

How do EQ-HWB candidate items perform in individuals with health conditions across varying education levels?

Guangjie Zhang¹; Jarinne Woudstra-de Jong^{1,2}; Jan Busschbach¹; Brendan Mulhern³; Aureliano Finch⁴; Nan Luo⁵; Zhihao Yang^{1,6}

1 Erasmus MC, Rotterdam, the Netherlands. Department of Psychiatry, Section Medical Psychology

2 Rotterdam Ophthalmic Institute, Rotterdam Eye Hospital, Rotterdam, the Netherlands

3Centre for Health Economics Research and Evaluation, University of Technology Sydney

4Aureliano Finch: EuroQol Research Foundation

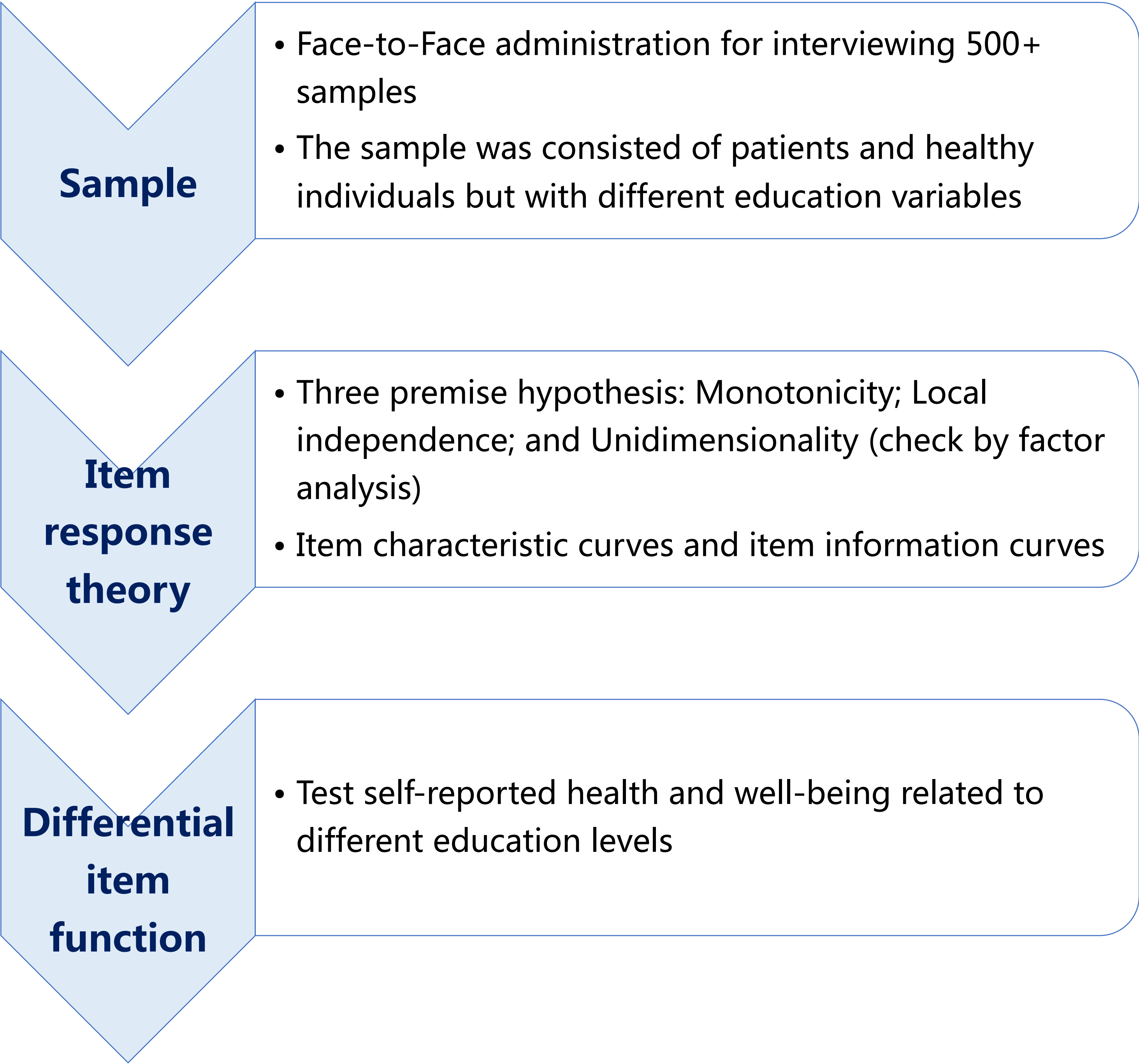
5Health Systems and Behavioural Sciences Domain, Saw Swee Hock School of Public Health, National University of Singapore, Singapore, Singapore

6Health Services Management Department, Guizhou Medical University, Guiyang, China

Abstract

- The EQ-HWB consists of 25 items aiming to measure health and well-being outcomes across the healthcare and social care systems.
- Population with low education levels may struggle with understanding the questionnaire in general.
- We aimed to explore the item performance of the EQ-HWB in the population with low education levels using DIF.

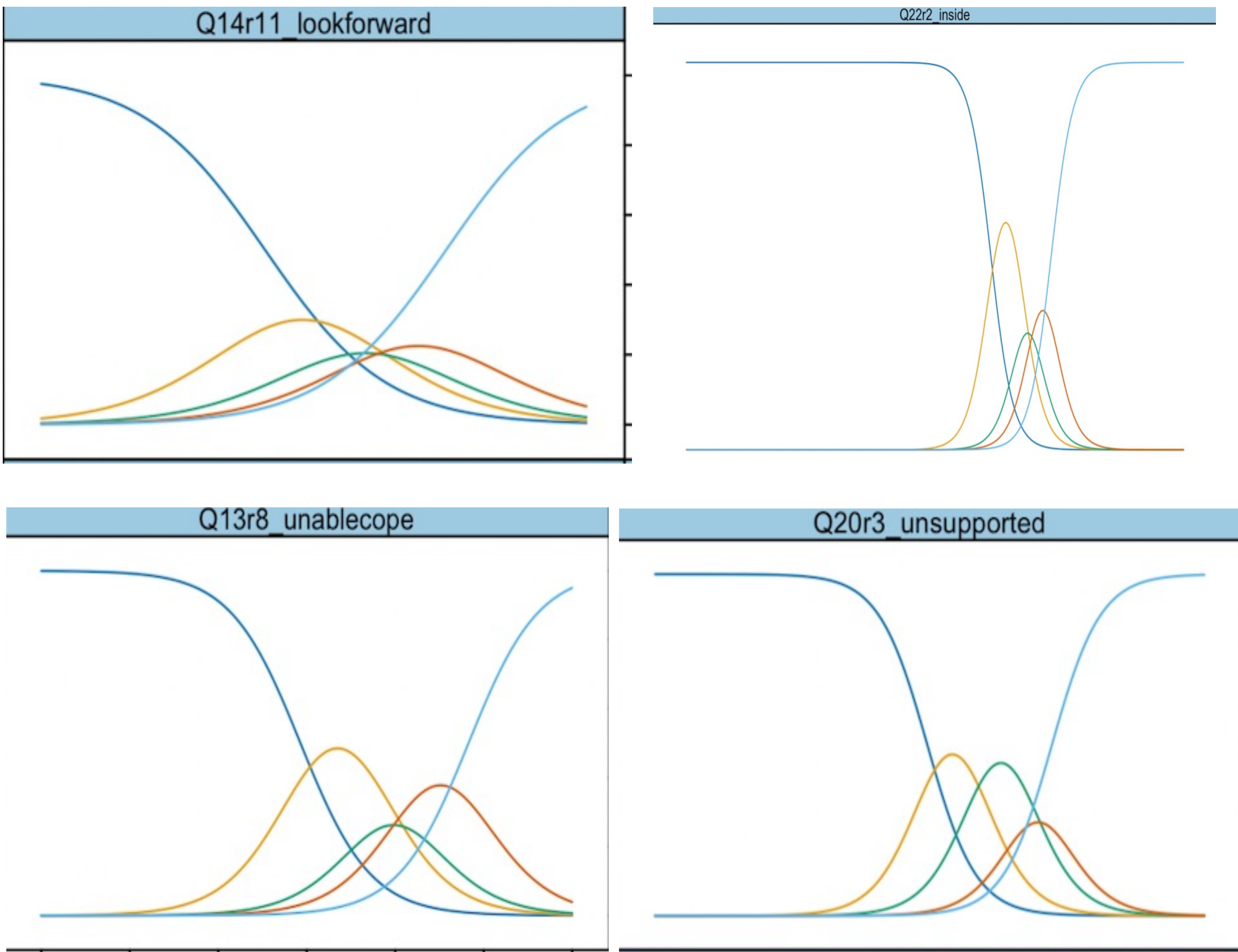
Methods



Conclusion

- We found only a few indications that people with low education levels experienced difficulties in understanding the items.
- Further investigation into context and response scales is essential to ensure all items are comprehensible and effective across different education levels.

Problematic ICCs



Results

Table 1 IRT parameters and results								
Domain	Item name	P s_χ ²	A	B1	B2	B3	B4	Range
Psychological well-being	Self-respect	0.01	-1.49	3.13	1.97	0.73	-0.65	3.78
	Relationship	0.17	-1.39	3.07	2.02	0.84	-0.59	3.66
	Meaningful activity	0.05	-1.57	2.89	1.65	0.75	-0.53	3.42
	Cope	0.35	1.26	-0.14	1.54	2.39	3.66	3.80
	Sad	0.10	1.94	-0.17	0.66	1.67	2.82	2.98
	Concentrate	0.65	1.98	-0.46	0.43	1.41	2.29	2.76
	Anger	0.23	2.99	-0.15	0.73	1.69	2.38	2.53
	Safety	0.39	3.00	0.09	1.15	1.99	2.78	2.69
	Thinking	0.52	2.01	-0.26	0.74	1.83	2.85	3.11
	Loneliness	0.21	2.73	0.03	0.89	1.68	2.41	2.38
	Control	0.05	2.18	0.25	1.36	2.22	3.32	3.07
	Supported	0.25	1.87	-0.05	1.04	2.07	2.67	2.72
	Anxiety	0.59	2.67	-0.17	0.54	1.34	2.21	2.38
	Memory	0.59	1.27	-0.73	0.32	1.47	3.20	3.93
Physical function	Hope	0.05	0.75	-1.07	0.58	1.69	2.91	3.98
	Self-care	0.02	1.47	0.91	1.88	3.20	4.04	3.13
	Outside	0.10	7.36	0.99	1.63	2.00	3.01	2.02
	Activities	0.43	3.82	0.86	1.58	2.04	2.79	1.93
Physical sensation	Inside	0.02	3.74	1.35	2.07	2.40	2.81	1.46
	Pain fre	0.60	3.39	-0.61	0.47	1.36	2.45	3.06
	Pain sev	0.12	3.26	0.10	1.24	2.25	2.91	2.81
	Exhausted	0.24	1.19	-0.48	0.61	1.93	3.35	3.83

