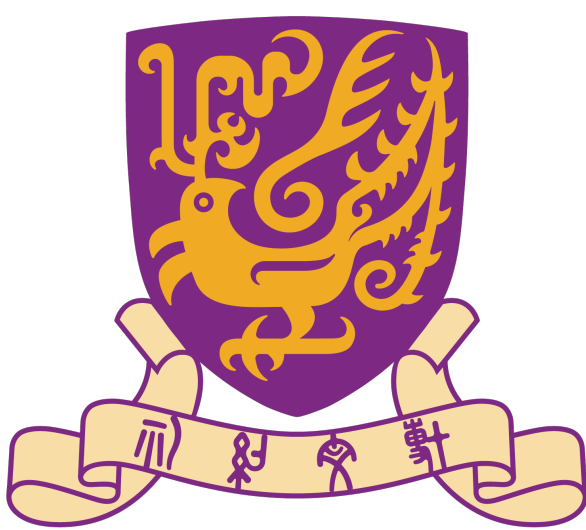


Exploring Relative Weighting and Ranking of Potential Bolt-on Item for the EQ-5D-5L-HK by Pairwise Comparison in Hong Kong Context

Clement CW NG, Annie WL CHEUNG, Eliza LY WONG*



EuroQoI-5D (EQ-5D) is a popular instrument to illustrate users’ health-related quality of life (HRQoL). Various studies tested the addition of cultural or community-specific bolt-on items to enrich the current tool but such exploration has not been done in Hong Kong Community.

Objective

To illustrate the relative weighting of the potential bolt-on items in Hong Kong context by pairwise comparison, a methodology utilised by Analytical Hierarchy Process in multi-criteria decisional analysis.

Method

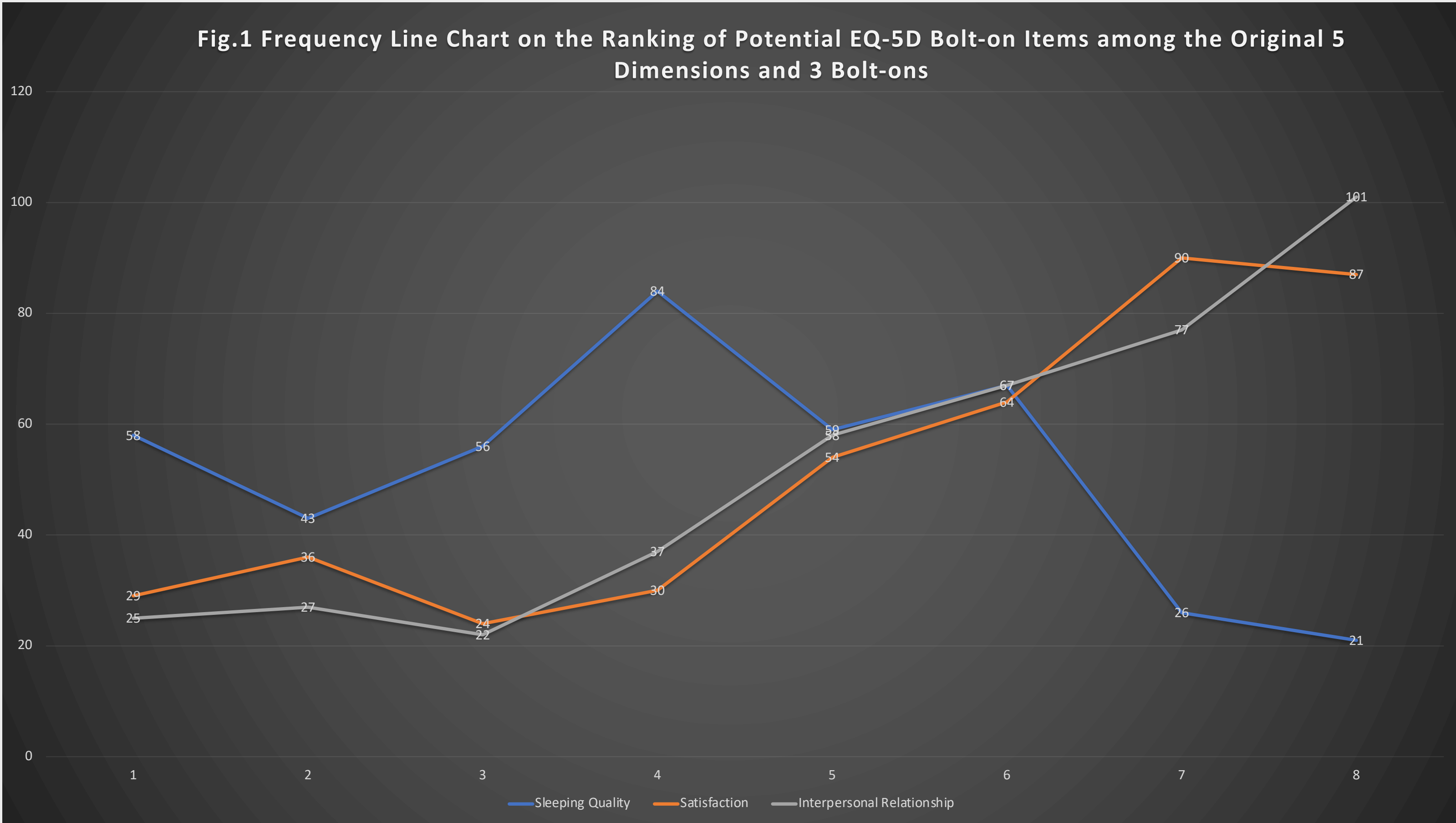
Design	Online Self-administered Cross-sectional Survey
Time	March to April 2022
Sample Size	n=414
Sampling	Quota Sampling based on Sex and Age Group Mix of Hong Kong Community Aged 18 or Above With Chinese or Cantonese Literacy

Results & Findings

Questions	Responses	
	Yes (%)	No (%)
Are the original 5 dimensions comprehensive enough to describe your HRQoL ?	335 (80.9)	79 (19.1)
Will the EQ-5D describe your HRQoL more accurately if the following Dimension is added?		
• Sleeping Quality	371 (89.6)	43 (10.4)
• Satisfaction	323 (78.0)	91 (22.0)
• Interpersonal Relationship	311 (75.1)	103 (24.9)

Table 1. Response Summary of Perception on EQ-5D-5L Comprehensiveness and Feasibility in Adding Potential EQ-5D Bolt-on Dimensions

- Satisfactory Comprehensiveness of the EQ-5D with Its Original 5 Dimensions.
- Enrichment with Additional Dimensions, especially Sleeping Quality, Can Be Useful in Describing HRQoL More Accurately.



Item	Most Common Ranking	Pattern
Sleeping Quality	4	Right-skewed
Satisfaction	7	Left-skewed
Interpersonal Relationship	8	Left-skewed

Sleeping Quality

- Right-skewed and Majority Ranks within Top 5
- Rank over the Other Two Potential Bolt-on Dimensions

	Original EQ-5D		EQ-5D + Sleeping Quality		EQ-5D +Satisfaction		EQ-5D +Interpersonal Relationship	
	Weighting	Rank	Weighting	Rank	Weighting	Rank	Weighting	Rank
Mobility	0.169	4	0.142	5	0.152	3	0.152	4
Self- care	0.230	2	0.194	2	0.201	2	0.204	2
Usual Activities	0.267	1	0.216	1	0.226	1	0.230	1
Pain/ Discomfort	0.161	5	0.141	6	0.144	5	0.146	5
Anxiety/ Depression	0.173	3	0.147	4	0.151	4	0.153	3
Potential Bolt-on	-	-	0.160	3	0.126	6	0.116	6

Table 2 . Summary of Pairwise Comparisons with EQ-5D Dimensions and Potential Bolt-on Dimensions

- Sleeping Quality Demonstrated Dominating Importance over some of the Original Dimensions
 - Rank above Anxiety/ Depression, Mobility, Pain/ Discomfort

Conclusions

- Participants considered 'Sleeping Quality' as most important among the three bolt-on items under study.
- Consistency in Pairwise Comparison and Direct Ranking hints that pairwise comparison could be potential methods to test bolt-on item(s).