

# How to stop bogus respondents who say they live on Pluto from taking your surveys

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# SOCIETAL IMPACT OF ONLINE OPT-IN PANEL RESEARCH

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Political  
polls

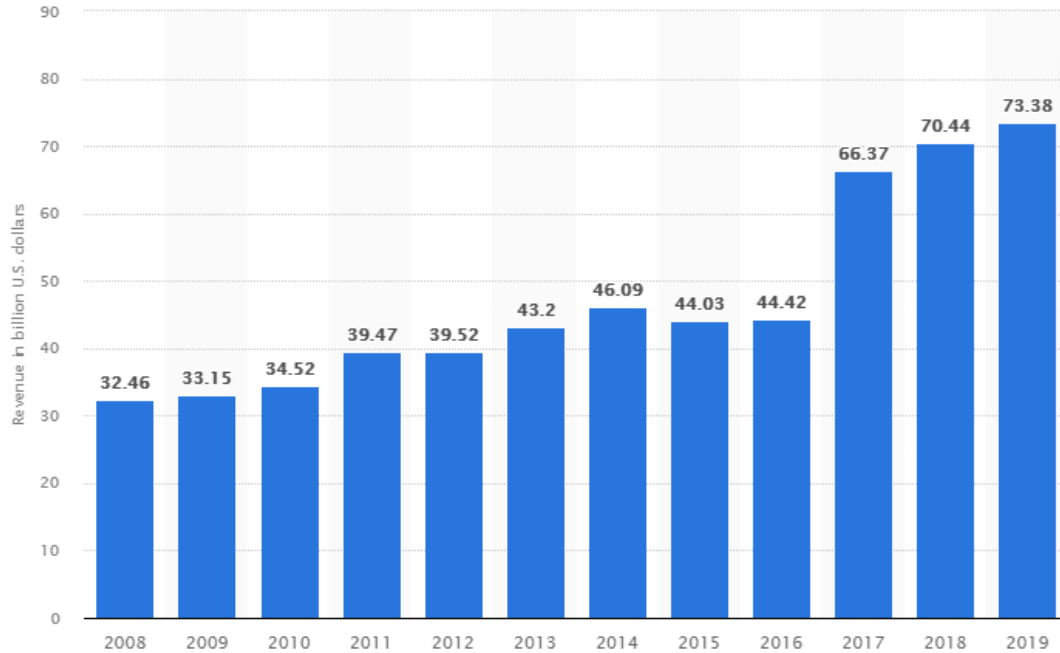
Public  
opinion  
surveys

Social  
science  
studies

Market  
research

Medical  
research

# RISE OF ONLINE RESEARCH



# EVOLUTION OF RESPONDENT RECRUITMENT PRACTICES



# EXAMINING THE SCOPE OF DATA QUALITY PROBLEMS



## Online Sample Fraud: Causes, Costs, and Cures



WWW.CASE4QUALITY.COM

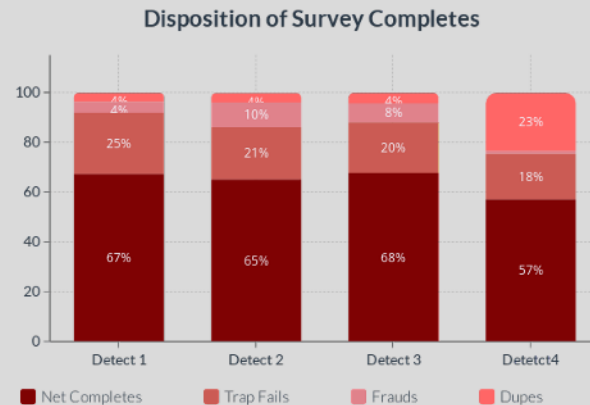
Insights Association Town Hall

11 February 2022

# SCOPE OF DATA QUALITY PROBLEMS

## ▲ Total Cleaning Removes 30-40% of Completes

- ✓ Roughly 4 in 10 of all respondents who entered the survey did not complete it
- ✓ Fraud/Dupes accounted for 4%-24% of completes depending on vendor
- ✓ We also included 'trap' questions in the survey, and employed open-end analysis, mismatched answer and survey completion time analysis to identify additional questionable respondents
- ✓ An additional 1 in 4 respondents failed trap q's, had open-end issues, and other inconsistencies that warranted removal



CASE Fraud Detection Study 2021



# ONLINE DATA QUALITY

## **Online Panels in Social Science Research: Expanding sampling methods beyond Mechanical Turk**

**Behavior Research Methods,  
September 11, 2017**

Jesse Chandler, Cheskie Rosenzweig,  
Aaron J. Moss, Jonathan Robinson, and  
Leib Litman

## **Assessing the Risks to Online Polls From Bogus Respondents:**

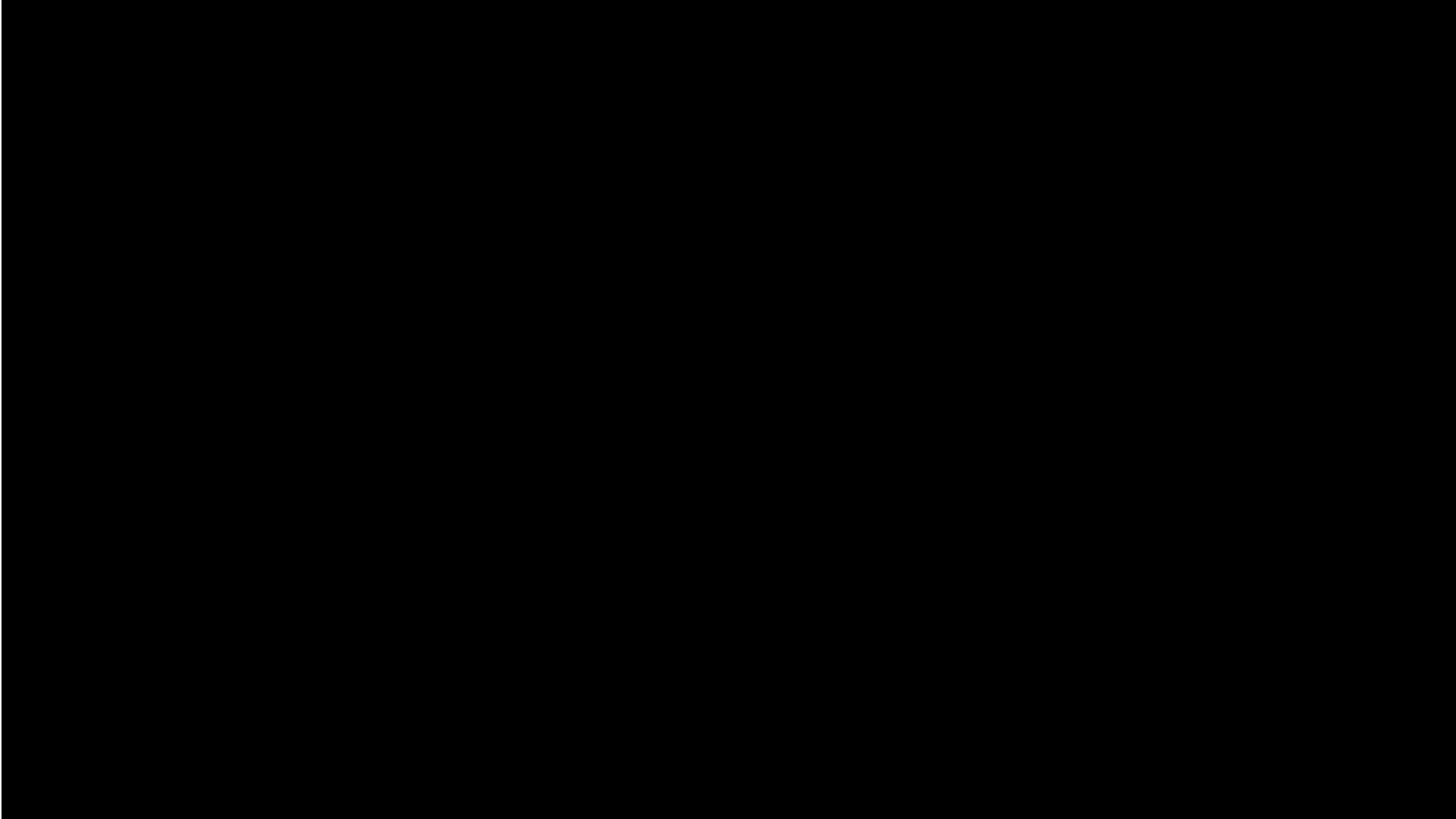
**Pew Research Center  
February 18, 2020**

Courtney Kennedy, Nick Hatley, Arnold Lau,  
Andrew Mercer, Scott Keeter, Joshua Ferno, and  
Dorene Asare-Marfo

## **Dirty Data: The Effects of Screening Respondents Who Provide Low-Quality Data in Survey Research**

**Journal of Business and  
Psychology, September 2, 2017**

Justin A. DeSimone & P. D. Harms





### Instructions

The next few questions ask about your knowledge of the world, and your understanding of words.

For each question, please pick the answer that seems most correct to you.

Next →

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00:00



00:19



1x

2x

4x

8x



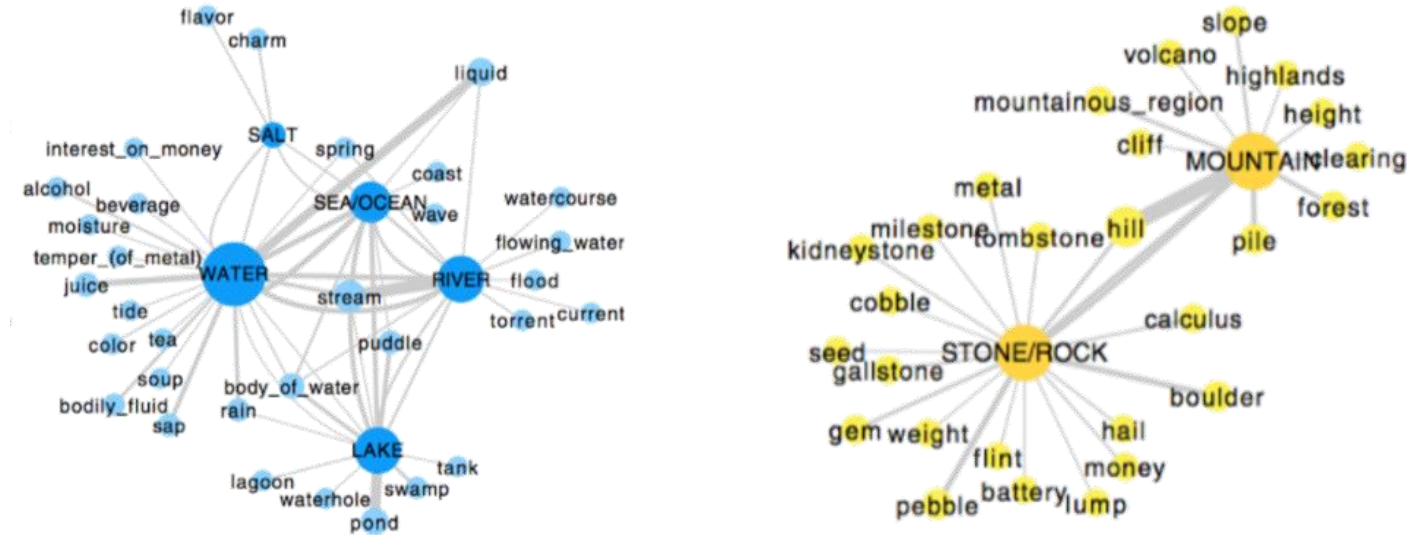
skip inactive



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## Goals:

- **Scalability:** thousands of instrument items are needed to prevent fraud
- Difficulty levels based on objective, quantifiable, and adjustable criteria
  - Difficulty quantified based on word frequency and threshold adjustment



## Instructions

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00:00



00



2x

4x

8x



skip inactive



00:43

Question 1 of 4

Customer is most associated with

A ambassador

B junior

C drum

D service

Please select answer to continue



© 2021-2022 CloudResearch®. Sentry® من قبل US Patent No's 11,227,298 و 11,080,656 و 10,572,778.

00:01



1x

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4x

8x



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00:48

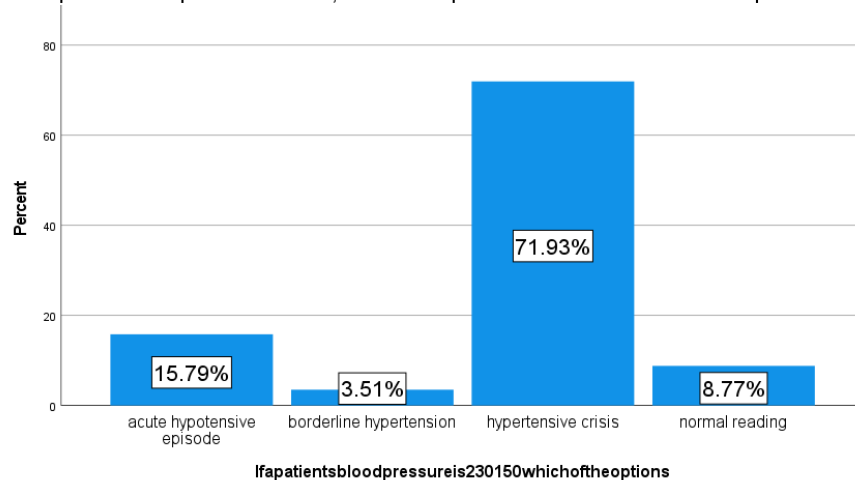
# B2B RECRUITMENT



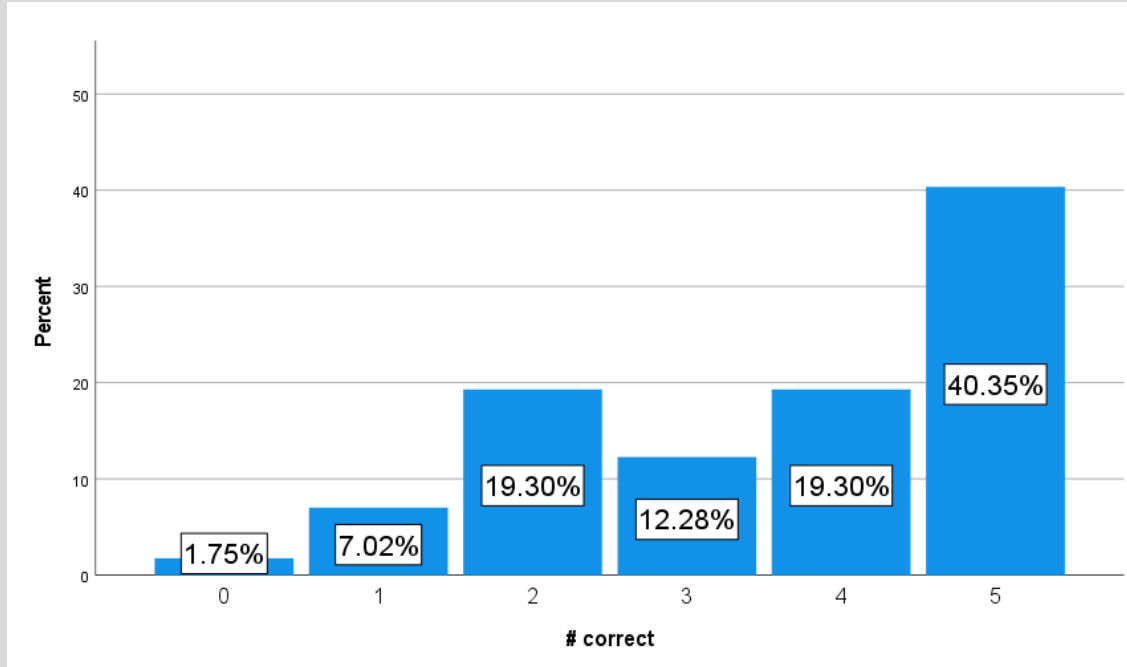
# CREATING BEHAVIORAL STANDARDS

BLOOD PRESSURE CATEGORY	SYSTOLIC (mm Hg)	DIASTOLIC (mm Hg)
Healthy	less than 120	and less than 80
Elevated	120–129	and less than 80
Stage 1 hypertension	130–139	or 80–89
Stage 2 hypertension	140 or higher	or 90 or higher
Hypertension crisis	over 180	or over 120

If a patient's blood pressure is 230/150, which of the options below is the most accurate interpretation?



# B2B NURSING MODULE





# POOR DATA QUALITY IS AN INSIDIOUS SOCIETAL PROBLEM



DATA  
PROVIDERS



DATA USERS



SOCIETY

# THE QUESTIONS

Morbidity and Mortality Weekly Report

## Knowledge and Practices Regarding Safe Household Cleaning and Disinfection for COVID-19 Prevention — United States, May 2020

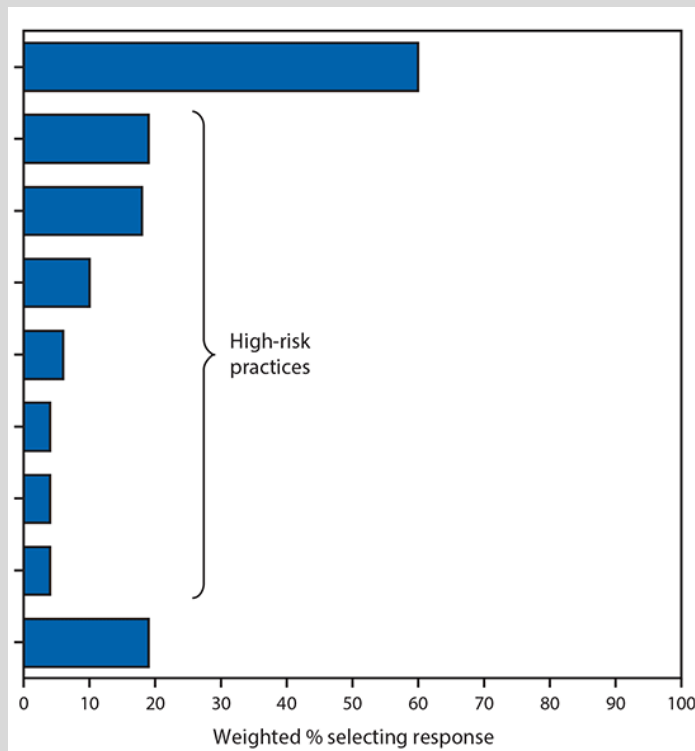
Radhika Gharpure, DVM<sup>1,2</sup>; Candis M. Hunter, PhD<sup>1</sup>; Amy H. Schnall, MPH<sup>3</sup>; Catherine E. Barrett, PhD<sup>1</sup>; Amy E. Kirby, PhD<sup>1</sup>; Jasen Kunz, MPH<sup>1</sup>; Kirsten Berling, MPH<sup>1</sup>; Jeffrey W. Mercante, PhD<sup>1</sup>; Jennifer L. Murphy, PhD<sup>1</sup>; Amanda G. Garcia-Williams, PhD<sup>1</sup>

*On June 5, 2020, this report was posted as an MMWR Early Release on the MMWR website (<https://www.cdc.gov/mmwr>).*

A recent report described a sharp increase in calls to poison centers related to exposures to cleaners and disinfectants since the onset of the coronavirus disease 2019 (COVID-19) pandemic (1). However, data describing cleaning and disinfection

members who had not taken a survey in the previous 20 waves of survey administration were eligible to participate. Quota sampling and statistical weighting were employed to make the panel representative of the U.S. population by gender, age, region, race/ethnicity, and education. Respondents were informed that their answers were being used for market research and could refuse

# BOGUS RESPONDENTS, BOGUS CONCLUSIONS?



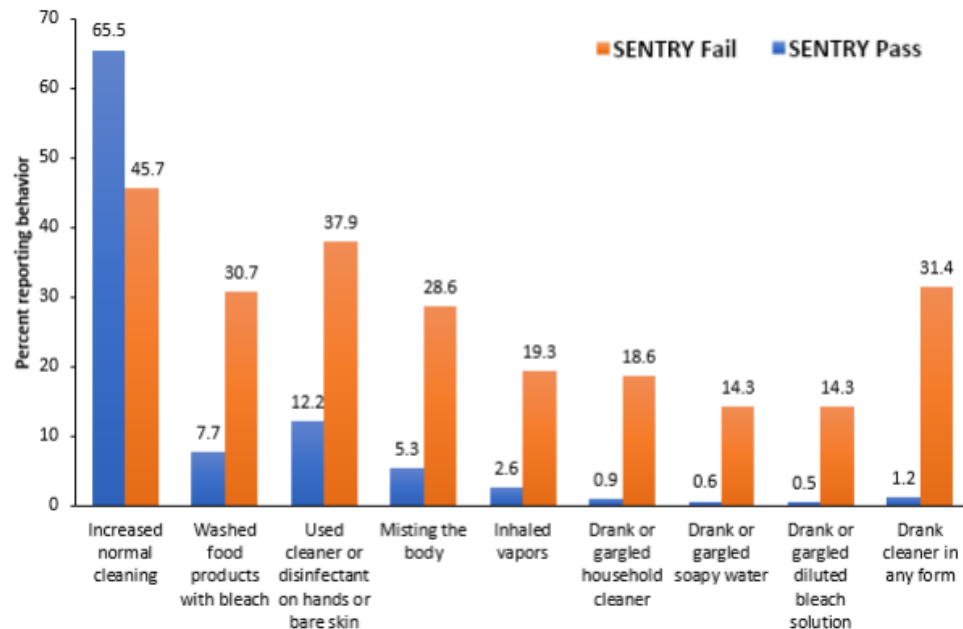
“Approximately one third reported engaging in high-risk practices such as washing food products with bleach, applying household cleaning and disinfectant products to bare skin, and intentionally inhaling or ingesting cleaners or disinfectants. These practices pose a risk of severe tissue damage and corrosive injury (8,9) and should be strictly avoided.”

# THE PRESS

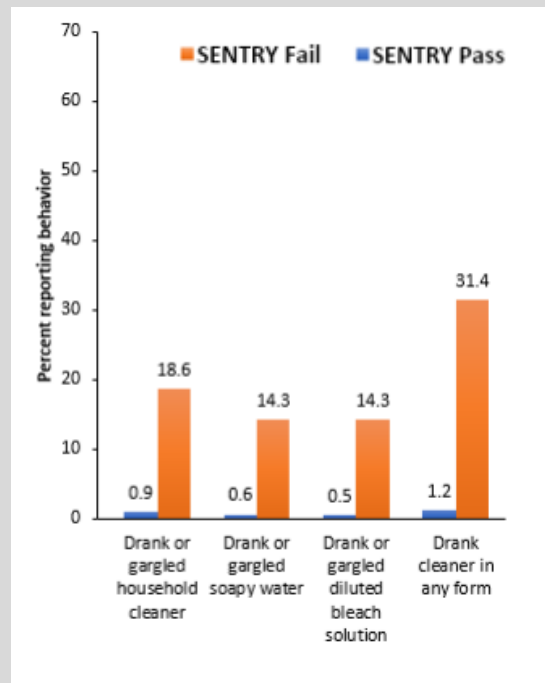


# SENTRY® RESULTS:

**FIGURE 1. Comparisons of problematic and non-problematic respondents' reports of cleaning and disinfection practices since April, 2020.**



# SENTRY® RESULTS:



# FULL PAPER

medRxiv






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## Did people really drink bleach to prevent COVID-19? A tale of problematic respondents and a guide for measuring rare events in survey data

 Leib Litman,  Zohn Rosen,  Cheskie Rosenzweig,  Sarah L. Weinberger-Litman,  Aaron J. Moss,  
Jonathan Robinson

doi: <https://doi.org/10.1101/2020.12.11.20246694>



# SOCIETAL IMPACT

“...the association between these high-risk practices and reported adverse health effects indicates a need for public messaging regarding safe and effective cleaning and disinfection practices aimed at preventing SARS-CoV-2 transmission in households.”

Harvard  
Business  
Review

[Diversity](#) [Latest](#) [Magazine](#) [Ascend](#) [Topics](#) [Podcasts](#) [Video](#) [Store](#) [The Big Idea](#) [Visual Library](#)

Analytics And Data Science

## Did 4% of Americans Really Drink Bleach Last Year?

by Rachel Hartman

April 20, 2021



HBR Staff



# Conclusions

- The online research industry is not just in the news – it is the source of the news.
- There is a social responsibility to be aware of the danger that bogus respondents in our industry pose to our own data, our client's data, and for the consumption of information in society as a whole.
- During a time of unprecedented misinformation which has yielded devastating consequences, we have a social responsibility as researchers to keep our data as clean as possible



Surveys-N-Stuff // 10:43PM

Have you purchased cosmetics in the last 30 days? Reply Y / N

You // 10:43PM

Yes

# LET'S CONNECT



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**THANK YOU!**

# PAST RESEARCH

**VERSTA**  
RESEARCH



Finding Fraud in Public Polls: Our  
AAPOR Presentation