

(oblique rotation) (eigen value) 2. 스트레스반응 척도의 요인분석
가1 7 . , , , 4가
. 4 42 maximum - like -
Student t . likelihood factor analysis (oblique rotation)
analysis of variance(ANOVA) 7 . (eigenvalue)가 1
가 45.1%,
Scheffe test . 2.31, 5.5%,
GARS 1.64, 3.9%,
, PSQ , SCL - 90 - R global se - 1.60, 3.8%,
verity index(GSI), positive symptom distress index 1.29, 3.1%,
(PSDI), positive symptom toatl(PST) 1.08, 2.6%,
Pearson 1.01, 2.4% .
- 가 2 3 .
1 2 2 43 factor loading .3 ,
Pearson ' , ' ,
Cronbach's . ' 가 .
, , , 7 ' 39 ,
' 4 ' 3 ' 6
Student t , ' 8 ' 5 ' 7
, , , 39
Pearson 8 , 11 , 11 ,
9 .
4 가 , 3 ,
2 , 1 .

3. 스트레스반응 척도의 신뢰도

(multiple regression ana- 1) 검사-재검사 신뢰도(Test-retest reliability)
lysis) . -
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결 과 (r) .69 .96 (.4).
2) 내적 일치도
1. 대상자들의 사회인구학적 특징(1) 215 7
, , 가 (Cronbach's)
, . 8 .76 .91, 39
, .97
, (.4).

Table 1. Sociodemographic characteristics of subjects

	Normal subjects(N = 215)	Control patients(N = 242)	Statistics	df	p
Sex					
Male N(%)	108(50.2)	118(48.8)	$\chi^2 = .098$	1	.75
Female N(%)	107(49.8)	124(51.2)			
Age					
Mean(SD)	41.7(10.4)	39.5(12.6)	$t = -2.02$	455	.04
Duration of education					
Mean(SD)	14.2(3.0)	12.9(3.6)	$t = -4.00$	446	.0001
Duration of illness(months)					
Mean(SD)	31(42)				
Religion(N = 440)					
Present	135(65.2)	174(74.7)	$\chi^2 = 4.69$	1	.03
Absent	72(34.8)	59(25.3)			
Marital status(N = 422)					
Married	161(77.8)	156(75.6)	$\chi^2 = 1.54$	1	.22
Single	46(22.2)	59(27.4)			
Occupation(N = 266)					
Professional	58(36.2)	27(25.5)	$\chi^2 = 3.40$	1	.07
Non-professional	102(63.8)	79(74.5)			
Income(1,000won)					
Mean(SD)	2,517(704)	2,273(864)	$t = -3.31$	445	.001

Table 2. Factor analysis of Stress Response Inventory and item-total correlations

Items	Tension*	Aggression*	Somatization*	Anger*
30.	.55 .68			
17.	.47 .67			
37.	.44 .67			
2.	.42 .68			
16.	.35 .62			
31. 가	.34 .63			
18. 가		.76 .68		
33. 가		.70 .73		
29. 가		.67 .66		
28.		.51 .56		
6. 가			-.82 .62	
7. 가			-.73 .68	
10.			-.35 .49	
24. 가				.62 .62
26. 가				.54 .58
27.				.48 .69
25. 가				.41 .65
34.				.35 .56
4. 가				.34 .59
Eigenvalue(explained proportion %)	18.95(45.1)	2.31(5.5)	1.64(3.9)	1.60(3.8)

* : Item-total correlation($p < .05$)

Table 3. Factor analysis of Stress Response Inventory and item-total correlations

Items	Depression*	Fatigue*	Frustration*
38. 가	.67	.70	
22. 가	.66	.70	
35.	.48	.65	
39.	.47	.70	
15.	.42	.75	
23.	.37	.70	
5.	.35	.68	
19.	.35	.68	
12.		.58	.68
14.		.42	.67
36.		.41	.50
1. 가		.36	.56
13.		.31	.56
8.			-.79 .75
9.			-.65 .79
20.			-.47 .79
11. 가			-.47 .73
3. 가			-.41 .67
32. 가			-.33 .65
Eigenvalue(explained proportion %)	1.29(3.1)	1.08(2.6)	1.01(2.4)

* : Item-total correlation(p<.05)

3) 하위척도와 척도 전체점수간의 상관성(Subscale-total correlations)

(r = .89, p = .000), (r = .87, p = .000), (r = .76, p = .000), (r = .91, p = .000), (r = .81, p = .000), (r = .91, p = .000) 7 가

4) 문항-하위척도 전체점수 간 상관성(Item-total correlations)(2, 3)

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4. 스트레스반응 척도의 타당도

1) 공존 타당도

GARS, PSQ SCL - 90 - R

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가 GARS PSQ , SCL - 90 - R

Table 4. Test-retest reliability and internal-consistency

	Test-retest correlation (n = 62)	Internal consistency (n = 215)
	r*	Cronbach's **
Tension	.69	.86
Aggression	.82	.83
Somatization	.87	.76
Anger	.92	.84
Depression	.92	.90
Fatigue	.87	.81
Frustration	.93	.91
Total	.96	.97

r : Pearson's correlation coefficient

* : p<.0001, ** : p<.0

GSI, PSDI, PST

(5).

2) 변별 타당도

(14.7 ±

6.1 vs 10.4 ± 4.2, t = 8.89 df = 429 p = .000),

(6.5 ± 2.9 vs 4.9 ± 2.2, t = 6.83 df = 443 p = .000),

Table 5. Correlation of SRI total scores with total score of GARS, PSQ and SCL-90-R

	Tension	Aggression	Somatization	Anger	Depression	Fatigue	Frustration	Total
GARS	.46*	.39*	.41*	.47*	.53*	.47*	.45*	.54*
PSQ	.68*	.37*	.55*	.65*	.69*	.63*	.71*	.75*
SCL-90-R								
GSI	.69*	.54*	.62*	.66*	.69*	.54*	.69*	.76*
PSDI	.58*	.30*	.48*	.55*	.58*	.42*	.59*	.62*
PST	.64*	.63*	.60*	.63*	.65*	.56*	.65*	.74*

*p<.01

GARS ; Global Assessment of Recent Stress Scale, PSQ : Total scores of Perceived Stress Questionnaire, GSI ; Global Severity Index, PSDI ; Positive Symptom Distress Index, PST : Positive Symptom Total

Table 6. SRI scores in each of patient groups and normal group

	Anxiety disorder (N = 71)	Depressive disorder (N = 73)	Somatiform disorder (N = 47)	Psychosomatic disorder (N = 51)	Normal control (N = 215)	F	df	p
Tension	13.4 ± 5.4*	17.2 ± 6.2*	14.8 ± 6.4*	13.1 ± 5.4*	10.4 ± 4.2	26.6	452	.0001
Aggression	6.0 ± 3.7	7.2 ± 3.8*	6.1 ± 3.4	5.4 ± 2.6	5.9 ± 2.4	3.4	451	.009
Somatization	6.3 ± 2.6*	6.7 ± 3.0*	7.1 ± 3.2*	6.0 ± 2.5	4.9 ± 2.2	12.7	452	.0001
Anger	13.5 ± 5.0*	16.4 ± 6.1*	13.8 ± 5.4*	13.0 ± 5.4	11.0 ± 4.2	18.2	452	.0001
Depression	17.4 ± 7.6*	23.9 ± 8.5*	18.8 ± 7.9*	15.8 ± 5.4	13.6 ± 5.6	34.1	452	.0001
Fatigue	12.6 ± 4.4*	15.7 ± 5.0*	13.9 ± 4.6*	12.0 ± 4.0*	9.5 ± 3.2	39.5	452	.0001
Frustration	18.1 ± 7.6*	22.2 ± 8.1*	19.4 ± 7.7*	16.7 ± 7.0*	13.2 ± 5.6	28.6	452	.0001
Total	87.1 ± 31.6*	109.2 ± 34.8*	94.1 ± 32.5*	82.0 ± 27.3	68.5 ± 23.4	32.0	452	.0001

* ; significantly higher in scores of each subscale than normal controls(p<.05 ; Scheffe test)

(14.4 ± 5.7 vs 11.0 ± 4.2, t=7.33 df=439 p=.000),
 (19.3 ± 8.2 vs 13.6 ± 5.6, t=8.71 df=427 p=.000),
 (13.7 ± 4.8 vs 9.5 ± 3.2, t=11.07 df=426 p=.000),
 (19.2 ± 7.9 vs 13.2 ± 5.6, t=9.49 df=432 p=.000)
 (94.1 ± 33.6 vs 68.5 ± 23.4, t=9.52 df=430 p=.000)가

(6.3 ± 3.5 vs 5.9 ± 2.4, t=1.45 df=425 p=.15)

가

,

가

(6).

5. 사회인구학적 변수와 스트레스반응 척도점수 간의 관계

가 (64.8 ± 20.9 vs 72.1 ± 25.4, t= -2.31 df=213 p=.02).

(r= -.16 p=.02)

(r= -.08 p=.24),

(r= -.12 p=.08)

(65.7 ± 20.9 vs 73.3 ± 27.4 t= -1.75 df=61 p=.09)

(64.5 ± 22.2 vs 68.4 ± 24.2

t= -1.03 df=158 p=.31) , (70.1 ± 25.4 vs 65.0 ± 19.6 t=1.59 df=179 p=.11)

가

가

가

가 6 가
 가 가
 가 4가 11 가
 (R 2=.23 F=17.26 p=.0001 ;
 = -.41 t= -6.92 p=.000).
 4가 4
 (r=.34 p=.02) 가 , 3 , 2 ,
 (r= -.28 1 가
 p=.048) . 가

(r= -.18 p=.13 ; 가
 r=.06 p=.61 ; r=.07 p=.63 ; 7
 r= -.17 p=.25). 7

6. 스트레스반응척도의 임상적 응용(6)
 가 가 가
 (p=.003) 가 6
 가 (p=.001), (p
 =.02), (p=.000), (p=.000), (p=.01), SCL - 90 - R ²⁶⁾ , GARS ²³⁾
 (p=.000)

(p=.001), PSQ²⁸⁾
 (p=.03), (p=.006), (p=.000), (p 가
 =.000), (p=.001), (p=.000) 가 7
 가 가
 가 가 6

고 찰

가 4가 가
 7 가 가
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 가 8 , ,
 가 , 7 ,

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Development of the Stress Response Inventory

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Objective : The purpose of this study was to develop the stress response inventory (SRI) which includes emotional, somatic, cognitive, and behavioral stress responses, and then to use the scale in clinical practice.

Methods : First, a preliminary survey was conducted for 109 healthy adults to obtain 70 response items. Second, a preliminary questionnaire was completed by 215 healthy subjects. Third, a comparison was made regarding stress responses among 242 patients (71 with anxiety disorder, 73 with depressive disorder, 47 with somatoform disorder, and 51 with psychosomatic disorder) and 215 healthy subjects.

Results : Factor analysis yielded 7 subscales : tension, aggression, somatization, anger, depression, fatigue and frustration. Reliability was computed by administering the SRI to 62 healthy subjects during a 2-week interval. Test-retest reliability for 7 subscales and the total score was significantly high, ranging between 0.69 -.96. Internal consistency was computed, and Cronbach's α for 7 subscales ranged between .76 -.91 and .97 for the total score. Concurrent validity was computed by correlating the 7 subscales and the total score with the total score of the global assessment of recent stress (GARS) scale, the perceived stress questionnaire (PSQ), and the symptom checklist-90-revised (SCL-90-R). The correlations were all at significant levels. Discriminant validity was computed by comparing the total score and the 7 subscale scores of the patient and control groups. Significant differences were found for 6 subscales and the total score, with the exception being the aggression subscale. The depressive disorder group was highest in total scores of SRI among 4 patient groups, and showed a significant higher scores in total scores of SRI than each of anxiety disorder and psychosomatic disorder groups. In total scores of SRI, female subjects were significantly higher than male ones, and subjects with lower income were significantly higher than those with higher income.

Conclusions : These results indicate that the SRI is highly reliable and valid, and that it can be utilized as an effective measure of stress for research in stress-related fields. It is suggested that depressive disorder group is more susceptible to stress than any other patient groups.

KEY WORDS : Stress response inventory · Reliability · Validity · Depressive disorder.

□ 부 록 □

스트레스반응척도

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