TBI Symptom Screener for Corrections

User's Guide

Draft Version

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TBI SYMPTOM SCREENER FOR CORRECTIONS

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Funding Source and Disclaimer

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Acknowledgements

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Terms of Use

The TBI-SSC is a customized screener created from items developed and tested in the following federally funded projects: Patient Reported Outcomes Measurement Information System (PROMIS), Quality of Life in Neurological Disorders (Neuro-QoL), and TBI Quality-of-Life (TBI-QOL). The screener also includes two items from the Columbia-Suicide Severity Rating Scale (C-SSRS). Users of the TBI-SCC should follow all <u>PROMIS</u>, <u>Neuro-QoL</u>, <u>TBI-QOL</u>, and <u>C-SSRS</u> terms of use.

The TBI-SSC is free for non-commercial use. Examples of non-commercial use include administration of surveys in correctional settings to screen incarcerated individuals for administrative purposes, or as part of a research study. Users may not use the TBI-SCC in commercial applications, modify the wording or layout of items, distribute to others in other forms, or translate items into any other language without permission.

Any presentation or publication of results using the TBI-SSC should cite the user guide and screening tool as follows:

TBI Symptom Screener for Corrections (TBI-SCC) Draft Version Users Guide. 2020. http://tbicorrections.washington.edu/tbi-scc. Accessed on [date].

Questions about the TBI-SCC

If you have questions about the TBI-SCC, please contact the TBI in Corrections project.

Mailing Address

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Overview of the TBI-SCC

The TBI Symptom Screener for Corrections (TBI-SSC) is an Item Response Theory (IRT) based instrument intended for screening for TBI-related symptomatology in a correctional setting. The TBI-SSC is a publicly available, psychometrically sound item bank for measuring the effects of TBI on incarcerated individuals.

Instructions for Using the TBI-SCC

Below you will find both an administrator and respondent version of the TBI-SCC. The administrator version is the version with the numbers marked for what scores should be assigned to each response on each item. It is best practice **not to administer the version that shows scoring to the participants**. The screener is intended to be administered in full. However, individual sections may also be administered for different domains if desired. The screener contains four items to measure each of the following domains: Fatigue, Sleep Disturbance, Anxiety, Depression, Anger, Applied Cognition—General, Emotional and Behavioral Dsycontrol, Social Isolation, Headache Pain, Communication/Comprehension, Sensory Sensitivity, Dizziness/Balance. It also contains two Suicide items. The four items per domain are used to generate a score for that domain only. At this time Sensory Sensitivity, Dizziness/Balance, and suicide cannot be scored. However, scoring tables for all the other domains are given below. The screener requires less than 5 minutes to administer.

Scoring

Each domain within the screener is scored by summing responses to all 4 individual items within that domain and transforming the summary score to an IRT-based T-score using the correct conversion table provided. **The summary score should not be used for any purposes**. All reliability and validation information relates to the IRT based T-scores. Raw scores/codes for each item range from 1 to 5 as indicated in the investigator/clinician versions below. Only complete responses with no missing data on any of the 4 items can be scored using the provided conversion scoring tables. Detailed instructions for scoring the 4-item domains are outlined here (note that the red box on the side of the clinician version indicates which 4 items belong to each of the different domains):

<u>Scoring the 4-item Subscales</u>: You will score each domain shown in the clinician/investigator version below separately. These instructions are only valid if there are complete responses with no missing data on all 4 items in the domain. <u>Step 1</u>: The 4 items for the domain of interest are summed using the values provided for each response available in the clinician/researcher version of the form. This will give a summary score that ranges from 4 to 20. This is **not** a score that can be used for clinical or analytical purposes. <u>Step 2</u>: Using the **CORRECT** Summary Score to T-score Conversion Table, use the summary score to look up the IRT-based T-score in the column labeled "T-score" in the conversion table (pages 5-11 below). There are 10 different summary score to T-scores tables below so make sure to use the correct one for the domain you are currently scoring. For example, a person with a summary score of 10 using the 4 social isolation items would have a T-score of 54.3. This T-score is the final score you will use for all analyses.

If you administer the full screener, you will have 10 different T-scores, one for each of the following domains: Fatigue, Sleep Disturbance, Anxiety, Depression, Anger, Applied Cognition—General, Emotional and Behavioral Dsycontrol, Social Isolation, Headache Pain, Communication/Comprehension.

Interpreting Scores

The measures use a T-score metric where a score of 50 is the mean of the US general population, with a standard deviation of 10. This provides an immediate interpretation of the score (e.g., 60 is one standard deviation above the mean of the general population). A higher T-score represents more of the concept being measured (e.g., higher score on the fatigue measure is more fatigue; higher score on physical function means better physical function).

Based on a normal distribution, 50% of the general US population has a T-score of 50 or higher (see Figure 1 below). A respondent that receives a T-score of 60 has reported a level of the trait approximately 1 standard deviation above the mean of and is higher than 84% of individuals in the US general population centering sample.

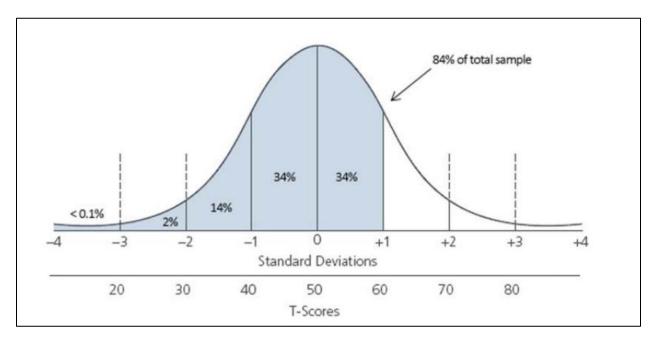


Figure 1 - A T-score of 60 indicates that approximately 84 percent of persons in the Centering sample reported a lower level of the trait, as reflected by the shaded area.

Summary Score to T-score Conversion Tables

Fatigue Summary Score to T-score Conversion

Summary Score	T-score	SD of T- Score
4	34.0	5.1
5	39.7	3.5
6	42.8	3.1
7	45.4	3.0
8	47.7	2.9
9	49.9	2.9
10	52.0	2.9
11	54.2	2.9
12	56.3	2.9
13	58.5	3.0
14	60.7	3.0
15	62.9	3.0
16	65.1	3.0
17	67.4	3.0
18	69.9	3.1
19	72.8	3.3
20	76.9	4.2

Sleep Disturbance

Summary Score to T-score Conversion

Summary Score	T-score	SD of T- Score
4	33.7	6.3
5	38.3	5.4
6	41.6	5.1
7	44.9	4.7
8	47.6	4.6
9	50.1	4.5
10	52.4	4.4
11	54.7	4.4
12	56.8	4.4
13	58.9	4.3
14	61.1	4.3
15	63.3	4.4
16	65.6	4.4
17	68.2	4.5
18	71.1	4.6
19	74.6	4.9
20	78.1	5.5

Anxiety Summary Score to T-score Conversion

Summary Score	T-score	SD of T- Score
4	38.4	5.6
5	45.4	3.0
6	48.3	2.6
7	50.4	2.4
8	52.2	2.4
9	54.0	2.4
10	55.7	2.3
11	57.3	2.3
12	58.8	2.3
13	60.4	2.3
14	62.0	2.3
15	63.5	2.3
16	65.1	2.3
17	66.8	2.4
18	68.8	2.6
19	71.2	2.9
20	75.2	4.1

Depression

Summary Score to T-score Conversion

Summary Score	T-score	SD of T- Score
4	40.6	6.1
5	48.4	3.2
6	51.2	2.8
7	53.3	2.5
8	55.2	2.4
9	56.9	2.4
10	58.6	2.4
11	60.3	2.4
12	62.0	2.4
13	63.8	2.4
14	65.6	2.4
15	67.4	2.4
16	69.3	2.4
17	71.1	2.4
18	73.2	2.5
19	75.6	2.7
20	79.4	3.7

Anger Summary Score to T-score Conversion

Summary Score	T-score	SD of T- Score
4	37.6	6.7
5	42.7	5.5
6	46.4	5.1
7	49.8	4.5
8	52.5	4.3
9	55.1	4.1
10	57.6	4.0
11	60.0	4.1
12	62.4	4.1
13	64.9	4.1
14	67.4	4.2
15	69.9	4.2
16	72.5	4.2
17	75.2	4.3
18	78.1	4.3
19	81.2	4.4
20	84.5	4.5

Applied Cognition - General Summary Score to T-score Conversion

Summary Score	T-score	SD of T- Score
4	22.0	3.8
5	25.8	2.6
6	27.7	2.5
7	29.3	2.4
8	30.8	2.3
9	32.2	2.3
10	33.6	2.4
11	35.0	2.4
12	36.4	2.4
13	37.9	2.4
14	39.4	2.4
15	40.9	2.4
16	42.4	2.4
17	44.1	2.5
18	46.2	2.9
19	48.8	3.3
20	57.2	6.6

Emotional and Behavioral Dyscontrol Summary Score to T-score Conversion

Summary Score	T-score	SD of T- Score
4	35.0	5.4
5	41.0	3.8
6	44.3	3.5
7	47.1	3.3
8	49.5	3.2
9	51.9	3.2
10	54.2	3.2
11	56.6	3.2
12	58.9	3.2
13	61.3	3.2
14	63.6	3.2
15	65.9	3.2
16	68.2	3.2
17	70.6	3.3
18	73.1	3.4
19	75.9	3.7
20	79.8	4.4

Headache Pain Summary Score to T-score Conversion

Summary		SD of T-
Score	T-score	Score
4	40.8	5.9
5	48.5	2.0
6	50.3	1.7
7	51.7	1.6
8	52.8	1.5
9	53.9	1.5
10	55.0	1.5
11	56.1	1.5
12	57.2	1.5
13	58.3	1.5
14	59.5	1.5
15	60.6	1.5
16	61.7	1.5
17	62.9	1.6
18	64.3	1.7
19	66.0	1.9
20	70.6	4.0

Communication/Comprehension Summary Score to T-score Conversion

Summary Score	T-score	SD of T- Score
4	24.1	5.0
5	28.1	4.3
6	30.7	4.2
7	33.1	4.1
8	35.3	4.1
9	37.4	4.1
10	39.4	4.1
11	41.3	4.1
12	43.3	4.1
13	45.3	4.1
14	47.4	4.1
15	49.6	4.1
16	52.0	4.1
17	54.5	4.2
18	57.4	4.4
19	60.9	4.7
20	66.3	5.7

Sensory/Dizziness/Balance

T-score conversions are not available for the Sensory Sensitivity or Dizziness/Balance scales.

Social Isolation Summary Score to T-score Conversion

Summary Score	T-score	SD of T- Score
4	36.3	5.4
5	42.5	3.3
6	45.5	2.9
7	47.9	2.8
8	50.1	2.7
9	52.2	2.8
10	54.3	2.8
11	56.4	2.8
12	58.5	2.8
13	60.6	2.8
14	62.6	2.8
15	64.5	2.8
16	66.4	2.8
17	68.3	2.9
18	70.4	3.1
19	72.6	3.3
20	76.5	4.3

Suicidality

These items are the first two items from the Columbia-Suicide Severity Rating Scale. If a respondent answers yes to item 2, please proceed to administer the Columbia. TBI Symptom Screener for Corrections: Administrator Version

TBI-SCC Administrator Version

	In the past 7 days	Never	Rarely	Some- times	Often	Always
Fatigue	How often did you feel run-down?				□4	
atig	How often did you find yourself getting tired easily?	□ 1			□4	□5
Ш.	How often did your fatigue make you feel less alert?					
	How often did your fatigue make you feel slowed					
	down in your thinking?	□1	□2	□3	□4	□5
				Some-		
Sleep Disturbance	In the past 7 days	Never	Rarely	times	Often	Always
Sleep turban	I had difficulty falling asleep.	1	□2	□3	□4	□5
Sle Stur	I had trouble stopping my thoughts at bedtime.	1	□2	□3	□4	□5
ä	I felt physically tense during the middle of the night					
	or early morning hours.	□1	□2	□3	□4	□5
	I was sleepy during the daytime.	□1	□2	□3	□4	□5
				Some-	• (
Anxiety	In the past 7 days	Never	Rarely	times	Often	Always
ix i	I felt uneasy.					
	I felt nervous.					
	My worries overwhelmed me.				□4	
_	I had sudden feelings of panic.	1	□ <mark>2</mark>		□4	□5
Depression	In the part 7 days	Never	Barahy	Some- times	Often	Alwove
Les	In the past 7 days I felt depressed		Rarely			Always
eb	I felt hopeless					
	I felt that nothing could cheer me up					
	I felt like a failure					
				Some-	LJ4	
<u> </u>	In the past 7 days	Never	Rarely	times	Often	Always
Anger	When I was frustrated, I let it show.					
Ā	I felt angry.				□4	□5
	I had trouble controlling my temper.					
	I felt like I was ready to explode					
				Some-		
Applied Cognition	In the past 7 days	Never	Rarely	times	Often	Always
Applied Cognition	I had trouble thinking clearly.	1	□2	□3	□4	□5
A B	I had to work really hard to pay attention or I would					
	make a mistake.	□1	□2	□3	□4	□5
	My thinking was slow.	1	□2	□3	□4	□5
	I had difficulty doing more than one thing at a time.	□1	□2	□3	□4	□5
Emot./Behav. Dyscontrol				Some-		
not./Behav Dyscontrol	In the past 7 days	Never	Rarely	times	Often	Always
ot./	It was hard to control my behavior.		□ <u>2</u>		□4	
	I said or did things without thinking.	1	□2	□3	□4	□5
	I became easily upset.	□1	□2	□3	□4	□5
	I was bothered by little things.	□1	□ <mark>2</mark>	□3	□4	

		In the past 7 days	Never	Rarely	Some- times	Often	Always
Headache		I was bothered by headaches.	1	□ <mark>2</mark>	□3	□4	□5
		I had constant pain from headaches	□1	□2	□3	□4	□5
	Pain	I was unable to concentrate because of headaches	□1	□2	□3	□4	□5
		Headaches interfered with my ability to do things.	1	□2	□3	□4	□5
	-	In the past 7 days	Never	Rarely	Some- times	Often	Always
Communication/	E	I forgot what I wanted to say when talking to others.	□1	□2	□3	□4	
	lsio	I had difficulty following the topic of conversation.	1	□2	□3	□4	□5
	Comprehension	I had trouble saying what I mean in conversations with others.	□1	□ <u>2</u>	□3	□4	□5
1	Ë	I had trouble finding the right words to express myself.	1	□2	□3	□4	□5
- Ū	ပိ				Some-		
		In the past 7 days	Never	Rarely	times	Often	Always
		I was irritable or anxious because of bright lights.	□1	□2	□3	□4	□5
	≥	I avoided going to places with bright lights.	□1	□2	□3	□4	□5
	Sensory	I was irritable or anxious because of too much noise.	D1	□2	□3	□4	□5
		I avoided going to places with too much noise.	1	□2	□3	□4	□5
		In the past 7 days	Never	Rarely	Some- times	Often	Always
	Dizziness/Balance	I lost my balance.	1	□ <u>2</u>	□3	□4	
		I did not participate in activities because I felt					
		unsteady and about to lose my balance.	□ <mark>1</mark>	□2	□3	□4	□5
	sss/	I felt dizzy.	1	□2	□3	□4	□5
	Dizzine	I did not participate in activities because of my dizziness.	1	□2	□3	□4	□5
	c		Never	Rarely	Some- times	Often	Always
		I feel isolated from others.	□1	□2	□3	□4	□5
	itio	I feel left out.	1	□2	□3	□4	□5
	Social Isolation	I feel that some of my friends avoid me.	1	□2	□3	□4	□5
		I feel that people avoid talking to me.	1	□2	□3	□4	□5
		Past month	Yes	No			
		r dst month					
	Suicide	Have you wished you were dead or wished you could go to sleep and not wake up?					

TBI Symptom Screener for Corrections: Informant Version

TBI Symptom Screener

Please respond to each question or statement by marking one box per row.

In the past 7 days	Never	Rarely	Some- times	Often	Always
How often did you feel run-down?					
How often did you find yourself getting tired easily?					
How often did your fatigue make you feel less alert?					
How often did your fatigue make you feel slowed	_		_		
down in your thinking?					
			Some-		
In the past 7 days	Never	Rarely	times	Often	Always
I had difficulty falling asleep.					
I had trouble stopping my thoughts at bedtime.					
I felt physically tense during the middle of the night					
or early morning hours.					
I was sleepy during the daytime.					
			Some-		
In the past 7 days	Never	Rarely	times	Often	Always
I felt uneasy.					
I felt nervous.					
My worries overwhelmed me.					
I had sudden feelings of panic.					
	•		Some-	-	
In the past 7 days	Never	Rarely	times	Often	Always
I felt depressed					
I felt hopeless					
I felt that nothing could cheer me up					
I felt like a failure					
In the next 7 days	Never	Davah	Some-	Officer	A
In the past 7 days	Never	Rarely	times	Often	Always
When I was frustrated, I let it show.					
I felt angry.					
I had trouble controlling my temper.					
I felt like I was ready to explode			Some-		
In the past 7 days	Never	Rarely	times	Often	Always
I had trouble thinking clearly.					
I had to work really hard to pay attention or I would					
make a mistake.					
make a mistake.					
My thinking was slow					
My thinking was slow.					
My thinking was slow. I had difficulty doing more than one thing at a time.			Some-		
				□ Often	Always
I had difficulty doing more than one thing at a time.			□ Some-		
I had difficulty doing more than one thing at a time. In the past 7 days	Never	Rarely	□ Some- times	Often	Always
I had difficulty doing more than one thing at a time. In the past 7 days It was hard to control my behavior.	Never	Rarely	Some- times	Often	Always

In the past 7 days	Never	Rarely	Some- times	Often	Always
I was bothered by headaches.					
I had constant pain from headaches					
I was unable to concentrate because of headaches					
Headaches interfered with my ability to do things.					
In the past 7 days	Never	Rarely	Some- times	Often	Always
I forgot what I wanted to say when talking to others.					
I had difficulty following the topic of conversation.					
I had trouble saying what I mean in conversations with others.					
I had trouble finding the right words to express myself.					
In the past 7 days	Never	Rarely	Some- times	Often	Always
I was irritable or anxious because of bright lights.					
I avoided going to places with bright lights.					
I was irritable or anxious because of too much noise.					
I avoided going to places with too much noise.					
In the past 7 days	Never	Rarely	Some- times	Often	Always
I lost my balance.					
I did not participate in activities because I felt unsteady and about to lose my balance.					
I felt dizzy.					
I did not participate in activities because of my dizziness.					
	Never	Rarely	Some- times	Often	Always
I feel isolated from others.					
I feel left out.					
I feel that some of my friends avoid me.					
I feel that people avoid talking to me.					
Past month	Yes	No			
Have you wished you were dead or wished you could go to sleep and not wake up?					
Have you actually had any thoughts of killing yourself?			If, yes proceed to Columbia- Suicide Severity Rating Scale		

Columbia-Suicide Severity Rating Scale

Past SUICIDE IDEATION DEFINITIONS AND PROMPTS month YES NO Ask questions that are bolded and <u>underlined</u>. Ask Questions 1 and 2 1) Wish to be Dead: Person endorses thoughts about a wish to be dead or not alive anymore, or wish to fall asleep and not wake up. Have you wished you were dead or wished you could go to sleep and not wake up? 2) Suicidal Thoughts: General non-specific thoughts of wanting to end one's life/commit suicide, "I've thought about killing myself" without general thoughts of ways to kill oneself/associated methods, intent, or plan. Have you actually had any thoughts of killing yourself? If YES to 2, ask questions 3, 4, 5, and 6. If NO to 2, go directly to question 6. 3) Suicidal Thoughts with Method (without Specific Plan or Intent to Act): Person endorses thoughts of suicide and has thought of a least one method during the assessment period. This is different than a specific plan with time, place or method details worked out. "I thought about taking an overdose but I never made a specific plan as to when where or how I would actually do it....and I would never go through with it." Have you been thinking about how you might kill yourself? 4) Suicidal Intent (without Specific Plan): Active suicidal thoughts of killing oneself and patient reports having some intent to act on such thoughts, as opposed to "I have the thoughts but I definitely will not do anything about them." Have you had these thoughts and had some intention of acting on them? 5) Suicide Intent with Specific Plan: Thoughts of killing oneself with details of plan fully or partially worked out and person has some intent to carry it out. Have you started to work out or worked out the details of how to kill yourself? Do vou intend to carry out this plan? 6) Suicide Behavior Question: <u>Have you ever done anything, started to do anything, or prepared to do anything to</u> end vour life? Examples: Collected pills, obtained a gun, gave away valuables, wrote a will or suicide note, took out pills but didn't swallow any, held a gun but changed your mind or it was grabbed from your hand, went to the roof but didn't jump; or actually took pills, tried to shoot yourself, cut yourself, tried to hang yourself, etc. If YES, ask: How long ago did you do any of these? Over a year ago? Between three months and a year ago? Within the last three months?

Columbia-Suicide Severity Rating Scale