Enhancing Trust in the Social Security Administration and E-Government Among People Targeted by Fraud

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Marti DeLiema, Cliff Robb and Steve Wendel
Thank You

And A Short Disclaimer

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The problem:

Imposter scams and the erosion of public trust
A telephone survey found that 46% of Americans age 18+ experienced an attempted Social Security scam between Oct-Dec 2020 alone.

69% of Social Security beneficiaries experienced at least one Social Security scam between Oct-Dec 2020.

SimplyWise (January 2021). Retirement Confidence Index. SimplyWise Retirement Confidence Index | SimplyWise
Our focus: Digital Imposter Scams

From: IRS; subject: IRS Data Require Immediate Action

Dear IRS User,

This is an important message regarding your IRS filing. Our system indicates you have some changes in your record with us, and we are asking you to kindly follow the given instructions in order to comply with our new system requirements to avoid further difficulty with IRS services.

By filing out the taxpayers' information that only you and IRS know you can feel even more secure with your yearly Tax payment. We are providing all the information to help you in more detail.

To Proceed, Please find attached HTML Web Page.

- See Attached HTML Web Page
- Download and Save it to your Device Desktop
- Go to Device Desktop to open the HTML Web Page
- Continue by filling your information

Failure to comply, IRS will have your information flagged on the system which will lead to taking other actions towards your next Tax filing period.

IRS will review the taxpayers personal information with third party.

Sincerely,
IRS Office Services

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Join the Millions

who already have a mySocialSecurity account.

Send Message

Social Security Administration
Government Organization

Home Reviews Videos Photos More +
Businesses are increasingly targeted
Trends in Imposter Scam Consumer Reports

In 2021, 17% of consumers who reported imposter scams were victims (lost money), and the median loss was $1,000.

Specific research testing techniques to counter impostor fraud is limited. Instead, we can find:

• Practical and logical tips from organizations like the SSA, IRS, FTC and AARP

• Research on countering other types of fraud and persuasion that we can apply to this problem. For example: Forewarning can limit phone call-based scam susceptibility (Scheibe et al. 2014), and the extensive work on general influence appeals, and how to counter them (e.g. Wood and Quinn 2003)
Impact of fraud on trust

• In general, public trust in government has declined since the 1960s. Only about 25% of Americans say they can trust the government in Washington to do what is right (Pew Research Center, 2021)

• Very little research has explored the impact of fraud victimization on subsequent consumer trust

• Our study sought to examine whether there are differences in the willingness to trust legitimate communications among people who reported being targeted (and some victimized) by imposter scams relative to those who were not.
Study Design
Research Questions

1) Does prior exposure to fraud lead people to trust government communications less?

2) Can an online intervention help increase trust in real communications from the SSA and others?
Study Design

1. Gather Participants
2. Conduct Background Survey
3. Random assignment into one of four arms
   - Interactive training experience with fraud-detection tips
   - Written tips (same as training, but not interactive)
   - General information on the erosion of trust
   - Control: Unrelated information on internet addiction
4. Potential Delay Period
5. Test Effect of Training on “Rightful Trust”
6. Build Predictive Model of Susceptibility
Study Design Cont.

Do this

Test Effect of Training on “Rightful Trust”

Build Predictive Model of Susceptibility

For Two ‘Types’ of Imposters

Government

Business

Across two domains

Websites

Emails
Study Design: Population

Gather Participants: General Population

Nat Rep #1:
N= 1,200; July 9-12; 8 Communications; Test Immediately after Training

Nat Rep #2:
N = 1,200; July 30-Aug 1; 10 Communications w/ Fix to 2 Pages; Test Immediately after Training

Nat Rep #3:
N=1,200 Participants, Mid-August; 10 Communications; 2 Week Delay

Gather Participants: Prior Scam Reporters

BBB Scam Tracker Sample
Target N= 1,000
Underway now
Interactive training: a series of emails and websites, where we ask participants to judge if they are real or fake.
An overlay then shows tips on what to look for, *after* the participant responds.
Similarly for websites

REAL. See below on learn why.
Fraud Detection Test
Interactive Email, Web and Letter Interfaces

Thank you. Now, is this Email real or a scam?  
REAL ✓  SCAM X  
Skip >

Get Protected

NO-REPLY@ssa.gov  
June 13th, 11:06 (2 days ago)

to: me  

Social Security Administration  
Securing today and tomorrow

Dear James:

As recently mandated in the S.A.F.E. Act of 2020, the Social Security Administration has developed a new security feature that helps you as a taxpayer to secure and protect your personal information.

The new feature helps you monitor use of your Social Security number and alert you of unauthorized use - similar to a credit report. The service is freely provided.

To register, click here to get started.

Please do not reply to this email, as we are unable to respond to messages sent to this address.
Full duplicates of existing websites, with scam modifications
Results:
Can the public be trained?
High Level Result: Yes.

N=1132 (Nat Rep Sample 2); 95% CI shown.
Some Observations

The interactive training can be very effective. An 8% increase on a 67% baseline.

The training is far more effective at helping people recognize scams than at increasing trust: a 12% increase versus a 4% increase.

Written, non-interactive tips help: especially for increasing trust (and not for recognizing scams)

N=1132 (Nat Rep Sample 2); 95% CI shown.
The training is far more effective for emails than for websites: a 15% increase versus a 2.8% increase.

The training is NOT effective for communication mediums that were not targeted. We found no impact on the participant’s ability to correctly identify real or scam Letters.
Sensitivity Tests

• The results hold for both nationally representative samples, with minor variations.

• Training participants show increases in fraud-detecting behavior, consistent with these results: They are more likely to open email headers and less likely to click on links within the communications.

• The results hold in multivariate regressions, after controlling for potential incomplete randomization.

• We find no significant sub-population effects. No significant difference by age; frequency of interaction with the internet; prior experience with fraud; prior experience with SSA impostor scams; and prior loss from fraud.
Results:
What predicts distrust?
Context

• We measure trust in two ways:
  
  • **Self-report:** Trust in the Social Security Administration. Trust of interactions on the Internet. Confidence and trust in the US government.
  
  • **Revealed behavior.** The percent of real messages they correctly identify during the test among the control group.
Observations

- Exposure to attempted fraud is widespread – 93% of participants reported being targeted for at least one type of fraud (at any point in the past). This is likely an underestimate.
- Only 6% reported having lost any money to any such fraud in the past.
- Only 24% of the people targeted by fraud reported the attempted fraud to the US Government, BBB, or other organization. This highlights the challenges of using fraud reports to understand the full breadth of fraud.
- 38% of participants reported having undergone some form of Cybersecurity training in the past.
What do we learn?

- Most importantly for this study, **prior experience with fraud has an inconsistent relationship with current trust**. The strongest results are for Internet trust – prior experience with business imposter scams and losses from fraud indicate decreased trust. Otherwise the results are neutral (non significant).

- Trust is multi-faceted and different factors may drive trust in the Internet versus the Social Security Administration.

- Income and education are generally associated with these forms of trust.

- Age has a curvilinear effect. For example, for Trust in the SSA, it decreases from 18-31, then increasing from 31+. There are similar patterns for trust in Government, the opposite for trust in the Internet.

- After controlling for age and income, retired persons show lower trust in the SSA.

- All else being equal, women appear to have less trust in each area measured (note: the results are not statistically significant for the SSA in Nat Rep Sample #2; they are for Nat Rep Sample #1).

- People who score highly on a loneliness scale are significantly more likely to distrust the SSA (see detailed results in paper)
Where you can find the code & data
And that’s it.

Marti DeLiema: mdeliema@umn.edu
Clifford Robb: carobb@wisc.edu
Stephen Wendel: steve@behavioraltechnology.co