Moving Questionnaires by Design

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with help from Brita Dorer and Janet Harkness
Prelude

• Comparability is THE top 3M quality issue
• Consider 1 incomparable question in 1 country destroys total comparability (Swiss Cheese Effect)
• Consider the costs of 1 minute lost for comparison
• 60 mins total costs $10,000,000$ for a 20 country survey
  \[ 166,666 \, \$ \]
Overview

• A translation error?
• Trapped in translation?
• Reset: 3m surveys as global products
• 3m quality
• Movable instrument design
A translation error
AAPOR Webinar Schoua-Glusberg & Villar, March 26 2014

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A translation error?

What do we know about the properties of the item??????
Sequence – Schwarz-Hippler
Fowler-Shaeffer, etc
Concept
Construct
Indicator

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Neverending story?

• For how much longer shall we discuss such matters?

• What shall we do?
RESET
From mono to comparative surveys

- In the beginning there were mono-surveys
- Later on comparative surveys came in
- They adopted questions from mono-surveys
- No changes made, if the same language was used (nearly)
- Translated, if language was different
From comparative to 3m surveys

- Comparative minimum 2
- International a couple
- 3m minimum 9 simultaneous surveys
- *Multilingual 3m more than 3*
3m here and now

- Comparative surveys are almost always 3m surveys (multiple across cultures, languages, nations, or regions)

- Current best practice is
  - Design and develop a source instrument in one language (often English of sorts)
    - Mostly items are still adopted from mono-surveys
  - Translate/adapt it to all target languages including local variants of the source language
  - Use TRAPD as translation/adaptation technique
TRAPD in Translation

• Why are we trapped in translation?
  – no way to change source, if translation is stuck

• Advance translation as a way out
  – including SQP and cApStAn and TRAPD as tools

• Is that good enough, actually?
STOP IN THE NAME OF LOVE
What type of international/global product are 3m surveys?

• All Surveys are local products
  – Sample frame
  – Data collection
  – Survey language

• 3m Surveys are global products
  – Sample design
  – Data collection design
  – Source instrument
  – Quality assurance
Analogy to other industries

• Soft drinks (Coca Cola, Pepsi)
  – Always produced locally
  – Always designed globally
3m Survey Quality Assurance

- Sampling clearly 3m defined
- Translation clearly 3m defined
- Questionnaire design not well defined
- Others not well defined
  - data collection
  - harmonization
  - data fusion
  - documentation
  - you name it
Moving Questionnaires towards international and global instruments
The Moving Questionnaires by Design Concept

The idea behind moving questionnaires

- “moving house” implies
  - planned change of locality and situation
  - no identical setting
  - loss and gain

- “moving source instrument” implies
  - planned implementation in a specific 3m setting
  - conservation of comparability across multiple settings
Moving on

What, actually, is the task?

1. Designing a source instrument that is fit for use in 3m surveys, internationally and globally

2. Observing the CCII framework
   - Construct – Concept – Indicator – Item

3. Observing comparability requirements

4. **Conserving measurement properties**
Moving ahead example*

How interested would you say you are in politics – are you… READ OUT…

very interested, 1
quite interested, 2
hardly interested, 3
or, not at all interested? 4
(Don’t know) 8

*ESS, B1, core questionnaire
Moving ahead

Example

Source Questionnaire

Now we want to ask a few questions about politics and government.

B1. How interested would you say you are in politics – are you... READ OUT...

very interested, 1
quite interested, 2
hardly interested, 3
or, not at all interested? 4
(Don’t know) 8

Checks

1. what is the concept?
   • similar in all target populations?
   • what’s our evidence?

2. what construct?
   • really not directly measurable?
   • similar in all target populations?
   • what’s our evidence?

3. which indicators?
   • one and only one?
   • multiple?
   • similar in all target populations?
   • what’s our evidence?

4. which items
   • local gladiators?
   • comparable?
   • what’s our evidence?
Spelling it out..

Concept
Health

Latent Construct
Physical Strength

Indicator
Physical Strength
Upper Body

Indicator
Physical Strength
Lower Body

Latent Construct
Mental Health

Do you have difficulty raising a 2 liter bottle of water or soda from waist to eye level?

Haben Sie Probleme eine 1.5 Liter Wasserflasche von Ihrer Hüfte bis auf Ihre Augenhöhe zu heben?

¿Tiene dificultad para levantar una botella de agua o de refresco de 2 litros, desde la cintura hasta el nivel de los ojos?

¿Tiene dificultad para levantar una botella de agua o de refresco de 2, desde la cintura hasta el nivel de los ojos?

Avez-vous des difficultés pour soulever une bouteille d’un litre et demi d’eau, de la taille jusqu’au niveau des yeux?

Question 1

Question 2

Indicator 1

Indicator 2

Mohler, ESRA 2013

Mohler CSDI 2014
What can we do?

• Turn the world upside down
• Check proposed items for known translation/adaptation issues
• What does this mean?
Moving Checks
or
Harkness applied

As for instance

– good bye to language games
  • agree – disagree
  • important – unimportant

– good bye to ad hoc adaptations
  • playing golf – picking berries
  • 5 point scales – 7 point scales

– good bye to lousy items
  • tried and tested – dried and dusted
  • scaled yes – no
  • etc. etc. etc.
Moving items by design

• Apply Concept-Construct-Indicator-Item (CCII)
• Apply QA
• Apply strict item design filters
  – Cognition & Survey Research (Schwarz)
  – Translation Research (Harkness)
  – Question Design Research (Fowler)
  – Quantitative item properties (Saris, Alwin)
Translation error?

• You or a member of your household...??

• Seemingly fails the moving items test
Ah, the costs

• Balancing costs and quality
• Consider the money spend happily on
  – Sampling
  – Contac protocols
  – Interviewer training
  – Talking meetings
  – PI conversion
• What are you willing to spend on designing and implementing movable items?
Comparatively speaking designing movable items is Dirt cheap Invaluable!