

Is the OXCAP-MH capability measure a feasible and psychometrically valid tool for the routine evaluation of mental health services?

Judit Simon^{1,2*}, Agata Łaszewska¹, Eva Leutner³, Marold Oberrauter³, Markus Schwab⁴, Susanne Mayer¹, David Churchman⁵, Georg Spiel^{3,4}

¹ Department of Health Economics, Center for Public Health, Medical University of Vienna, Austria; ² Department of Psychiatry, University of Oxford, UK; ³ pro mente kärnten, Austria; ⁴ pro mente forschung, Austria; ⁵ Oxford University Innovation (Clinical Outcomes), Oxford, UK
*Contact: judit.simon@muv.ac.at

Objectives

Broader life impacts of mental health conditions are often not captured in commonly used health-related quality of life (HRQoL) measures. The multi-dimensional OxCAP-MH wellbeing questionnaire was developed in the UK based on Sen's capability approach to overcome these limitations. This study aimed to test the OxCAP-MH's construct profile, psychometric validity and feasibility of implementing it in routine evaluation of mental health services in Austria.

Methods

159 Austrian patients receiving regular care in social-psychiatric services completed relevant questionnaires at baseline and 6-month follow-up. Test-retest reliability was estimated via repeated testing using ICC. Internal consistency was assessed using Cronbach's alpha, item-total correlations, and by investigating floor and ceiling effects. Construct validity was tested by comparing the OxCAP-MH with other patient-reported measures (EQ-5D-5L/VAS, BSI-18, WHOQOL-BREF) and relevant observer rated instruments (Mini-ICF, GAF). Standardised response mean (SRM) was used to assess the responsiveness to changes over time. Exploratory factor analysis was conducted.

Table 1 Results of test-retest reliability analysis

Time between assessments	No. of participants	Single-measure intra-class correlation	Linear regression (coefficient, p-value and R ²)
0 to 30 days	69	0.80 (95% CI 0.69-0.87)	0.80, p<0.001, R ² =0.68
0 to 21 days	39	0.83 (95% CI 0.70-0.91)	0.85, p<0.001, R ² =0.73
0 to 14 days	28	0.86 (95% CI 0.72-0.92)	0.96, p<0.001, R ² =0.80

Table 2 Results exploratory factor analysis (n=154)

	Questionnaire items	Socio-physical health factor	Broader wellbeing factor
EQ-5D-5L	mobility	-0.85	
	self-care	-0.67	
	daily activities	-0.73	
	pain/discomfort	-0.74	
	depression/anxiety	-0.68	
OxCAP-MH	limit daily activities	0.73	
	meet socially with friends or family	0.62	
	less sleep over worries	0.57	
	enjoy free time activities	0.63	
	safety in neighbourhood	0.56	
	probability of assault	0.33	
	probability of discrimination	0.48	
	suitable flat situation		0.43
	local decisions		0.46
	freedom of expression		0.38
appreciation of nature		0.81	
respect for people around		0.86	
enjoy love and support		0.57	
freedom of deciding for yourself		0.60	
creativity		0.75	
access to interesting activities/employment		0.58	

References

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Results

German OxCAP-MH had good internal consistency (0.85) and satisfactory item-total correlations (0.29-0.61). One-month test-retest analysis (ICC 0.80) proved reliability (**Table 1**). No floor/ceiling effects were observed (**Fig 1a**). Construct validity of the German OxCAP-MH and its ability to measure a broader concept of wellbeing in the mentally ill population was confirmed by exploratory factor analysis (**Table 2**) and strong correlations with generic HRQoL measures (EQ-5D-5L: 0.66, EQ-5D-VAS:0.58), relevant WHOQOL-BREF dimensions (0.50 to 0.75), the BSI-18 (-0.67) (**Table 3**). OxCAP-MH could distinguish between patients with different levels of QoL with the mean score of 48 and 74 for 'very poor' or 'poor' and 'good' or 'very good' QoL. In terms of responsiveness, the instrument was able to detect patients who improved in their overall scores in the anchor instruments with SRMs ranging from 0.62 to 0.90 (**Fig 1b**).

Fig 1a Distribution of the baseline OxCAP-MH score

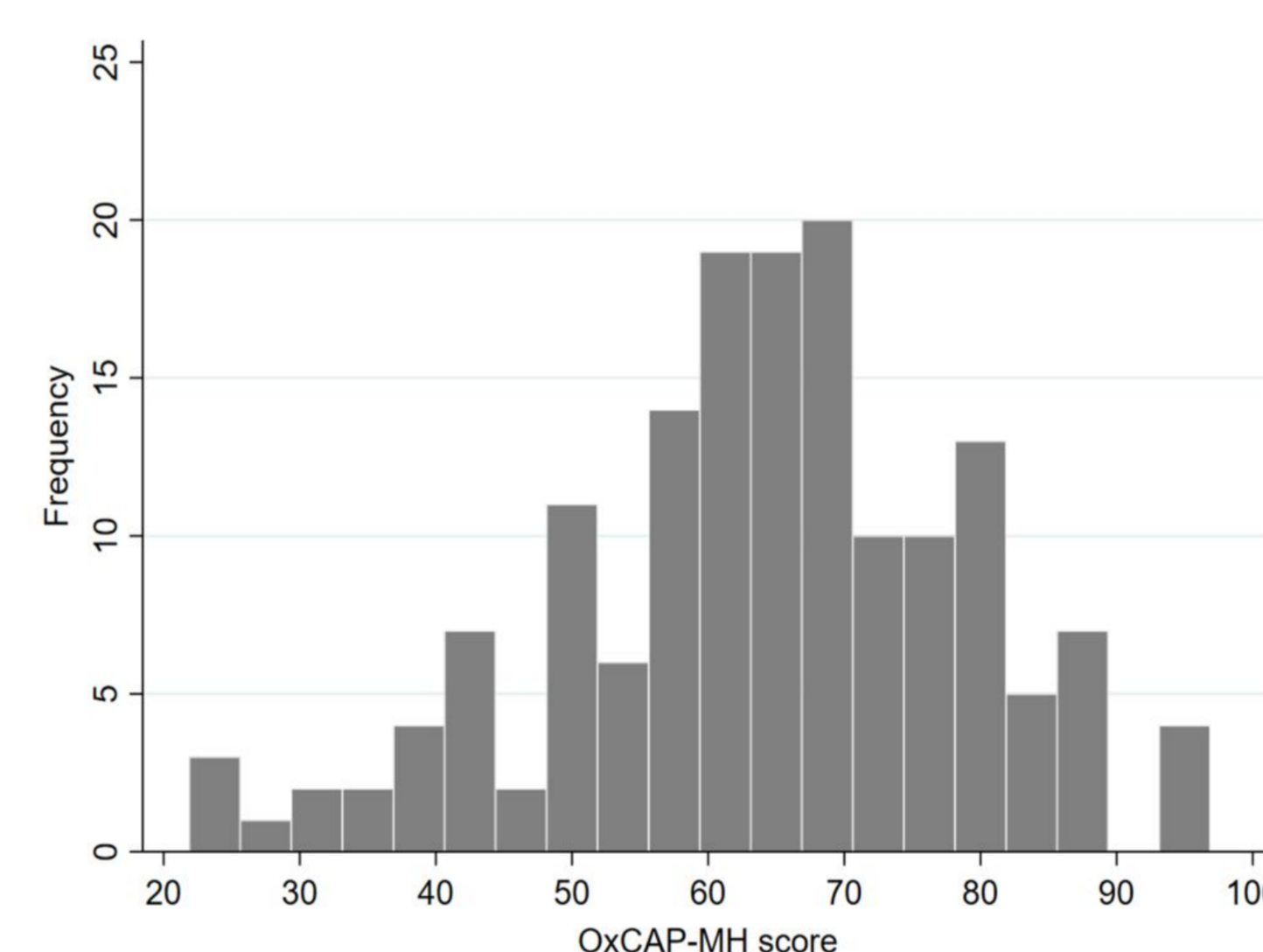


Fig 1b Distribution of the change in OxCAP-MH score between baseline and 6-month follow-up

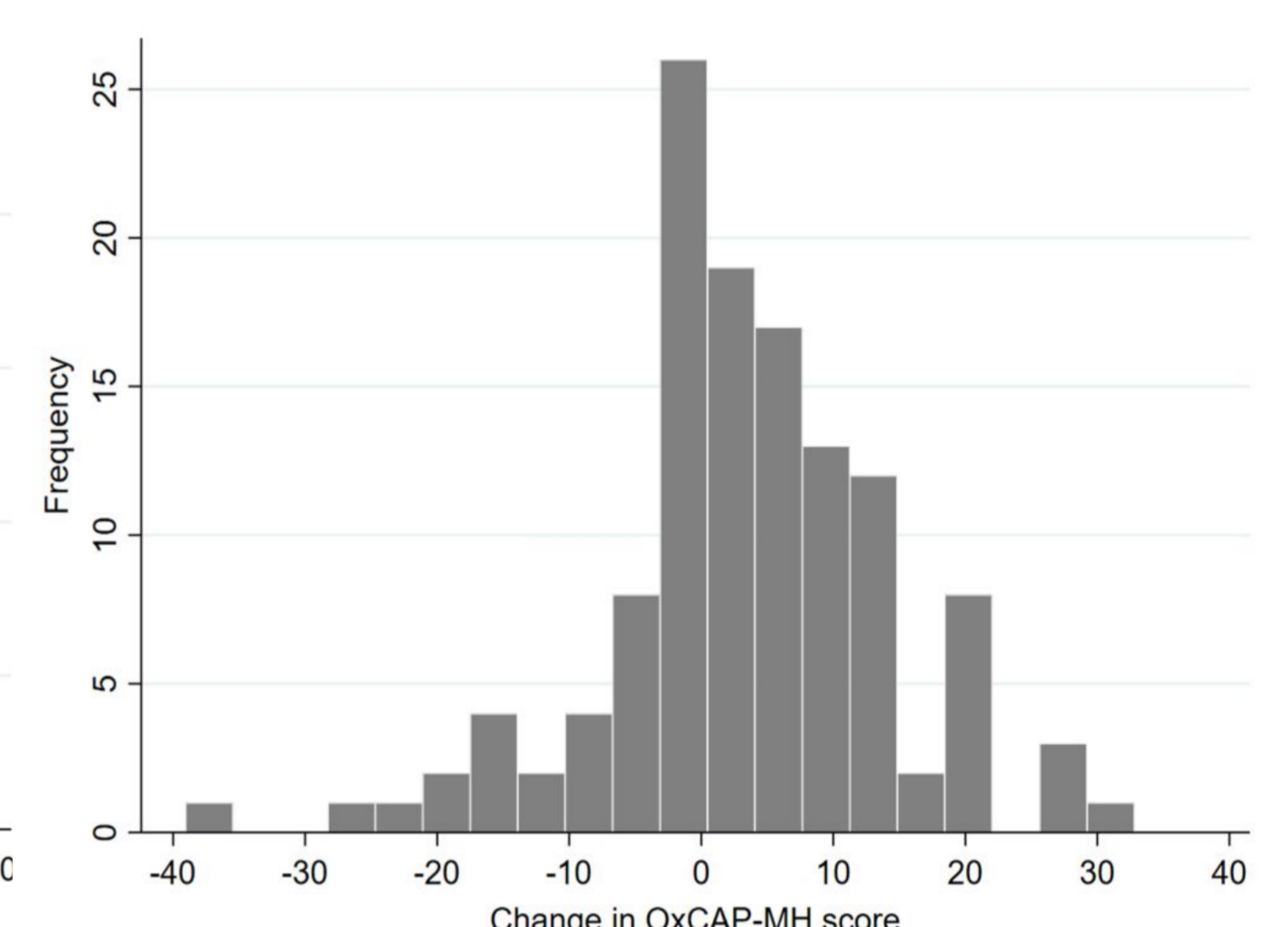


Table 3 Correlations between OxCAP-MH and measures of HRQoL, QoL, psychiatric symptoms and functioning

Questionnaire's name	OXCAP-MH		
	Total score	Socio-physical health factor	Broader wellbeing factor
EQ-5D-5L-index	0.66*	0.73*	0.43*
EQ-5D-VAS	0.58*	0.63*	0.38*
Mini-ICF-APP	-0.47*	-0.50*	-0.31*
BSI-18	-0.67*	-0.74*	-0.43*
GAF	0.35*	0.42*	0.22*
WHOQOL-BREF Physical health	0.69*	0.74*	0.46*
WHOQOL-BREF Psychological health	0.75*	0.71*	0.59*
WHOQOL-BREF Social relationships	0.50*	0.42*	0.45*
WHOQOL-BREF Environment	0.69*	0.61*	0.58*

Note: Spearman's correlation coefficients; *p<0.01; Strong correlations (>0.5) are marked **bold**

Conclusions

The study confirmed good psychometric properties of the OxCAP-MH and its ability to measure patients' broader wellbeing beyond HRQoL. The instrument also proved suitable for the routine evaluation of mental health services.

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