

**QUANTITATIVE
EVALUATION OF
QUESTIONNAIRE
TRANSLATION WITH
BILINGUAL SPEAKERS**

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OVERVIEW

- Background
 - Translation
 - Translation equivalence
- Data and methods
 - National Latino and Asian American Study
- Results
- Implications

QUESTIONNAIRE TRANSLATION

- From source language to target language
- Seek equivalence in measurement
 - More than semantic and lexical equivalence
 - Functional equivalence

TRANSLATION EVALUATION

- Cross-Cultural Survey Guidelines (<http://ccsg.isr.umich.edu/translation.cfm>)
- Qualitative approaches
 - Experts' review; translators feedback; cognitive interviews; behavioral coding
 - Dominant in the practice but limited
- Quantitative approaches
 - Experiments; statistical assessment models
 - Rare but reflect statistical considerations

DATA AND METHODS – 1

- National Latino and Asian American Study
- Targeting Latinos and Asian Americans
- Interviews in English, Spanish, Chinese, Vietnamese, and Tagalog by fully bilingual interviewers
- 2,554 Latino and 2,095 Asian Americans

DATA AND METHODS – 2

- Experiment with 332 bilingual English-Spanish speaking Latinos
 - Random assignment of interview language
 - 182 in English
 - 150 in Spanish
 - If functional equivalence, response distributions should not differ

DATA AND METHODS – 3

- Response scale
 - One-on-one translation
 - Excellent – poor (4 point and 5 point)
 - Strongly agree – strongly disagree (4 point)
 - One-on-two translation
 - Frequency: often – never
 - Quantity: a lot – not at all
- Standardization on demographics
- Consistency rather than significance of results

ONE-ON-ONE TRANSLATION RESULTS: EXCELLENT – POOR

- Excellent-good-fair-poor
- Excelente-bien-regular-pobre
- Language proficiency questions



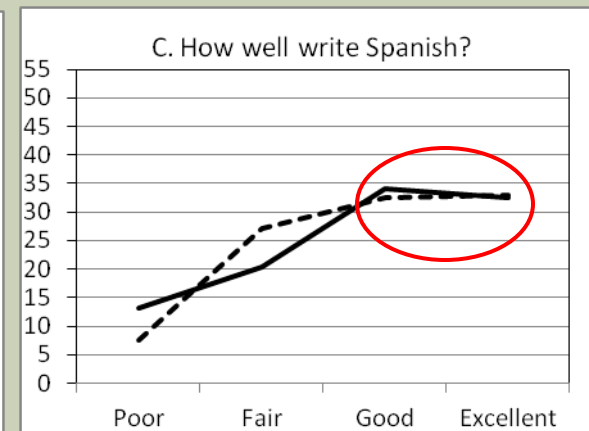
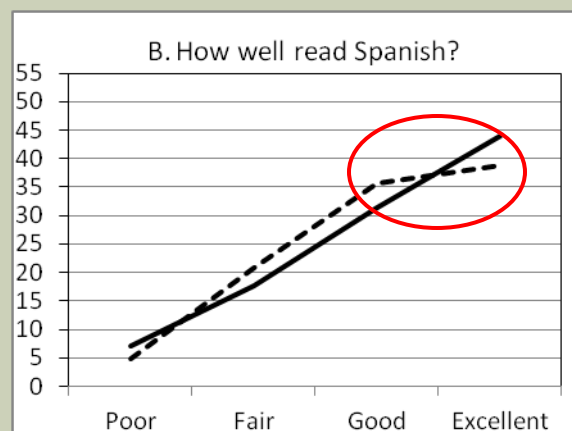
ONE-ON-ONE TRANSLATION RESULTS: EXCELLENT - POOR

Speaking

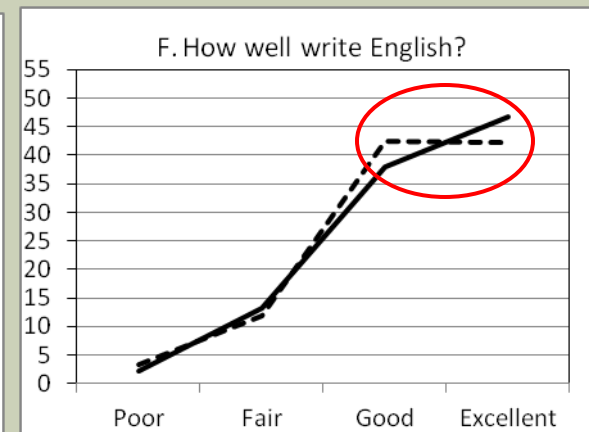
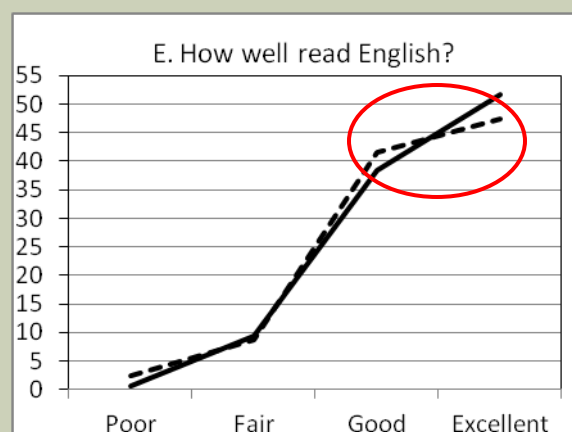
Reading

Writing

Spanish



English



ONE-ON-ONE TRANSLATION RESULTS: STRONGLY AGREE – STRONGLY DISAGREE

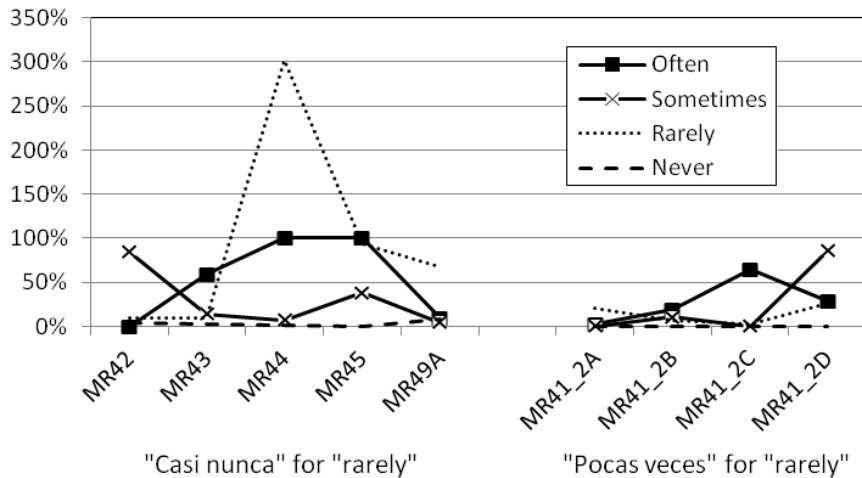
- Strongly agree-somewhat agree-somewhat disagree-strongly disagree
- Mayormente de acuerdo-algo de acuerdo-algo en desacuerdo-mayormente en desacuerdo
- 10 Family cohesion questions (positively worded)
- Consistently higher % strongly agree in Spanish

ONE-ON-TWO TRANSLATION RESULTS: OFTEN – NEVER

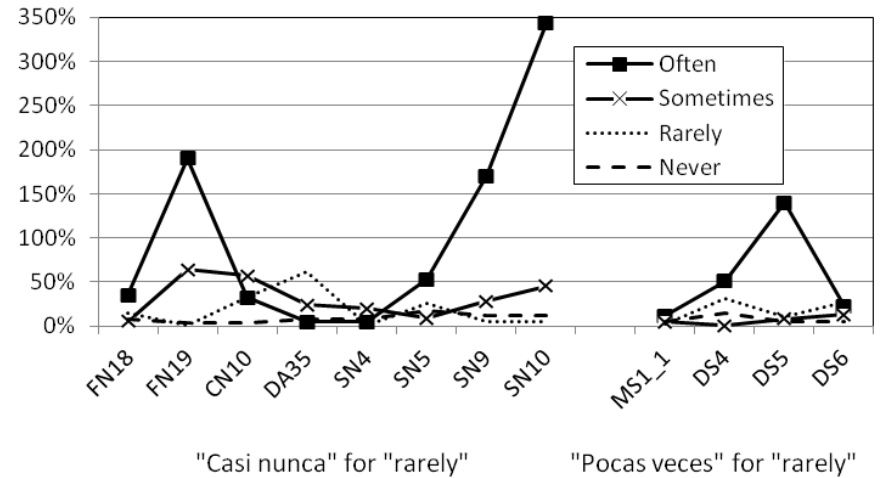
■ % Relative difference

Often	Sometime	Rarely	Never
Muchas Veces	Alguna Eces	Casi Nunca	Nunca
Muchas Veces	Alguna Eces	Pocas Veces	Nunca

A. Frequency scale: Questions related to marriage



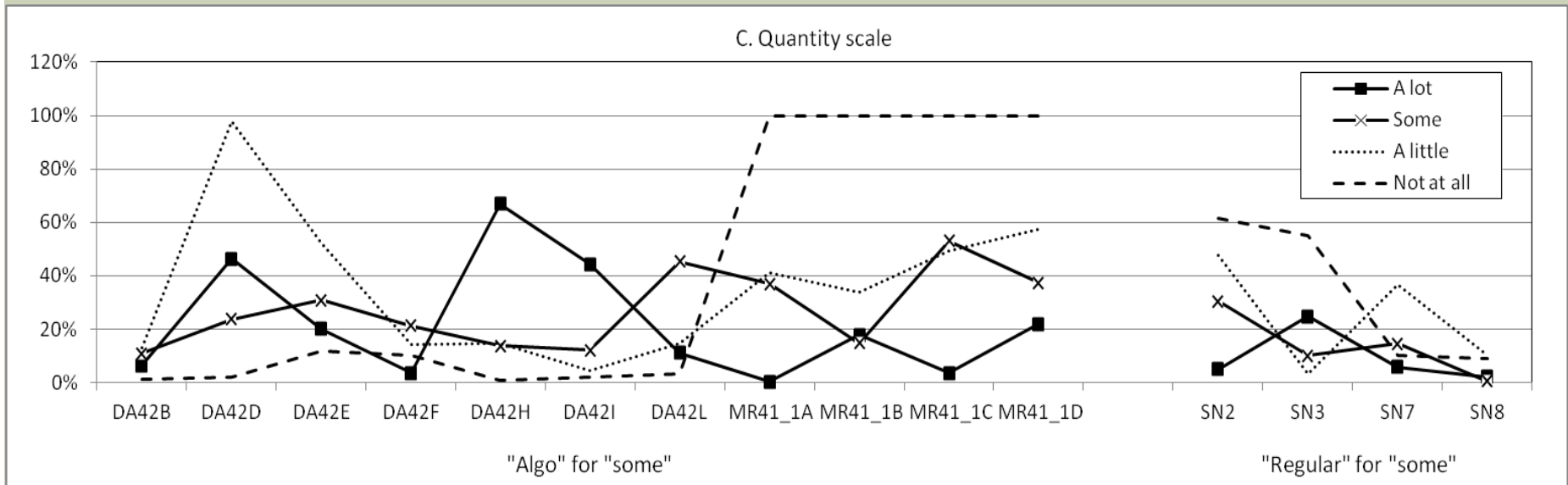
B. Frequency scale: Questions unrelated to marriage



ONE-ON-TWO TRANSLATION RESULTS: A LOT – NOT AT ALL

■ % Relative difference

A lot	Some	A little	Not at all
Mucho	Algo	Poco	Nada
Mucho	Regular	Poco	Nada



IMPLICATIONS

- Uncertain functional equivalence with translation
 - In Spanish,
 - Lower tendency of positive rating of language proficiency
 - Higher tendency of “strongly agree” for family cohesion questions
 - Extreme response style? Question topic?
- Which translation is better?
 - “Pocas veces” (rather than “casi nunca”) for “rarely”
 - “Regular” (rather than “algo”) for “some”

THANK YOU!!

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