Respondent-centered incentives: Increasing answer provision when it comes to voice answers to open questions

Höhne[1,2], Revilla[3], & Couper[4]

[1] Leibniz University Hannover

[2] German Center for Higher Education Research and Science Studies (DZHW)

[3] Institut Barcelona Estudis Internacionals (IBEI)

[4] University of Michigan

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Melanie Revilla is Principal Investigator

Digitalization and Research Potential

- Global digitalization tendency

  - *Increase in internet use and electronic device ownership*

- New opportunities for researching (social) reality

  - *People leave traces and produce data in digital spheres* (Struminskaya et al. 2020)

- Emergence of digital intersections

  - *Ex ante data linkage (e.g., sensors)* (Elevelt et al. 2021; Höhne & Schlosser 2019)
  - *Ex post data linkage (e.g., trace data)* (Pasek et al. 2020; Stier et al. 2020)

- Transformation of social and behavioral science

  - *New conferences: BigSurv ,Mobile Apps and Sensors in Surveys, WEB DATA OPP etc.*
  - *New journals: Frontiers in Big Data and Journal of Computational Social Science etc.*

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Voice Answers I

- New communication channels because of electronic devices
  - *Linking established methods with technological innovations*

- Voice answers to open questions
  - *Using built-in microphones or headsets*
  - *Closeness to daily conversation* (Tourangeau et al. 2000; Revilla et al. 2020)
  - *Rich information due to narrations* (Gavras & Höhne 2022; Gavras et al. 2022)

- Technological requirements of voice answers are met
  - *Even in web surveys with large N*

- General willingness for voice answers
  - *Between 40% and 60%* (Lenzner & Höhne 2022; Revilla et al. 2018)

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Voice Answers II

- Voice answers struggle with high item non-response
  - *Varying between 25% and 60%* (Gavras et al. 2022; Revilla et al. 2020)

- Revilla and Couper (2021) varied voice answer instructions
  - *They found almost no decreasing effect and item non-response was about 40%*

- Revilla and Couper (2023) showed that voice answer provision is higher for …
  - *… respondents using voice input in daily life*
  - *… respondents trusting that their answers are treated confidentially*

- We build on Revilla and Couper (2023) providing extra incentives for voice answers
  - *We focus on respondent groups varying in their likelihood of providing voice answers*
  - *We focus on a push-to-voice recording design*

Building Likelihood Groups

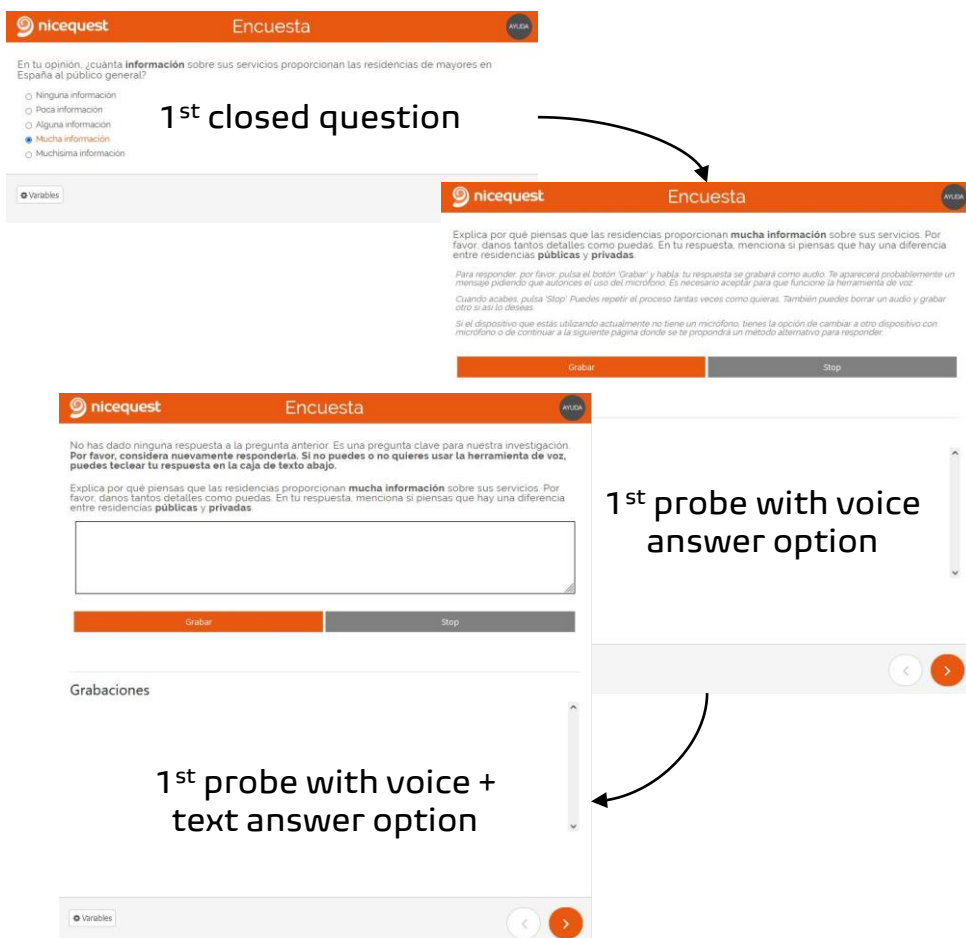| Likelihood groups	Descriptions
Low	Respondents who report not being aware of the existence of voice recording or never using it in their daily life and not completely trusting that their answers are treated confidentially
Medium	Respondents who report not being aware of the existence of voice recording or never using it in their daily life, but completely trusting that their answers are treated confidentially
	Respondents who report using at least sometimes voice recording in their daily life, but not completely trusting that their answers are treated confidentially
High	Respondents who report using voice recording at least sometimes in their daily life and completely trusting that their answers are treated confidentially

Incentives

- Providing incentives is an effective way to increase survey participation, answer provision, and data quality (Boulianne 2008)

- Incentives can be conditional or unconditional
  - *Conditional: After survey task (postpaid) and contingent*
  - *Unconditional: Before survey task (pre-paid) and noncontingent*

- Typically, incentives are provided globally on a survey level
  - *Incentivization for the entire survey participation*

- In this study, we provide conditional incentives …
  - *… on a survey level (basis)*
  - *… extra for answering two open questions through voice*
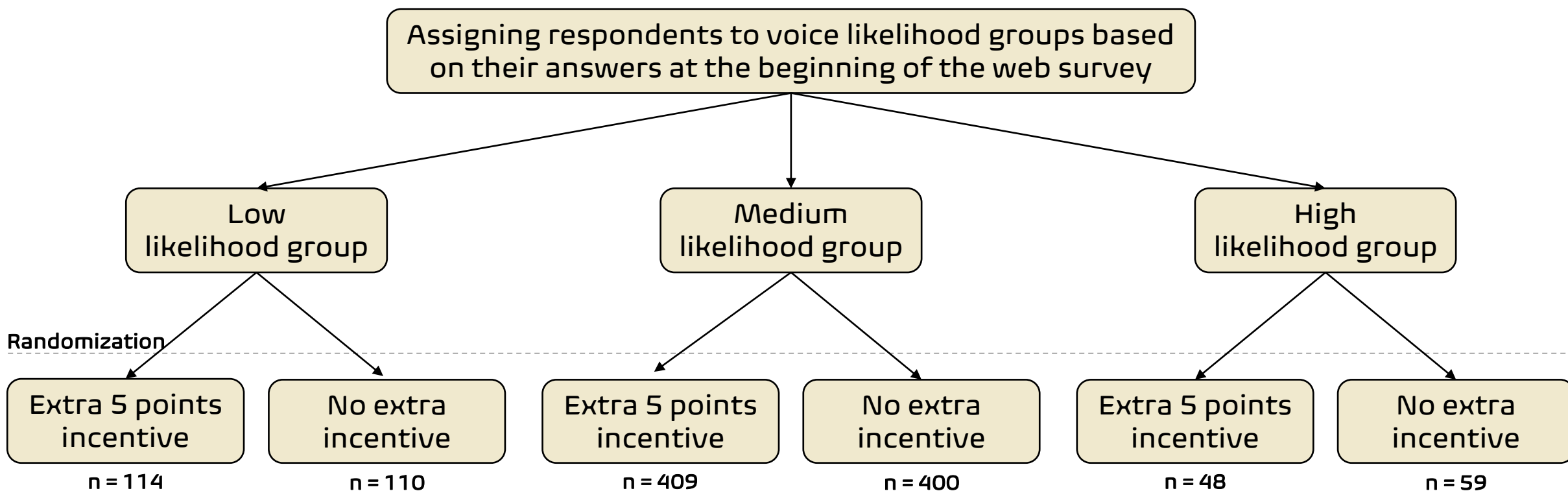
Research Question and Hypotheses

- **RQ**: Can we increase answering through voice by providing extra incentives?

- **H1a:** Extra incentives <u>do not increase</u> answering through voice for the low likelihood group

- **H1b:** Extra incentives <u>increase</u> answering through voice for the medium likelihood group

- **H1c:** Extra incentives <u>do not increase</u> answering through voice for the high likelihood group

- **H2:** Extra incentives for answering through voice <u>do not increase</u> overall answering

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Method: Study Design I

1ˢᵗ closed question

1ˢᵗ probe with voice answer option

1ˢᵗ probe with voice + text answer option

- Web survey lasts about 10 minutes
  - *We target N ~1,700 respondents from Netquest*
  - *All respondents get a basis incentive of 12 points*
  - *Cross-quotas on gender and age plus education*

- 2 follow-up probes on 2 closed questions
  - *Opinions about nursing homes in Spain*
  - *We used the WebdataVoice tool* (Revilla et al. 2022)

- <-- Example screenshots (PC only)
  - *If respondents refuse to answer the probe through voice, they receive a text answer option*

- Study is pre-registered through OSF (see https://osf.io/cxz4s)

Method: Study Design II

Assigning respondents to voice likelihood groups based on their answers at the beginning of the web survey

- Low likelihood group
- Medium likelihood group
- High likelihood group

Randomization

Low likelihood group		Medium likelihood group		High likelihood group	
Extra 5 points incentive	No extra incentive	Extra 5 points incentive	No extra incentive	Extra 5 points incentive	No extra incentive
n = 114	n = 110	n = 409	n = 400	n = 48	n = 59

Important: Respondents only receive the extra 5 points if they answer both probes through voice

Method: Data Collection Status

- Respondent recruitment (17th March 2024)

Recruitment	Break down (n)
Filter out age	1
No knowledge about nursing homes	179
Filter out consent	186
Complete	**1,140**
Incompletes	505
Total	*2,011*

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Challenges and Points for Discussion

- We face an imbalance across experimental/likelihood groups
  - *What variables should be set relevant for incentive schemes?*

- We have many incompletes (about 10%) – probably break-offs

- We also have many respondents not providing consent (about 10%)

- What are proper incentive levels? – 5 points for two answers might be too low

- Data quality beyond missing data and answer length
  - *What are text-based quality metrics (e.g., valid answers, themes mentioned etc.)*
  - *Manual coding vs. contemporary text-as-data methods*

- Only access to transcripts because of ethical/data protection regulations (ERC)
  - *No processing of tonal cues for affective state and interest level predictions*
  - *Transcription quality of automatic speech recognition (ASR) systems*

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Many thanks for your attention!

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