Trust in the Food and Drug Administration: A National Survey Study

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Building trust in public health agencies like the US Food and Drug Administration (FDA) has become a key government priority. Understanding the roots of FDA mistrust is important if the agency is to develop targeted messaging and reforms aimed at building confidence in the agency. We conducted a survey of 2,021 respondents in the US probing attitudes toward the FDA. The primary outcome was FDA trust, defined as the mean score that each respondent assigned to the FDA across four prespecified axes: (1) competence and effectiveness; (2) commitment to acting in the best interests of the American public; (3) abiding by the rules and regulations set forth by policy or law; and (4) expertise in health, science, and medicine. On multivariable ordinal logistic regression, FDA mistrust was associated with female gender (odds ratio [OR] = 0.74, 95% confidence interval [CI] 0.62–0.88), rural community (OR 0.85, 95% CI 0.75–0.96), conservative political views (OR 0.77, 95% CI 0.74–0.81), worse self-reported health (OR 0.89, 95% CI 0.80–0.98), lower satisfaction with health care received (OR 0.63, 95% CI 0.56–0.71), less attention to health and science news (OR 0.72, 95% CI 0.64–0.80), and not having children under the age of 18 (OR 0.72, 95% CI 0.60–0.86). These findings underscore the challenges faced by US political leaders in convincing a heterogeneous American public to trust the FDA. The FDA should develop and deploy targeted outreach strategies to populations with lower levels of trust and strengthen internal processes that minimize biases and ensure sound decision-making.

Study Highlights

WHAT IS THE CURRENT KNOWLEDGE ON THE TOPIC?

☑ Although prior studies have examined trust in the Food and Drug Administration (FDA), less has been written about the nature of this mistrust. Earlier theoretical work on organizational reputation and public administration identified four key axes of trust in governmental agencies, including the following: (1) whether the agency is competent and effective, (2) whether it acts in the best interest of the American public, (3) whether it abides by rules and regulations, and (4) whether it possesses subject matter expertise.

WHAT QUESTION DID THIS STUDY ADDRESS?

☑ How respondents in a national survey evaluated the FDA along each axis of trust and how sociodemographic features, political leanings, and media consumption of respondents contributed to their evaluations.

WHAT DOES THIS STUDY ADD TO OUR KNOWLEDGE?

☑ Among 2,021 respondents in the United States, lower levels of trust in the FDA were associated with female gender, rural community, conservative political views, worse self-reported health, lower satisfaction with health care received, less attention to health and science news, and not having children under the age of 18.

HOW MIGHT THIS CHANGE CLINICAL PHARMACOLOGY OR TRANSLATIONAL SCIENCE?

☑ These findings underscore the challenges faced by US political leaders in convincing a heterogeneous American public to trust the FDA. The FDA should develop and deploy targeted outreach strategies to populations with lower levels of trust and strengthen internal processes that minimize biases and ensure sound decision making.

Building trust in public health agencies has become a key priority for governments seeking to promote patient adherence to medical treatment recommendations and population-level health outcomes.[1] Studies have found, for example, that lower levels of trust in government officials have been associated with reduced rates of vaccination against H1N1 influenza and COVID-19.[2–7] Public health agencies in the US, including the US Food and Drug Administration (FDA), have historically experienced higher levels of trust than other offices within the federal government.[8,9] Yet, the trustworthiness of public health agencies can be easily undermined. The FDA faced criticism, particularly during the early part of the COVID-19 pandemic, for several emergency

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use authorizations based on low-quality data, including hydroxychloroquine and convalescent plasma, and for the perception of inappropriate influence by political officials over its decision-making.[10,11] Scholars have worried that damage to the FDA's reputation during the COVID-19 pandemic could be long-lasting.[12] A 2022 survey found that just 27% of respondents trusted the FDA "a great deal," and 23% did not trust the FDA "very much" or "at all."[13] The current FDA Commissioner Robert M. Califf has identified building trust in the agency as a top policy goal.[14]

Understanding the roots of FDA mistrust is important if policymakers and regulators are to implement policies and develop targeted messaging aimed at strengthening confidence in the US medical product regulatory system. While recent surveys have documented low levels of trust in the FDA, comparatively less has been written about the nature of this mistrust.[13] Earlier theoretical work on organizational reputation and public administration identified four key axes of trust in governmental agencies, including: (1) whether the agency is competent and effective, (2) whether it acts in the best interest of the American public, (3) whether it abides by rules and regulations, and (4) whether it possesses subject matter expertise.[15]

Using this conceptual framework, we conducted a national survey to understand how respondents evaluated the FDA along each axis of trust and how the sociodemographic features, political leanings, and media consumption of respondents contributed to their evaluations. To properly contextualize attitudes toward the FDA, we also asked respondents about other governmental institutions, including the Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), Congress, and non-government groups, including the pharmaceutical industry. Our goal was to provide policymakers and regulators with evidence to help design initiatives that build trust in the FDA and, in turn, promote better health outcomes among patients.

METHODS

Cohort identification

Survey respondents aged 18–79 were recruited from an online opt-in consumer panel consisting of several million verified panelists between October 5 and October 13, 2022. We set a quota for political party affiliation based on proportions in the 2020 American National Election Study (ANES), a time-series survey of voter identification hosted by the University of Michigan and Stanford University (see **Supplemental methods**).[16]

Survey administration

The survey was conducted in a non-probability-based panel managed by Luminas, a consumer survey firm.[17] Panelists received an email invitation with a description of the study. Each invitation contained a unique URL, which ensured that participants could only complete the survey once. Those who completed the survey received panel points, which can be redeemed for gift cards. Before respondents could engage with the survey, they were asked several screening questions, including questions about demographics and political party affiliation, which were needed to determine if inclusion criteria and quotas had been met. Only after these screening questions were completed would respondents be invited to participate in the survey. The participation rate—defined as the number of respondents who completed at least one question in the survey divided by the number of people who clicked on the survey link—was 81%. This is the preferred reporting metric for non-probability panel surveys of the American Association for Public Opinion Research.[17]

Survey design and testing

The questions in the survey panel were designed by the authors of this study. Researchers at Luminas then provided guidance on the final question construction, scale selection, question flow, and length. No open-ended questions were included in the survey, and all surveys were administered in English. The approximate completion time of a full survey was 20 minutes (see the **Data S2** survey instrument).

Variable construction

Our primary outcome was FDA trust, defined as the mean score that each respondent assigned to the FDA across four prespecified axes: (1) competence and effectiveness; (2) commitment to acting in the best interests of the American public; (3) abiding by the rules and regulations set forth by policy or law; and (4) expertise in health, science, and medicine. Each of the four questions defining this variable was scored from 1 to 4 (with 1 indicating no confidence and 4 the highest confidence). We then repeated this assessment for the CDC, NIH, scientists, pharmaceutical companies, patient advocacy groups, doctors, Congress, and the office of the President.

Finally, we sought information on demographic and other variables: age, gender, Hispanic ethnicity, race, highest level of schooling, annual household income, community (urban, suburban, or rural), ZIP code, state, political views, political party, self-described health, perceived quality of health care received in the prior 12 months, attention to the news about government and politics, attention to the news about health and science, and whether they had children at home under the age of 18.

Statistical analysis

Univariate analyses were completed using Kruskal–Wallis one-way analysis of variance. All variables that were significant on our univariate screen (based on a two-tailed test with P-value < 0.05) were then included in a multivariable ordinal logistic regression model (see Supplemental methods). Given that the four components of FDA trust were each probed on a 4-point scale, mean FDA trust (the primary outcome) for each participant could only be one of 13 possible scores (1, 1.25, and 1.5, etc.); an ordinal rather than continuous model was chosen to maximize statistical power when analyzing trust. We checked for multicollinearity in our regression model based on analysis of variance inflation factors.

To test the robustness of our findings, we performed three *post hoc* sensitivity analyses: the first examined covariates associated with low FDA trust (mean scores 1–2) vs. higher trust (mean scores > 2); the second examined high FDA trust (mean scores of 3 or more) vs. lower trust (mean scores < 3); and the third examined no confidence in the FDA (score of 1) on at least one axis of trust vs. at least some confidence (score of 2–4) across all axes. The aim of all three sensitivity analyses was to understand if relevant associations shifted when mistrust and trust were treated as binary outcomes, defined in different ways. We performed multivariable logistic regression in each sensitivity analysis to identify covariates associated with the outcome. This study was approved by the Mass General Brigham Institutional Review Board. All analyses were completed in Stata (StataCorp LLC, College Station, TX, version 16.1).

Role of the funding source

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RESULTS

The survey was completed by 2,021 respondents, including 1,040 women (51.5%), 970 (48.0%) men, 3 individuals (0.2%) who identified as non-binary and 8 (0.4%) who preferred not to answer the question (**Table 1**). Respondents were aged 18–79

Table 1 Characteristics of survey respondents

	Respondents, *n* (%)
Age	
18–29	414 (20.5)
30–39	407 (20.1)
40–49	330 (16.3)
50–59	380 (18.8)
60–69	308 (15.2)
70–79	182 (9.0)
Gender[a]	
Male	970 (48.0)
Female	1,040 (51.5)
Other	3 (0.2)
Race[b]	
American Indian	17 (0.8)
Asian	101 (5.0)
Black	182 (9.0)
Native Hawaiian or Pacific Islander	6 (0.3)
White	1,607 (79.5)
Other	34 (1.7)
More than one race identified	47 (2.3)
Hispanic, Latino, or Spanish ethnicity	151 (7.5)
Highest level of school completed	
Less than high school	41 (2.0)
High school degree or equivalent	384 (19.0)
Some college but no degree	349 (17.3)
Associate's degree	226 (11.2)
Bachelor's degree	628 (31.1)
Graduate or professional degree	393 (19.5)
Annual household income	
Less than $19,999	231 (11.4)
$20,000–$34,999	263 (13.0)
$35,0000–$49,999	250 (12.4)
$50,000–$74,999	370 (18.3)
$75,000–$99,999	303 (15.0)
$100,000–$199,999	506 (25.0)
$200,000 or more	98 (4.9)
Community location	
Urban	681 (33.7)
Suburban	949 (47.0)
Rural	391 (19.4)
Region	
Northeast	414 (20.5)
South	788 (39.0)
Midwest	418 (20.7)
West	401 (19.8)
Self-described political views	
Extremely liberal	229 (11.3)
Liberal	226 (11.2)
Somewhat liberal	140 (6.9)
Moderate	685 (33.9)
Somewhat conservative	232 (11.5)
Conservative	286 (14.2)
Extremely conservative	223 (11.0)
Self-reported health	
Poor	46 (2.3)
Fair	280 (13.9)
Good	754 (37.3)
Very good	651 (32.2)
Excellent	290 (14.4)
Satisfaction with health care received	
Very satisfied	1,050 (52.0)
Somewhat satisfied	623 (30.8)
Somewhat dissatisfied	132 (6.5)
Very dissatisfied	72 (3.6)
No health care received in prior 12 months	144 (7.1)
Attention to news about government and politics	
All the time	445 (22.0)
Often	685 (33.9)
Sometimes	575 (28.5)
Rarely	205 (10.1)
Not at all	111 (5.5)
Attention to news about health and science	
All the time	346 (17.1)
Often	674 (33.4)
Sometimes	683 (33.8)
Rarely	210 (10.4)
Not at all	108 (5.3)
Have children under the age of 18	
Yes	643 (31.8)
No	1,378 (68.2)

[a]Eight respondents preferred not to answer this question. [b]Twenty-seven respondents preferred not to answer this question.

and identified as White (79.5%), Black (9.0%), Asian (5.0%), and the remainder were from other racial groups or selected more than one race. One hundred and fifty-one respondents (7.5%) reported Hispanic ethnicity. Just over half had a bachelor's degree or higher, and 55.1% had an annual income of less than $75,000 per year. Respondents were drawn from the Northeast (20.5%), South (39.0%), Midwest (20.7%), and West (19.8%) and from communities described as urban (33.7%), suburban (47.0%), and rural (19.4%). Self-classified political views covered the gamut: extremely liberal (11.3%), liberal (11.2%), somewhat liberal (6.9%), moderate (33.9%), somewhat conservative (11.5%), conservative (14.2%), and extremely conservative (11.0%).

Overall measures of trust in the FDA

The mean score for trust in the FDA was 2.87 (standard deviation [SD] 0.79) on the 4-point scale. On univariate analysis, men were more trusting of the FDA than women (2.97 [SD 0.80] vs. 2.77 [SD 0.77], $P < 0.001$) (Table 2). Those with the most education (bachelor degree or higher) and the least education (less than high school) were more trusting of the FDA than those with levels of education in between: graduate or professional degree 3.05 (SD 0.79), bachelor degree 2.90 (SD 0.76), associate degree 2.76 (SD 0.82), some college but no degree 2.79 (SD 0.79), high school degree 2.75 (SD 0.80), and less than high school 2.96 (SD 0.67) ($P < 0.001$). Respondents from urban communities were more trusting of the FDA (3.08 [SD 0.71]) than those from suburban communities (2.78 [SD 0.80]) or rural communities (2.70 [SD 0.82]) ($P < 0.001$), and respondents with more annual income had higher levels of trust in the FDA than those with less annual income: $200,000 or more 3.01 (SD 0.78), $100,000–$199,999 3.04 (SD 0.77), $75,000–$99,999 2.87 (SD 0.78), $50,000–$74,999 2.76 (SD 0.77), $35,000–$49,999 2.77 (SD 0.82), $20,000–$34,999 2.76 (SD 0.85), less than $20,000 2.81 (SD 0.74) ($P < 0.001$).

Trust in the FDA varied by political affiliation, with the highest levels of trust observed among the extremely liberal (3.20, SD 0.73) and liberal (3.16, SD 0.61) and the lowest levels of trust observed among the conservative (2.53, SD 0.82) and extremely conservative (2.64, SD 1.00) ($P = <0.001$). Those with better self-reported health and more satisfaction with their health care were also more trusting of the FDA, and respondents who paid more attention to the news, either political or health and science, were more trusting of the FDA than those who paid less attention.

Respondents with children under 18 expressed more trust in the FDA (3.03 [SD 0.74]) than respondents without (2.79 [0.80]) ($P = <0.001$). There were no associations between trust in the FDA and race, Hispanic ethnicity, or region of the US.

Multivariable analysis of trust in the FDA

On multivariable regression, FDA mistrust was associated with female gender (odds ratio [OR] = 0.74, 95% confidence interval [CI] 0.62–0.88), rural community (OR 0.85, 95% CI 0.75–0.96), conservative political views (OR 0.77, 95% CI 0.74–0.81), worse self-reported health (OR 0.89, 95% CI 0.80–0.98), lower satisfaction with health care received (OR 0.63, 95% CI 0.56–0.71), less attention to health and science news (OR 0.72, 95% CI 0.64–0.80), and not having children under the age of 18 (OR 0.72, 95% CI 0.60–0.86) (Table S1). There was no multicollinearity in our regression model based on analysis of variance inflation factors (Table S2).

Relationship between trust in the FDA and trust in other institutions

Mean levels of trust in the FDA (2.87, 95% CI: 2.83–2.90) were lower than for physicians (3.09, 95% CI: 3.06–3.12) and scientists (2.99, 95% CI: 2.96–3.02) but higher than for the pharmaceutical industry (2.57, 95% CI: 2.53–2.60), the office of the President (2.29, 95% CI: 2.25–2.33), and Congress (2.10, 95% CI: 2.06–2.14) (Table S3).

Table 2 Univariate screen for trust in the Food and Drug Administration

	FDA trust, mean (SD)	*P*-value
Age		
18–29	2.87 (0.71)	<0.001
30–39	3.02 (0.77)	
40–49	2.91 (0.82)	
50–59	2.77 (0.81)	
60–69	2.78 (0.84)	
70–79	2.78 (0.80)	
Gender		
Male	2.97 (0.80)	<0.001
Female	2.77 (0.77)	
Race		0.118
Asian	2.95 (0.72)	
Black	2.90 (0.71)	
White	2.87 (0.80)	
Other	2.80 (0.83)	
More than one race	2.58 (0.86)	
Hispanic, Latino, or Spanish ethnicity	2.92 (0.77)	0.447
Highest level of school completed		
Less than high school	2.96 (0.67)	<0.001
High school degree or equivalent	2.75 (0.80)	
Some college but no degree	2.79 (0.79)	
Associate's degree	2.76 (0.82)	
Bachelor's degree	2.90 (0.76)	
Graduate or professional degree	3.05 (0.79)	
Annual household income		
Less than $19,999	2.81 (0.74)	<0.001
$20,000–$34,999	2.76 (0.85)	
$35,0000–$49,999	2.77 (0.82)	
$50,000–$74,999	2.76 (0.77)	
$75,000–$99,999	2.87 (0.78)	
$100,000–$199,999	3.04 (0.77)	
$200,000 or more	3.01 (0.78)	
Community location		
Urban	3.08 (0.71)	<0.001
Suburban	2.78 (0.80)	
Rural	2.70 (0.82)	
Region		
Northeast	2.92 (0.73)	0.171
South	2.85 (0.82)	
Midwest	2.80 (0.81)	
West	2.91 (0.78)	
Self-described political views		
Extremely liberal	3.20 (0.73)	<0.001
Liberal	3.16 (0.61)	

(Continued)

Table 2 (Continued)

	FDA trust, mean (SD)	*P*-value
Somewhat liberal	3.05 (0.64)	
Moderate	2.88 (0.75)	
Somewhat conservative	2.74 (0.71)	
Conservative	2.53 (0.82)	
Extremely conservative	2.64 (1.00)	
Self-reported health		
Poor	2.83 (0.84)	<0.001
Fair	2.68 (0.82)	
Good	2.75 (0.76)	
Very good	2.97 (0.75)	
Excellent	3.13 (0.85)	
Satisfaction with healthcare received		
Very dissatisfied	2.62 (0.88)	<0.001
Somewhat dissatisfied	2.53 (0.77)	
Somewhat satisfied	2.73 (0.72)	
Very satisfied	3.04 (0.77)	
No healthcare received in prior 12 months	2.62 (0.91)	
Attention paid to news about government and politics		
Not at all	2.49 (0.83)	<0.001
Rarely	2.65 (0.75)	
Sometimes	2.76 (0.72)	
Often	2.99 (0.74)	
All the time	2.99 (0.90)	
Attention paid to news about health and science		<0.001
Not at all	2.56 (0.82)	
Rarely	2.60 (0.80)	
Sometimes	2.70 (0.75)	
Often	2.97 (0.74)	
All the time	3.24 (0.77)	
Have children under the age of 18		
Yes	3.03 (0.74)	<0.001
No	2.79 (0.80)	

On multivariable regression, the odds of experiencing higher levels of trust in the FDA were greater among individuals who experienced higher levels of trust in other groups and institutions, including the CDC (OR 4.51, 95% CI 3.65–5.58), the NIH (OR 2.97, 95% CI 2.39–3.68), scientists (OR 2.00, 95% CI 1.65–2.43), the pharmaceutical industry (OR 1.68, 95% CI 1.44–1.95), patient advocacy groups (OR 1.86, 95% CI 1.54–2.23), and physicians (OR 1.32, 95% CI 1.10–1.58). There was no association between trust in the FDA and trust in Congress (OR 1.14, 95% CI 0.98–1.32) or trust in the office of the President (OR 1.13, 95% CI 0.98–1.31).

Individual measures

Scores for the four individual measures of trust varied with one another: mean confidence that the FDA is competent and effective in its job was 2.78 (SD 0.92); mean confidence that the FDA acts in the best interest of the public was 2.79 (SD 0.94); mean confidence that the FDA abides by its own rules and regulations was 2.82 (SD 0.96); mean confidence that the FDA has expertise in health, science, and medicine was 3.06 (SD 0.82).

Multivariable analysis of individual measures

When separately examining the question of whether the FDA is competent and effective in its work, the covariates associated with confidence were the same as the primary analysis, except that lower levels of education were also associated with lower confidence on this analysis (OR 0.92 0.86–0.99) (**Table S4**). The covariates associated with confidence in the FDA acting in the best interests of the American public (**Table S5**) and in the FDA abiding by the rules and regulations (**Table S6**) were the same as the primary analysis. When separately examining the question of whether the FDA has expertise in health, science, and medicine, several covariates that had been significant in the primary analysis were no longer significant, including gender, community location, and self-reported health (**Table S7**).

Sensitivity analyses

Findings on multivariable logistic regression were similar to the primary analysis when examining covariates associated with low FDA trust (mean scores 1–2) vs. higher trust (mean scores > 2) (**Table S8**), high FDA trust (mean scores of 3 or more) vs. lower trust (mean scores < 3) (**Table S9**), and "not at all confident" on at least 1 axis of FDA trust vs. at least "slightly confident" on all axes of trust (**Table S10**).

DISCUSSION

Higher levels of mistrust in the FDA were observed for several key groups of interest, including those who identified as women, endorsed conservative political leanings, reported lower satisfaction with health care received, and had no children under the age of 18. Levels of confidence in the FDA varied across the four axes of trust, with the highest scores for confidence in the agency's expertise in health, science, and medicine. Our findings underscore the challenges faced by our political leaders in convincing a heterogeneous American public with wide-ranging political views from a diverse array of backgrounds and communities to trust the FDA, an agency charged with guaranteeing the safety and effectiveness of new medical therapies for all patients. Building trust in the FDA, particularly among the least trusting sociodemographic and political groups, will be critical as the agency promotes new vaccines for COVID-19 and other respiratory viruses and as we move into a highly contested presidential election cycle with particular controversy related to the FDA and its role in furthering public health.

The FDA's high marks on expertise in health, science, and medicine compared with other axes of trust may owe, in part, to

the fact that much current FDA communication occurs through materials released with new product approvals, which are accompanied by comprehensive medical reviews and often press releases that describe, in detail, the scientific evidence underpinning FDA decision-making. This focus on data may inherently convey subject-matter expertise. High ratings on this axis of trust could also be due to demand bias, in which respondents know that the FDA is charged with scientific evaluation and may thus rate the agency well on scientific expertise.

By contrast, the FDA scored lower on trust categories that it has traditionally emphasized less in public messaging, such as to what extent the FDA was competent and effective (bureaucratic efficiency), looked out for the interests of the American people (political allegiance), and abided by the rules and regulations set forth by Congress (legal compliance). Topics in these areas include the agency's ability to quickly and efficiently review drugs, its attention to public perspectives—particularly those of patients—when making decisions and developing guidance, and the procedural safeguards in place to ensure that the agency plays by the rules.[18,19] Respondents had lower trust in pharmaceutical companies, and so perceived industry involvement in FDA decisions and the revolving door between the FDA and industry could further undermine public trust in the FDA.[20,21]

Despite substantial disparities in outcomes and access to care among groups of color during the COVID-19 pandemic,[22] we did not detect lower levels of trust in the FDA among Black or Hispanic respondents—a finding consistent with research completed earlier during the pandemic.[13] Black and Hispanic respondents, however, were underrepresented in the current study, and future work should seek to further probe shifting attitudes toward the FDA among these historically marginalized groups.

The low levels of trust observed among women, conservatives, those who live in rural communities, and those who report poor health or are dissatisfied with their health care suggests a need for targeted outreach. Effective messaging for these groups (the least trusting in our survey) may look very different from effective messaging for more trusting demographics. Future research, including focus groups with patients and community leaders, should analyze the types of messaging that may be most effective across different populations and the messengers and media most likely to instill trust. The FDA's ongoing efforts to combat misinformation and its "sticking with the facts" campaign to promote the use of reliable government and academic sources are valuable but, without proper political and sociodemographic targeting, may not address the concerns and fears of the least trusting groups.[23]

Of course, the ability for communication alone to shape trust is limited. Distrust of government officials, and by extension, the FDA, reflects beliefs by some groups in the US that elected and appointed officials are not adequately representing their interests, and changes to messaging may therefore be inadequate to improve trust without underlying substantive changes. In addition, many solutions aimed at combating mistrust lie outside of the FDA. For example, efforts to improve health, lower healthcare costs, and strengthen our healthcare system may go further in building trust in the agency than targeted messaging focused on convincing those in poor health and who are dissatisfied with their healthcare that the FDA should be trusted.

To promote public trust, the FDA must also continually strive to become a more trustworthy institution. Messaging intended to promote trust in an agency that does not deserve it could be counterproductive, with long-term negative consequences for both trust and public health. Scholars have raised concerns about the FDA's evolving standards for drug approvals,[24] increased reliance on surrogate measures,[25] failure to withdraw certain accelerated approval drugs from the market in timely fashion,[26] reduced role for outside expert advisory committees,[27] approval of low-value drugs,[28–30] and more generally, outsized role that pharmaceutical companies have played in certain controversial approval decisions.[31] Beyond perceived missteps by the FDA during the COVID-19 pandemic, other recent high-profile decisions have sparked criticism, including the approval of aducanumab for Alzheimer's disease after breaches of FDA protocol during the review process and limitations of data underpinning the approval.[32,33] Some of the mistrust expressed by survey respondents may be traced to these factors, the solution for which is not better communication but strengthening existing internal procedures and processes to ensure fairness and appropriate transparency.[34]

Our work has several limitations. First, this was a panel survey, and panel participants who chose to participate may differ in important ways from panel participants who chose not to participate. Second, given constraints on survey length, we did not include other respondent characteristics that may be associated with trust in the FDA, such as religiosity or experience with taking particular medications. Third, the survey asked about four axes of trust, but there may be specific FDA actions or decisions that contribute to mistrust and were beyond the scope of this study. In particular, we did not ask respondents to describe why they lacked trust in the FDA, which will be an important area for future investigation.

CONCLUSIONS

Trust in the FDA varied considerably based on the sociodemographic features, political views, and health status of survey respondents. The FDA should develop and deploy targeted outreach strategies to populations with lower levels of trust. Moreover, the FDA should strengthen internal processes that minimize biases and ensure sound decision-making on products to ensure that this critically important agency remains both trustworthy and widely trusted.

SUPPORTING INFORMATION

Supplementary information accompanies this paper on the *Clinical Pharmacology & Therapeutics* website (www.cpt-journal.com).

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CONFLICT OF INTEREST

Outside the scope of the work, Dr Feldman serves as a consultant for Alosa Health and has served a consultant to Aetion and an expert witness in litigation against inhaler manufacturers. Dr Feldman also reports serving as a co-investigator on grants from the FDA. Dr Kesselheim reports being a co-principal investigator on a grant from the FDA to study Risk Evaluation and Mitigation Strategies, and served as an expert witness in now-complete cases related to promotion of rosiglitazone (2022) and opioids (2021–2022). Most recently, Dr Campbell served as a paid expert witness in litigation against Insys Therapeutics related to Subsys. All other authors declared no competing interests for this work.

AUTHOR CONTRIBUTIONS

W.B.F. wrote the manuscript. W.B.F., L.Z.R., D.C., A.B., E.G.C., J.D., and A.S.K. designed the research. All authors performed the research. W.B.F., D.C., M.R., Z.L., and E.G.G. analyzed the data.

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