

Assessment of Questionnaire Translations:

Comparing Back Translation & TRAPD Dorothée Behr & Katja Hanke, GESIS, ESRA, 24 July 2019





This presentation...

... is about the *design* of the experiment and seeks helpful input and combined wisdom from your side so that we can produce something that may be useful for many.

Sincere apologies for not having data yet!

BUT: Some results from an empirical study comparing back translation assessment and native speaker checks (Behr, 2017) are presented and fed into the experimental considerations.





Outline

- (1) Back translation (BT) and TRAPD
- (2) The data gap lack of empirical data on translation processes
- (3) Challenges of translation experiments: source text and persons
- (4) The planned experiment details





Back translation (BT)

- Wide-spread method for questionnaire translation ('father': Brislin, 1970). Its basic form includes:
 - ▶ original questionnaire →
 - ▶ translation →
 - ▶ back translation into original language →
 - comparison of original language versions ->
 - correction
- Method is problematic especially if it is used as a sole quality assessment method, e.g.:
 - ▶ There is no assessment of the translation itself in the language of translation.
 - ▶ BT can identify problems but it can also be erroneous and thus conceal translation mistakes or wrongly suggest them.





Three examples (Behr, 2017)

- BT in a positive way:
 - Social movements (e.g. environmental, human rights), charities (e.g. fundraising, campaigning)
 - BT: election campaigning (Wahlkampf)
- False negative:
 - I have felt downhearted and depressed
 - BT: I've felt low and depressed (depressiv)
- False positive:
 - participate in social activities of a club, society or an association not related to your work
 - BT: participation in the social activities of an association, a collective or a federation (without any connection to the professional activity)





Translation, Review, Adjudication, Pretesting, and Documentation (TRAPD)

- Team-based translation method developed for the European Social Survey (ESS), taken up (in modified form) in many other surveys (Harkness, 2003; Harkness, Pennell, & Schoua-Glusberg, 2004):
 - ▶ Translation: double translation (split translation)
 - Review and adjudication: reconciliation and final decisionmaking in team-based setting
 - Pretesting
 - Documentation: of decisions, challenges, process, staff.



The data gap: lack of empirical data on translation process

- TRAPD = 'good practice' in the cross-cultural survey research community, but BT is still a common feature in many cross-cultural surveys.
- To spread one method (ideally: TRAPD), we need to show the strengths and limitations of each method and for this we need empirical data.
- This is where this experiment comes in.





United in the endeavor across disciplines

- "We strongly feel that it is essential to collect evidence before asserting that back translation, an untested method—however, widely implemented—represents 'principles of good practice'." (McKenna & Doward, 2005: 90)
 - ▶ Epstein, J., Osborne, R. H., Elsworth, G. R., Beaton, D. E., & Guillemin, F. (2015). Cross-cultural adaptation of the Health Education Impact Questionnaire: experimental study showed expert committee, not backtranslation, added value. *Journal of Clinical Epidemiology*, 68(4), 360-369.
 - ▶ Hagell, P., Hedin, P. J., Meads, D. M., Nyberg, L., & McKenna, S. P. (2010). Effects of method of translation of patient-reported health outcome questionnaires: a randomized study of the translation of the Rheumatoid Arthritis Quality of Life (RAQoL) Instrument for Sweden. *Value in Health*, 13(4), 424-430.





The planned experiment: Which method leads to better data?

 Basic back translation (translation - > back translation -> comparison -> correction)

VS.

- TRA of TRAPD approach (good practice):
 - Translation (double translation)
 - Review (team review and adjudication)





Challenges of experiments: source instrument

- Experiments depends on the quality of the source questionnaire & its translatability and cultural relevance:
 - ▶ E.g., if a questionnaire is designed in a way that translation challenges have been removed early on/instructions are given how to deal with them, the initial translations of any experimental condition may be ok (assuming good translators are hired). -> We will try to include 'cross-national' items, but also items developed in a monolingual context.
 - ▶ E.g., if items are straightforward / robust and not so much dependent on individual wording, good initial translations may result from this (assuming good translators are hired). → We will try to include robust, but also more challenging items.





Examples of different items

Civic Attitudes Questionnaire:

- I am involved in my community
- I participate in a community action program

ISSP – being a good citizen (2014)

- Always to vote in elections*
- Never to try to evade* taxes

ISSP – leisure time (2007)

- Watch TV, DVD, videos
- Go out to watch movies

Personality items:

- I hold grudges.
- Don't know how to handle myself in a new social situation.





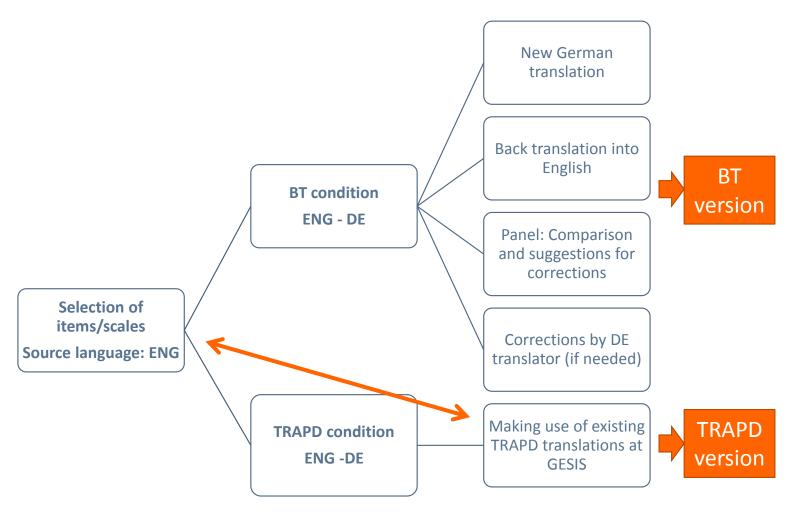
Challenges of experiments: persons

- Every experiment depends on the persons, so it may not necessarily be the method as such but the persons in each experimental decision/at each stage that trigger a result.
 - E.g., the (back translation) translators or the team in the TRAPD approach may not be adequate so that this does not lead to what is potentially possible or achievable in a given method. → We will try to include different translators and translations from several teams.





Experiment: Translation step







Experimental decisions

- Instructions given to BT translators and evaluators on the panel, e.g.,
 - German translator should produce a final product.
 - Back translators should produce a 'documentary translation' for quality checks (no improvements).
 - Panel should look of possible measurement issues and changes in sentence structure/format/design features that may have an effect on data comparability
 - ▶ Background of panel is important: Here: high-level expertise in cross-national surveys and questionnaire design.
- Using translators for BT condition who are experienced questionnaire translators vs. those not experienced in translating questionnaires.
- Using different projects and teams for TRAPD condition.





Assessment step

- Qualitative analysis:
 - ▶ Blind assessment (by **two** persons) of final German translation in BT and TRAPD conditions: errors, fluency and comprehensibility (grid/rating).
- Quantitative analysis:
 - Split-ballot experiments in web survey
 - Case numbers should be large enough to make the desired analyses
 - Substantive analysis, non-response, paradata (e.g. timing)





Assumptions

- TRA(PD) will produce better quality, in particular
 - in cases where items have not been designed for a cross-national study,
 - ▶ in cases whether wording is crucial, so for instance with personality items, or with items that are more complex.
- BT and TRA(PD) will lead to the same results when items are simple and straightforward and when at the same time experienced survey translators are employed.





Questions to you

- Would you have any additional recommendations for the experiment (items, translator profiles, instructions...)?
- How can individual translator effects be mitigated?
- Note: Given budget constraints, this can only be a first experiment to get this started on this.





References

- Behr, D. (2017). Assessing the use of back translation: The shortcomings of back translation as a quality testing method. *International Journal* of Social Research Methodology, 20(6), 573-584.
- Brislin, R. W. (1970). Back-translation for crosscultural research. *Journal of Cross-cultural Psychology*, 1(3), 185-216.
- McKenna, S. P., & Doward, L. C. (2005). The translation and cultural adaptation of patient-reported outcome measures. *Value in Health*, 8(2), 89-91.

