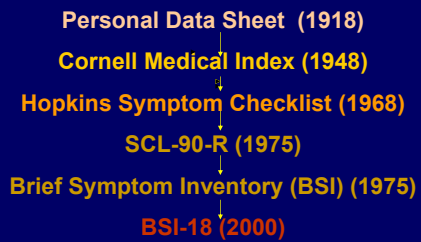


History and Design of the SCL-90-R

Leonard R. Derogatis, PhD

Brief History of the SCL-90-R / BSI



Dimensional Structures

• Dimension	HSCL	SCL-90R	BSI	BSI-18
• Somatization	✓	✓	✓	✓
• Obsessive Comp.	✓	✓	✓	✓
• Interpers. 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

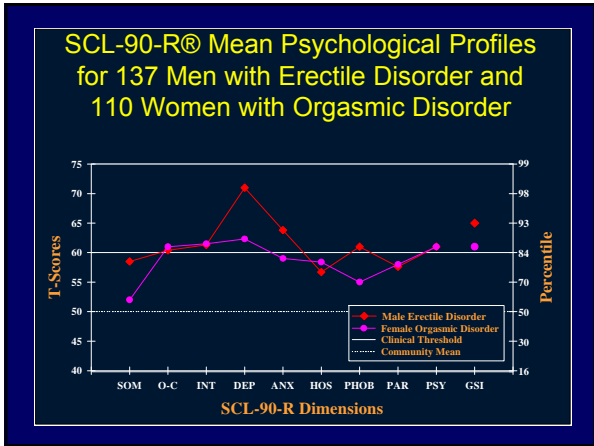
SCL-90-R Configural Items

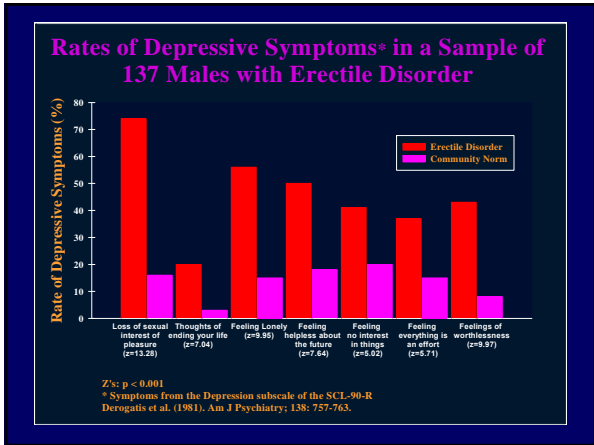
- #19 Poor appetite
- #44 Trouble falling asleep
- #59 Thoughts of death or dying
- #60 Overeating
- #64 Awakening in the early morning
- #66 Sleep that is restless or disturbed
- #89 Feelings of guilt

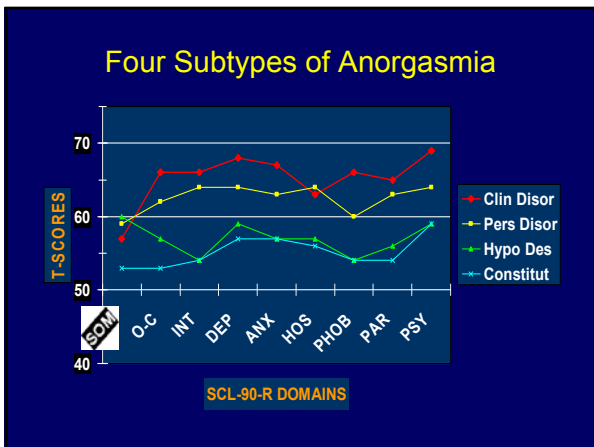
Tri-Level Interpretive Model

Tri-Level Interpretive Model

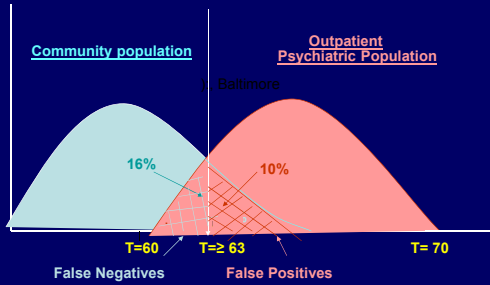
- **Global Score (s)**- Provide summary information on overall respondent distress level in a single numerical value.
- **Dimension Score (s)**- Provide information on specific areas of psychological distress and deliver a relative profile of the respondent's current distress experience.
- **Item Score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





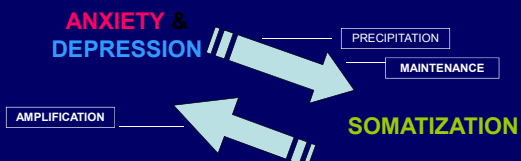


Generic Caseness Criterion for the SCL-90-R

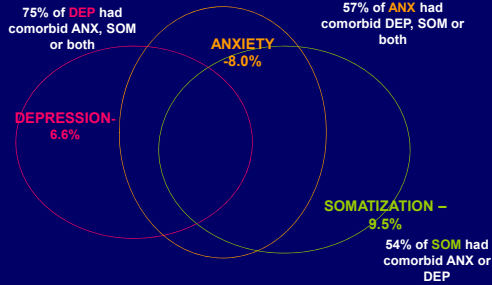


Common Comorbidities and The SCL-90-R

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 \uparrow in Dx of panic disorder 9 years post eval. for chest pain
- High psychiatric morbidity in Environmental Illness pts. ie, Somatiform, 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)

Diabetic sample (n=102)

Case finding w ROC (PSE)

AUC = .90

Sensitivity =88%

Specificity =80%

Logistic Regression w/GSI

Sensitivity= 72%

Specificity= 87%

Subscale Convergence

12 of 14 subscale matches

Bulimic sample (n=71)

Case Finding vs PSE

AUC=.90

Sensitivity =76%

Specificity =92%

Logistic Regression w GSI

Sensitivity= 77%

Specificity= 91%

Subscale Convergence

11 of 14 subscale matches

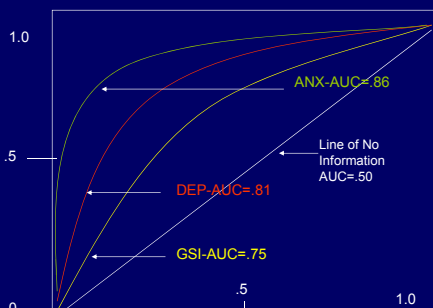
Peveler & Fairburn, Psychol. Med. (1990)

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%

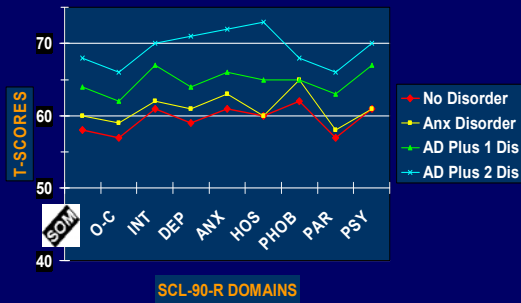
Jensen, et.al., Scand. J. Psychol. (2008)

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



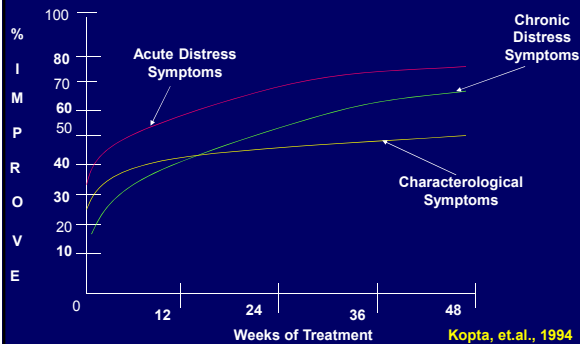
Essau, Dep & Anx, 2003

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

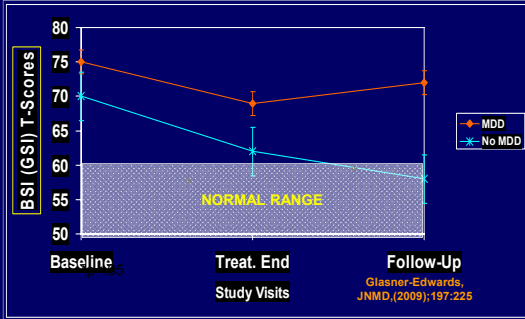
Ketterer, et al., Psychosomat. (2006)

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



Kopta, et al., 1994

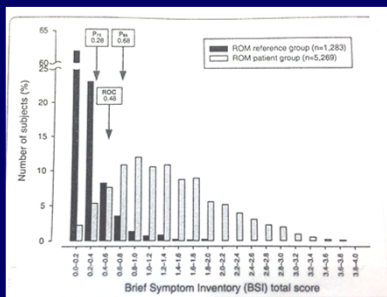
BSI GSI T-Scores of Methamphetamine Addicts With and Without Baseline MDD at 3 Years Post-Treatment Follow-Up



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

Routine Outcome Monitoring: Outpatient Group versus a Reference Group in Dutch Population



Scoring the SCL-90-R, BSI, & BSI 18

- Q Local™ or Q-global™ Scoring & Reporting
 - Remote administration (New on Q-global!)
 - On-screen report viewing / pdf output
 - Progress Reports to track patient results over time
- Mail-in Scoring Services
- Hand-Scoring Materials

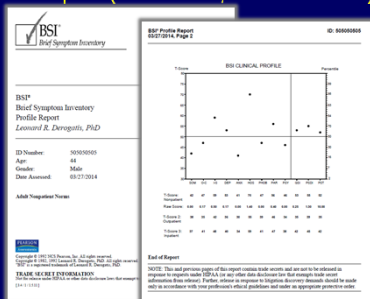


Reporting

- Profile Report (SCL-90-R, BSI & BSI 18)
 - Presents a graphic profile of raw and normalized *T* scores for each of the nine symptom scales and three global indices
 - Useful for monitoring change over time if patient is continually assessed
- Interpretive Report (SCL-90-R and BSI only)
 - Graphic profile
 - Narrative overview of symptoms
 - Pathognomonic Signs
 - Symptoms of Note
- Progress Report (Q Local)

Reporting

- Profile Report (SCL-90-R, BSI & BSI 18)



Presents a graphic profile of raw and normalized *T* scores for each of the nine symptom scales and three global indices

Reporting

- Interpretive Report (SCL-90-R and BSI)

SCL-90-R Interpretive Report
01/20/2014, Page 3

INTERPRETATION OF SCORES

The respondent's SCL-90-R composite profile reveals a pattern and magnitude to be considered in the clinical setting, and warrants further or specific clinical care.

Significantly elevated levels are indicative of high morbidity for the respondent. Scores in certain areas are elevating, and have already prompted the clinical setting.

Overall severity of distress is somewhat elevated and she has indicated a marked number of symptoms.

The respondent's somatization levels are elevated above average, and are clearly indicative of a clinical picture involving emotional distress associated with somatic symptoms.

A lack of distress-compressive components in this respondent's profile are an overall strength.

There is some evidence to suggest that the respondent is experiencing difficulty personal relationships and communication that demand and needs further attention.

The respondent's level of depression is markedly elevated and elevated in relation to the respondent may be suffering from a clinical picture that may be related to the emergence of another psychological disorder.

The respondent's overall level of global anxiety above the normal to be truly remarkable.

There is high evidence of acute symptoms in the respondent's response.

The respondent's global anxiety is in the elevated range, however it is not as severe as other areas, other than through disorder.

PATHOLOGIC SIGNS

The pathologic signs indicate that are not intended to suggest a clinical picture with which the respondent may be associated.

The respondent has indicated moderate concern with suicidal ideation. This evidence is most acute.

NOTATIONS OF NOTE

The respondent indicates "Somatization" of distress.

The patient indicated "Spins a bit" distressed for the following:

- 1) Individually used for the reason.
- 2) Suspicion of one another.
- 3) Signs of stress or panic.

End of Report

Note: This report provides a general overview of the respondent's profile and is not to be used as a replacement for a clinical diagnosis. For more information on the respondent's profile, please refer to the respondent's clinical record. This report is intended to be used in accordance with your professional ethical guidelines and under an appropriate protective order.

Graphical profile with narrative addressing symptom overview, Pathognomic Signs & Symptoms of Note

Reporting

- Progress Report (SCL-90-R, BSI & BSI 18)

PROGRESS REPORT
Form: Adult Interpretation
Test Administration: 01/20/2014, 01/20/2014, 02/23/2014
01/20/2014, Page 1

Multiple line graphs showing scores over time for various scales: Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, Psychoticism, and Total Score.

Track progress over time

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Questions?

Thank You!

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