BUILDING EVIDENCE IN THE GOVERNMENT-WIDE PULSE SURVEY

Evaluation findings offer insights on employee perceptions and behaviors

Target a Priority Outcome

In the wake of the COVID-19 pandemic, as many federal agencies planned for a return to in-person work or navigated newly hybrid workplaces, agency leadership needed real-time actionable information to inform decision making and support a strong and successful federal workforce. To address this challenge, the President's Management Council (PMC), the Office of Management and Budget (OMB), the Office of Personnel Management (OPM), and the General Services Administration launched the first ever federal employee pulse survey pilot to better understand federal employee needs and perceptions. This pilot also served as an opportunity to gather information about the infrastructure and resources required to conduct government-wide employee surveys more frequently.

The federal employee pulse survey pilot launched in October 2021 and reached two million civilian employees of the 24 CFO Act agencies. Each pulse survey round invited federal employees to share their thoughts on three or four questions to help inform the administration's actions on how best to support the federal workforce. In total, the pilot initiative included three separate pulse survey rounds in October 2021, January 2022, and March 2022.

Translate Behavioral Insights

The first evaluation tested the impact of small adjustments to the email invitation to complete the survey on response rates. Specifically, it tested whether the sender of the email and the framing of the survey affected survey response rates. This evaluation builds on prior research that demonstrates the importance of known and credible messengers in communications[1,2] and evidence suggesting that small changes in framing can have an outsized impact on response.[3]

All employees who received the first pulse survey round were randomly assigned one of three survey themes: employee engagement, equity and inclusion, or the reentry process. They then received an email invitation to complete the survey that included language tailored to each employee's assigned survey theme. For instance, the email invitation for employees assigned to receive the equity and inclusion pulse theme included a sentence that read "Your participation will directly shape [Agency name] decisions on how to invest in an inclusive, respectful, and collaborative work environment." Meanwhile, employees assigned to receive the employee engagement pulse theme received an email invitation that included a sentence that read "Your participation will directly shape [Agency name] decisions on how to help our team thrive and stay engaged with our mission."

Additionally, in order to test the impact of the messenger (sender), approximately half of the employees who received the first pulse survey received an email invitation that was signed and sent by the OMB Deputy Director for Management while the other half received an email invitation that was signed by their agency's PMC representative.

The second evaluation built on evidence suggesting that burnout and wellbeing–both of which can be exacerbated by work conditions–are strong

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[1] A. M. J. Deetlefs, J. Chalmers, K. Tindall, C. Wiryakusuma-McLeod, S. Bennett, I. Hay, J. Humphries, M. J. Eady, L. Cronin, and K. Rudd. "Applying behavioral insights to increase rural and remote internships: Results from two Randomized Controlled Trials." *Journal of Behavioral and Experimental Economics* 92 (2021).

[2] C. Pornpitakpan. "The persuasiveness of source credibility: A critical review of five decades' evidence." *Journal of Applied Social Psychology* 34, no. 2 (2006): 243-281.

[3] E. Linos, A. Prohofsky, A. Ramesh, J. Rothstein, M. Unrath. Can nudges increase take-up of the EITC?: Evidence from multiple field experiments. *American Economic Journal: Economic Policy*, forthcoming.

predictors of turnover intention.[4] In the second pulse survey one group of employees saw a version of a turnover intention question that read, "If I found a job elsewhere with more workplace flexibilities or remote options, I would take it," while a second group received a version that read, "If I found a job elsewhere with more pay or better benefits, I would take it."

Finally, the third evaluation aimed to understand employees' perceptions of support in the workplace and how these perceptions differ by employee demographics. This question arose from results of prior pulse rounds that showed that employees' perceptions of support were associated with turnover intention. One group of employees received a version of a question that read "Employees like me are given the support to succeed here," while a second group saw a version that read "Employees with different backgrounds are given the support to succeed here."

Embed Evaluation

In each pulse survey round, all employees received an email invitation to complete the survey. Each employee then received a pulse survey with 3-4 questions related to their assigned theme. Each evaluation was tested with an individual-level randomized control trial embedded in each round of the pulse survey.

The first evaluation was conducted in October 2021 as part of the first pulse survey round. Approximately 2 million federal employees were randomly sent an email invitation to complete the survey that was signed by either the OMB Deputy Director for Management or by their agency's PMC representative. At the same time, they were also randomly assigned to receive either the reentry, equity and inclusion, or employee engagement

survey theme. Employees received the same survey theme for all three surveys.

In the second survey, administered in January 2022, 630,192 employees who received the reentry survey theme were randomly assigned to receive one of the two versions of a question on turnover intention, which asked whether they would take another job either with "more pay or better benefits" or with "more workplace flexibilities or remote options."

In the third pulse survey, administered in March 2022, 649,367 employees who received the equity survey theme were randomly assigned to receive one of the two versions of a question about perceptions of employees' support, either "Employees like me are given the support to succeed here" or "Employees with different backgrounds are given the support to succeed here."

Analyze Using Existing Data

Survey responses were collected via an online platform, and employee demographics and job characteristics were retrieved from the Enterprise Human Resources Integration (EHRI) database maintained by OPM.

In the first evaluation, the primary outcome of interest was response to the survey, defined as the employee responding to at least one question and submitting the survey within five days of receiving the email invitation. In the second evaluation, the outcome of interest was the level of agreement with the two versions of the turnover question, both measured on a scale of 1 (strongly disagree) to 5 (strongly agree). In the third evaluation, the outcome of interest was the difference in the level of agreement with the two versions of the employee support question, also measured on a scale of 1 (strongly disagree) to 5 (strongly agree).[5]

[4] T. D. Shanafelt, M. Mungo, J. Schmitgen, K. A. Storz, D. Reeves, S. N. Hayes, J. A. Sloan, S. J. Swense, S. J. Buskirk. Longitudinal study evaluating the association between physician burnout and changes in professional work effort. *Mayo Clinic Proceedings* 91, no. 4 (2016):422–431.

Results

In the first evaluation, both the framing of the survey and messenger impacted response rates, though treatment effects were small in magnitude. The analysis for experiment 1 was conducted among pulse survey recipients at 23 of 24 agencies that were included in the pilot (N = 1,320,587), due to an issue that interfered with the email invitation delivery at one agency. Overall, 15.8% of the employees who received the first pulse survey responded during the outcome period.[6] Employees were 0.1 percentage points (pp), or 0.8% more likely to respond to survey invitations when the emails were signed by their agency PMC member than when the emails were signed by the OMB Deputy Director of Management ($p = 0.05$; 95% CI [0.00, 0.002]; N = 1,320,587). There were also statistically significant differences in response rates across the three survey themes: 16% of employees invited to complete the reentry theme pulse survey responded, compared to 15.3% of those invited to complete the engagement theme, and 13.9% of those invited to complete the equity and inclusion theme (joint significance F = 399.92, $p < 0.001$).

The second evaluation was embedded in the second pulse round, in the reentry theme survey. Overall, 20.1% of the 630,192 employees who received the survey responded. Agreement with the turnover intention question was 3.9% higher among respondents who were asked whether they would take a different job with better pay or benefits compared to respondents who were asked whether they would take a job with more flexibility (3.56 vs. 3.70 on a 5-point scale, $p < .001$; 95% CI [-0.15, -0.12]; N = 126,540). It is important to note that these results are specific to the time period in which the survey was fielded – a period of economic uncertainty and unprecedented workplace flexibility. Whether the results of this survey experiment would be similar in other work contexts is unknown.

The third evaluation was embedded in the third pulse round, in the equity and inclusion theme survey. Of the 17.5% of those who received and responded to the survey,[7] respondents tended to agree more strongly with the statement that "employees from different backgrounds" received support compared to similar respondents' level of agreement with the statement that "employees like me" receive support. The results of this third experiment can be seen in Table 1.

Among the entire sample, the "different backgrounds" frame yielded 0.25 points higher agreement on a five-point scale, than the "employees like me" frame: 3.79 vs. 3.54, or 7% higher agreement among the sample as a whole ($p < 0.001$; 95% CI [-0.27, -0.24]; N = 100,519).[8]

To analyze demographic differences in employees' perceptions of support for different types of employees at work, differences in the levels of agreement with the two versions of the question were compared in four separate subgroup analyses: White vs. non-White, Black vs. non-Black, Latino/Hispanic vs. non-Latino/Hispanic, and male vs. female employees.

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[6] Because of the nature of the experiment, we measure response for the first pulse round only in the one week following the initial email notification.

[7] 16,009 employees were excluded from the analysis due to an error that occurred when matching employees to the survey theme they received in past evaluations that caused them to receive a different theme in the third survey. Including these employees in the analysis does not meaningfully change the results.

[8] Models included inverse probability weighting, and those with a likelihood of response above the 95% percentile were trimmed from the sample, which affected 13,087 observations. The analysis for the overall difference between the "employees like me" frame and "different backgrounds" frame was not included in the analysis plan.

Table 1. *Perceptions of Support for Federal Employees*

Sample	Perceived support for "Employees like me" (1-5 scale)	Perceived support for "Employees from different backgrounds" (1-5 scale)	Percent increase for "Employees from different backgrounds" over "Employees like me" baseline
White	3.56	3.89	9%
Non-White	3.49	3.59	3%
Black	3.47	3.48	0%
Non-Black	3.54	3.84	8%
Latino/Hispanic	3.51	3.62	3%
Non-Latino/ non-Hispanic	3.54	3.81	8%
Male	3.56	3.87	9%
Female	3.51	3.71	6%
Total Sample	3.54	3.79	7%

The difference in average level of agreement with perceived support for "employees from different backgrounds" and support for "employees like me;" was larger for White respondents than non-White respondents. Among White employees, the average level of agreement with the "different backgrounds frame" was 3.89, compared to 3.56 with the "employees like me" frame–agreement with the "different backgrounds" frame was 9% higher. This suggests that White employees perceive employees of different backgrounds to have more support than White employees perceive the support for employees like themselves. Among non-White employees, the average level of agreement with the "employees like me" frame was 3.49, versus 3.59 for the "different backgrounds" frame (3% higher) (*p* < 0.001; 95% CI [-0.264, -0.188]; N = 100,519).

The difference in average level of agreement with perceived support for employees from different backgrounds and perceived support for employees like themselves was smaller for Black employees. Among Black employees, there was a 0.3% difference in perceived support for employees from different backgrounds versus employees like

themselves: the average level of agreement with the "different backgrounds" frame was 3.48 versus 3.47 with the "employees like me" frame. In comparison, the difference in perceived support for employees from different backgrounds versus employees like themselves was 8% higher among non-Black employees: the average agreement with the "different backgrounds frame" was 3.84, compared to 3.54 with the "employees like me" frame (*p* < 0.001; 95% CI [0.228, 0.337]; N = 100,519).

Similarly, this gap in perceived support was 3% higher among Latino/Hispanic employees but 8% higher among non-Latino/Hispanic employees (*p* < 0.001; 95% CI [0.090, 0.233]; N = 100,519). Among Latino/Hispanic employees, the average agreement with the "different backgrounds" frame was 3.62, compared to 3.51 among those who saw the "employees like me" frame. Meanwhile among non-Latino/Hispanic employees, average agreement with the "different backgrounds frame" was 3.81, compared to 3.54 for the "employees like me" frame.

Women also perceived a smaller difference in the levels of support for employees of different backgrounds compared to employees like themselves than men did (*p* < 0.001; 95% CI [0.081, 0.152]; N = 100,519). Among women, the average agreement among those who saw the "employees from different backgrounds" frame was 3.71, compared to 3.51 for employees like themselves (6% higher), whereas among men, the average agreement for employees from different backgrounds was 3.87, compared to 3.56 among those who were asked about employees like themselves (9% higher).

Build Evidence

The results from the first federal employee pulse survey evaluations offer a number of policy and logistical lessons. First, the pulse survey pilot offered a unique opportunity to build evidence on employee perceptions and mindsets, as well as on

increasing response rates to employee surveys, on a large scale. The findings from this pilot suggest that survey invitations sent from an employee's agency PMC member modestly increase response rates, adding to existing evidence on the importance of the messenger in government communications. Choosing a known messenger may be one way to increase response rates in future government survey efforts. The fact that response rates also differed by survey theme warrants further research to better understand why employees were less likely to respond to the equity and inclusion survey, and how to promote engagement in the future.

On employee perceptions and mindsets, the results from this pilot suggest that pay and benefits may influence expressed willingness to change jobs more than workplace flexibility. Once again, we note that this survey experiment was conducted during a period of unprecedented workplace flexibility; it is unclear whether this finding would extend to other contexts. Additionally, White employees and men may believe that higher levels of support exist for employees from diverse backgrounds than exist for employees like themselves, while Black, Hispanic, and female employees perceive more similar levels of support for themselves and for employees from different backgrounds. Understanding whether this misalignment in perceptions of available support reflects actual levels of support, and understanding the implications of both perceived and actual levels of support, are important areas for future research.

Finally, the federal employee pulse survey pilot also offers a number of logistical lessons for similar efforts in the future. Conducting a large-scale employee survey and producing results on a rapid timeline requires investment in both data infrastructure and resources. When such resources do exist, embedding evaluations into such efforts can be an effective way of generating actionable and timely evidence to inform decision-making.