

AN EXPERIMENT COMPARING GRIDS AND ITEM-BY-ITEM FORMATS IN WEB SURVEYS COMPLETED THROUGH PCS AND SMARTPHONES

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M. Revilla, RECSM-UPF
Contact: melanie.revilla@upf.edu
D. Toninelli, University of Bergamo
C. Ochoa, Netquest



MAIN GOAL

Investigate what is the impact of the device used (PC or smartphone) and of the questions' layout (as a grid or as separate questions) on the:

- 1 interitem correlations**
(measured by the Cronbach's α)
- 2 completion time**
- 3 non-differentiation**

EXPERIMENT: 2-WAVE CROSSOVER SURVEY

	Wave 1	Wave 2
Control Groups	PC	PC
	SNO	SNO
	SO	SO
Treatment Groups	PC	SNO
	SNO	PC
	PC	SO
	SO	PC
	SO	SNO
	SNO	SO

PC = Desktops & Laptops
SNO = Smartphone Not Optimized
SO = Smartphone Optimized

Note: In SO, grids are automatically split into separate questions.

ANALYSIS

- ▶ Compare PC, SO and SNO in each wave (descriptive).
- ▶ Study the answers of individuals across waves (Mixed-Models with observations nested in individuals or OLS regressions).

HYPOTHESES & SUPPORT FOR EACH

- H1 Answering through smartphones instead of PCs...**
- a) increases interitem correlation in grids: **not supported**.
 - b) increases completion times for grids: **supported**.
 - c) increases non-differentiation in grids: **partially supported**.
- H2 Splitting grids into separate questions in surveys completed through smartphones...**
- a) reduces interitem correlation when all items go in the same direction, and increases it when there are positively and negatively formulated items: **not supported**.
 - b) increases completion time: **partially supported**.
 - c) reduces non-differentiation: **supported**.

DATA

- ▶ Using the Netquest opt-in online panel for Spain.
- ▶ **Wave 1:** February 23 to March 2, 2015; **1,800 completes**.
- ▶ **Wave 2:** March 9 to 18, 2015; **1,610 completes**.
- ▶ Same questionnaire in both waves; about sensitive behaviors (e.g. alcohol consumption or deviant behaviors).
- ▶ 68 questions studied, coming from 2 grids of 14 items each and 3 sets of 15, 15 and 9 items.

3 KEY TAKE AWAY

- 1** The device used can affect results.
- 2** Risk of losing comparability even higher for mobile optimized surveys (grids split into separate questions).
- 3** Recommendation to improve comparability: **use item-by-item format in both PC and smartphone surveys** when there is a high probability of having both mobile and PC respondents.