CHOOSING A GENERIC PROM TO COMPLEMENT STANDARD SETS – WHICH HEALTH AND WELLBEING DIMENSIONS SHOULD BE COVERED?

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INTRODUCTION

Traditionally, questionnaires of Health-Related Quality of Life (HRQoL) follow the WHO definition of health, covering physical, mental, and social wellbeing. Throughout the decades, the proposed models of wellbeing measurement have included a number of different themes and dimensions that fall under those categories, such as cognitive, emotional, economic, occupational, spiritual, and environmental factors.

A well-known weakness of ICHOM Standard Sets is their diverse use of generic PROMs, which is in the process of being unified.

The aims of this study were

1) to compare some generic PROMs in terms of the dimensions of health and wellbeing they cover,

2) to examine which PROM items correlate with each other

3) to assess how demographic and socioeconomic factors are associated with the examined generic PROM scores.

METHODS

A national survey of 2187 Finnish adults, representative of the Finnish population in age, sex, and area, was conducted in 2022. The survey consisted of different PROMs: EQ-5D-5L, PROMIS-10, single-item subjective wellbeing (from SWB-10), and Self-Reported Capabilities (SRC). Background questions included demographic and socioeconomic factors and long-term illnesses (marked as *other* in Table 2, to denote that these items are not a part of any internationally known standardized questionnaire).

Factor analysis (principal component analyses) is used to find correlated variables and to form new variable combinations, factors. Linear regression modelling is used to examine how demographic and socioeconomic factors are associated with PROM measures.
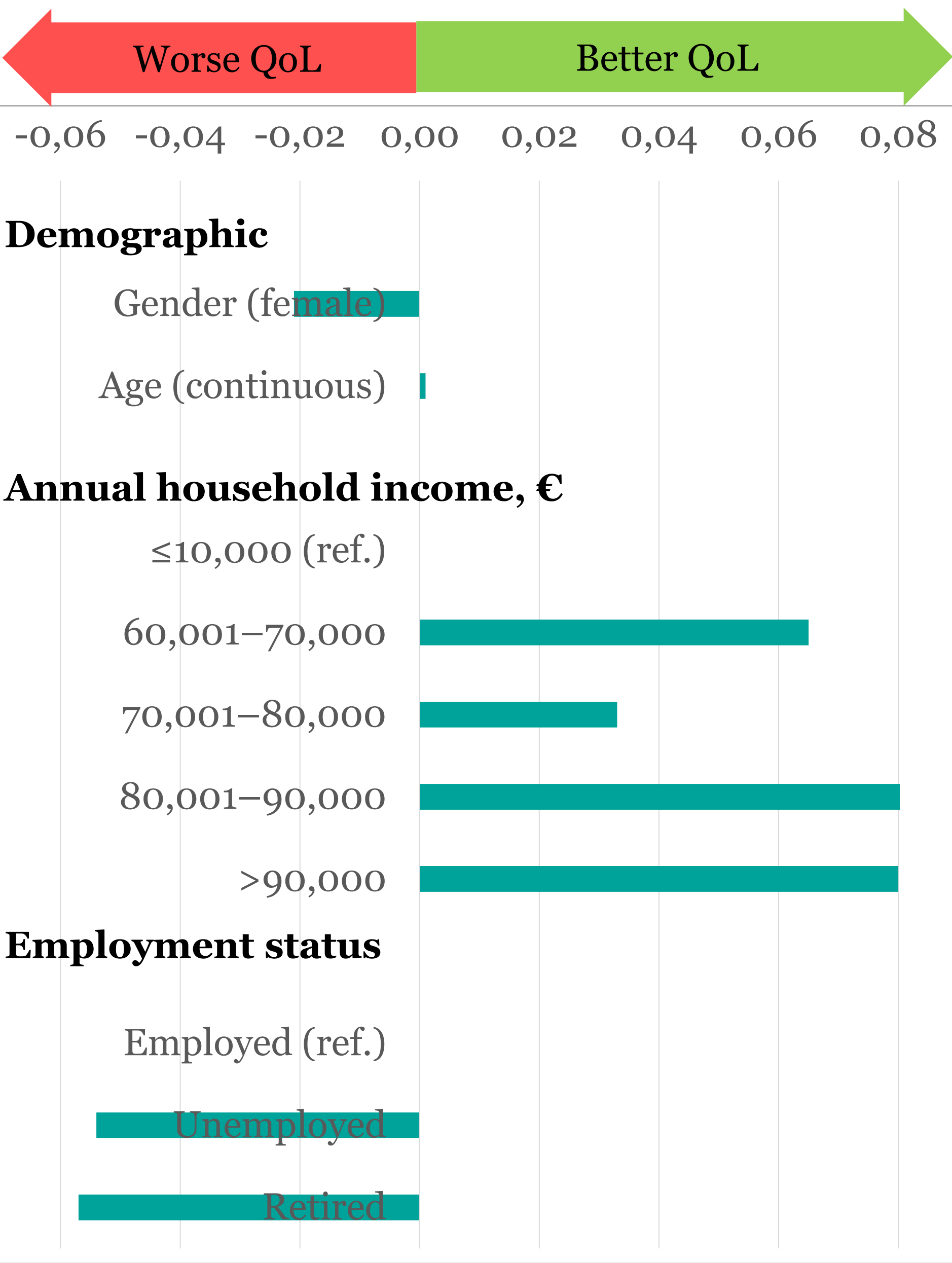
RESULTS

There are significant differences between commonly used generic PROMs in terms of their coverage of different health and wellbeing dimensions - even the traditional three dimensions as defined by WHO. Table 1 describes the dimensions covered.

Regression analysis shows that all PROMs studied are affected by financial situation. Graph 1 shows these effects (where statistically significant) for EQ-5D-5L.

		Self-Reported Capabilities	EQ-5D-5L	PROMIS Global Health (PROMIS-10)	Life Satisfaction (SWB)
Questionnaire items		7 + summary item	5	10	Single
Dimensions covered	Physical		x	x	
	Mental		x	x	
	Social			x	
	Capabilities	x			
Scores available	General life satisfaction / QoL			x (single-item)	x (single-item)
	General health		x (QALY)		
	Physical			x	
	Mental			x	
	Social				

Table 1. Dimensions covered by the PROMs.

Graph 1. Statistically significant effects on EQ-5D valuation.

Results of the factor analysis show that six factors can be found based on their correlation with each other: capabilities, mental health, daily activities, financial situation, general health, and social wellbeing. Table 2 shows the items these factors consist of.

Questionnaire	Question
Factor 1: Capabilities	
SRC	I feel the scope to seek happiness in my life is…
SRC	I feel the scope to achieve things in my life is…
SRC	Taking all things together, I think my options are…
SRC	I feel the scope for intellectual stimulation in my age is…
SRC	I feel the scope to live a healthy life, for my age, is…
Factor 2: Mental Health	
PROMIS-10	How often have you been bothered by emotional problems such as feeling anxious, depressed or irritable?
EQ-5D	Anxiety / depression
(other)	Long-term illness: Depression.
(other)	Long-term illness: Other mental health problem.
PROMIS-10	How would you rate your fatigue on average?
Factor 3: Daily Activities	
EQ-5D	Self-care
PROMIS-10	To what extent are you able to carry out your everyday physical activities such as walking, climbing stairs, carrying groceries, or moving a chair?
EQ-5D	Mobility
EQ-5D	Usual activities
EQ-5D	Pain / discomfort
Factor 4: Financial Situation	
(other)	In the last 12 months, have you for financial reasons skipped meeting friends, attending hobbies, etc.?
(other)	In the last 12 months, have you run out of money for food?
(other)	In the last 12 months, have you asked for food from friends or relatives?
(other)	In the last 12 months, have you asked for food from food aid?
(other)	How easily can your household cover their expenses with the available income?
Factor 5: General Health	
SPH	What is your general health at the moment?
PROMIS-10	In general, would you say your health is:
PROMIS-10	In general, how would you rate your physical health?
PROMIS-10	In general, would you say your quality of life is:
PROMIS-10	In general, how would you rate your mental health, including your mood and your ability to think?
Factor 6: Social Wellbeing	
PROMIS-10	In general, how would you rate your satisfaction with your social activities and relationships?
SRC	I feel the scope to to form satisfying relationships in my life is…
PROMIS-10	In general, please rate how well you carry out your usual social activities and roles. (This includes activities at home, at work and in your community, and responsibilities as a parent, child, spouse, employee, friend, etc.)
SRC	I feel the scope to be in pleasant environments (taking home, work, and leisure together)
SRC	I feel the scope to act with personal integrity in my life is…

Table 2. The six factors formed. SPH = Self-Perceived Health

CONCLUSIONS

EQ-5D and PROMIS-10 differ in terms of the dimensions of health they cover. It is notable that PROMIS-10 does not provide a score of general health, but rather separate scores of physical and mental health. EQ-5D overlooks the social dimension entirely. Social wellbeing is covered by PROMIS-10 (2 items, one of which is included in the mental wellbeing T-score), yet it doesn't yield a score of social wellbeing.

All PROMs studied are affected by financial situation (household income level and employment status), which is not covered by these PROMs. Questions of financial situation could thus provide additional insight into the nature of problems of an individual and the services they need. Attempting to address issues of income and employment by means of healthcare services will probably lead to a waste of resources.

Capabilities is another dimension that is not covered by PROMIS-10 or EQ-5D, as seen in table 2. Recent studies suggest that self-reported capabilities should be included as general PROM measure to provide more person-centered social and health services. Our results support this notion.