

<b>Supplementary Table S1. Summary statistics and correlation of item responses with intensity of worst and average itch and frequency of itch.</b>											
<b>Item No.</b>	<b>Item</b>	<b>Mean</b>	<b>SD</b>	<b>Response Category Frequency</b>					<b>Pearson correlation (r)*</b>		
				<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Worst itch</b>	<b>Average itch</b>	<b>Frequency of itch</b>
<b>Q1</b>	...because of itch, I was less active.	2.90	1.17	91 (15.2%)	117 (20.2%)	210 (35.2%)	128 (21.2%)	54 (9.2%)	0.59	0.60	0.59
<b>Q2</b>	...because of itch, I limited exercising.	2.84	1.27	121 (20.2%)	108 (18.2%)	184 (31.2%)	118 (20.2%)	69 (12.2%)	0.55	0.56	0.51
<b>Q3</b>	...because of itch, it was hard to do some types of exercise.	2.89	1.27	117 (20.2%)	105 (18.2%)	169 (28.2%)	145 (24.2%)	64 (11.2%)	0.57	0.59	0.53
<b>Q4</b>	...because of itch, it was hard to run.	2.76	1.32	152 (25.2%)	90 (15.2%)	172 (29.2%)	120 (20.2%)	66 (11.2%)	0.53	0.58	0.52
<b>Q5</b>	...because of itch, it was hard to walk.	2.55	1.24	158 (26.2%)	139 (23.2%)	165 (28.2%)	94 (16.2%)	44 (7.2%)	0.55	0.59	0.51
<b>Q6</b>	...because of itch, it was hard to do vigorous physical activity, such as running, lifting heavy objects, or participating in strenuous sports.	2.86	1.30	120 (20.2%)	122 (20.2%)	155 (26.2%)	131 (22.2%)	72 (12.2%)	0.55	0.56	0.52
<b>Q7</b>	...because of itch, it was hard to do moderate physical activity, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf.	2.69	1.23	131 (22.2%)	134 (22.2%)	167 (28.2%)	124 (21.2%)	44 (7.2%)	0.57	0.59	0.53
<b>Q8</b>	...because of itch, it was hard to do light physical activity.	2.64	1.22	135 (23.2%)	144 (24.2%)	172 (29.2%)	101 (17.2%)	48 (8.2%)	0.55	0.60	0.50
<b>Q9</b>	...because of itch, I sat around more than usual.	2.92	1.30	120 (20.2%)	96 (16.2%)	167 (28.2%)	144 (24.2%)	73 (12.2%)	0.60	0.61	0.55
<b>Q10</b>	...because of itch, it was hard to do activities that made me sweat.	3.12	1.30	92 (15.2%)	87 (15.2%)	185 (31.2%)	128 (21.2%)	108 (18.2%)	0.57	0.55	0.57
<b>Q11</b>	...because of itch, I did as little as possible physically.	2.85	1.25	116 (19.2%)	108 (18.2%)	188 (31.2%)	124 (21.2%)	64 (11.2%)	0.59	0.61	0.56
<b>Q12</b>	...because of itch, I had balance problems.	2.28	1.31	248 (41.2%)	101 (17.2%)	130 (22.2%)	78 (13.2%)	43 (7.2%)	0.41	0.49	0.40
<b>Q13</b>	...because of itch, I limited the clothing I could wear.	3.12	1.27	91 (15.2%)	79 (13.2%)	194 (32.2%)	139 (23.2%)	97 (16.2%)	0.55	0.52	0.53
<b>Q14</b>	...because of itch, it was hard to wear short-sleeves.	2.57	1.30	176 (29.2%)	115 (19.2%)	152 (25.2%)	106 (18.2%)	51 (9.2%)	0.47	0.51	0.43
<b>Q15</b>	...because of itch, it was hard to wear shorts.	2.66	1.38	178 (30.2%)	100 (17.2%)	151 (25.2%)	93 (16.2%)	78 (13.2%)	0.51	0.56	0.47

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<b>Item No.</b>	<b>Item</b>	<b>Mean</b>	<b>SD</b>	<b>Response Category Frequency</b>					<b>Pearson correlation (r)*</b>		
				<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Worst itch</b>	<b>Average itch</b>	<b>Frequency of itch</b>
<b>Q16</b>	...because of itch, it was hard to wear wool clothing.	3.30	1.46	111 (19.2%)	69 (12.2%)	122 (20.2%)	128 (21.2%)	170 (28.2%)	0.48	0.49	0.46
<b>Q17</b>	...because of itch, it was hard to wear tight clothing.	3.25	1.31	86 (14.2%)	70 (12.2%)	184 (31.2%)	131 (22.2%)	129 (22.2%)	0.54	0.54	0.55
<b>Q18</b>	...because of itch, it was hard to wear warm clothing.	3.09	1.33	104 (17.2%)	83 (14.2%)	174 (29.2%)	132 (22.2%)	107 (18.2%)	0.52	0.53	0.51
<b>Q19</b>	...because of itch, it was hard to wear certain shoes.	2.59	1.38	196 (33.2%)	92 (15.2%)	146 (24.2%)	97 (16.2%)	69 (12.2%)	0.43	0.45	0.39
<b>Q20</b>	...It was hard to wear shorts because of how my legs looked.	2.80	1.37	153 (26.2%)	98 (16.2%)	149 (25.2%)	118 (20.2%)	82 (14.2%)	0.46	0.50	0.45
<b>Q21</b>	...because of itch, my physical activities were limited.	2.83	1.25	122 (20.2%)	102 (17.2%)	198 (33.2%)	114 (19.2%)	64 (11.2%)	0.58	0.61	0.54
<b>Q22</b>	...because of itch, I was nervous.	3.05	1.30	100 (17.2%)	94 (16.2%)	177 (30.2%)	133 (22.2%)	96 (16.2%)	0.51	0.55	0.50
<b>Q23</b>	...I was afraid my itch would never go away.	3.34	1.21	56 (9.2%)	83 (14.2%)	186 (31.2%)	153 (26.2%)	122 (20.2%)	0.60	0.59	0.60
<b>Q24</b>	...my itch was annoying.	3.89	1.11	22 (4.2%)	42 (7.2%)	147 (25.2%)	159 (27.2%)	230 (38.2%)	0.53	0.49	0.57
<b>Q25</b>	...because of itch, my thinking was slowed.	2.55	1.33	176 (29.2%)	131 (22.2%)	140 (23.2%)	91 (15.2%)	62 (10.2%)	0.49	0.55	0.43
<b>Q26</b>	...because of itch, I felt angry.	3.05	1.29	100 (17.2%)	91 (15.2%)	181 (30.2%)	134 (22.2%)	94 (16.2%)	0.50	0.52	0.44
<b>Q27</b>	...because of itch, I felt sad.	2.76	1.32	141 (24.2%)	111 (19.2%)	176 (29.2%)	97 (16.2%)	75 (13.2%)	0.48	0.51	0.46
<b>Q28</b>	...because of itch, I felt depressed.	2.69	1.35	158 (26.2%)	119 (20.2%)	158 (26.2%)	84 (14.2%)	81 (14.2%)	0.50	0.55	0.46
<b>Q29</b>	...because of itch, I felt irritable.	3.31	1.20	57 (10.2%)	83 (14.2%)	190 (32.2%)	157 (26.2%)	113 (19.2%)	0.51	0.50	0.43
<b>Q30</b>	...because of itch, I felt miserable.	3.15	1.28	77 (13.2%)	109 (18.2%)	175 (29.2%)	124 (21.2%)	115 (19.2%)	0.56	0.57	0.52
<b>Q31</b>	...because of itch, I felt frustrated.	3.42	1.23	59 (10.2%)	60 (10.2%)	194 (32.2%)	144 (24.2%)	143 (24.2%)	0.55	0.54	0.49
<b>Q32</b>	...because of itch, I felt embarrassed.	2.98	1.32	107 (18.2%)	108 (18.2%)	174 (29.2%)	112 (19.2%)	99 (17.2%)	0.55	0.53	0.47

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<b>Item No.</b>	<b>Item</b>	<b>Mean</b>	<b>SD</b>	<b>Response Category Frequency</b>					<b>Pearson correlation (r)*</b>		
				<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Worst itch</b>	<b>Average itch</b>	<b>Frequency of itch</b>
<b>Q33</b>	...because of itch, I was distracted.	3.21	1.19	56 (9.2%)	103 (17.2%)	201 (34.2%)	139 (23.2%)	101 (17.2%)	0.57	0.56	0.52
<b>Q34</b>	...I worried that others would see me scratching.	3.23	1.29	78 (13.2%)	88 (15.2%)	180 (30.2%)	129 (22.2%)	125 (21.2%)	0.53	0.55	0.52
<b>Q35</b>	...because of itch, I was self-conscious.	3.24	1.26	75 (13.2%)	79 (13.2%)	188 (31.2%)	143 (24.2%)	115 (19.2%)	0.57	0.56	0.55
<b>Q36</b>	...because of itch, people avoided touching me (ex: holding my hand).	2.54	1.39	199 (33.2%)	109 (18.2%)	135 (23.2%)	82 (14.2%)	75 (13.2%)	0.43	0.47	0.42
<b>Q37</b>	...because of itch, I avoided certain foods.	2.50	1.35	200 (33.2%)	107 (18.2%)	146 (24.2%)	85 (14.2%)	62 (10.2%)	0.38	0.44	0.36
<b>Q38</b>	...because of itch, it was hard to shower or take a bath.	2.53	1.36	195 (33.2%)	106 (18.2%)	151 (25.2%)	81 (14.2%)	67 (11.2%)	0.46	0.48	0.44
<b>Q39</b>	...because of itch, it was hard to watch television.	2.48	1.30	192 (32.2%)	124 (21.2%)	141 (24.2%)	93 (16.2%)	50 (8.2%)	0.49	0.53	0.46
<b>Q40</b>	...because of itch, it was hard to play games (ex: board games, computer games, phone apps).	2.57	1.37	188 (31.2%)	111 (19.2%)	146 (24.2%)	84 (14.2%)	71 (12.2%)	0.47	0.51	0.47
<b>Q41</b>	...because of itch, it was hard to read a book.	2.58	1.33	170 (28.2%)	135 (23.2%)	137 (23.2%)	93 (16.2%)	65 (11.2%)	0.48	0.52	0.44
<b>Q42</b>	...because of itch, it was hard to watch a movie.	2.53	1.31	179 (30.2%)	126 (21.2%)	151 (25.2%)	87 (15.2%)	57 (10.2%)	0.49	0.53	0.47
<b>Q43</b>	...because of itch, I had to stop what I was doing to scratch.	3.44	1.19	50 (8.2%)	68 (11.2%)	184 (31.2%)	165 (28.2%)	133 (22.2%)	0.57	0.56	0.58
<b>Q44</b>	...because of itch, I made more mistakes than normal.	2.66	1.25	133 (22.2%)	152 (25.2%)	156 (26.2%)	103 (17.2%)	56 (9.2%)	0.52	0.54	0.46
<b>Q45</b>	...because of itch, it was hard to sit still.	3.14	1.26	75 (13.2%)	109 (18.2%)	186 (31.2%)	120 (20.2%)	110 (18.2%)	0.56	0.57	0.52
<b>Q46</b>	...because of itch, it was hard to do even simple tasks.	2.77	1.31	130 (22.2%)	134 (22.2%)	152 (25.2%)	112 (19.2%)	72 (12.2%)	0.54	0.60	0.53
<b>Q47</b>	...because of itch, it was hard to relax	3.20	1.20	57 (10.2%)	110 (18.2%)	194 (32.2%)	136 (23.2%)	103 (17.2%)	0.59	0.58	0.53
<b>Q48</b>	...because of itch, I was restless.	3.25	1.22	58 (10.2%)	102 (17.2%)	185 (31.2%)	143 (24.2%)	112 (19.2%)	0.60	0.59	0.57
<b>Q49</b>	...my itch interfered with my sex life.	2.60	1.44	202 (34.2%)	96 (16.2%)	125 (21.2%)	93 (16.2%)	84 (14.2%)	0.48	0.51	0.47

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<b>Item No.</b>	<b>Item</b>	<b>Mean</b>	<b>SD</b>	<b>Response Category Frequency</b>					<b>Pearson correlation (r)*</b>		
				<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Worst itch</b>	<b>Average itch</b>	<b>Frequency of itch</b>
<b>Q50</b>	...because of itch, I had difficulty falling asleep.	3.24	1.22	64 (11.2%)	96 (16.2%)	181 (30.2%)	153 (26.2%)	106 (18.2%)	0.59	0.56	0.57
<b>Q51</b>	...because of itch, I had trouble staying asleep.	3.06	1.32	102 (17.2%)	100 (17.2%)	162 (27.2%)	133 (22.2%)	103 (17.2%)	0.54	0.54	0.54
<b>Q52</b>	...because of itch, I had trouble sleeping.	3.18	1.31	85 (14.2%)	95 (16.2%)	169 (28.2%)	132 (22.2%)	119 (20.2%)	0.56	0.55	0.56
<b>Q53</b>	...because of itch, my sleep was restless.	3.10	1.28	89 (15.2%)	101 (17.2%)	171 (29.2%)	140 (23.2%)	99 (17.2%)	0.55	0.55	0.56
<b>Q54</b>	...because of itch, I was absent from work.	2.15	1.35	300 (50.2%)	76 (13.2%)	103 (17.2%)	76 (13.2%)	45 (8.2%)	0.39	0.45	0.36
<b>Q55</b>	...because of itch, it was hard to work.	2.72	1.32	150 (25.2%)	113 (19.2%)	159 (27.2%)	113 (19.2%)	65 (11.2%)	0.50	0.55	0.48
<b>Q56</b>	...I limited activities with others because of how my skin looked.	2.69	1.35	164 (27.2%)	109 (18.2%)	150 (25.2%)	105 (18.2%)	72 (12.2%)	0.51	0.53	0.49
<b>Q57</b>	...because of itch, I avoided being around people.	2.65	1.35	169 (28.2%)	112 (19.2%)	149 (25.2%)	101 (17.2%)	69 (12.2%)	0.51	0.55	0.47
<b>Q58</b>	...because of itch, I avoided going out with friends.	2.63	1.38	180 (30.2%)	108 (18.2%)	141 (24.2%)	96 (16.2%)	75 (13.2%)	0.50	0.55	0.47
<b>Q59</b>	...because of itch, I avoided going to social events.	2.62	1.40	193 (32.2%)	92 (15.2%)	140 (23.2%)	103 (17.2%)	72 (12.2%)	0.52	0.54	0.49
<b>Q60</b>	...because of itch, people treated me differently.	2.30	1.33	239 (40.2%)	116 (19.2%)	119 (20.2%)	77 (13.2%)	49 (8.2%)	0.42	0.46	0.38
<b>Q61</b>	...because of itch, I stayed home most of the time.	2.78	1.40	158 (26.2%)	103 (17.2%)	140 (23.2%)	109 (18.2%)	90 (15.2%)	0.48	0.52	0.50
<b>Q62</b>	...because of itch, I avoided interacting with other people.	2.63	1.38	178 (30.2%)	113 (19.2%)	139 (23.2%)	95 (16.2%)	75 (13.2%)	0.50	0.54	0.50
<b>Q63</b>	...my Itch bothered people around me	2.45	1.34	211 (35.2%)	110 (18.2%)	135 (23.2%)	89 (15.2%)	55 (9.2%)	0.43	0.47	0.41
<b>Q64</b>	...people told me to stop scratching.	2.72	1.34	158 (26.2%)	100 (17.2%)	171 (29.2%)	95 (16.2%)	76 (13.2%)	0.49	0.51	0.46
<b>Q65</b>	...because of itch, I had to depend on the help of other people.	2.29	1.30	245 (41.2%)	103 (17.2%)	125 (21.2%)	89 (15.2%)	38 (6.2%)	0.45	0.49	0.39
<b>Q66</b>	...I worried that my itch would get worse if people touched me.	2.47	1.42	227 (38.2%)	90 (15.2%)	127 (21.2%)	84 (14.2%)	72 (12.2%)	0.45	0.49	0.43

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<b>Item No.</b>	<b>Item</b>	<b>Mean</b>	<b>SD</b>	<b>Response Category Frequency</b>					<b>Pearson correlation (r)*</b>		
				<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Worst itch</b>	<b>Average itch</b>	<b>Frequency of itch</b>
<b>Q67</b>	...because of itch, it was hard to interact with my family.	2.43	1.35	218 (36.2%)	106 (18.2%)	132 (22.2%)	89 (15.2%)	55 (9.2%)	0.46	0.51	0.42
<b>Q68</b>	...because of itch, I avoided hugging people.	2.53	1.41	215 (36.2%)	92 (15.2%)	123 (21.2%)	102 (17.2%)	68 (11.2%)	0.47	0.50	0.42
<b>Q69</b>	...I was tired of people asking questions about my itching and scratching.	2.73	1.39	173 (29.2%)	84 (14.2%)	154 (26.2%)	108 (18.2%)	81 (14.2%)	0.50	0.51	0.48
<b>Q70</b>	...my clothing got bloody from scratching. Select only one option.	2.44	1.33	206 (34.2%)	119 (20.2%)	143 (24.2%)	72 (12.2%)	60 (10.2%)	0.47	0.46	0.42
<b>Q71</b>	...I scratched myself until I bled.	2.55	1.29	171 (29.2%)	128 (21.2%)	159 (27.2%)	86 (14.2%)	56 (9.2%)	0.47	0.50	0.43
<b>Q72</b>	...I worried about flaking skin from scratching.	2.99	1.33	105 (18.2%)	123 (21.2%)	144 (24.2%)	130 (22.2%)	98 (16.2%)	0.52	0.53	0.51
<b>Q73</b>	...I worried about getting scars from scratching.	2.92	1.42	126 (21.2%)	131 (22.2%)	124 (21.2%)	102 (17.2%)	117 (20.2%)	0.52	0.54	0.47
<b>Q74</b>	...it was hard to stop scratching or rubbing.	3.40	1.18	42 (7.2%)	92 (15.2%)	180 (30.2%)	157 (26.2%)	129 (22.2%)	0.58	0.57	0.58
<b>Q75</b>	...I worried about having open wounds from scratching.	2.89	1.38	133 (22.2%)	117 (20.2%)	126 (21.2%)	130 (22.2%)	94 (16.2%)	0.55	0.59	0.50

\* Pearson correlation,  $P < 0.0001$  for all.

**Supplementary Table S2. Item response theory parameters for items in the item banks.**

Item		Calibration Statistics				
Number	Stem	Discrimination	Location	Location	Location	Location
Q22	...because of itch, I had balance problems.	2.7439	-0.3185	0.1812	0.9159	1.6642
Q35	...because of itch, my thinking was slowed.	2.9998	-0.6902	-0.0392	0.6988	1.3975
Q46	...because of itch, people avoided touching me (ex: holding my hand).	3.2614	-0.5524	-0.0024	0.6687	1.2309
Q47	...because of itch, I avoided certain foods.	2.5469	-0.5868	-0.0382	0.7445	1.4554
Q48	...because of itch, it was hard to shower or take a bath.	3.1178	-0.5856	-0.0495	0.7318	1.333
Q49	...because of itch, it was hard to watch television.	3.3948	-0.578	0.0279	0.7219	1.4633
Q50	...because of itch, it was hard to play games (ex: board games, computer games, phone apps).	3.6031	-0.5927	-0.0457	0.6535	1.2273
Q51	...because of itch, it was hard to read a book.	3.3961	-0.7077	-0.0297	0.651	1.3129
Q52	...because of itch, it was hard to watch a movie.	3.8095	-0.636	-0.0244	0.7037	1.3456
Q54	...because of itch, I made more mistakes than normal.	3.304	-0.9326	-0.1188	0.6523	1.4169
Q56	...because of itch, it was hard to do even simple tasks.	3.6659	-0.9355	-0.2073	0.5166	1.2266
Q59	...my itch interfered with my sex life.	3.1966	-0.5451	-0.0539	0.5684	1.1601
Q64	...because of itch, I was absent from work.	3.6651	-0.0541	0.2955	0.8443	1.5142
Q65	...because of itch, it was hard to work.	3.3274	-0.8301	-0.2061	0.5564	1.3151
Q66	...I limited activities with others because of how my skin looked.	3.2059	-0.7441	-0.1507	0.5786	1.2624
Q67	...because of itch, I avoided being around people.	3.7958	-0.7027	-0.1258	0.5871	1.2292
Q70	...because of itch, people treated me differently.	3.5522	-0.3536	0.2029	0.8336	1.4647
Q72	...because of itch, I avoided interacting with other people.	3.4589	-0.6478	-0.0626	0.595	1.2054
Q73	...my Itch bothered people around me.	3.3642	-0.4909	0.0453	0.7326	1.4188
Q74	...people told me to stop scratching.	2.4718	-0.8191	-0.2529	0.6407	1.3299
Q75	...because of itch, I had to depend on the help of other people.	3.5986	-0.3137	0.1792	0.8147	1.6113
Q76	...I worried that my itch would get worse if people touched me.	3.6428	-0.3852	0.0588	0.6754	1.2249
Q77	...because of itch, it was hard to interact with my family.	4.5248	-0.4376	0.0693	0.6905	1.3294
Q78	...because of itch, I avoided hugging people.	3.7169	-0.4448	0.0154	0.6036	1.2566

Item bank 1: Itch-interference

<b>Item bank 2: Mood and sleep</b>	Q79	...I was tired of people asking questions about my itching and scratching.	2.7188	-0.7177	-0.2288	0.5624	1.2466
	Q32	...because of itch, I was nervous.	2.655	-1.147	-0.5581	0.3243	1.1711
	Q33	...I was afraid my itch would never go away	2.6089	-1.571	-0.8387	0.1085	0.9741
	Q36	...because of itch, I felt angry	2.6509	-1.1369	-0.5615	0.3383	1.1898
	Q37	...because of itch, I felt sad	2.6596	-0.8507	-0.2609	0.6291	1.3605
	Q38	...because of itch, I felt depressed	2.6852	-0.7508	-0.1548	0.6561	1.2906
	Q40	...because of itch,I felt miserable.	3.4998	-1.2421	-0.5573	0.259	0.9645
	Q41	...because of itch, I felt frustrated.	3.2349	-1.4299	-0.9126	0.0468	0.7907
	Q42	...because of itch,I felt embarrassed.	2.6975	-1.0639	-0.4323	0.4081	1.1341
	Q43	...because of itch, I was distracted.	2.8272	-1.5468	-0.7409	0.2583	1.1159
	Q44	...I worried that others would see me scratching.	2.4352	-1.3671	-0.7209	0.2088	0.9777
	Q45	...because of itch, I was self-conscious.	2.7822	-1.3275	-0.735	0.197	1.0095
	Q53	...because of itch, I had to stop what I was doing to scratch.	2.3847	-1.7033	-1.0289	0.013	0.9411
	Q55	...because of itch, it was hard to sit still.	2.919	-1.3037	-0.5837	0.3101	1.0373
	Q57	...because of itch, it was hard to relax.	3.2879	-1.4678	-0.6576	0.2781	1.0741
	Q58	...because of itch, I was restless.	3.577	-1.4081	-0.6861	0.1703	0.9799
	Q60	...because of itch, I had difficulty falling asleep.	3.3144	-1.372	-0.6843	0.1767	1.0434
	Q61	...because of itch, I had trouble staying asleep.	3.0339	-1.0743	-0.4823	0.2981	1.0837
	Q63	...because of itch, my sleep was restless.	3.3468	-1.1538	-0.5436	0.2734	1.0901
<b>Item bank 3: Physical activity and clothing</b>	Q11	...because of itch, I was less active.	3.7463	-1.1128	-0.3262	0.5907	1.4251
	Q12	...because of itch, I limited exercising.	4.3319	-0.8393	-0.2216	0.5568	1.2357
	Q13	...because of itch, it was hard to do some types of exercise.	4.0771	-0.8867	-0.2509	0.4688	1.2902
	Q14	...because of itch, it was hard to run.	4.0188	-0.6492	-0.1698	0.5702	1.2758
	Q15	...because of itch, it was hard to walk.	4.0415	-0.5939	0.0617	0.8045	1.5096
	Q16	...because of itch, it was hard to do vigorous physical activity, such as running, lifting heavy objects, or participating in strenuous sports.	4.2814	-0.8491	-0.1548	0.4951	1.2241
	Q17	...because of itch, it was hard to do moderate physical activity, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf.	4.7387	-0.7564	-0.0594	0.6488	1.4602
	Q18	...because of itch, it was hard to do light physical activity.	4.2854	-0.7313	0.0078	0.7385	1.4334

Item bank 4:	Q19	...because of itch, I sat around more than usual.	3.8381	-0.8595	-0.2851	0.4356	1.2445
	Q20	...because of itch, it was hard to do activities that made me sweat.	3.2786	-1.129	-0.4988	0.3617	1.0313
	Q21	...because of itch, I did as little as possible physically.	4.298	-0.8668	-0.2277	0.5511	1.2907
	Q23	...because of itch, I limited the clothing I could wear.	2.4662	-1.2306	-0.607	0.3925	1.2079
	Q24	...because of itch, it was hard to wear short-sleeves.	2.5739	-0.5965	0.0032	0.7576	1.6012
	Q29	...because of itch, it was hard to wear certain shoes.	2.1827	-0.516	-0.0396	0.7227	1.5006
	Q31	...because of itch, my physical activities were limited.	4.5942	-0.8352	-0.2544	0.5803	1.2699
	Q81	...I scratched myself until I bled.	2.7959	-0.6631	-0.0065	0.8183	1.5405
	Q82	...I worried about flaking skin from scratching.	2.8068	-1.0971	-0.3393	0.3693	1.1423
	Q83	...I worried about getting scars from scratching.	3.5448	-0.8943	-0.2092	0.3686	0.9461



**Supplemental Table S3. Correlation between items in bank-1 (PIQ-interference).**

Item	Q12	Q25	Q36	Q37	Q38	Q39	Q40	Q41	Q42	Q44	Q46	Q49	Q54	Q55	Q56	Q57	Q60	Q62	Q63	Q64	Q65	Q66	Q67	Q68
<b>Q12</b>	1.00																							
<b>Q25</b>	0.71	1.00																						
<b>Q36</b>	0.66	0.67	1.00																					
<b>Q37</b>	0.65	0.63	0.69	1.00																				
<b>Q38</b>	0.69	0.70	0.71	0.69	1.00																			
<b>Q39</b>	0.70	0.71	0.69	0.66	0.73	1.00																		
<b>Q40</b>	0.67	0.71	0.69	0.68	0.73	0.78	1.00																	
<b>Q41</b>	0.68	0.71	0.67	0.66	0.69	0.78	0.82	1.00																
<b>Q42</b>	0.68	0.73	0.71	0.66	0.69	0.80	0.82	0.84	1.00															
<b>Q44</b>	0.67	0.75	0.70	0.62	0.71	0.74	0.75	0.77	0.77	1.00														
<b>Q46</b>	0.66	0.75	0.70	0.67	0.72	0.73	0.77	0.73	0.76	0.76	1.00													
<b>Q49</b>	0.65	0.68	0.69	0.66	0.68	0.69	0.72	0.69	0.71	0.68	0.73	1.00												
<b>Q54</b>	0.72	0.66	0.72	0.70	0.69	0.70	0.69	0.69	0.70	0.67	0.68	0.68	1.00											
<b>Q55</b>	0.64	0.69	0.67	0.63	0.69	0.68	0.71	0.72	0.72	0.72	0.77	0.71	0.72	1.00										
<b>Q56</b>	0.63	0.65	0.70	0.62	0.72	0.68	0.69	0.67	0.70	0.69	0.74	0.70	0.68	0.75	1.00									
<b>Q57</b>	0.67	0.68	0.73	0.63	0.71	0.71	0.68	0.68	0.71	0.69	0.75	0.73	0.70	0.73	0.81	1.00								
<b>Q60</b>	0.69	0.67	0.76	0.67	0.70	0.71	0.69	0.66	0.70	0.68	0.69	0.69	0.76	0.70	0.71	0.75	1.00							
<b>Q62</b>	0.64	0.68	0.68	0.63	0.70	0.71	0.67	0.67	0.69	0.69	0.73	0.72	0.66	0.72	0.76	0.82	0.74	1.00						
<b>Q63</b>	0.68	0.69	0.73	0.69	0.68	0.71	0.69	0.67	0.71	0.65	0.70	0.68	0.73	0.69	0.69	0.73	0.81	0.74	1.00					
<b>Q64</b>	0.60	0.62	0.64	0.63	0.65	0.63	0.64	0.62	0.65	0.61	0.66	0.62	0.64	0.63	0.66	0.64	0.65	0.63	0.69	1.00				
<b>Q65</b>	0.71	0.68	0.70	0.68	0.71	0.68	0.71	0.71	0.71	0.70	0.70	0.69	0.74	0.68	0.69	0.71	0.74	0.70	0.77	0.71	1.00			
<b>Q66</b>	0.67	0.71	0.75	0.67	0.71	0.70	0.70	0.68	0.72	0.70	0.72	0.71	0.72	0.70	0.71	0.73	0.74	0.71	0.74	0.70	0.75	1.00		
<b>Q67</b>	0.71	0.74	0.75	0.68	0.75	0.75	0.77	0.75	0.76	0.73	0.75	0.73	0.76	0.73	0.72	0.76	0.78	0.77	0.76	0.69	0.79	0.77	1.00	
<b>Q68</b>	0.67	0.69	0.74	0.65	0.70	0.69	0.71	0.73	0.72	0.70	0.73	0.73	0.70	0.70	0.73	0.76	0.73	0.78	0.72	0.64	0.73	0.77	0.80	1.00
<b>Q69</b>	0.60	0.63	0.67	0.60	0.68	0.65	0.65	0.65	0.68	0.63	0.68	0.66	0.61	0.68	0.70	0.72	0.70	0.67	0.68	0.74	0.67	0.72	0.68	0.71

**Supplementary Table S4. Correlation between items in bank-2 (PIQ-mood and sleep).**

Item	Q22	Q23	Q26	Q27	Q28	Q30	Q31	Q32	Q33	Q34	Q35	Q43	Q45	Q47	Q48	Q50	Q51
Q22	1.00																
Q23	0.65	1.00															
Q26	0.68	0.61	1.00														
Q27	0.66	0.61	0.72	1.00													
Q28	0.69	0.59	0.72	0.82	1.00												
Q30	0.66	0.71	0.70	0.70	0.71	1.00											
Q31	0.65	0.67	0.71	0.65	0.62	0.73	1.00										
Q32	0.67	0.61	0.64	0.65	0.68	0.68	0.62	1.00									
Q33	0.64	0.63	0.66	0.66	0.63	0.69	0.69	0.63	1.00								
Q34	0.63	0.59	0.58	0.59	0.61	0.64	0.64	0.68	0.57	1.00							
Q35	0.64	0.62	0.59	0.60	0.60	0.67	0.66	0.72	0.63	0.81	1.00						
Q43	0.58	0.63	0.55	0.50	0.53	0.63	0.66	0.54	0.61	0.61	0.62	1.00					
Q45	0.62	0.61	0.62	0.59	0.59	0.67	0.67	0.63	0.68	0.60	0.64	0.71	1.00				
Q47	0.62	0.65	0.66	0.59	0.61	0.70	0.70	0.60	0.68	0.62	0.67	0.73	0.73	1.00			
Q48	0.65	0.64	0.64	0.61	0.61	0.71	0.70	0.61	0.68	0.62	0.67	0.71	0.77	0.82	1.00		
Q50	0.61	0.65	0.62	0.61	0.61	0.70	0.69	0.63	0.64	0.60	0.66	0.63	0.67	0.74	0.73	1.00	
Q51	0.59	0.61	0.60	0.64	0.64	0.66	0.66	0.65	0.64	0.58	0.63	0.59	0.66	0.64	0.69	0.80	1.00
Q53	0.64	0.65	0.63	0.66	0.65	0.70	0.67	0.67	0.65	0.60	0.63	0.62	0.69	0.69	0.74	0.81	0.84

**Supplementary Table S5. Correlation between items in bank-3 (PIQ-clothing and physical activity).**

<b>Item</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>	<b>Q11</b>	<b>Q13</b>	<b>Q14</b>	<b>Q19</b>
<b>Q1</b>	1.00													
<b>Q2</b>	0.81	1.00												
<b>Q3</b>	0.76	0.80	1.00											
<b>Q4</b>	0.74	0.78	0.78	1.00										
<b>Q5</b>	0.73	0.74	0.73	0.81	1.00									
<b>Q6</b>	0.73	0.79	0.80	0.81	0.78	1.00								
<b>Q7</b>	0.76	0.77	0.78	0.79	0.78	0.80	1.00							
<b>Q8</b>	0.75	0.75	0.75	0.76	0.80	0.73	0.83	1.00						
<b>Q9</b>	0.74	0.76	0.75	0.72	0.72	0.75	0.77	0.77	1.00					
<b>Q10</b>	0.71	0.75	0.73	0.73	0.66	0.74	0.75	0.70	0.76	1.00				
<b>Q11</b>	0.74	0.79	0.75	0.73	0.74	0.76	0.78	0.77	0.82	0.77	1.00			
<b>Q13</b>	0.66	0.68	0.66	0.65	0.64	0.65	0.68	0.68	0.67	0.68	0.67	1.00		
<b>Q14</b>	0.65	0.65	0.65	0.64	0.68	0.66	0.70	0.72	0.62	0.59	0.66	0.66	1.00	
<b>Q19</b>	0.60	0.61	0.56	0.60	0.65	0.60	0.65	0.66	0.59	0.54	0.60	0.57	0.63	1.00
<b>Q21</b>	0.74	0.79	0.77	0.73	0.76	0.80	0.79	0.78	0.77	0.75	0.82	0.69	0.68	0.63

**Supplementary Table S6.**  
**Correlation between items in**  
**bank-4 (PIQ-Scratching**  
**behavior).**

<b>Item</b>	<b>Q71</b>	<b>Q72</b>	<b>Q73</b>	<b>Q74</b>
<b>Q71</b>	1.00			
<b>Q72</b>	0.65	1.00		
<b>Q73</b>	0.68	0.69	1.00	
<b>Q74</b>	0.58	0.62	0.65	1.00
<b>Q75</b>	0.73	0.72	0.77	0.68