

TABLE E1 | Fundamental information of final item bank for CAT-SD ($N=94$).

<i>Item</i>	<i>Abbreviated item content</i>	<i>Item parameters</i>							<i>Item-fit estimates</i>			<i>DIF</i>
		<i>a</i>	<i>Grade</i>	<i>b1</i>	<i>b2</i>	<i>b3</i>	<i>b4</i>	<i>b5</i>	<i>S-X2</i>	<i>df</i>	<i>p value</i>	<i>R² change</i>
N2	Wake up early	0.95	4	-0.05	1.43	3.24	-	-	251.57	252	0.496	0.0005
N3	Go to the bathroom	0.63	4	0.23	2.55	4.28	-	-	246.77	259	0.697	0.0004
N4	Not breathing properly	1.44	4	0.90	1.94	3.36	-	-	172.71	161	0.250	0.0082
N5	Coughing or snoring loudly	0.76	4	0.99	2.53	4.65	-	-	261.75	228	0.062	0.0078
N6	Feel cold	0.71	4	-0.20	1.44	3.43	-	-	174.06	184	0.689	0.0022
N7	Feel hot	0.87	4	0.36	1.94	4.28	-	-	250.53	246	0.408	0.0018
N8	Having nightmares	0.90	4	-0.06	1.86	4.17	-	-	274.59	243	0.080	0.0014
N9	Pain and discomfort	1.38	4	0.85	2.00	3.36	-	-	158.52	161	0.541	0.0099
N11	Other things that interfere with sleep	1.12	4	-0.67	0.82	2.49	-	-	258.98	253	0.385	0.0069
N12	Sleep quality	1.31	4	-1.44	1.11	3.04	-	-	174.36	199	0.896	0.0106
N15	Have insufficient energy to do things	1.15	4	-1.44	1.15	2.55	-	-	224.94	231	0.600	0.0126
N24	Dozing off while sitting reading	0.84	4	-1.68	0.94	3.17	-	-	269.36	243	0.118	0.0002
N25	Nodding off while watching TV	1.01	4	-0.49	1.51	2.92	-	-	249.54	237	0.275	0.0083

N26	Dozing off while sitting in a dull public place	0.84	4	-1.14	0.78	2.47	-	-	264.14	241	0.146	0.0005
N30	Sitting quietly dozing off after a boozy lunch	0.70	4	-1.04	0.77	2.69	-	-	352.94	326	0.146	0.0027
N31	Dozing off in traffic jams for a few minutes	1.11	4	0.71	2.12	3.41	-	-	209.04	190	0.164	0.0192
N32	Sleep is difficult	1.55	4	-0.67	1.50	2.82	-	-	184.76	182	0.429	0.0026
N33	Always forget things	0.96	4	-1.81	1.41	3.50	-	-	205.74	218	0.715	0.0113
N34	Sleep well at night, but I sleep a lot during the day	0.72	4	-1.99	1.72	4.79	-	-	234.27	241	0.610	0.0048
N35	Surroundings are quiet or monotonous, I will feel sleepy	1.02	4	-1.43	1.79	3.82	-	-	241.23	210	0.069	0.0010
N38	Getting confused about some simple things	1.28	4	-0.74	1.57	3.29	-	-	214.13	203	0.283	0.0004
N39	Often wake up and hard to fall asleep again	1.66	4	0.21	1.96	3.20	-	-	149.71	149	0.468	0.0005
N40	Go to bed early and wake up late	0.80	4	-0.48	2.46	4.64	-	-	256.87	225	0.071	0.0063
N41	Have an uncontrollable urge to sleep	1.36	4	0.00	2.11	3.46	-	-	175.37	161	0.207	0.0054
N42	Ineffective work	1.40	4	-0.94	1.60	2.97	-	-	168.47	182	0.756	0.0017
N43	Awakened by nightmares.	1.28	4	0.01	2.30	4.21	-	-	152.86	155	0.534	0.0096
N44	Too little sleep	1.18	4	-0.92	1.42	3.12	-	-	211.42	222	0.684	0.0029
N45	Always dreaming	0.79	4	-1.94	1.34	3.34	-	-	256.11	242	0.255	0.0045

N46	Hard to concentrate	1.32	4	-1.23	1.52	3.20	-	-	197.75	188	0.299	0.0022
N47	Retardation	1.46	4	-0.92	1.54	3.04	-	-	203.11	180	0.114	0.0032
N48	Talk /Moan in sleep	0.99	4	0.60	2.65	4.80	-	-	192.75	168	0.093	0.0129
N49	Numbness of limbs and trunk/ awakening, inability to open eyes, speak and move	1.43	4	0.19	2.08	3.47	-	-	184.65	153	0.041	0.0015
N51	Sleepy during the day	1.38	4	-1.20	1.23	2.63	-	-	194.60	202	0.633	0.0078
N52	Not happy with my sleep	1.38	4	-1.36	0.97	2.40	-	-	203.79	204	0.491	0.0096
N55	Sleep very shallow	1.37	4	-0.31	1.35	2.74	-	-	226.89	221	0.378	0.0005
N56	Loss of interest	1.63	4	-0.36	1.48	2.74	-	-	171.69	178	0.619	0.0014
N58	Do you feel fully rested after sleep	0.87	5	-1.95	0.45	2.46	3.20	-	336.98	307	0.115	0.0034
N59	Have you slept at night and dozed off during the day	1.07	5	-0.69	1.03	2.45	3.95	-	279.04	281	0.522	0.0027
N60	Average about a few hours of sleep a night	0.65	5	-4.66	0.46	4.36	4.44	-	153.85	153	0.465	0.0018
N61	Do you have difficulty falling asleep	1.62	5	-0.03	1.28	2.20	3.40	-	216.57	211	0.382	0.0004
N62	Do you wake up easily after falling asleep	1.47	5	0.27	1.60	2.64	3.66	-	188.68	191	0.533	0.0070
N63	Do you have trouble falling asleep after you wake up	1.53	5	0.35	1.53	2.40	3.33	-	199.57	195	0.396	0.0020
N64	Have you had many dreams or been awakened by nightmares	1.31	5	0.49	1.77	2.78	3.72	-	223.60	194	0.071	0.0064

N66	What is your mood after losing sleep	0.83	5	-1.82	-0.45	2.33	2.71	-	355.53	334	0.200	0.0120
N71	Wake up with a dry mouth	0.95	4	-1.71	1.26	3.51	-	-	192.37	225	0.944	0.0022
N72	Wake up during the night while coughing or being short of breath	1.58	4	0.81	2.33	3.73	-	-	149.89	121	0.038	0.0097
N73	Wake up with a sour taste in my mouth	1.24	4	0.27	2.01	3.69	-	-	181.52	181	0.475	0.0129
N74	Wake up with a headache	1.48	4	-0.04	2.02	3.40	-	-	186.66	157	0.053	0.0006
N75	Have difficulty in falling asleep	2.09	4	-0.02	1.32	2.39	-	-	160.82	170	0.681	0.0017
N76	Thoughts go through my head and keep me awake	1.62	4	-0.83	1.10	2.54	-	-	194.80	204	0.666	0.0069
N77	Worry and find it hard to relax	1.65	4	-0.37	1.49	2.96	-	-	175.23	179	0.566	0.0097
N78	Wake up during the night	1.48	4	0.06	2.04	3.78	-	-	184.60	155	0.052	0.0036
N79	After waking up during the night, I fall asleep slowly	1.76	4	0.27	1.65	2.98	-	-	203.15	162	0.016	0.0013
N80	Wake up early and cannot get back to sleep	1.50	4	0.32	1.80	3.31	-	-	169.21	173	0.567	0.0042
N81	Sleep lightly	1.31	4	-0.20	1.41	2.66	-	-	250.22	228	0.149	0.0005
N82	Sleep too little	1.44	4	-0.74	1.13	2.50	-	-	209.32	217	0.633	0.0072

N83	See dreamlike images when falling asleep or waking up	1.27	4	0.29	1.91	3.65	-	-	206.24	186	0.147	0.0029
N85	Have sleep attacks during the day	1.53	4	-0.93	1.50	3.11	-	-	201.24	176	0.093	0.0087
N86	Have sleep attacks during the day	1.87	4	0.16	1.55	2.89	-	-	209.35	167	0.014	0.0018
N87	Sometimes cannot move when falling asleep or waking up	1.64	4	0.39	2.14	3.33	-	-	147.67	128	0.112	0.0056
N88	Kick my legs	1.04	4	-0.18	2.39	4.62	-	-	200.49	182	0.165	0.0039
N89	Have cramps or pain in my legs	0.98	4	-0.05	2.85	5.23	-	-	202.30	159	0.011	0.0058
N90	Feel little shocks in my legs	1.58	4	0.86	2.24	3.89	-	-	145.89	119	0.047	0.0149
N91	Cannot keep my legs	1.80	4	0.80	2.26	3.28	-	-	151.33	119	0.024	0.0067
N92	Would rather go to bed at a different time	1.15	4	-0.15	1.92	3.57	-	-	190.35	204	0.745	0.0026
N94	Go to bed at very different times	1.33	4	-0.06	1.61	2.83	-	-	184.02	207	0.873	0.0019
N98	Having performed an action during the night I do not remember	0.90	4	-0.55	1.79	3.81	-	-	191.20	244	0.995	0.0013
N99	Have frightening dreams	1.31	4	-0.13	2.11	3.86	-	-	184.44	163	0.120	0.0059
N100	Wake up from dreams	0.62	4	-1.17	2.88	4.04	-	-	225.34	242	0.772	0.0023
N103	Have physical symptoms during or after dreams	0.58	4	-1.08	2.95	4.88	-	-	253.33	249	0.412	0.0041

N104	My bedroom is too light	1.07	4	0.31	2.08	3.68	-	-	223.16	205	0.183	0.0031
N105	My bedroom is too noisy	1.07	4	0.06	1.97	3.59	-	-	209.39	212	0.538	0.0004
N109	Feel sad	1.69	4	-0.02	1.73	2.93	-	-	161.36	163	0.522	0.0000
N110	Have no pleasure or interest	1.60	4	-0.34	1.71	3.03	-	-	188.90	172	0.179	0.0020
N111	Feel tired at getting up	1.78	4	-0.20	1.47	2.75	-	-	168.24	176	0.650	0.0014
N112	Feel sleepy during the day and Struggle to remain alert	1.62	4	-0.20	1.62	2.82	-	-	181.84	181	0.468	0.0019
N114	Easily irritated	1.36	4	-0.12	1.81	3.30	-	-	183.11	191	0.646	0.0002
N115	Have difficulty in concentrating at work or school	1.27	4	-0.85	1.34	2.93	-	-	221.48	219	0.440	0.0078
N116	Worry whether I sleep enough	1.52	4	-0.56	1.05	2.38	-	-	213.78	221	0.624	0.0067
N117	Generally, I sleep badly	2.02	4	-0.51	1.01	2.28	-	-	204.14	186	0.172	0.0064
N119	Hard to discontinue your thoughts before going to bed	1.47	5	-0.74	0.47	1.66	2.78	-	311.01	292	0.213	0.0033
N120	Feel drowsy during the day	1.38	5	-1.13	0.47	1.92	3.08	-	262.54	252	0.311	0.0044
N122	Have trouble in sleeping	1.96	5	-0.18	0.86	1.62	2.55	-	241.47	245	0.552	0.0034
N123	Woke up in pain	1.52	5	0.65	1.69	2.76	3.78	-	198.80	169	0.058	0.0122
N124	I was tired, so I had to avoid or cancel activities with my friend	1.87	5	0.24	1.17	2.12	2.95	-	167.11	192	0.902	0.0024
N126	Difficulty falling asleep	2.27	5	-0.03	1.04	1.95	2.74	-	178.63	186	0.638	0.0018

N127	Difficulty maintaining sleep	2.49	5	0.21	1.20	2.05	2.64	-	143.90	154	0.709	0.0061
N128	Go to bed early	0.88	5	-0.36	1.62	3.55	5.39	-	265.49	246	0.188	0.0080
N130	Sleep problems interfere with your daytime functions	1.41	5	-1.41	0.62	1.99	3.30	-	251.87	236	0.228	0.0130
N131	Insomnia affect your quality of life	1.74	5	-0.71	0.72	2.01	3.05	-	230.01	217	0.260	0.0011
N132	How much anxiety you have about your current sleep problems	2.28	5	-0.43	0.76	1.77	2.61	-	188.97	199	0.684	0.0007
N133	How long did it usually take you to fall asleep in the past week	1.33	5	-0.07	1.47	2.52	3.42	-	236.77	221	0.222	0.0010
N135	Wake up in the morning feeling rested and energized	0.93	6	-2.52	-0.75	0.14	1.50	3.80	411.63	423	0.645	0.0095
N143	Feeling rested	0.80	6	-3.13	-1.02	0.03	1.43	3.67	481.26	426	0.033	0.0103
