

### Mode Effect Review Tool: A Practical **Guide for Minimising Measurement** Error in Mixed-Mode Surveys

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# The Rise of Mixed-Mode Surveys: A New Challenge



- Increasing reliance on online and mixed-mode designs to reach diverse populations.
- Each mode has unique strengths and weaknesses (e.g., cost, accessibility, interviewer effects).
- Mode effects can threaten data validity and reliability, leading to inaccurate comparisons.
- Mode effects are comprised of Sampling effects and Measurement effects.
- The ESRC-funded Survey Futures program and NatCen are addressing the issue of measurement effects.







# Introducing the Mode Effect Review Tool: A Practical Solution



- Practical, user-friendly tool for evaluating survey questions.
- Designed for use during the questionnaire design phase before you field your survey.
- Developed based on a thorough literature review.
- Focuses on minimising measurement non-equivalence ensuring questions measure the same thing across modes.







# What the Tool Covers: Key Considerations for Minimising Mode Effects



- Interviewer Effects (e.g., social desirability bias, positivity bias, privacy concerns).
- Question Complexity (e.g., respondent fatigue, cognitive burden).
- Visual Presentation (e.g., mobile usability, question layout).







#### Interviewer Effects



- Examples: Socially Desirable Reporting (e.g., voting, charitable giving, personal finances). Positivity bias on rating scales.
- Problem: People may be more likely to give socially acceptable answers to interviewers.
- Recommendation 1: Consider using CASI (Computer-Assisted Self-Interviewing) for sensitive questions or those prone to interviewer effects (e.g. rating scales).
- Recommendation 2: If using CAPI, train interviewers on creating a comfortable and non-judgmental environment.
- Recommendation 3: Acknowledge and document the potential for social desirability bias in your research reports.







# Question Complexity: Minimising Respondent Burden



- Example: Complex Calculations or Lengthy Questions, and Loops.
- Problem: Satisficing Respondents may rush, make errors, or become disengaged, especially online.
- Recommendation 1: For calculations, consider asking for component parts rather than a final sum.
- Recommendation 2: Use clear and concise language, avoiding jargon or technical terms. Consider capping or grouping long response lists.
- Recommendation 3: Consider removing or shortening loops (both number of questions and number of repetitions).







### Visual Presentation: Designing for Different Modes



- Example: Grid alternatives, Refusals/ Don't Know coding, Conditional prompts
- Problem: Non-differentiation due to formatting, Missing data, Rounded answers (e.g. Heaping)
- Recommendation 1: Mobile first design of grid alternatives (e.g. collapsing grids, multiple questions per page).
- Recommendation 2: Allow skips or use 'hidden' DK/ Refusal codes.
- Recommendation 3: Consider selective use of conditional prompts online to prevent known issues. Consider the placement of these on the page.







# Using the Tool: A Practical Example

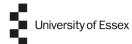


Which of the following local services have you used in the last 12 months?

- 1. GP surgeries
- 2. Local schools
- 3. Local waste collection
- 4. Local police services
- Parks and recreation etc

How satisfied are you with each of the these? {LOOPED FOR ALL SERVICES USED}

- 1. Very satisfied
- 2. Satisfied
- 3. Neither Satisfied nor Dissatisfied
- Dissatisfied
- 5. Very dissatisfied
- 6. Don't know



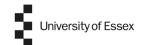




# General Best Practice for Minimising Mode Effects



- Mobile-First Design: Prioritise mobile usability in all online surveys.
- Pre-test in All Modes: Test your questions in every mode they will be administered.
- Interviewer Training: Provide thorough training on mixed-mode procedures and question-specific issues.
- Consistency across modes: Make formats consistent across devices as far as possible. Formats used for CASI should mirror formats used for web. If possible, use the same programming team for different methods of survey instrument to retain consistency.



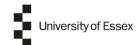




### Access the Measurement Effect Review Tool



- Available soon: This valuable resource will be made available to the research community.
- A resource developed as part of the ESRC-funded Survey Futures Program at NatCen.
- Designed to improve data quality, strengthen research proposals, and enhance the credibility of your findings.







#### Q&A



Contact us at QDTHub@natcen.ac.uk





