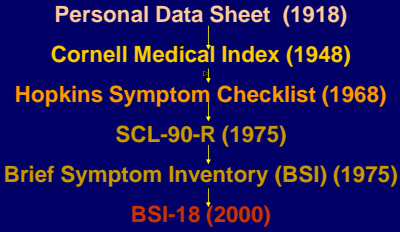


History and Design of the SCL-90-R

Leonard R. Derogatis, PhD

Brief History of the SCL-90-R / BSI



Dimensional Structures

Dimension	HSCL	SCL-90R	BSI	BSI-18
• Somatization	✓	✓	✓	✓
• Obsessive Comp.	✓	✓	✓	--
• Interspers. Sensit.	✓	✓	✓	--
• Depression	✓	✓	✓	✓
• Anxiety	✓	✓	✓	✓
• Hostility	--	✓	✓	--
• Phobic Anxiety	--	✓	✓	--
• Paranoid Ideat.	--	✓	✓	--
• Psychoticism	--	✓	✓	--
• Global Score (GSI)	✓	✓	✓	✓

Dimension Definition
Somatization

Somatization:
Reflects distress arising from perceptions of bodily dysfunction. Complaints focus on cardiovascular, gastrointestinal, respiratory, neurological and other systems with strong autonomic mediation. Pain and discomfort of the gross musculature and other somatic equivalents of anxiety are also possible components of Somatization.

Dimension Definition
Obsessive-Compulsive

Obsessive-Compulsive:
This measure focuses on thoughts, impulses and actions that are experienced as irresistible and unremitting and that are of an ego-alien or unwanted nature. Behavior and experiences reflecting a more general cognitive performance deficit also contribute to this measure.

Dimension Definition
Interpersonal Sensitivity

Interpersonal Sensitivity:
The Interpersonal Sensitivity measure focuses on feelings of inadequacy and inferiority, particularly in comparison to other people. Self-deprecation, self-doubt and marked discomfort during interpersonal interactions are characteristic manifestations of this syndrome. Self-consciousness and negative expectations about interpersonal relations are hallmark features of I-S.

Dimension Definition

Depression

Depression:

The Depression dimension reflects a representative range of the manifestations of clinical depression. It comprises symptoms of dysphoric mood and affect, signs of withdrawal of life interest, lack of motivation and loss of vital energy. Feelings of hopelessness, thoughts of suicide and other cognitive and somatic correlates of clinical depression are included in this measure.

Dimension Definition

Anxiety

Anxiety:

General signs of anxiety such as nervousness, tension and trembling are included in the domain definition, as are feelings of apprehension, dread, terror and panic. In addition, some somatic manifestations of anxiety are also reflected in the domain.

Dimension Definition

Hostility

Hostility:

The symptoms of the Hostility dimension include thoughts, feelings, and actions that are characteristic of the negative affect state of anger. Items reflect all three modalities of expression, and demonstrate qualities such as resentment, irritability, aggression and rage.

Dimension Definition
Phobic Anxiety

Phobic Anxiety:

The Phobic Anxiety dimension defines the syndrome as a persistent fear response to a specific person, place, object or situation, which is disproportionate to any actual threat, and leads to avoidance or escape behavior. Items overlap highly with DSM-IV Agoraphobia syndrome.

Dimension Definition
Paranoid Ideation

Paranoid Ideation:

The Paranoid Ideation dimension represents paranoid behavior as fundamentally a disordered mode of thinking. The Items comprising P-I reflect the cardinal clinical features of projective thought, hostility, grandiosity, suspiciousness, centrality, and fear of loss of autonomy.

Dimension Definition
Psychoticism

Psychoticism:

Psychoticism was designed to represent the construct as a continuous dimension, from a withdrawn isolated lifestyle at one pole to demonstrable psychotic behavior at the other. The measure attempts to reflect a graduated continuum from mild social alienation to first-rank symptoms of psychosis.

Importance of Norms

- Essential for Standardized Reporting
- Greatly facilitate interpretation and communication
- Greatly facilitate the evaluation of clinical change
- Enable within-profile as well as between-profile comparisons
- Enable comparisons across gender or age through specifically-keyed norm groups.

Norms via Area T-Scores

- Area T-scores represent standardized normalizing transformations that reflect the area (proportion) under the normal curve associated with that score.
- This enables the assignment of an accurate percentile equivalent score which facilitates interpretation both within and across profiles.
- The use of a standardized score like the area-T enables the development of gender-keyed norms and the possibility of meaningful comparisons between men and women.

Normative Samples for the Checklist Series

- Community population norms-SCL-90R, BSI,BSI-18
- Psychiatric Outpatient norms- SCL-90R, BSI
- Psychiatric Inpatient norms – SCL-90R, BSI
- Adolescent non-patient norms – SCL-90R, BSI
- Oncology Patient norm – BSI-18

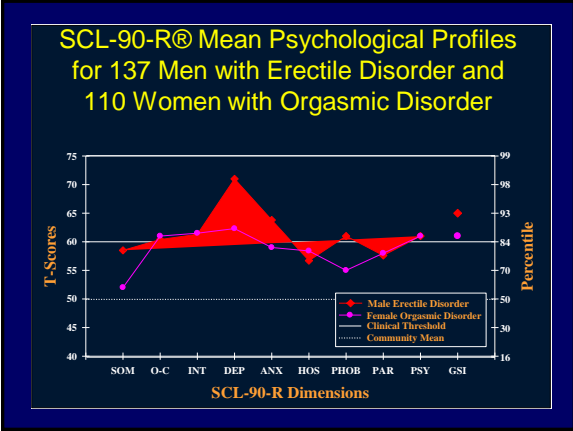
SCL-90-R Configural Items

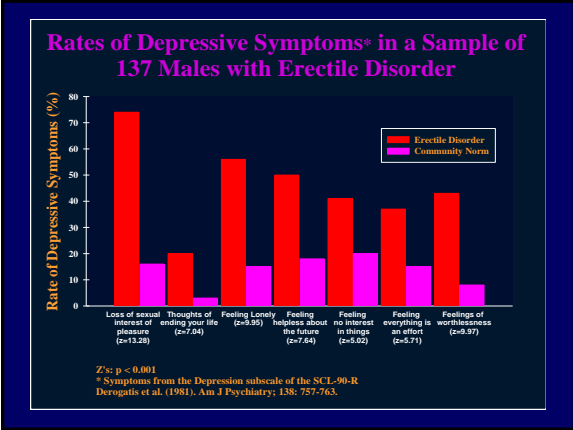
- #19 Poor appetite
- #44 Trouble falling asleep
- #59 Thoughts of death or dying
- #60 Overeating
- #64 Awakening in the early morning
- #66 Sleep that is restless or disturbed
- #89 Feelings of guilt

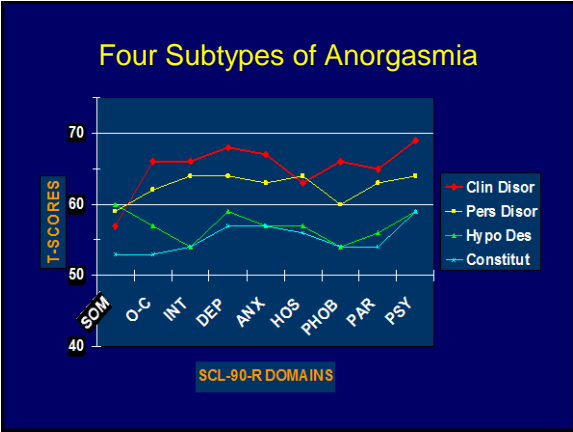
Tri-Level Interpretive Model

Tri-Level Interpretive Model

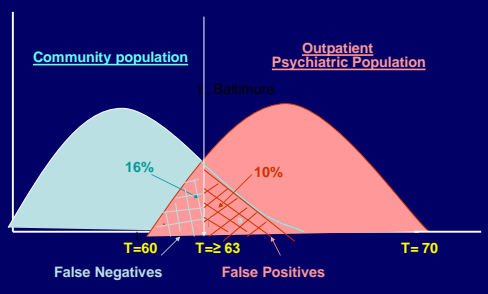
- **Global Score (s)**- Provide summary information on overall respondent distress level in a single numerical value.
- **Dimension Score (s)**- Provide information on specific areas of psychological distress and deliver a relative profile of the respondent's current distress experience.
- **Item Score (s)**- Provide details concerning the specific manifest symptoms that are currently distressing the respondent.





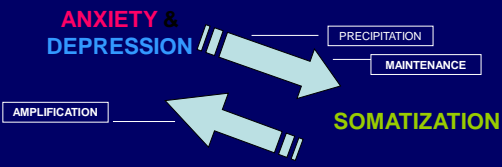


Generic Caseness Criterion for the SCL-90-R

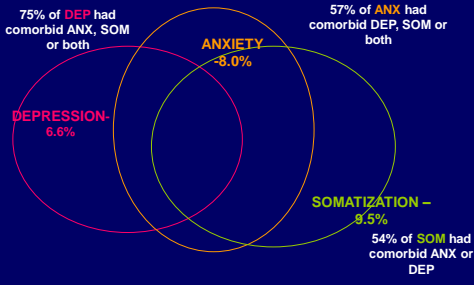


Common Comorbidities and The SCL-90-R

Model for Relationship Between Anxiety, Depression & Somatization



Depression, Anxiety and Somatization Syndrome Overlap in Primary Care



Lowe, B. et al, Psychiatry and Primary Care- 2008

SCL-90-R Somatization Score T-Value of ≥ 69 Predicts:

- Distressed high utilizers of health care
- High comorbidity with Mood (86%) & Anxiety Disorders (43%) lifetime prevalence
- 5-fold ↑ in Dx of panic disorder 9 years post eval. for chest pain
- High psychiatric morbidity in Environmental Illness pts. ie, Somataform, Anxiety & Dep.
- *Katon, W. et. al, Gen. Hosp. Psychiat. 1990.*
- *Rieff, W. et.al, Psychosomatics, 1995.*
- *Bringager, C.B. et. al, Gen. Hosp. Psychiat. 2008.*
- *Bornschein, S. et.al, Psychosomatic Med. 2006*

SCL-90-R Predictive Validity

Validation of the SCL-90-R via the Present State Examination (PSE)

<p><u>Diabetic sample n=102</u></p> <p><u>Case finding w ROC (PSE)</u> AUC = .90 Sensitivity =88% Specificity =80%</p> <p><u>Logistic Regression w/GSI</u> Sensitivity= 72% Specificity= 87%</p> <p><u>Subscale Convergence</u> 12 of 14 subscale matches</p>	<p><u>Bulimic sample (n=71)</u></p> <p><u>Case Finding vs PSE</u> AUC=.90 Sensitivity =76% Specificity =92%</p> <p><u>Logistic Regression w GSI</u> Sensitivity= 77% Specificity= 91%</p> <p><u>Subscale Convergence</u> 11 of 14 subscale matches</p>
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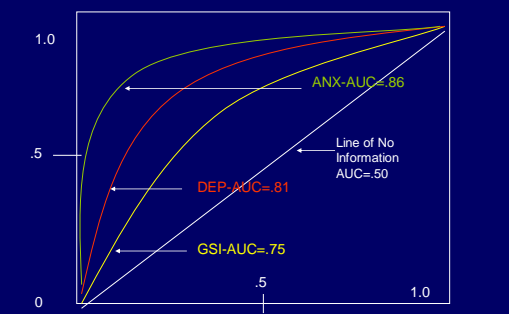
Peveler & Fairburn, Psychol. Med. (1990)

SCL-90-R Residual Gain Scores Correlated with Retrospective Outcomes Evaluations In Group Dynamic Psychotherapy

SCL-90R	Pt. Retro Eval	SCL-90-R	Ther Retro Eval
• Somatization	.36***	• Somatization	.33***
• Obsessive Comp.	.42***	• Obsessive Comp.	.34***
• Interpers. Sensitiv.	.48***	• Interpers. Sensitiv.	.39***
• Depression	.65***	• Depression	.47***
• Anxiety	.53***	• Anxiety	.39***
• Hostility	.39***	• Hostility	.24***
• Phobic Anxiety	.33***	• Phobic Anxiety	.28***
• Paranoid Ideation	.31***	• Paranoid Ideation	.23**
• Psychoticism	.50***	• Psychoticism	.28***
• GSI	.57***	• GSI	.42***
• Total Regress Variat.= 44%		• Total Regress Variat.= 25%	

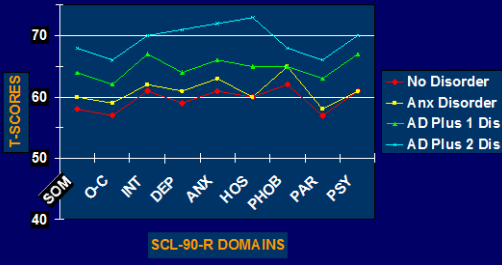
Jensen, et.al., Scand. J. Psychol. (2008)

ROC Analysis of SCL-90-R Anxiety, Depression and GSI In Identifying Cases in Primary Care



Schmitz, et.al., 1999

Impact of Comorbidity on Adolescents With Anxiety Disorders



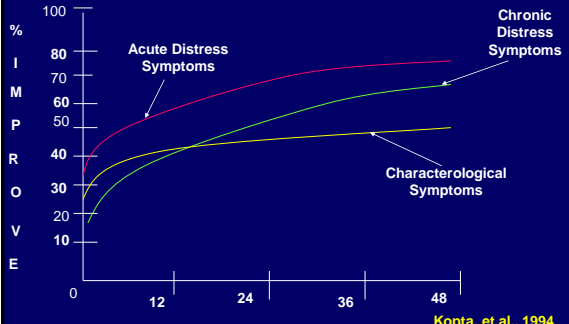
Essau, Dep & Anx, 2003

Correlation of SCL-90-R Scores with Age at Initial Dx of CHD with and without Patients with MDD

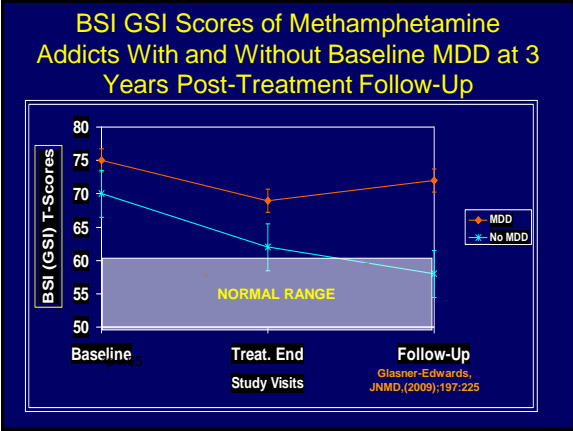
With MDD Patients (n= 77)			W/O MDD Patients (n=54)		
Dimension	r	p	Dimension	r	p
Somatization	-.03	.41	Somatization	-.04	.38
Obsess-Comp	-.13	.12	Obsess-Comp	-.13	.17
Interp Sensitiv	-.25	.02	Interp Sensitiv	-.27	.03
Depression	-.22	.03	Depression	-.25	.03
Anxiety	-.27	.01	Anxiety	-.24	.04
Hostility	-.08	.25	Hostility	-.05	.37
Phobic Anxiety	-.03	.33	Phobic Anxiety	-.06	.35
Paranoid Ideat	-.19	.05	Paranoid Ideat	-.13	.17
Psychoticism	-.24	.02	Psychoticism	-.23	.05

Ketterer, et.al., Psychosomat. (2006)

Symptomatic Recovery in Psychotherapy as a Function of Dose and Symptom Class (SCL-90-R)

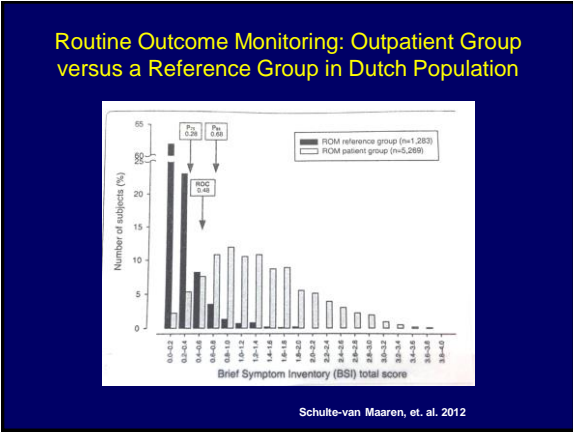


Kopta, et.al., 1994



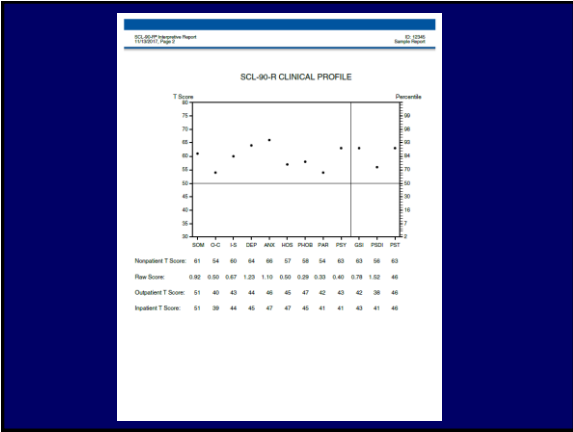
BSI Anxiety Prediction of In-Hospital Complications in Acute Myocardial Infarction Patients via Logistic Regression (N= 476)

PREDICTOR	ODDS RATIO	BETA	P-VALUE
AGE	0.99	-0.01	.310
SEX	1.25	0.22	.369
HYPERTENS.	1.32	0.28	.236
DIABETES	0.87	-0.13	.648
PREV. MI	0.55	0.60	.028
SMOKING	0.62	-0.47	.062
ANXIOLYTIC	1.57	0.45	.040
ADMIS. DBP	1.00	.01	.990
ADMIS. SBP	1.02	.02	.982
PEAK PAIN	1.07	.07	.117
BSI ANXIETY	1.79	.59	.001



SCL-90-R Case Example





SCL-90-R & BSI: Derogatis Checklists

SCL-90-R Interpretive Report
 Client ID: 12345
 Patient Name: Jane Doe

INTERPRETATION OF SCORES

The respondent's SCL-90-R symptom profile reveals a pattern and magnitude to be considered in the clinical range, and qualifies her as a positive clinical case.

Symptomatic distress levels are moderate to high/moderate for the respondent. Scores in certain areas are approaching, or have already penetrated the clinical range.

Overall intensity of distress is somewhat elevated and she has endorsed a marked number of symptoms.

The respondent's somatization levels are obviously above average, and are clearly indicative of a clinical picture involving enhanced distress associated with somatic complaints.

Levels of obsessive-compulsive symptoms in this respondent's profile are at normative mean levels, and are essentially unremarkable.

There is some evidence to suggest that the respondent is experiencing difficulties with feelings of personal inadequacy and considerations about devalued self-worth. However, distress is not of a clinical magnitude.

The respondent's level of depression is manifestly elevated and clinical in nature. There is evidence suggesting a true depressive disorder may be present. It is also worth noting that the respondent reports suicidal ideation.

The respondent's level of anxiety is significantly elevated, and clinical in nature. Evidence suggests that the respondent may be suffering from a clinical anxiety state, or may be experiencing anxiety secondary to the emergence of another psychological disorder.

The respondent's mood reveals levels of phobic anxiety above the normative mean, but not of a nature to be truly remarkable.

There is slight evidence of some preoccupations in the respondent's responses, but not at all outside the ordinary.

The respondent's psychoticism score is in the clinical range. However, it is more likely that this reflects an intense preoccupation with social alienation, rather than a thought disorder.

PATHOLOGNOMINIC SIGNS

The pathognomonic signs indicated below are not intended to suggest diagnoses. They indicate those conditions with which the test results would be consistent.

The respondent has indicated moderate concerns with suicidal ideation. This problem should be evaluated in more detail.

SCL-90-R Interpretive Report
 Client ID: 12345
 Patient Name: Jane Doe

The respondent manifests a symptom pattern highly consistent with a condition of Panic Disorder. Further evaluation is recommended since such a constellation of symptoms may also be associated with a variety of medical conditions, side effects of a therapeutic drug, or withdrawal from an addictive substance.

The respondent has positively endorsed a number of first rank symptoms of thought disorder. Although this pattern sometimes occurs as a result of psychotic, over-dramatization or other personality-based responses and distortions, the possibility of a true thought disorder should be evaluated.

The respondent indicates substantial distress associated with Sleep Disturbance. The nature and duration of this problem should be further explored.

SYMPTOMS OF NOTE

No items were endorsed "Extremely" distressed.


The patient endorsed "Quite a Bit" distressed for the following:

- 23 - Suddenly scared for no reason.
- 42 - Soreness of your muscles.
- 72 - Spells of terror or panic.

End of Report

NOTE: This and previous pages of this report contain trade secrets and are not to be released in response to requests under HIPAA or any other data disclosure law that exempts trade secret information from release). Further, release in response to litigation discovery demands should be made only in accordance with your profession's ethical guidelines and under an appropriate protective order.

Questions?



Leonard R. Derogatis, PhD

Product Information

For product details, sample reports, pricing, and ordering information visit SCL-90-R, BSI, and BSI-18 product pages at:

www.PearsonClinical.com

or contact Customer Service at 800-627-7271

University Professors teaching clinical assessment can find valuable resources through Pearson's Teaching Partner Program (TPP) at www.pearsonclinical.com/programs/tpp.html
