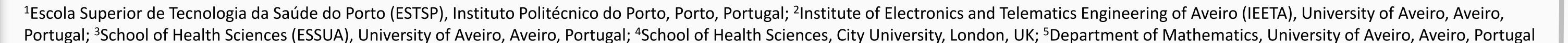# Limitations of the social relationships domain of WHOQOL-Bref

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Introduction

The use of World Health Organization Quality of Life (WHOQOL) instruments has been increasing internationally, and it is now one of the most frequently used instruments to assess Quality of life (QOL).

WHOQOL instruments are comprehensive, sensitive, have cultural relevance, are cross-culturally comparable, and have a subjective assessment approach by including satisfaction criteria.

The WHOQOL-100 is comprehensive, however, it takes a long time to complete. A short version that is widely used, the WHOQOL-Bref (with 26 items), was also developed. The Social Relationships' (SR) domain of WHOQOL-Bref has 3 items (F13.3, F15.3 and F14.4) and has shown to have the weakest correlation with overall QOL among all domains (Skevington et al., 2004; Hawthorne, Herrman, et al., 2006). The SR domain of WHOQOL-100 has 12 items.

Since SR are essential in clinical rehabilitation after stroke, and especially for people with aphasia (PWA: language impairment), it is important to study the suitability of the SR domain of the WHOQOL-Bref when compared to the same domain of WHOQOL-100, which items better explain the overall SR results in each WHOQOL version and if those are represented in the short version.

Method

The aim of this research was to assess the suitability of the SR domain of the WHOQOL-Bref and compare it with the WHOQOL-100 SR domain.

This is a cross-sectional correlational study. Two hundred and fifty-five (n=255) participants from the general Portuguese population participated in this research. Participants completed the European Portuguese version of the WHOQOL-Bref (Serra et al., 2006) and the SR domain of WHOQOL-100 (Canavarro et al., 2009). Correlation and regression analysis of QOL, and the SR domains of WHOQOL-Bref and of WHOQOL-100 were undertaken.

Results

The sample was composed of 58% females and 42% males with a mean age of 43 years. The majority had university education level (37%), was employed (82%), was from a medium-high socioeconomic level (38%), and was healthy (91%) (see table 1).

Table 1: Demographic data (n = 255)

		Range	Mean ± SD
Age		25 - 84	42.65 ± 12.51
		n	Percentage (%)
Gender	Male	107	41.96
	Female	148	58.04
Educational level	Illiterate	2	0.78
	Literate	1	0.39
	1-4 years	16	6.27
	5-6 years	14	5.49
	7-9 years	33	12.94
	10-12 years	68	26.67
	University	94	36.86
	Posgraduate	27	10.59

		n	Percentage (%)
Occupation	Employed	209	81.96
	Unemployed	22	8.63
	Retired	24	9.41
Socioeconomic status	High	53	20.78
	Medium-high	97	38.04
	Medium	51	20
	Medium-low	32	12.55
	Low	22	8.63
Health	Unhealthy	24	9.41
	Healthy	231	90.59

All WHOQOL-Bref domains were significantly correlated with overall QOL. The weakest correlation was with the SR domain (0.34) (see Table 2). The SR domain of WHOQOL-100 better correlates with overall QOL (0.37) (see Table 3).

Table 2: Overall QOL and WHOQOL-Bref domains' correlations

		Spearman's rho			
		Physical	Psychological	Social relationships	Environment
Overall QOL	Correlation Coefficient	0.558**	0.499**	0.335**	0.452**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	255	255	255	255

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3: Overall QOL and WHOQOL-100 SR domain's correlation

		Spearman's rho
		WHOQOL-100 SR
Overall QOL	Correlation Coefficient	0.366**
	Sig. (2-tailed)	0.000
	N	255

**. Correlation is significant at the 0.01 level (2-tailed).

In the presence of WHOQOL-100 SR, the WHOQOL-Bref SR domain was not considered a significant predictor. WHOQOL-100 SR predicted 13% of overall QOL (see Table 4).

Table 4: SR domains as predictors of overall QOL

Linear regression		
Model	R	R Square
1	0.365a	0.133

a. Predictors: (Constant), WHOQOL-100 SR

Table 5: WHOQOL-Bref SR facets as predictors of overall WHOQOL-Bref SR

Linear regression		
Model	R	R Square
1	0.818a	0.669
2	0.948b	0.899

a. Predictors: (Constant), F15.3; b. Predictors: (Constant), F15.3, F14.4

WHOQOL-Bref SR results were better explained by the item 3 of facet 15 (F15.3) – sexual life (67%) (see Table 5). The facet that predicted the most the WHOQOL-100 SR results was facet 13 - personal relationships (79%) (see Table 6).

Table 6: WHOQOL-100 SR facets as predictors of overall WHOQOL-100 SR

Linear regression		
Model	R	R Square
1	0.890a	0.793
2	0.958b	0.918
3	0.993c	0.986

a. Predictors: (Constant), F13; b. Predictors: (Constant), F13, F15; c. Predictors: (Constant), F13, F15, F14

Table 7: WHOQOL- 100 SR items as predictors of overall WHOQOL-100 SR

Linear regression		
Model	R	R Square
1	0.821a	0.674
2	0.895b	0.800
3	0.943c	0.889
4	0.960d	0.922
5	0.973e	0.946

a. Predictors: (Constant), F13.4; b. Predictors: (Constant), F13.4, F15.3; c. Predictors: (Constant), F13.4, F15.3, F14.2; d. Predictors: (Constant), F13.4, F15.3, F14.2, F13.2; e. Predictors: (Constant), F13.4, F15.3, F14.2, F13.2, F13.1

Among the 12 items of WHOQOL-100 SR, item F13.4 (personal relationships) strongly predicted WHOQOL-100 SR results (67%), followed by F15.3 (sexual life), F14.2 (friends support),F13.2 and F13.1 (personal relationships). Together, the 5 items, explained 95% of the WHOQOL-100 SR results (see Table 7).
All Regression analyses were significant (p=0.000).

Conclusions

The SR domain of WHOQOL-100 better explained overall QOL scores than the WHOQOL-Bref SR domain. Four out of the 5 items that better explained WHOQOL-100 SR results are not included in WHOQOL-Bref.

Data collection in a clinical group of people with aphasia (PWA) is being undertaken now. If these findings are repeated for PWA, the WHOQOL-100 SR domain is preferable to the WHOQOL-Bref SR domain when assessing SR among PWA as it will reveal more impact on SR and be better understood by clinicians.

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