



INCREASING USAGOV SURVEY RESPONSE

An early message of gratitude decreased completion, whereas a timeline that made government operations transparent increased completion

Target a Priority Outcome With 130,000 unique visitors each day, USA.gov is the central online guide to government information and services. Over one million people subscribed to receive additional information via email, but USAGov knows little about their preferences for communication frequency and content. The U.S. General Service Administration's USAGov sought to administer a survey to learn more about their email subscribers and what messages would increase survey completion.

Translate Evidence-Based Insights

Potential respondents may have little motivation to complete a survey when faced with competing priorities for their time, particularly when they know little about who will use their responses and how their participation will provide personal benefit.¹ A personal survey request from the sender can make the request appear more real and trustworthy, while expressions of gratitude before the request can promote survey completion through a desire to show reciprocity.^{2,3} Alternatively, providing operational transparency can increase trust in government and make clear the benefits from participation, while highlighting approaching deadlines can create a sense of scarcity that motivates immediate action.^{4,5,6}

These evidence-based insights informed the content of three emails, including the content of

the subject line, content of an embedded photo, the signature of the sender, and the text on the survey start button. First, a personal survey email included a photo of the USAGov team and signed off with team members first names.⁷ Second, a gratitude email sent a week prior to the personal survey email was designed as a thank you message for using USAGov to stay informed. Third, a process survey email highlighted how and when USAGov would use responses to improve their content, deadlines associated with the survey, and a request on the survey button to start the survey immediately (i.e., "Take two minutes now"). Emails were in English or Spanish depending on subscriber preference.

Embed Tests To test the effect of email content on survey completion, subscribers were randomly assigned to be sent one of four email messages (or sets of messages): the personal survey email (N = 227,607), the personal survey email plus the gratitude email one week before (N = 227,608), the process survey email (N = 227,603), or the business-as-usual survey email (N = 227,608).⁸ The business-as-usual email included a description of the survey (similar to the personal email), a patriotic photo, and a team sign off that did not include first names. Random assignment occurred within six blocks based on subscriber language (English or Spanish), subscriber engagement (opened one of last 16 email sends), and subscriber to business content (English only).

Analyze Using Existing Data Data from the Qualtrics survey platform were used to track and compare survey completion rates between groups assigned to the four email types. Embedded in the survey start button was a unique link associated with each email type and randomization block (i.e., 24 unique links), which allowed for tracking of

¹ Fan, Weimiao, and Zheng Yan. "Factors affecting response rates of the web survey: A systematic review." *Computers in human behavior* 26, no. 2 (2010): 132-139.

² Edwards, Philip James, Ian Roberts, Mike J. Clarke, Carolyn DiGiuseppi, Reinhard Wentz, Irene Kwan, Rachel Cooper, Lambert M. Felix, and Sarah Pratap. "Methods to increase response to postal and electronic questionnaires." *Cochrane database of systematic reviews* 3 (2009).

³ Groves, Robert M., Robert B. Cialdini, and Mick P. Couper. "Understanding the decision to participate in a survey." *Public opinion quarterly* 56, no. 4 (1992): 475-495.

⁴ Buell, Ryan W., Ethan Porter, and Michael I. Norton. "The Labor Illusion: How Operational Transparency Increases Perceived Value." *Management Science* 57, no. 9 (2011): 1564-1579.

⁵ Dillman, Don A. *Mail and Internet surveys: The tailored design method--2007 Update with new Internet, visual, and mixed-mode guide*. John Wiley & Sons, 2011.

⁶ Fan and Yan, 135.

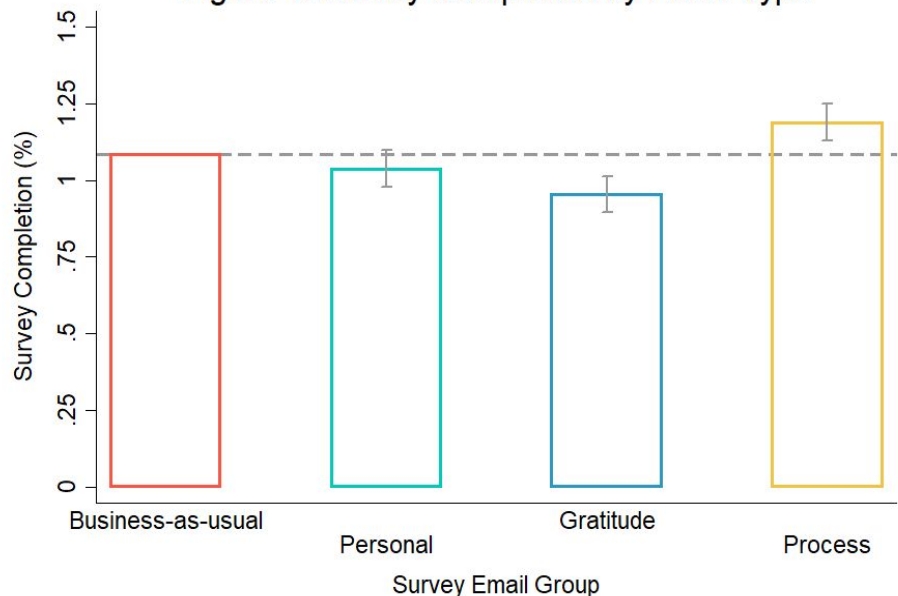
⁷ While personalization can take many forms, this application intended to make the sender appear more personal and communication more familiar.

⁸ Because of an unknown glitch, a small proportion of subscribers assigned to the personal email were not uploaded into HubSpot. These 5,589 subscribers had no opportunity to complete the survey.

survey completion by randomization block and email type while keeping survey responses anonymous. For secondary outcomes, the HubSpot email platform, used to send USA.gov emails, collected email engagement data on emails sent, delivered, opened, and survey links clicked.⁹ Outcomes between the groups were compared from when USA.gov sent survey emails on September 5th, 2018 to when the survey closed on September 27th, 2018.

Results Results suggest differences in survey completion based on email type. Survey completion was 1.19% for the process email group, 1.09% for the business-as-usual group, 1.04% for the personal group, and 0.95% for the personal plus gratitude email group. Figure 1 presents point estimates and confidence intervals for intent-to-treat effects of each evidence-based email on survey completion in comparison to the business-as-usual email.¹⁰ Compared to the business-as-usual group, survey completion was 0.10% higher in the process group ($p = 0.001$, 95% CI [0.04%, 0.16%], Holm-corrected $p = 0.002$), 0.13% lower in the personal plus gratitude group ($p < 0.001$, 95% CI [-0.19%, -0.07%], Holm-corrected $p < 0.001$), and 0.05% lower, but not statistically different, in the personal group ($p = 0.111$, 95% CI [-0.11%, 0.01%], Holm-corrected $p = 0.111$).

Figure 1: Survey Completion by Email Type



Build Evidence This study demonstrated that applying behavioral insights to communications in real world settings can have both intended and unintended effects on survey completion behaviors. USA.gov used the findings from this test and survey responses to reconsider the frequency of their email communications. Because other agencies across government often conduct similar activities to learn about their users, findings from this study can inform their efforts as well.

⁹ One departure from the analysis plan was made on the secondary outcomes analyzed. Message delivery replaced bounce back to make analysis easier to interpret.

¹⁰ Since there is no evidence of selection on the subscribers that were uploaded to be sent survey messages, the main results include the sample of subscribers uploaded into HubSpot. In an alternative two-stage least squares approach, the findings are qualitatively similar. Assignment to personal email strongly instruments for uploaded to personal email ($b = 0.975$). In comparison to assignment to the business-as-usual email, the local average treatment effect (LATE) of uploaded to the personal email on survey completion is -0.08% ($p < 0.01$).