

# THE FORMALITY EFFECT

Elsbeth Kirkman, Chris Larkin, Jessica Lasky-Fink,  
Elizabeth Linos, Jeremy Margolis, and Lindsay Moore  
March 2024



The People Lab



HARVARD Kennedy School

Across three field experiments and three online studies (total N=67,632), we document a counterintuitive “formality effect” in government communications. Contrary to expert predictions, we show that more formal government communications are more effective at shifting resident behavior than less formal government communications. One potential explanation for this effect is that people view formal government communications as more credible and more important to act upon.

## CONTEXT

Government effectiveness depends, in part, on successful state-resident interactions, many of which occur through written communication. Residents’ willingness to respond to government requests can affect a wide range of outcomes, including how public funds are spent, who benefits from public services, and even electoral outcomes.

There exists a widespread belief that colorful, attention-grabbing, and informal communications are more effective. This is, in part, due to research demonstrating the importance of simplifying language and using visuals, colors, and contrast in design.<sup>1,2,3</sup>

In a survey of 351 academics and government practitioners, 89% believed that communications that use color are more effective at motivating behavior than those that are in black and white; 73% believed that communications that use informal language are more effective than those that use formal language; and 89% believed that communications with images and graphics are more effective than those that are only text.

## KEY TAKEAWAYS

- 1 Contrary to expert predictions, formal government communications are more effective than informal ones at shifting residents’ behavior.
- 2 In three real-life contexts, residents were as much as 45% more likely to take a requested action if they received a formal communication than an informal one.
- 3 Formal communications are seen as more credible, more important, and more likely to be from the government, offering one possible explanation for the Formality Effect.

## CONTEXT (cont.)

However, prior research on persuasion has demonstrated that a communication's source and message can both influence behavior. In particular, people may be more likely to act upon or respond to communications that are perceived as more credible, trustworthy, or important. We predicted that formality could thus increase the effectiveness of government communications by acting as a signal of credibility and importance.

We define formality along two axes: aesthetics and language. A formal aesthetic can include standard typeface and font size (e.g., size 12, Times New Roman font), black font with minimal formatting, and no graphics or images aside from a logo. Conversely, an informal aesthetic can include colors, formatting, novelty fonts, and pictures or graphics. On the second axis, attributes of formal language can include impersonal language (e.g., third person) or more complex writing (e.g., a higher reading level), while informal language includes personalized or less complex writing.

## RESEARCH

### STUDY 1

---

In **Study 1** (N=688), conducted via Prolific, we sought to validate our definition of formality. Participants were randomly assigned to see one of four government letters that varied the axes of formality: (1) informal aesthetic and informal language; (2) formal aesthetic and informal language; (3) informal aesthetic and formal language; or (4) formal aesthetic and formal language. After viewing the letter, participants were asked how formal they believed the letter's design was, how formal the language was, and how formal overall they found the letter.

Studies 2 through 4 were field experiments in which we tested the real-world impact of formality on resident behavior at the state and local level.

### STUDY 2

---

**Study 2** (N=10,000) was conducted in January–March 2017 by the Behavioral Insights Team (BIT) in collaboration with a city that sought to collect information from local businesses to determine whether they qualified as a local, women-owned, or minority-owned business.

### STUDY 3

---

**Study 3** (N=35,172) was conducted in September–October 2017 by BIT in collaboration with a US city that wanted to increase enrollment in an emergency medical transportation program. For less than \$5 per month, city residents could purchase a membership that would fully cover the cost of emergency ambulance rides within the city even if they did not have medical insurance.

### STUDY 4

---

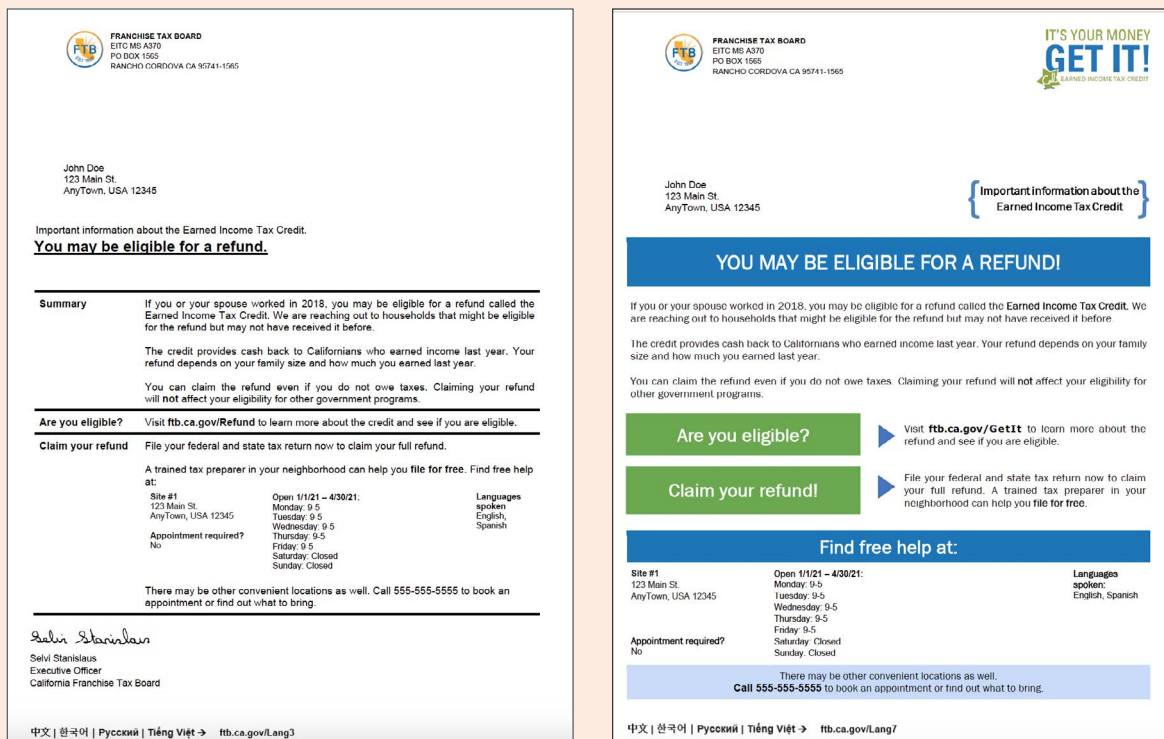
**Study 4** (N=20,000) was conducted in 2019 in collaboration with the California Policy Lab, California Franchise Tax Board, and Golden State Opportunity. This study was part of a series of randomized experiments testing the impact of informational outreach on take-up of the California Earned Income Tax Credit (EITC) among low-income Californians.

## RESEARCH (cont.)

In all three studies, residents were randomly assigned to receive either a formal or informal letter with a clear call to action. In study 2, letters asked residents to register as a local, woman-owned, or minority-owned business; in study 3, letters asked residents to enroll in the emergency transport program; and in study 4, letters asked residents to visit a website to learn more about the CalEITC (see Figure 1).

FIGURE 1

The formal (left) and informal (right) letters used in Study 4.



### STUDY 5

In **Study 5** (N=584), conducted via Prolific, we examined people's expectations of government communications. In a randomized design, all participants were asked to imagine receiving a communication from either the government, a non-profit, or a private company that asked them to either sign up for emergency alerts, attend an event, or pay a fine. Participants were then asked how formal they expected the letter to be, how important they believed it would be to take action, and about the likelihood of facing consequences for not taking action.

### STUDY 6

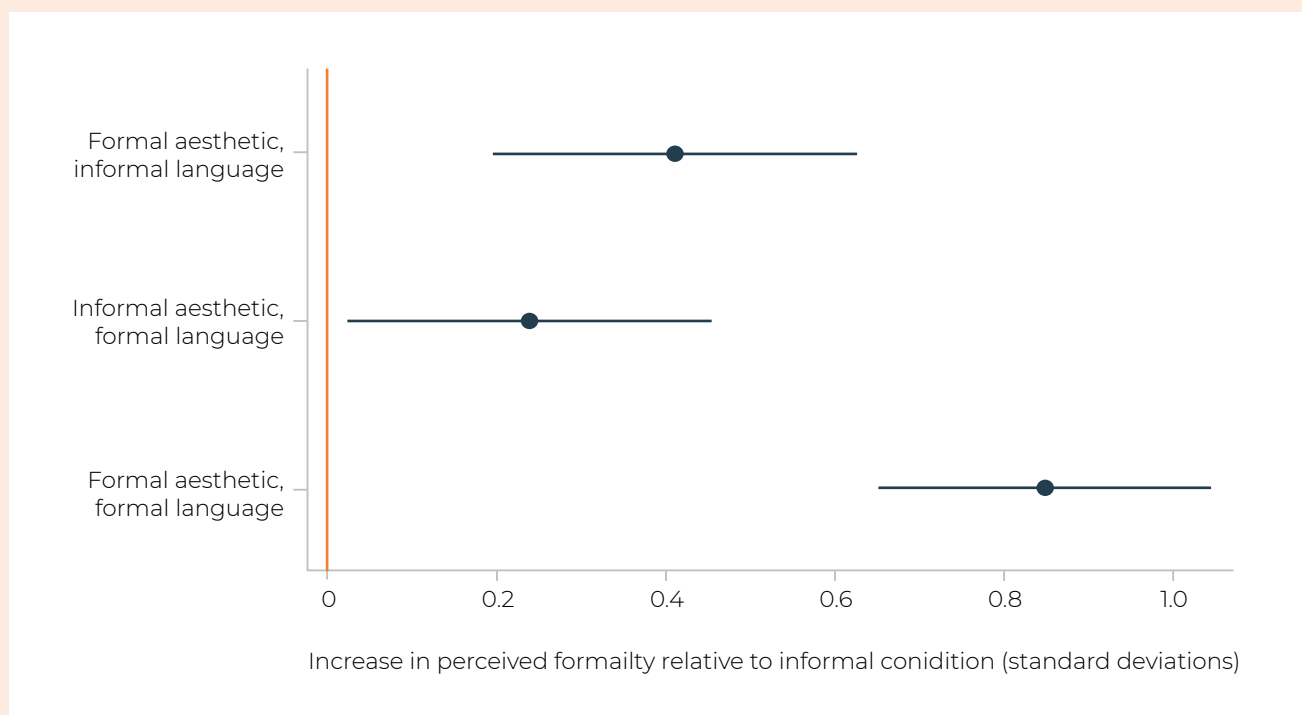
Finally, **Study 6** (N=1,189) was conducted via Prolific to explore potential explanations for the Formality Effect. All participants were randomly assigned to see one of the letters used in the three field experiments (Studies 2-4). They were then asked about their perceptions of the sender and the message.

## WHAT WE FOUND

In **Study 1**, we document that formal aesthetic and language are both recognized as more formal than their informal counterparts (see Figure 2). This suggests that people hold a shared understanding of what constitutes formality in communication and that formality can be manipulated by changing aesthetic and language attributes. Importantly, these findings also show that formality is distinct from language complexity. We find that it is possible to shift the perceived formality of a communication without increasing language complexity, which would risk making communications less accessible.

**FIGURE 2**

Study 1 results: Manipulating formality



In **Studies 2-4**, we found recipients of formal communications were significantly more likely to take a requested action in three different real-world contexts:

- In **Study 2**, business owners who received a formal letter were 25% more likely to register their businesses than owners who received the informal letter (1.9 percentage point increase over a base rate of 7.3%).
- In **Study 3**, residents who received a formal letter were 45% more likely to enroll in an emergency transportation service than residents who received the informal letter (0.8 percentage point increase over base rate of 1.8%).
- In **Study 4**, residents who received a formal letter were 28% more likely to visit a website with information about California's Earned Income Tax Credit than residents who received the informal letter (0.8 percentage point increase over a base rate of 2.8%).

## WHAT WE FOUND (cont.)

In a follow-up prediction survey, a group of 351 academics and practitioners were shown the formal and informal communications used in each study and asked to predict which would be more effective at motivating resident action. For each set of letters (corresponding with each study), less than 20% of experts predicted the formal letter would be more effective than the informal letter (see Table 1).

**TABLE 1**

Studies 2-4: Real-world field experiments on the Formality Effect

Study	Policy domain	Outcome measured	Sample size	Axis of formality manipulated	Formality effect	Percentage of experts who correctly predicted direction of effect (N=351)
2	Business self-certification	Registration as a local, minority-owned, or woman-owned business	10,000	Language and aesthetics	1.9 percentage points (25%) over base rate of 7.3%	10.0%
3	Local government service	Enrollment in an emergency medical transportation service offered by a local government	35,172	Aesthetics primarily	0.8 percentage points (45%) over base rate of 1.8%	15.7%
4	Earned Income Tax Credit	Website visits to learn more about the CalEITC	20,000	Aesthetics only	0.8 percentage points (28%) over base rate of 2.8%	10.8%

In **Study 5**, we find that participants expect communications from the government to be significantly more formal than communications from either non-profit or private sector senders, regardless of the nature of request. Participants also believed that it would be more important to act on a request from the government, and that they would be more likely to face consequences for not acting. These findings suggest that expectations about government communications may be one channel through which formality influences perceptions of credibility.

In **Study 6**, we find that formal letters are viewed as significantly more important and relevant, and significantly less likely to be “a scam,” than informal letters. Additionally, participants viewed the source (sender) of formal letters as more credible, trustworthy, and likely to be an expert, compared to the source of informal letters. In line with the results of Study 5, participants were also 21 percentage points more likely to believe formal letters came from the government.

At the same time, we find no impact of formality on comprehension or beliefs about the ease of taking action. This suggests that one potential explanation for the Formality Effect is that formality acts as a signal of credibility and importance, in part because it aligns with residents' expectations about government communications.



## WHAT'S NEXT

Across three field experiments, we found that — contrary to expert predictions — residents are more likely to act upon formal government communications than informal communications. These findings suggest that designing government communications with the Formality Effect in mind might improve the effectiveness of light-touch interventions beyond current practice. Future studies could explore whether the Formality Effect extends to other contexts and examine how demographics or individual characteristics interact with the Formality Effect within and across contexts.

## SOURCES

1. Lasky-Fink, J., Robinson, C.D., Chang, H.N., & Rogers, T. (2021, March 8). *Using Behavioral Insights to Improve School Administrative Communications: The Case of Truancy Notifications*. *Educational Researcher* 50, no. 7: 442-50. <https://doi.org/10.3102/0013189x211000749>.
2. Resnick, E. (2003). *Design for communication: Conceptual graphic design basics*. John Wiley & Sons.
3. Rodríguez, E., Cristina, F., & Davis, L.S. (2014, December 26). *Improving visual communication of science through the incorporation of graphic design theories and practices into science communication*. *Science Communication* 37, no. 1: 140-148. <https://doi.org/10.1177/1075547014562914>.
4. Pornpitakpan, C. (2004, February). The persuasiveness of source credibility: A critical review of five decades' evidence. *Journal of Applied Social Psychology* 34, no. 2: 243-81. <https://doi.org/10.1111/j.1559-1816.2004.tb02547.x>.
5. Fishbane, A., Ouss, A., & Shah, A.K. (2020, November 6). *Behavioral nudges reduce failure to appear for court*. *Science* 370, no. 6517. <https://doi.org/10.1126/science.abb6591>.



The People Lab



HARVARD Kennedy School

### About The People Lab

The People Lab aims to empower the public sector by producing cutting-edge research on the people of government and the communities they serve. Using evidence from public management and insights from behavioral science, we study, design, and test strategies for solving urgent public sector challenges in three core areas: strengthening the government workforce; improving resident-government interactions; and reimagining the production and use of evidence.



### Contact Us

✉ [peoplelab@hks.harvard.edu](mailto:peoplelab@hks.harvard.edu)

🐦 @HKS\_PeopleLab