดย่อ

**วัตถุประสงค์** การศึกษาการพัฒนาแบบวัดความเครียดในคนไทย เพื่อให้ได้แบบวัดที่มีประสิทธิภาพในเชิงความเที่ยงตรงเชิงโครงสร้าง และอำนาจการจำแนก

**วิธีการศึกษา** กลุ่มตัวอย่างแบ่งออกเป็น 2 กลุ่ม คือ กลุ่มศึกษานำร่องจำนวน 60 ราย และกลุ่มตัวอย่างสำรวจจำนวน 800 ราย โดยกลุ่มตัวอย่างทั้ง 2 กลุ่มแยกเป็นกลุ่มคนปกติ กลุ่มผู้ป่วยจิตเวช เครื่องมือวัดความเครียดที่พัฒนาขึ้นสร้างตามความหมายของความเครียดซึ่งประกอบด้วยความรู้สึกในเชิงลบและเชิงบวก

**ผลการศึกษา** พบว่าแบบวัดที่ทำการพัฒนาขึ้นมีค่าอำนาจจำแนกระหว่างคนปกติและกลุ่มผู้มีปัญหาทางจิตเวชอย่างมีนัยสำคัญทางสถิติที่ระดับ .001 มีความตรงเชิงโครงสร้างจำแนกออกเป็น 2 ด้านคือ กลุ่มความรู้สึกในเชิงลบ และกลุ่มความรู้สึกเชิงบวก ความเที่ยงตรงแบบแอลฟาของแบบวัดทั้งฉบับเท่ากับ .84 โดยมีค่าความเที่ยงด้านความรู้สึกเชิงลบและบวกเป็น .83 และ .86 ตามลำดับ ความเที่ยงตรงแบบแบ่งครึ่งของแบบวัดทั้งฉบับเท่ากับ .88 โดยมีค่าความเที่ยงด้านความรู้สึกเชิงลบและบวกเป็น .85 และ .91 ตามลำดับ

**สรุป** แบบวัดความเครียดที่ทำการพัฒนาขึ้นมีประสิทธิภาพความเที่ยงตรงเชิงโครงสร้างและอำนาจจำแนกในการใช้ค้นหาผู้ที่มีปัญหาสุขภาพจิตในชุมชนไทย วารสารสมาคมจิตแพทย์แห่งประเทศไทย 2543;45(3): 237-250.

**คำสำคัญ** การพัฒนา แบบวัดความเครียดสำหรับคนไทย