CAIR 2016

BEST PRACTICES IN ONLINE SURVEY DESIGN: HOW TO OPTIMIZE DATA QUALITY AND RESPONDENT ENGAGEMENT

Cheryl Harris, Ph.D. Institutional Research charris@miracosta.edu



THREATS TO DATA QUALITY

- Poor Sampling Design
- Poor Survey Design
- Respondent Burden
- Nonresponse Error
- Interpretive/Analytic Error

Sources:

- (1) Downes-Le Guin, Baker, R., (2013). Myths and Realities of Respondent Engagement in Online Surveys. International Journal of Market Research, (54)5, pp. 1-21.
- (2) Couper, M., Tourangeau, R., (2013). The Design of Grids in Web Surveys, Social Science Computer Review, (31)3, pp. 322-345.
- (3) Groves, R.M., Couper, M. (2012). Nonresponse in Surveys. Wiley.
- (4) Blasius, J., Thiessen, V. (2012). Assessing the Quality of Survey Data. Sage.



RESPONDENT BURDEN

- Length of Interview (LOI)
- Amount of Cognitive Effort
- Emotional Stress induced by Interview
- Frequency of Interview Invitations

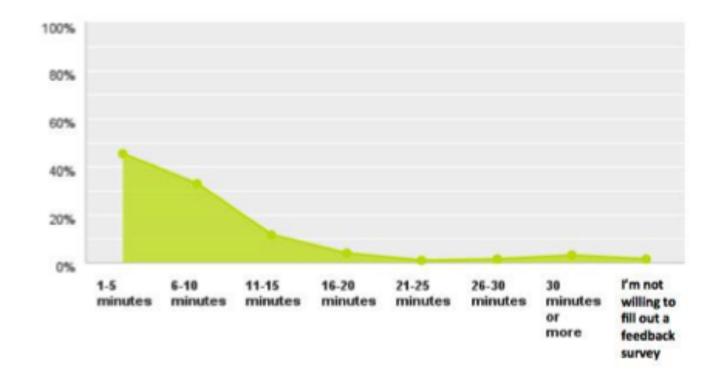
These combine to produce INTERVIEW COMPLEXITY & RESPONDENT ENGAGEMENT LEVEL

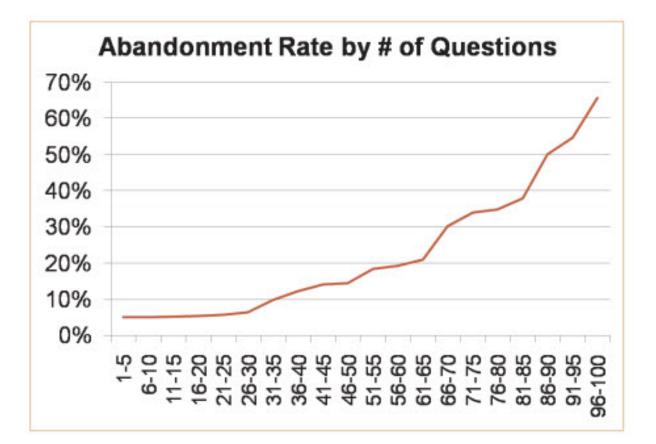
Source:

MIRACOSTA COLLEGE

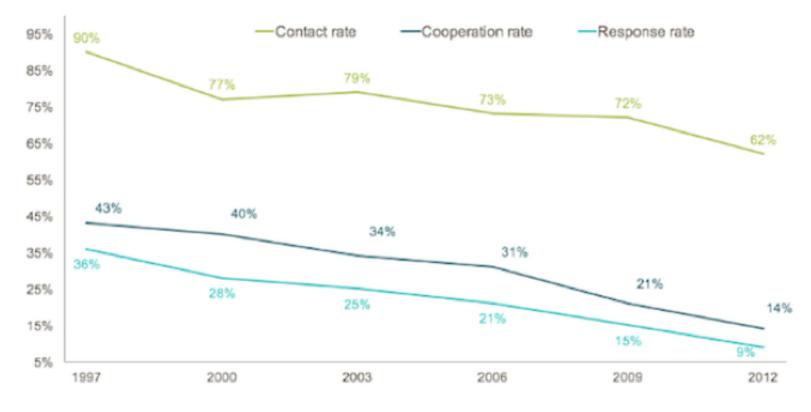
(1) Downes-Le Guin, Baker, R., (2013). Myths and Realities of Respondent Engagement in Online Surveys. International Journal of Market Research, (54)5, pp. 1-21.

What is the most amount of time you're willing to spend completing a feedback survey?





Response rates are in rapid decline



Source: Pew Research Center

Source: Pew Research Center and AAPOR (2012). Methodology Study

COMPLEXITY SCORING

Create a weighted algorithm that produces an indexed score

SURVEY DESIGN ELEMENTS

- Survey Length (mins)
- Total survey pages (clicks)
- Total # questions
- Avg # rows/matrix
- Avg # columns/matrix

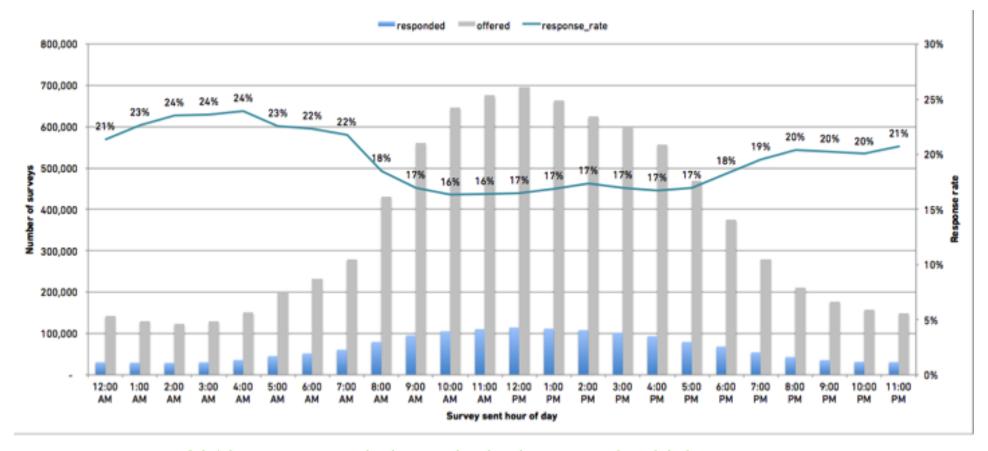
- Total # matrix questions
- Scale Repetition
- # of Open-ends
- Word count
- Readability score
- # Required (Validated) Questions

WHAT DO I DO TO REDUCE COMPLEXITY?

- Use your initial complexity score to determine how to improve the instrument – prior to fielding
- Weight the algorithm over time to better reflect your observations
- Make pre-testing and small-scale A/B tests an essential part of deployment
- Use insights from pre-testing to iterate and improve
- Stay up to date on latest findings in terms of optimal design practices...
- But don't assume they universally apply to all your populations or will not change



INVITATIONS AND RESPONSE RATES BY TIME OF DAY



2016 recommendations: Invitations receive highest response Thursday-Friday, between 11 am and 2pm

ENGAGEMENT SCORING

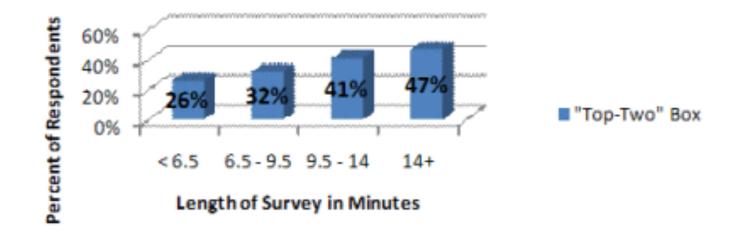
Create a weighted algorithm that produces an indexed score

RESPONDENT BEHAVIOR

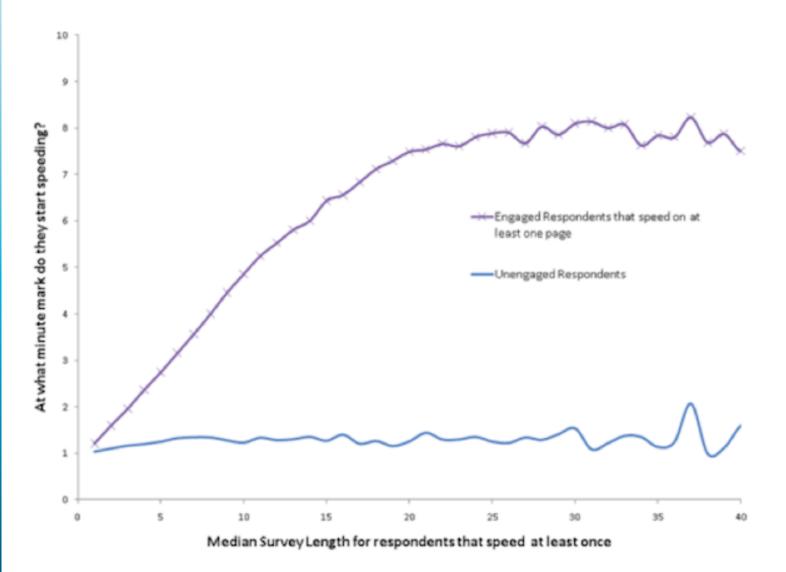
- Time spent on evaluation (key questions)
- Propensity to select lowincidence items
- Propensity to select "None", N/A
- Propensity to select *"Prefer not to answer"* (esp. for demographics)
- Rating consistency on "opposite" attributes

- Missing data
- Open-end response quality
- Straightlining
- Random responses
- Speeding
- Abandon point (<33%,
 <50%, etc.)
- Survey rating/debrief

Relationship Between Survey Length and Likelihood of Selecting the Top Two Boxes

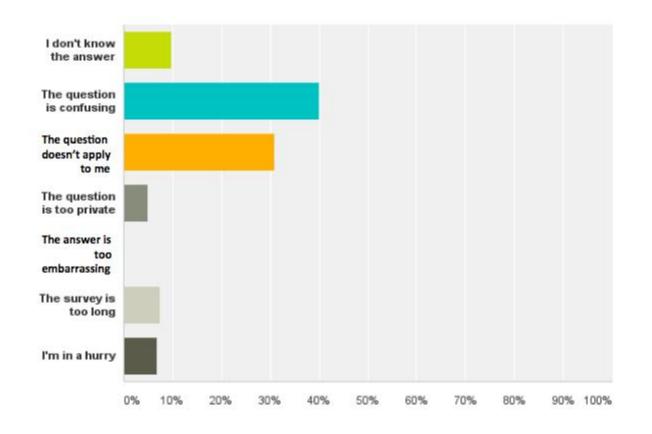


Indicates satisficing behavior and progressive disengagement



Source: Surveymonkey analysis of 3M respondents in Q4, 2013

Q11 If I give an inaccurate answer to a survey question, it's usually because:



HOW TO USE ENGAGEMENT FINDINGS

- Engagement scores will be telling in terms of what types of questions need to be improved, eliminated, or re-considered (of course, most useful if can be applied before full-field begins)
- Engagement scores have a lot to tell us about the nature of our survey respondents and how to tailor surveys specifically to their interests and needs
- Engagement scores help us make decisions about whether cases should be dropped from the dataset

Most importantly:

 Poor engagement scores tell us we probably have not yet earned our respondent's respect and trust



TIPS: CREATING/SUSTAINING RESPONDENT TRUST

- Take the time to test and optimize
- Use a mobile-first design approach where possible
- Respect their time and effort.
- Use a survey "debrief" as part of engagement scoring. It's a survey rating and/or respondent satisfaction measure.
- Avoid over-surveying
- Share findings: "factoids" to campus publications/social media

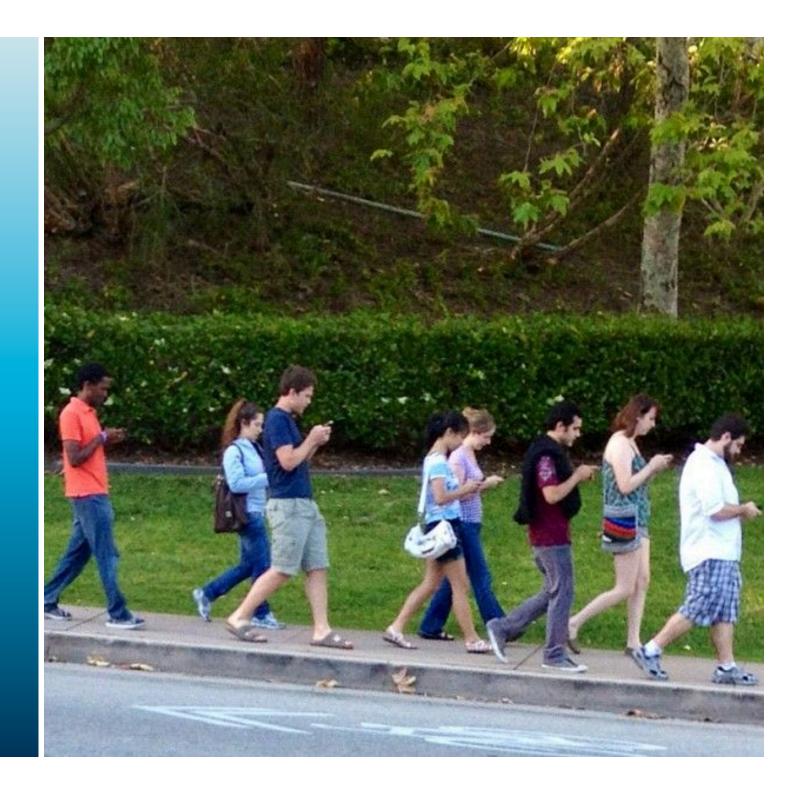
Show stakeholders the benefit of adding time to review questionnaires before deployment and to test and iterate

Improved cooperation rates

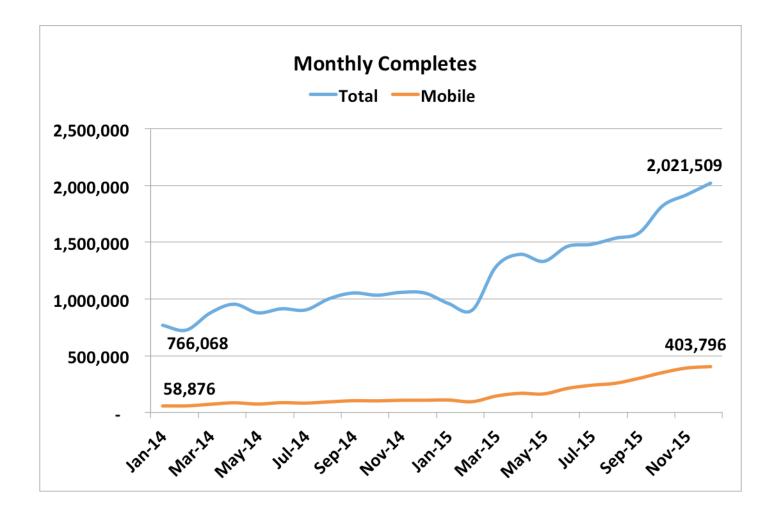
More reliable data and better insights

Public relations gains: enhanced community

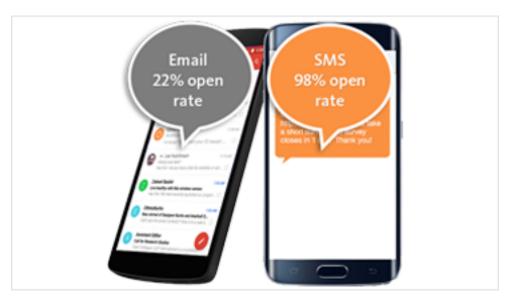




The case for "mobile first" design



Source: Comer, P. (2016) Mobile surveys will beat other modalities in 2016. Greenbook of Marketing Research. January 20.



THE CASE FOR "HUMANIZED" AND GAMIFIED" DESIGNS

Typical survey question:

"Thinking about all the advertising you may have seen about [our college], such as TV commercials, radio ads, billboards, banners on websites, print ads, or other similar forms of advertising, please list in the box below the messages that you may have seen/heard between January 1, 2015 and today. Please include all messages that you can recall."



How I feel when I read that question





Humanized surveys

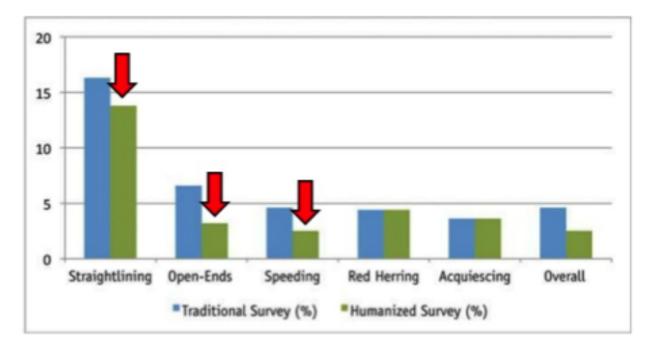
Table 1: Matched Questions	From the Tradition	al and Humanized Surveys
----------------------------	--------------------	--------------------------

Traditional Survey	Humanized Survey
Thank you for participating in this survey. Your careful and honest opinions help improve existing products and create brand new products.	Thanks a bunch for answering this survey! May the survey force be with you.
Which of the following gaming systems 1)do you currently own? 2)have you used in the past 3 months? 3)have you used in the past week?	Which systems do you 1)own? 2)use? 3) use a lot?
What is your favorite video/computer game?	If you could only play one video game for the rest of your life, what game would you choose?
Have you ever lined up at a store so you could be among the first to purchase a new video/computer game?	Are you one of those people who lines up at stores to be the first to buy a new game?
How much do you agree or disagree with these statements about gaming?	Love 'em or hate 'em, what do you think about video games?
What is your opinion about each of the following television shows?	Awesome or terrible, how do you rate these TV shows?
Is there any other information you would like to share with us regarding your opinions and use of video/computer games?	Sharing is caring! Is there anything else you'd like to share about gaming?

Source: Pettit, A. (2014). Forget gamification: Try writing a humanized survey. Quirks Marketing Research Review. (Feb.)



Humanized surveys



Source: Forget gamification; try writing a humanized survey. Published in Quirk's Marketing Research Review, February, 2014. Author: Annie Pettit.

25

Source: Surveymonkey analysis of 3M respondents in Q4, 2013 Source: Pettit, A. (2014). Forget gamification: Try writing a humanized survey. Quirks Marketing Research Review. (Feb.)



Cheryl Harris, Ph.D. Institutional Research charris@miracosta.edu

