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

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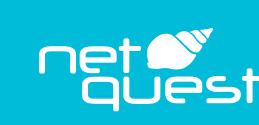
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# MAIN GOAL

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:

- interitem correlations (measured by the Cronbach's  $\alpha$ )
- 2 completion time
- 3 non-differentiation

# **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).

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#### Wave 2 Wave 1 PC PC Control SNO SNO Groups SO SO SNO PC PC SNO **Treat-**SO ment SO PC Groups SO SNO SNO SO

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

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

- 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.
- Risk of losing comparability even higher for mobile optimized surveys (grids split into separate questions).
- 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.