Comparing and adapting same-language versions of Patient Reported Outcome Measures (PROMs)



Annarita Felici, PhD¹, Clare Bradley PhD^{1,2}

⁴ Health Psychology Research Ltd, Royal Holloway University of London, Egham, Surrey, UK.
² Department of Psychology, Royal Holloway University of London, Egham, Surrey, UK.



Royal Holloway University of London

I. Introduction and aims

The increasing number of multinational clinical trials calls for accurate and relevant translations of patient-reported outcome measures (PROMs).

The present study reviews existing same-language versions in **English**, **Spanish**, **French** and **German** of the Diabetes Treatment Satisfaction Questionnaire (**DTSQ**) and of the Well-Being Questionnaire (**W-BQ12**), both developed by Clare Bradley (Bradley and Lewis 1990; Bradley 1994; Riazi et al 2006) and linguistically validated for more than 100 specific countries.

The aim is to identify patterns of similarities/differences within/between languages for each of the questionnaires in order to inform future

3. Results & Discussion

In all four languages, differences are mainly semantic with several grammatical changes in **Spanish**.

In the DTSQ, items 4 (convenience) and 5 (flexibility) showed the most differences. See DTSQ Table 1 >

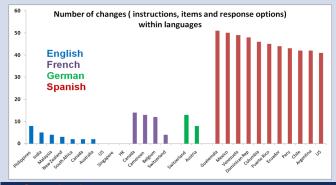
In the W-BQ12 major differences were noted in vocabulary describing **emotions**. See W-BQ12 Table 2 >

Unlike the Spanish DTSQ, where differences seem to depend on geographic distance (*Felici et al.2011*), the English versions are more linked to the local culture. India, the Philippines and Malaysia account for more changes than other English-speaking countries.

Spanish adaptations required more changes than other language adaptations and the nature of the changes in the two questionnaires was identical (i.e. **Anglicisms**, **use of tense** and **repetitive sentence structure**).

Canadian French and French for Cameroon account in the DTSQ for the largest number of changes; the first because of Quebecois and its contact with US English, Cameroon because of social and educational issues.

While Swiss French is almost identical to French for France, we have an opposite trend in German, where the Swiss version differs markedly from the one used in Germany.



2. Methods

- Collect the existing DTSQ versions in English (12), Spanish (12), French (5) and German (3), as well as of the W-BQ12 versions in English (5), Spanish (5) and French (3).
- Count and analyse the linguistic differences in the instructions, the items and the response options on the basis of semantics, syntax, discourse and culture.

DTSQ - Table 1			
Differences within languages between countries (coloured text)			
UK	How convenient have you been finding your treatment to be recently?	How flexible have you been finding your treatment to be recently?	
Malaysia	Same as UK	How satisfied are you with the extent to which your treatment fits in with your daily life?	
Spain	Últimamente, ¿en qué medida considera Vd. que su tratamiento resulta fácil / cómodo?	Últimamente, ¿en qué medida considera que su tratamiento se adapta a su vida?	
Mexico	¿Qué tan práctico y cómodo ha estado encontrando su tratamiento recientemente?	Recientemente, ¿qué tan flexible ha sido su tratamiento para usted?	
France	Ces derniers temps, dans quelle mesure votre traitement vous convient-il ?	Quel est à votre avis le degre de souplesse de votre traitement?	
Canada	Dans quelle mesure avez-vous trouvé votre traitement commode récemment?	Dans quelle mesure avez-vous trouvé votre traitement flexible récemment?	
Germany	Wie praktisch/bequem finden Sie Ihre Behandlung in letzter Zeit?	Wie zufrieden sind Sie mit der Flexibilität Ihrer Behandlung in letzter Zeit?	
Switzer- land	Wie einfach zu handhaben finden Sie Ihre Behandlung in der letzten Zeit?	Wie flexibel finden Sie Ihre Behandlung in der letzen Zeit?	

W-BQ12 -Table 2

Differences within languages between countries (coloured text)		
UK	I feel downhearted and blue	
India	I feel sad and low	
Canada	I feel downhearted and in low spirits	
Spain	A veces lloro o tengo ganas de llorar	
Mexico	Tengo ataques de llanto o siento que quiero llorar	
US	Tengo episiodos de llanto o siento ganas de llorar	
France	J'ai des crises de larmes ou je ressens l'envie de pleurer	
Canada	J'ai des crises de larmes ou <i>j'ai</i> envie de pleurer	

4. Conclusions

The comparison suggests the occurrence of common patterns of similarities/differences in same language adaptations. Consistent patterns include items' conceptual difficulties and the kind of variation (i.e. local culture in English, geographical distance in Spanish). In particular:

- · Castilian Spanish is never suitable for Latin America, but within Latin America there are similarities of languages in geographically close countries.
- · English differs the least of the four languages and differences relate more to colonization and culture than to geographic distance.
- German and French require intermediate adjustments with more substantial changes needed to French for Canada (US English influence) and German for Switzerland (influence of Romance languages).

These observations suggest the possibility of predicting differences and facilitating solutions in future adaptations.

References	Access to Questionnaires
Bradley C and Lewis KS (1990) Measures of psychological well-being and treatment sa from the responses of people with tablet-treated diabetes. Diabetic Medicine. 7, 445-45	
nom the responses of people with tablet-incated diabetes. Diabetic medicine, 7, 445-45	or contact Clare Bradley, the copyright holder of the
Bradley C. Diabetes treatment satisfaction questionnaire. In : Bradley C., ed., Handbook Diabetes. Chur, Switzerland: Harwood Academic Publishers, 1994: 111–132.	of Psychology and DTSQ and W-BQ12, at c.bradley@rhul.ac.uk.
Felici A, Plowright R, Wilson A and Bradley C (2011) Diabetes Treatment Satisfaction Q	
for Spain and Latin America: are Multiple Language Versions Really Necessary? Patien (PRO) Newsletter 45 (Spring), 19.	Reported Outcomes We would like to thank Mapi Institute, Lyon, for their
	linguistic services.
Riazi A, Bradley C, Barendse S and Ishii H (2006) Development of the Well-being quest Japanese: the W-RO12 Health and Ool Outcomes 4:40	onnaire short-form in

inquiries

Corresponding author: Annarita Felici PhD Health Psychology Research Ltd, University of London Egham, Surrey, TW20 0EX, UK. E-mail: a.felici@healthpsychologyresearch.com