

A Web-based Tool for Establishment Survey Assessment and Evaluation

FedCASIC

April 11, 2023

Presenter: Bryan B. Rhodes

Co-authors: Dustin Williams, Hannah Dewar



Establishment Surveys

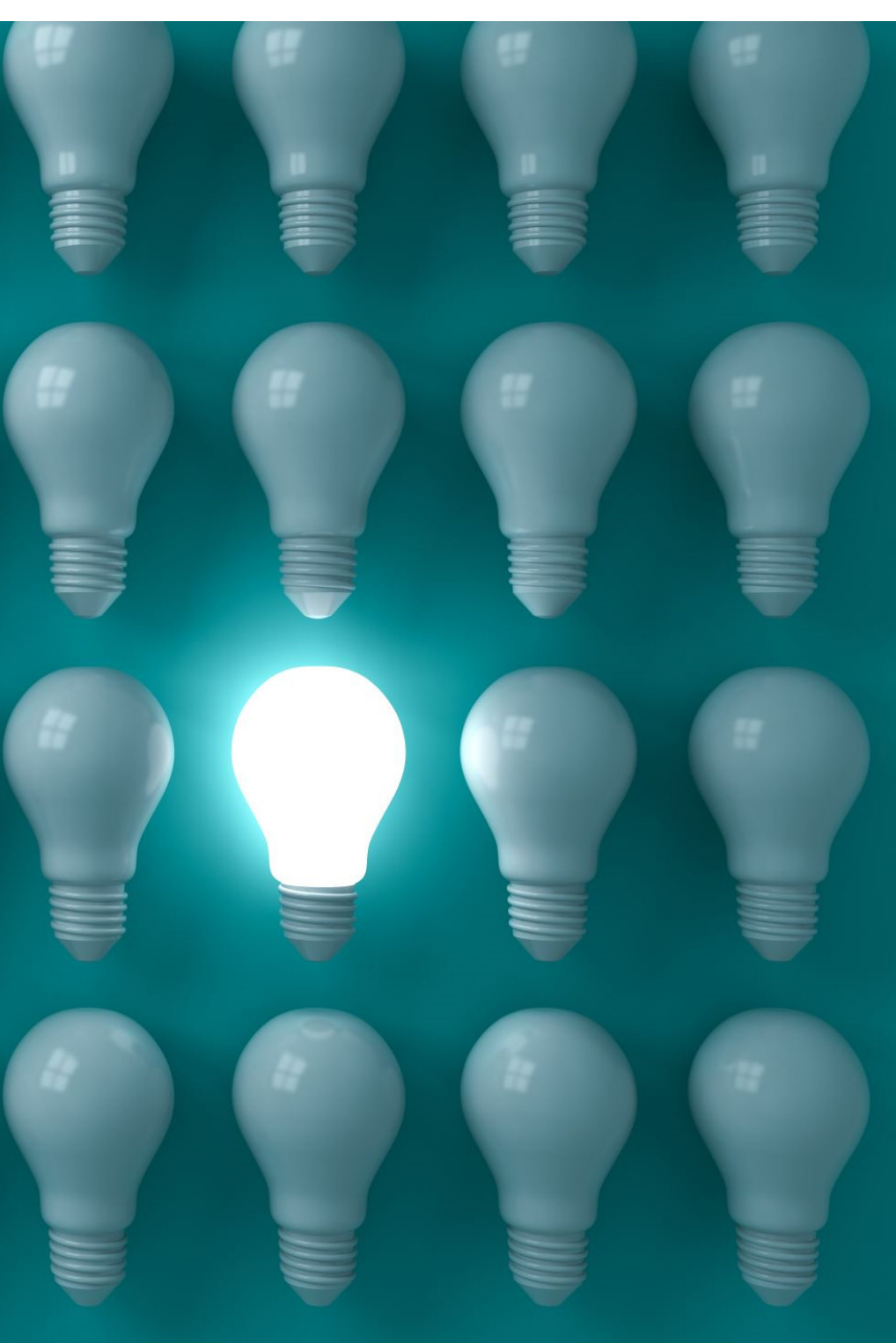
- Establishment surveys differ from household surveys in important ways
- Variety between establishment surveys have led to fewer firm best practices
- Less methods research on establishment surveys and results are often scattered in the literature



The Questions

- Is it possible or practical to have best practices when establishment surveys vary so much?
- How can we systematically improve our establishment survey designs to meet the specific needs of the overall project?
- How do we accommodate the fact that survey practitioners have varying levels of control over the elements of a survey design.





Solution

- Develop a universal method for reviewing establishment survey methodologies
- Focus on practical usability for the survey practitioner
- Help to identify areas for refinement in the methodology to better meet the goals of the study.

What makes a survey successful?

Unit response

Item response

Data Quality

Coverage

Budget

Design Facets

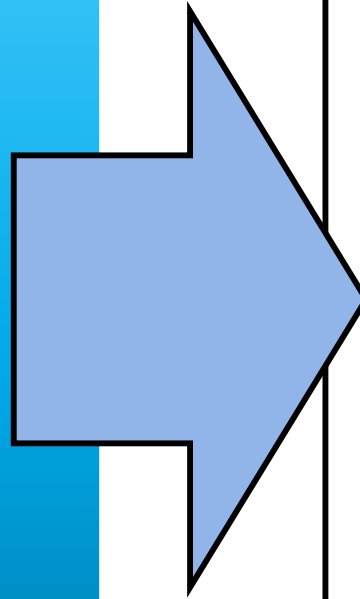
Response Motivation

Sample Frame

**Survey Instrument/
Data collected**

Outreach

Quality control



Success Measures

Unit Response

Item response

Data Quality

Coverage

Design Elements

History
Endorsement
Incentives
Saliency

Establishment definition
Turnover
Visibility
Registration

Data elements (#)
Actual burden
Perceived burden
Instrument dev/testing

Modes
Number
Points of contact
Time

Validation
Historical data
Follow-up
Response support

Design Facets

Response Motivation
Sample Frame
**Survey Instrument/
Data collected**
Outreach
Quality control

Success Measures

Unit Response
Item response
Data Quality
Coverage

Tool for Establishment Survey Assessment (TESA)

- Initially developed in Excel, converted to web via Voxco
- Walks the user through each element and asks them to score the survey on that specific element
- Scores are generally qualitative, but instructions provide guidance to help maintain reliability.
- Tool identifies strengths and weaknesses of the design.
- Points users toward resources that may help refine the methodology.

Tool for Establishment Survey Assessment (TESA)



[Save and Continue Later](#)

Welcome to the Tool for Establishment Survey Assessment (TESA). TESA is designed to review your establishment survey design and identify areas for improvement to better meet the goals of your survey.

First, you will identify how your establishment survey determines success. Then you will be asked to evaluate your survey on five metrics: frame, outreach protocol, instrumentation, response goals, and data quality.

You will then receive an evaluation that compares your design to the metrics of success for your survey and identifies any areas for improvement.

[Next >](#)

Progress  3%

Tool for Establishment Survey Assessment (TESA)



[Save and Continue Later](#)

First, we would like to get a better understanding of your goals for your survey.

Please distribute 100 points across the five rows to below to indicate the relative importance of unit response, item response, coverage, data quality, and budget for your survey. You may not exceed 100 points.

	Points
Unit Response	<input type="text"/>
Item Response	<input type="text"/>
Coverage	<input type="text"/>
Data Quality	<input type="text"/>
Budget	<input type="text"/>
	0

< Back

Next >

Progress



6%

Tool for Establishment Survey Assessment (TESA)



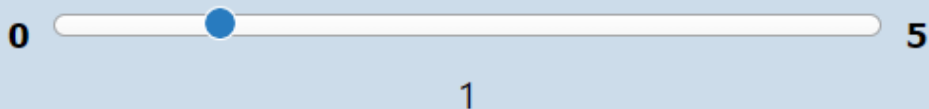
[Save and Continue Later](#)

Modes: How many modes will be employed in attempting to reach the establishment.

Low Score (0-1): Only one mode (email or paper) will be used.

Medium Score (2-3): E-mail and one other contact method will be used (mail, phone, FedEx)

High Score (4-5): Multiple modes of outreach (including phone or in-person) will be used.



< Back

Next >

Progress



25%

Tool for Establishment Survey Assessment (TESA)



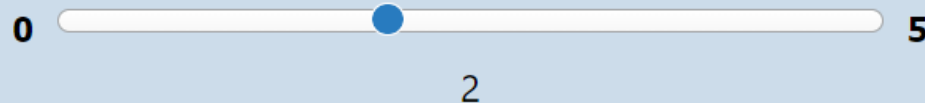
[Save and Continue Later](#)

Saliency: A measure of the perceived intrinsic value of the survey to the responding establishments. Consider also any concerns the establishment may have about sharing the data/confidentiality.

Low Score (0-1): Establishments are not generally inclined to share the data (either due to the nature of the data, confidentiality concerns or other reasons).

Medium Score (2-3): The topic of the survey is not likely seen as very important or interesting by sampled establishments.

High Score (4-5): The topic is of particular interest or seen as important to the field by the sampled establishments.



< Back

Next >

Progress



64%

Tool for Establishment Survey Assessment (TESA)



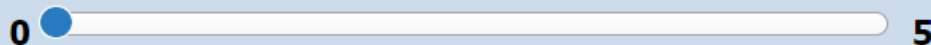
[Save and Continue Later](#)

Follow-up: Measures the amount of post survey follow-up implemented to improve response data quality.

Low Score (0-1): No or minimal follow-up is conducted to verify or update survey responses.

Medium Score (2-3): Some follow-up is conducted with the establishments. Follow-up is limited in scope (either by amount of outreach, number of establishments, or types of potential errors).

High Score (4-5): Extensive follow-up is conducted to improve response quality. Follow-up is conducted using multiple modes and for most of the identified potential errors.



< Back

Next >

Progress



75%

Tool for Establishment Survey Assessment (TESA)



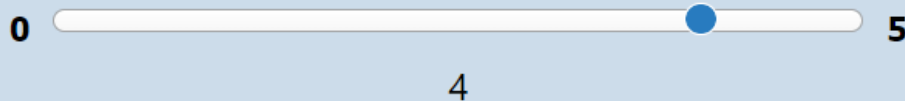
[Save and Continue Later](#)

Incentive: A measure of the amount and type of incentive. Consider the relative value of the incentive to the potential participant.

Low Score (0-1): No monetary or non-monetary incentives are offered.

Medium Score (2-3): Only non-monetary incentives are offered.

High Score (4-5): Monetary (or highly desired non-monetary) incentives are offered.



< Back

Next >

Progress



60%

Below are the summary results of your Establishment Survey Assessment. These results compare relative strengths and weaknesses of the establishment survey design to your stated goals. If you would like to revise any scores, you can use the back button to navigate to any question.

If you would like to research ways to improve your establishment survey design, click on the link for each survey component for a list of recommended resources.

Establishment Survey Component	TESA Score	Success Impact Score	Relative Design Strength
Frame	7	10	-3
Response	12	20	-8
Outreach	15	23	-8
Quality	12	20	-8
Instrument and Data	12	25	-13

Success Impact Score: A scoring of the impact each establishment survey component has on the overall success of the study based on your provided success indicators.

TESA Score: An overall score for each component of your survey design based on your answer to questions on that component.

Relative Design Strength: The difference between your TESA Score and the Success Impact Score. Survey components with a low or negative score indicates places where refinements to survey methods would have the biggest impact on overall survey success.

TESA Score

Establishment Survey Component	TESA Score
<u>Frame</u>	7
<u>Response</u>	12
<u>Outreach</u>	15
<u>Quality</u>	12
<u>Instrument and Data</u>	12

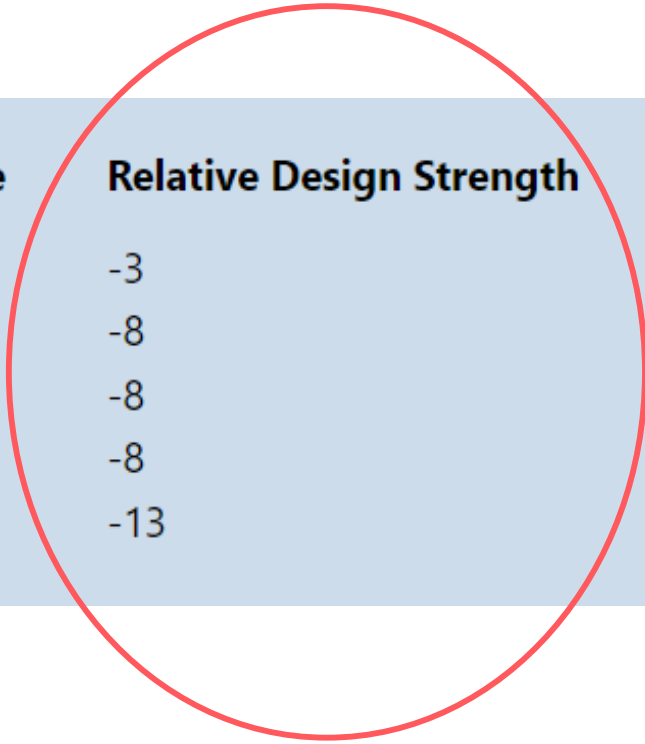
Success Impact Score

Establishment Survey Component	TESA Score	Success Impact Score
<u>Frame</u>	7	10
<u>Response</u>	12	20
<u>Outreach</u>	15	23
<u>Quality</u>	12	20
<u>Instrument and Data</u>	12	25



Relative Design Strength

Establishment Survey Component	TESA Score	Success Impact Score	Relative Design Strength
Frame	7	10	-3
Response	12	20	-8
Outreach	15	23	-8
Quality	12	20	-8
Instrument and Data	12	25	-13



Below are the summary results of your Establishment Survey Assessment. These results compare relative strengths and weaknesses of the establishment survey design to your stated goals. If you would like to revise any scores, you can use the back button to navigate to any question.

If you would like to research ways to improve your establishment survey design, click on the link for each survey component for a list of recommended resources.

Establishment Survey Component	TESA Score	Success Impact Score	Relative Design Strength
Frame	7	10	-3
Response	12	20	-8
Outreach	15	23	-8
Quality	12	20	-8
Instrument and Data	12	25	-13

Success Impact Score: A scoring of the impact each establishment survey component has on the overall success of the study based on your provided success indicators.


TESA Score: An overall score for each component of your survey design based on your answer to questions on that component.



















Relative Design Strength: The difference between your TESA Score and the Success Impact Score. Survey components with a low or negative score indicates places where refinements to survey methods would have the biggest impact on overall survey success.

Bibliography - Resources

zotero

Web Library Groups Documentation F



Title	Creator
 A Meta-Analysis of Experiments on the Effectiveness of Incentives in Organizational Surveys	Torres van Grinsven and Hox
 Answering questions, questioning answers: evaluating data quality in an establishment survey	Goldenberg
 Building Quality Assurance for the Occupational Requirements Survey	Brown and Harney
 Can data quality be enhanced through early notifications to responding agencies?: Fifth International Conference...	Ellis et al.
 Developing best practices of managing response burden & data quality for criminal justice establishment surveys	Hsieh et al.
 Evaluating Data Quality in Reports of Sales in a Retail Establishment Survey	Olson et al.
 GETTING TO YES . . . I WILL RESPOND: CHALLENGES AND SUCCESSES SURVEYING AGING SERVICES PROVIDERS ...	Harris-Kojetin
 Impact of instant feedback on data quality follow up: International Conference on Establishment Statistics VI	Couzens and Rhodes
 Mode effects in a survey of small retailers: American Association of Public Opinion Research Annual Conference ...	Derecho et al.
 More Clarification, Less Item Nonresponse in Establishment Surveys? A Split-Ballot Experiment	Küfner et al.
 Predicting Nonresponse in Future Waves of A Probability-Based Mixed-Mode Panel With Machine Learning*	Kern et al.
 Shifting data quality follow-up methods for a time-series collection of local and state agencies: Federal Committ...	Ellis et al.
 Strategies for ensuring the accuracy and completeness of an establishment frame: International Conference on E...	Ellis and Smith
 Studying the Impact of embedded validation on response burden, data quality and cost	Bavdaž et al.
 Studying the impact of embedded validation on response burden, data quality and costs	Lorenc et al.
 The Impact of Targeted Data Collection on Nonresponse Bias in an Establishment Survey: A Simulation Study of ...	McCarthy et al.
 Understanding and Coping with Response Burden	Haraldsen et al.
 Web Survey Methods: Introduction	Couper and Miller

Next Steps

- Integrate methods bibliography to point researchers toward specific research that may help improve their survey.
- Test with multiple establishment survey efforts and compare to known results.
- Continue to refine web formatting.
- Extend access to the field.



Thank you

Contact: Bryan B. Rhodes | email: brhodes@rti.org