

# Gender, Race, and (Un)Ethical Behavior: Perceptions from Within the Federal Bureaucracy

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How do bureaucrats with doubly underrepresented identities—specifically, women of color—navigate ethics within their workplace? Leveraging an intersectionality framework, we expect that women of color bureaucrats will have lower perceptions of their ethical environment and be more likely to witness unethical behavior versus men of color, white men, and white women employees. Using the Merit Principles Survey, we model gender and race as an interaction finding women of color report higher rates of observing unethical behavior and are more personally affected by the unethical behaviors of their superiors and colleagues. Our findings indicate that recent methodological recommendations to advance our understanding of doubly underrepresented identities provide a more detailed understanding of the barriers women of color face. For practitioners, our findings suggest re-evaluating best practices to cultivate an ethical workplace.

Scholars studying ethical behavior in the bureaucratic workplace have found that gender and race can impact an individual's experience with unfair behavior at work (Barboza-Wilkes 2023; Caillier 2022; Combs and Milosevic 2016; Kim 2021; Marvel 2022; Nelson and Piatak 2021; Tinkler and Zhao 2020). Intersectionality, or how multiple underrepresented identities compound oppression, discrimination, and/or exploitation, was coined by Kimberlé Crenshaw in 1989. The concept of intersectionality, however, existed before its coinage in 1989 and has roots in scholars of “feminist, queer, and other communities of color,” such as Audre Lorde (Catalano, Blumenfeld, and Hackman 2018, 348). bell hooks (1984) states, “It is essential for the continued feminist struggle that Black women recognize the special vantage point our marginality gives us . . .” (15). The aim of this study is to question how women of color perceive ethical and unethical behavior in the federal bureaucracy. We investigate this topic because research in the field of public administration that uses an intersectional lens is still emerging (Barboza-Wilkes 2023; Lopez-Littleton, Blessett, and Burr 2018; Nelson and Piatak 2021). This research helps clarify the perceptions and

experiences of individuals with multiple underrepresented identities within the federal bureaucracy.

The study of ethics in the workplace has not been ignored. For example, multiple scholars shed light on the discrepancies between ethical experiences for employees through the lens of ethical leadership (Beeri, Dayan, Vigoda-Gadot, and Werner 2012; Demir, Reddick, and Perlman 2023; Hassan 2015; Hassan, Wright, and Yukl 2014; Lopez-Littleton, Blessett, and Burr 2018; Meng and Neill 2022; Raile 2013). Ethical leadership has been found to have a notable correlation with public employees' willingness to report ethical problems (Hassan, Wright, and Yukl 2014). Caillier (2022) uses a different approach to study ethical behavior in organizations by analyzing the complaint success of employees at federal agencies. His results show that racially underrepresented employees are 1.816 times more likely to be successful in reporting aggression compared to white employees. They also find men to be the more effective complainants, as women complainants were 72% less likely to get their agency to step in and stop the abuse (Caillier 2022). However, what remains unanswered from Caillier's (2022) study is the success of complaints from those with multiple underrepresented identities—that is, women of

color. As the number of racial minorities in the federal bureaucracy has increased (Lee 2019), this is a concern, as it leaves public administrators' understanding of ethics and underrepresented federal employees incomplete.

This scholarship helps to better understand how those with power in bureaucratic agencies are responsible for contributing to an ethical or unethical work environment. Many of the researchers who have inquired about ethical behavior in the public workforce find discrepancies in their results between women and people of color compared to the prototypical white man (Caillier 2022; Hassan 2015). As the public sector pushes for more representation, a gap remains in understanding the experiences and perceptions of a particularly vulnerable group: employees who are women of color. As part of this recent push, President Biden signed the Executive Order on Diversity, Equity, Inclusion, and Accessibility (DEIA) in the Federal Workforce in June 2021. Some of the directives for federal agencies shared in this executive order included evaluating workforce diversity and increasing access to DEIA training (Exec. Order No. 14035 2021). This proposal for expanded DEIA training serves as an addition to current ethics training for employees of the federal government, who complete initial ethics training within the first three months of their appointment. Employees who are confidential filers and other federal employees designated by their agency heads then complete ethics training annually. Ethics training for federal employees must cover topics of financial conflicts of interest, impartiality, misuse of position, and gifts (National Archives, § 2638.304 Initial ethics training).

Building from an understanding of current federal ethical training and procedures, prior research, and recent advances to promote equity in the government, our study aims to expand upon existing studies on the ethical climate of federal agencies, and more specifically investigate how women of color perceive these climates. We are guided by the following research questions:

- (1) Are women of color witnessing more unethical workplace practices than men of color or their white men and women counterparts?
- (2) Are women of color personally experiencing unethical workplace practices at different rates versus white men and women, and men of color?

These research questions are particularly illuminating as they broaden the previous research on ethical

behavior in the workplace from its focus on direct leadership to the workplace environment more generally. This study also attempts to identify the intersectional impact of being a woman of color in the federal workforce with direct comparison to other identity groups, particularly those that are overrepresented based on the composition of the U.S. population.

We apply a measurement strategy that addresses the compounding marginalization of women of color. Following the recommendation of Meier (2019), we model gender and race as a multiplicative effect. In the following sections, we first discuss previous research regarding ethical practices for women and people of underrepresented identities in the public sector. Next, we introduce our data, operationalization, and findings through the lens of intersectionality. Our results illustrate that women of color bureaucrats face greater ethical barriers compared to their white and men-of-color colleagues. We also illustrate that our results are robust when using a coarsened exact matching approach. Finally, we discuss what this may mean for the public workforce and where future efforts can be made in both practice and scholarship.

### **Applying an Intersectional Framework to Ethics in the Workplace**

We approach this research through the framework of intersectionality as defined by Kimberlé Crenshaw (1989). This posits that people with multiple underrepresented identities do not experience those identities (i.e., race, gender, class) singularly, but rather cumulatively. Race and gender have often served as control variables in research, but public administration scholarship has begun investigating each in terms of representative bureaucracy and other managerial theories. However, research on the cumulative effect of identity has been less common in studies. This gap is beginning to be addressed. A recent study by Nelson and Piatak (2021) found that women of color in the federal government are both less likely to be supervisors and more likely to feel excluded in the workplace. Our study builds upon this research by analyzing perceptions of women of color regarding the ethical climate of federal bureaucracies, which may help clarify why these individuals feel less included. We theorize that there are disproportionate penalties in the federal workplace for women of color, and this is evidenced through the study of perceptions of ethics.

The significance of emphasizing the experiences of women of color has been acknowledged by scholars such as Sanchez-Hucles and Davis (2010) and Smith (2013). Highlighting this, Gaëtane, Williams, and Sherman (2009) argue that women of color face “double jeopardy” due to their underrepresented status in terms of both race and gender. In support of this perspective, Sanchez-Hucles and Davis (2010) explicitly advocate for researchers to consider the multifaceted identities of their participants, emphasizing the need to avoid disaggregating race and gender without recognizing their interplay among underrepresented individuals. Several prominent scholars in the field of public administration who study social equity recently emphasized the role of research as a tool for assessing the realization of social equity goals (Blessett et al. 2019). They specifically advocate for the incorporation of intersectionality within equity frameworks to deepen the understanding of nuanced inequities and enhance the effectiveness of research in addressing diverse societal challenges. This research addresses that call to action.

In the work of other scholars who have accepted this call to action from Blessett et al. (2019), research on the perceptions and experiences of women of color aligns with recent scholarship that emphasizes the disproportionately burdensome work environments they encounter. Barboza-Wilkes (2023) discusses the particular vulnerability of women of color to burnout, while Humphrey (2022) explores the uneven distribution of emotional labor they bear. Furthermore, Marvel’s work (2022) underscores the persistent issue of women of color having their contributions at work overlooked and inadequately recognized by managers. Collectively, these insights highlight the complex challenges faced by women of color in the workplace. However, there have been some indications of positive advancements made in the public sector at the federal level. For example, Humphrey, Portillo, Bearfield, and Doan (2023) recently studied the racialized and gendered identity of organizations and the potential for policy changes to foster equity, as seen in recent changes to grooming regulations in the U.S. military to allow Black women to wear protective hairstyles. This article offers an opportunity for ethics training to be another vehicle for these positive changes that are possible with a top-down approach from the federal government.

### ***Ethical Leadership***

Leadership and identity play crucial roles in the examination of an ethical workplace. Raile (2013) investigates perceptions of the ethical climate in the federal workplace and identifies several factors influencing these perceptions, including an employee’s position within the organization, their history with it, knowledge about ethics, ethics training, and behavior related to seeking formal advice on ethical matters. Kim (2021) explores the impact of ethical leadership and programs such as ethical codes, ethics training, and accountability training on reducing unethical behavior in public agency employees. Their study reveals that women largely rated their leaders as less ethical than men. Additionally, racially underrepresented employees evaluated colleagues, leaders, and ethics programs as significantly less ethical compared to their white counterparts (Kim 2021). And Hassan (2015) demonstrates that having an ethical leader encourages employees to voice their concerns and ideas. Surprisingly, their findings indicate that women are more likely to use their “voice” at work compared to men. However, racially underrepresented employees used their voices less than white employees (Hassan 2015).

### ***Ethical Workplace Environments***

An ethical climate is characterized by an organizational atmosphere where ethical principles are reflected in organizational policies and regulations, as well as in the behaviors and perceptions of employees (Beeri, Dayan, Vigoda-Gadot, and Werner 2012). Demir, Reddick, and Perlman (2023) found that an ethical workplace culture improves the overall ethical performance of public organizations. An ethical culture may include fostering openness and welcoming dialogue about ethical considerations. Similarly, Lee, Kang, and Kim (2021) studied bureaucratic settings to determine if employees feel safe whistleblowing on ethical problems. They concluded that having more protections available for whistleblowers makes it safer for employees to share any wrongdoings they have witnessed. This is a useful finding for scholars working to increase ethical climates in public settings, but a variable examining the effect of gender was absent from their analyses. It remains unknown how women specifically approach whistleblowing in a bureaucratic setting. Furthermore, we certainly do not know how women of color engage in this important aspect of ethical work culture.

Our emphasis on analyzing the perceptions of ethical behavior for women of color versus other more represented groups is also essential for the broader field of equity in public sector institutions. Whiteness and masculinity have served as the standard identities associated with public servants, which forces women and people of color to prove their value (Hansen and Clark 2020; Portillo, Humphrey, and Bearfield 2022). This is a concern for the field of public administration because while women and people of color have been shown to improve outcomes for constituents who share their identity, they can also improve outcomes for individuals of any race and gender (Portillo, Humphrey, and Bearfield 2022). As society continues to become more diverse (Alkadry, Blessett, and Patterson 2017), public administration needs to allow for a greater representation of women of color who are equipped to serve all constituents.

Research has identified that diversity is valued regarding meeting ethical obligations (Clark, Ochs, and Frazier 2013). Additionally, the value of promoting social equity in federal workplaces extends to benefits in service delivery. If public sector employees feel empowered to voice ethical concerns and dilemmas without fear of alienation from their leadership, these employees remain in a position to enhance the delivery of services to a variety of diverse constituents (Lopez-Littleton, Blessett, and Burr 2018). However, ethical concerns at the agency level must be addressed for women and people of color to be effectively represented.

The existing literature illustrates the value of promoting an ethical workplace in the public sector. It also highlights discrepancies between how men and women experience unethical behavior and how racially underrepresented groups fare in terms of ethical concerns. However, what remains missing is an understanding of how individuals with multiple underrepresented identities experience and perceive ethical or unethical work behavior in the federal bureaucracy. Studying the experiences and perceptions of women of color in this setting is important because this group may be more vulnerable to an uneven or unfair distribution of power. In their analysis of how women from racially underrepresented groups experience working in the federal government, Nelson and Piatak (2021) found that women of color perceive lower levels of fairness, openness, and support. As women of color are required to navigate both gender bias and racial discrimination in the federal bureaucracy while receiving less fairness and support, we hypothesize that:

H1: Women of color in the federal bureaucracy will perceive disproportionate levels of unethical behavior compared to their white or male colleagues.

H2: Women of color in the federal bureaucracy will experience more unethical conduct than their white or male colleagues.

It is vital that we develop the existing scholarship to account for the experiences of women of color in the federal bureaucracy and examine how they perceive the ethical climate at their workplace. Scholars have linked ethical workplace climates to quality of work life, or the overall well-being and satisfaction of employees in their work environment, encompassing factors such as social integration, isolation, and self-appreciation (Beeri, Dayan, Vigoda-Gadot, and Werner 2012). Quality of work life has important implications for employees, including their feelings of alienation at work and their intentions to leave their jobs. With the ethical environment of a workplace carrying so much weight on the experiences of employees, this research helps to clarify the inequities faced specifically by women of color who represent and work for public agencies.

### Data and Methods

Data were collected from the 2021 Merit Principles Survey (MPS), which is administered by the U.S. Merit Systems Protection Board (MSPB). The MPS seeks responses from federal civilian employees through stratified random sampling. While agency participation in the MPS is mandatory, individuals working in these agencies participate voluntarily. Data was collected between January and March 2021 (U.S. Merit Systems Protection Board 2021a, 2021b).

The 2021 MPS survey collected full or partial responses from 33,139 federal workers across 25 agencies. There were 27,250 respondents who provided information on their gender and racial-ethnic background. A total of 25,220 respondents completed the question battery necessary to evaluate hypothesis 1, and 23,145 respondents responded to the responses needed to evaluate hypothesis 2. Scholars have previously employed the MPS for research on inappropriate behavior in the federal workplace (Caillier 2022; Lee, Kang, and Kim 2021; Jackson and Newman 2004; Newman, Jackson,

and Baker 2003; Tinkler and Zhao 2020), and we extended this long-running survey to evaluate the perceptions of ethics by women of color. Existing literature widely neglects to highlight this important focus on employees who may face prejudice based on both their race and gender. Meier (2019) contends that it is necessary to study intersectionality in quantitative research to understand who and what gets represented in bureaucracies. For this reason, we do not include gender and race as exclusively independent demographic variables, but we consider the intersection of identities for those who describe themselves both as women and people of color by employing interaction terms in our model.

The data from the MPS allows us to compare the perceptions of women of color, white women, men of color, and white men to determine if there are significant inequities in their responses. It is important to note that this data does not allow for the disaggregation of racial identities beyond what is included to protect the anonymity of respondents.

### *Dependent Variables*

We leveraged several questions in the MPS survey to construct the two dependent variables used in this article. A copy of the survey questions used in this analysis is shown in Appendix A. To test hypothesis 1, we construct an index using five survey questions that measure the ethical health of the workplace of the respondent. The questions ask respondents to indicate their level of agreement or disagreement with each of the following statements:

1. Supervisors and managers at my agency demonstrate ethical behavior.
2. In my job, I am sometimes put under pressure to break the rules.
3. In my organization, ethical conduct is valued highly.
4. My senior leaders tolerate unethical supervisors.
5. In the past four months, a supervisor or manager discussed organizational ethics or values with employees.

Respondents could select a response along a five-point Likert scale ranging from strongly disagree to strongly

agree. Among respondents who provided answers to all questions, we added across the five-point scale for questions. We reverse coded questions 2 and 4. This provided us with a 20-point Ethics Index ranging from 0—a respondent who feels there is little ethical behavior within their workplace—to 20—a respondent who feels there are high ethical standards within their workplace.<sup>1</sup>

To evaluate hypothesis 2, we constructed a variable that measures whether federal employees have been exposed to any form of unethical behavior within the workplace. Survey items utilized to measure this dependent variable included retaliation for whistleblowing, retaliation for filing an appeal or grievance, and retaliation for refusal to violate a law, rule, or regulation. Additionally, respondents were asked: “In the past two years, an agency official (e.g., supervisor, manager, senior leader, etc.) in my work unit” has engaged in one of 12 unethical practices. These actions include:

1. Solicited or considered improper employment recommendations.
2. Tried to pressure someone to support or oppose a particular candidate or party for elected office.
3. Obstructed someone’s right to compete for employment.
4. Tried to influence someone to withdraw from competition for a position for the purpose of helping or injuring someone else’s chances.
5. Tried to define the scope or manner of a recruitment action, or the qualifications required, for the purpose of improving the chances of a particular person.
6. Advocated for the appointment, employment, promotion, or advancement of a personal friend of the agency official.
7. Advocated for the appointment, employment, promotion, or advancement of a relative.
8. Discriminated in favor or against someone in a personnel action based on off-duty conduct that was entirely unrelated to the job.
9. Knowingly violated a lawful form of veteran’s preference or veteran’s protection laws.
10. Inappropriately favored a veteran.
11. Asked an employee to sign a nondisclosure agreement limiting the individual’s ability to blow the whistle on wrongdoing.

1. We also estimated our results using principal component factor analysis to construct our ethics index. The correlation coefficient between the index used in our article and the factor analysis approach is 0.99. Additionally, our statistical and substantive findings presented in this article did not change regardless of how the measure is constructed—we feel that the index measure is more directly interpretable and thus used this version of the dependent variable when reporting results. We present the results of this alternative estimation strategy in Appendix B.

12. Accessed the medical record of an employee or applicant in an attempt to commit a prohibited personnel practice.

Participants could select one of three options for each behavior indicating that the employee: 1) had not observed the action, 2) had observed the action but was not personally affected, or 3) had observed the action and was personally affected. We constructed a trichotomous measure with this information. If a respondent observed no unethical behavior across all actions listed, we scored them as a 1. If the respondent observed at least one unethical action but was not personally affected, we scored them as a 2. If the respondent observed and was personally affected by at least one unethical action, we scored them as a 3.

### ***Independent Variables***

Our main independent variables are two binary measures of gender and race-ethnicity. We include a measure of gender, coded 1 if a respondent identifies as a woman and 0 if the respondent identifies as a man. Respondents who did not identify as either a woman or a man were blinded in the survey. Our second variable identifies race-ethnicity and was coded 1 if the respondent identifies as a person of color and 0 if the respondent identifies as white. MSP does not further disaggregate across racially underrepresented groups to protect the identity of respondents. We then interacted these two variables to evaluate the hypotheses discussed in the article.

### ***Control Variables***

We include several control variables in models to help account for potential spuriousness. These variables account for a respondent's career, demographic, and workplace characteristics, and federal agency. In Table 1, we report summary statistics for all variables used in models.

We account for a respondent's career characteristics by including a five-point scale of their length of service in federal agencies (ranging from less than four years of service to more than 28 years of service). We also include a four-point measure of respondent salary (ranging from less than \$75,000 annually to more than \$150,000 annually). Additionally, we include a five-point ordinal measure of a respondent's supervisory status (ranging from no supervisory role to executive).

Finally, we include a binary measure coded one if a respondent is eligible to retire.

Beyond a respondent's gender and race, we also include a binary variable coded 1 if a respondent is 40 years of age or older. We include a measure of educational attainment. The variable is trichotomous representing if a respondent holds a high school diploma or less, an associate's or bachelor's degree, or has some level of post-graduate education. These codes are restricted to these levels by the MPS survey.

We account for the gendered composition of work groups using a five-point ordinal variable. The variable ranges from substantially more men in the work group than women to substantially more women in the work group than men. Additionally, we include a series of dummy variables accounting for the teleworking behavior of the respondent. These variables identify if a respondent is eligible for telework and if so, how frequently they telework during a typical week. We account for the perceived ideology of federal agencies by leveraging the scores developed by Richardson, Clinton, and Lewis (2018). We include a trichotomous measure of whether an agency is perceived as conservative, moderate, or liberal.

We estimate multivariate models to understand how administrators' gender-racial background inform their perceptions and experiences with ethical behavior.<sup>1</sup> In these models, the administrator is the unit of analysis. Our models use random effects at the agency level to hold constant any systematic or idiosyncratic factors that influence the rate of ethical practices. Functionally, this empirical strategy allows each federal agency to draw from a distribution of intercepts and estimate its own baseline level of ethical behavior. Variations in our models thus come from the differences across administrators within a singular agency. All models are estimated with robust standard errors.

### ***Findings***

#### ***Hypothesis 1***

In Table 2, we estimate a random effects regression model and find support for hypothesis 1. Administrators who are women of color report significantly lower perceptions of ethics within their agency. On average, a woman of color administrator is expected to score -0.57 points lower on the ethics index compared to a white male administrator ( $p < 0.000$ ). This is a substan-

2. The correlation between outcomes 1 and 2 is -0.67, between 1 and 3 is -0.62, and between 2 and 3 is -0.17.

**Table 1. Summary Statistics**

Variable	N	Mean	S.D.	Median	Min	Max
<i>Dependent Variables</i>						
Ethics Index	25,220	14.39	4.23	15	0	20
Discrimination	23,145	0.38	0.71	0	0	2
Has not occurred (%) – <i>Reference Category</i>	17,433	75.32				
Occurred, not personally affected (%)	2,553	11.03				
Occurred, personally affected (%)	3,159	13.65				
<i>Independent Variables of Interest</i>						
Woman	27,284	0.46	0.50	0	0	1
Person of Color	27,257	0.35	0.48	0	0	1
<i>Control Variables</i>						
Length of Service	29,454	3.03	1.33	3	1	5
Less than 4 years (%) – <i>Reference Category</i>	3,972	13.49				
4 to 11 years (%)	7,543	25.61				
12 to 19 years (%)	7,548	25.63				
20 to 27 years (%)	4,317	14.66				
More than 28 years (%)	6,074	20.62				
Salary	29,256	3.38	1.42	4	1	5
Less than \$74,999 (%)	6,398	21.87				
\$75,000 - \$99,999 (%)	5,806	19.85				
\$100,000 - \$149,999 (%)	10,144	34.67				
\$150,000 or more (%)	6,908	23.61				
Supervisory Status	29,535	1.95	1.35	1	1	5
No supervisory role (%) – <i>Reference Category</i>	17,350	58.74				
Team leader (%)	3,767	12.75				
Supervisor (%)	3,784	12.81				
Manager (%)	1,837	6.22				
Executive (%)	2,797	9.47				
Eligible to Retire	28,860	0.21	0.40	0	0	1
Age: 40 or Older	28,860	0.82	0.38	1	0	1
Work Group Gender Composition	29,101	2.77	1.39	3	1	5
Substantially more men than women (%)	7,662	26.33				
Slightly more men than women (%)	4,525	15.55				
About the same number of men and women (%) – <i>Reference Category</i>	8,198	28.17				
Slightly more women than men (%)	4,158	14.29				
Substantially more women than men (%)	4,558	15.66				
Educational Attainment	29,054	3.66	1.35	1	3	5
High school or less (%) – <i>Reference Category</i>	3,360	11.56				
Associates or Bachelor's degree (%)	12,696	43.70				
Graduate degree (%)	12,998	44.74				
Telework	29,239	5.09	2.20	6	1	8
0 day/week (%) – <i>Reference Category</i>	8,890	30.40				
1 day/week (%)	3,779	12.92				
2 days/week (%)	1,355	4.63				
3 days/week (%)	2,999	10.26				
4 days/week (%)	922	3.15				
5 days/week (%)	2,599	8.89				
Ineligible for telework (%)	6,321	21.62				
No telework by choice (%)	2,374	8.12				
Agency Ideology	33,139	2.07	0.87	2	1	3
Liberal Agency (%)	11,444	34.54				
Moderate Agency (%) – <i>Reference Category</i>	7,866	23.74				
Conservative Agency (%)	13,829	41.73				

**Table 2. The Determinants of Ethical Perceptions**

	(Model 1) Ethics Index b/se
Woman	-0.046 (0.074)
Person of Color	-0.415** (0.086)
Woman x Person of Color	-0.573** (0.126)
Controls	✓
Constant	16.946** (0.260)
N. of observations	20,271
N. of Groups (Agencies)	25
R-squared within	0.09
R-squared between	0.42
R-squared overall	0.10

Notes: \*  $p < 0.05$ , \*\*  $p < 0.01$ , two-tailed tests. Random effects at agency level. Robust standard errors in parentheses.

tively significant finding as well, corresponding with a 2.87% decrease in the ethics index scale ( $0.573/20 \times 100$ ). Men of color administrators also report lower perceptions of ethics in their agency. On average, a man of color scores  $-0.42$  points lower on the ethics index compared to a white male administrator ( $p < 0.000$ ). White women administrators do not demonstrate significantly different perceptions of ethics compared to white men ( $p < 0.535$ ).

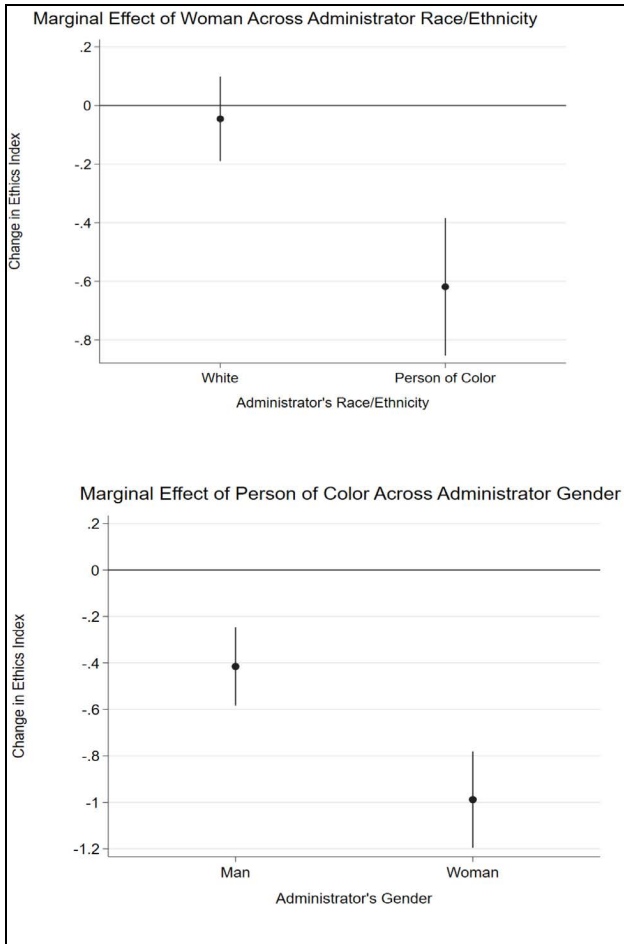
Additionally, several control variables in the model significantly correlate with the perception of ethics in the workplace. Length of service, workgroup gender imbalance, increased teleworking, and ideological agencies all correlate with significantly lower ethics index scores. Conversely, increased pay, supervisory status, and eligibility to retire all correlate with significantly higher perceptions of workplace ethics. To view the full model of determinants of ethical perceptions, see Appendix C.

We follow the recommendations in Brambor, Clark, and Golder (2006) to fully investigate conditional effects. In Figure 1, we report marginal effects. The top panel illustrates the marginal effect of moving from a man to a woman across race-ethnicity (i.e., white man to white woman, vs. man of color to woman of color). The bottom panel illustrates the marginal effect of moving from

a white administrator to an administrator of color across genders. Across both panels the y-axis can be interpreted as the changes in the ethics index score for an administrator—higher values indicate a perception of higher ethics in the workplace while negative values represent a perception of less ethical behavior in the workplace.

We find that the marginal effect of moving from a white man to a white woman is not statistically significant ( $p < 0.535$ ). Conversely, the marginal effect of gender on a woman of color is negative and statistically significant. Moving from an administrator who is a man of color to a woman of color is associated with an ethics index decrease of  $-0.62$  points ( $p < 0.000$ ). Turning to the bottom panel, we find that the marginal effect of moving from a white administrator to an administrator of color has a negative impact on perceptions of ethics across genders. When an administrator is a man, an administrator of color is predicted to have an ethics index score that is  $-0.42$  points lower compared to their white colleagues on average ( $p < 0.000$ ). This difference in ethics perceptions becomes significantly larger when compared across women administrators. On average, an administrator who is a woman of color will score  $-0.99$  points lower on the perceptions of ethics index compared to her white woman colleague ( $p < 0.000$ ).

**Figure 1. Marginal Effects of Gender and Race–Ethnicity on Ethics Index**



Note: 95% Two-tailed confidence intervals.

In sum, the marginal effect of gender is negative only for administrators who are women of color. These findings suggest that the intersectional effect of gender and race is strongly associated with federal administrators’ ethical experiences within agencies.

**Hypothesis 2**

We now turn to evaluate H2—that women of color are on average more likely to witness unethical behavior in the workplace. In Table 3, we report a multinomial logistic regression with agency-level random effects. Our baseline outcome is administrators who did not witness any unethical behavior within their agency. Column 1 represents the probability that a respondent witnessed unethical behavior but was not personally affected. Column 2 represents the probability that a respondent witnessed unethical behavior and was personally affected by the action. As multinomial logistic regressions are not directly interpretable, predicted probabilities are

**Table 3. The Determinants of Ethical Experiences**

	(Model 2)			
	Outcome Someone else affected b/se	Pred. Prob.	Outcome Personally Affected b/se	Pred. Prob.
Woman	0.149** (0.044)	0.018	0.020 (0.072)	
Person of Color	0.110 (0.084)		0.350** (0.074)	0.035
Woman x Person of Color	0.312** (0.101)	0.065	0.253* (0.108)	0.057
Controls	✓		✓	
Constant	-2.591** (0.131)		-3.745** (0.221)	
N. of observations	15,522			
N. of Groups (Agencies)	25			
AIC	23100.111			
BIC	23283.711			

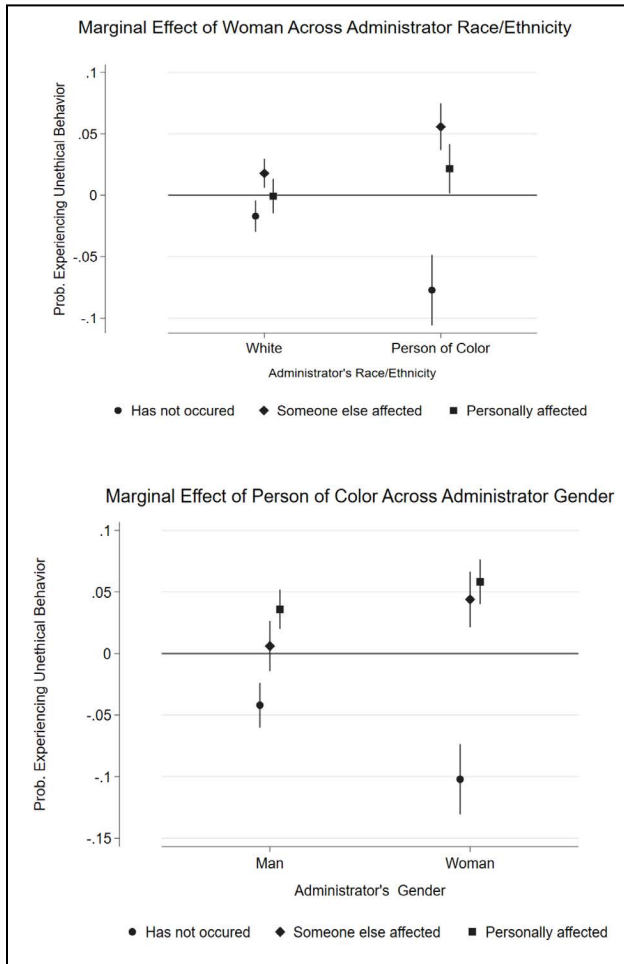
Notes: \* p < 0.05. \*\* p < 0.01, two-tailed tests. Random effects at agency level. Robust standard errors in parentheses. Base outcome of unethical behavior has not occurred. Predicted probabilities represent the change in the outcome from the baseline “Did not observe” with all other variables held at their mean value.

reported to the right of statistically significant coefficients. The predicted probability can be interpreted as the percentage change in the likelihood that a respondent would select the respective outcome given a one-unit increase in the independent variable—holding all other independent variables at their mean values.

We find that women of color are significantly more likely to indicate that they have witnessed unethical behavior in the workplace that did not personally affect them relative to white male administrators. On average, a woman of color is 6.5% more likely to indicate that they observed unethical behavior in the agency that did not personally affect them compared to a white male administrator (p < 0.002). Likewise, white women administrators are also significantly more likely to have observed unethical behavior that did not personally affect them (1.8% more likely to observe unethical behavior, p < 0.001). Male administrators of color do not report significantly different ethical violation observation rates relative to white male administrators (p < 0.191).

Similarly, we find that women of color administra-

**Figure 2. Marginal Effects of Gender and Race-Ethnicity on Ethical Experiences**



Note: 95% Two-tailed confidence intervals.

tors are also significantly more likely to have been personally affected by unethical behavior in the workplace relative to other administrators. On average, a woman of color is 5.7% more likely to indicate that she was affected by unethical behavior relative to a white man ( $p < 0.020$ ). A man of color is 3.5% more likely to have personally been affected by unethical behavior relative to a white male administrator ( $p < 0.000$ ). White women administrators are not affected by unethical behavior at significantly different rates than white male administrators ( $p < 0.782$ ). See Appendix D for the full model of the determinants of ethical experiences.

In Figure 2, we report marginal effects for gender and race-ethnicity across experiences with unethical workplace actions. The y-axis is the change in the probability that the administrator experienced various unethical outcomes. All other elements can be interpreted similarly to Figure 1.

Evaluating the top panel, we observe the marginal ef-

fect of gender across race-ethnicity. We find that white female administrators are 1.7% less likely to indicate that unethical behavior has not occurred in the workplace compared to a white male administrator ( $p < 0.009$ ). They are also 1.8% more likely to state that she has observed, but not been affected by unethical behavior, compared to a white male administrator ( $p < 0.003$ ).

The marginal effect of gender is more dramatic when observing unethical practices for women of color administrators. Compared to a man of color, the average woman of color administrator is 7.8% less likely to state that she has never observed unethical behavior in the workplace ( $p < 0.000$ ). The marginal effect is significantly lower when compared to white women administrators as well. Additionally, women of color administrators are more likely to state that they have both witnessed and been personally affected by unethical behavior in the workplace compared to men of color. On average, a woman of color administrator is 5.6% more likely to have observed unethical behavior ( $p < 0.000$ ) and is 2.2% more likely to have been affected by unethical behavior in the workplace compared to a man of color administrator ( $p < 0.035$ ). The marginal effect of witnessing unethical behavior for women of color is also significantly higher when compared to white women administrators.

The bottom panel illustrates the marginal effect of race-ethnicity across administrator gender. We observe analogous patterns when examining the marginal effect of moving from a white administrator to an administrator of color. Moving on to examine the marginal effect of race-ethnicity across genders, we find that women of color are more likely to experience unethical behavior relative to white women administrators. On average, a woman of color administrator is 10.2% less likely to state that she has never observed unethical behavior compared to a white woman administrator ( $p < 0.000$ ). This marginal effect is also significantly lower when compared to white male administrators and men of color administrators. Similarly, women of color administrators are both more likely to observe and personally experience unethical workplace behavior compared to white women administrators. A woman of color administrator is 4.4% more likely to witness unethical behavior ( $p < 0.000$ ) and is 5.8% more likely to have been personally affected by unethical behavior ( $p < 0.000$ ) compared to a white woman administrator.

Overall, the marginal effects support our hypo-

esis. White women administrators are more likely to witness unethical workplace behavior and male administrators of color are more likely to experience unethical workplace behavior relative to white male administrators. Conversely, women of color administrators are more likely to both witness and experience unethical behavior relative to white male administrators. Furthermore, the probability that a woman of color will have these unethical experiences is significantly higher than administrators of other gender-race pairings.

In addition to the findings reported earlier, we also include a series of robustness checks to validate the quality of our findings. In Appendix E, we re-estimate findings using coarsened exact matching. In Appendix F, we estimate models leveraging agency fixed effects. All alternative estimation strategies mirror the results reported in the results section.

### Discussion and Conclusion

Taken together, these findings indicate strong support for our hypotheses. Women administrators of color are the only gender-race group to have a higher likelihood of witnessing and experiencing unethical actions in the workplace. Additionally, their chances of personally experiencing these outcomes are greater than either a white woman or man of color administrator. These findings amplify other recent scholarship about how whiteness and masculinity define the working environment in public agencies (Humphrey 2022; Portillo, Humphrey, and Bearfield 2022). The findings of this research align with Crenshaw's (1989) discussion of intersectionality. The intersectionality framework contends that people of underrepresented and marginalized constituencies face compounded difficulties and barriers in society. Considering that women of color are already underrepresented in public institutions (Alkadry, Blessett, and Patterson 2017) and feel less supported (Nelson and Piatak 2021; Uttermark, Dula, Bové, and Scott 2023), these findings reveal another level of difficulty for administrators who must contend with the racialized and gendered nature of the federal bureaucracy. Our findings also indicate that these experiences extend to women of color at all levels of federal administration—not only street-level administrators.

For scholars of public administration, our results support the recommendations established by Meier (2019). Operationalizing gender and race through an intersectional framework as an interaction term allows researchers

to uncover a more nuanced understanding of the effects of doubly underrepresented populations within public affairs. Future empirical evaluations of these identities should continue to follow both the operationalization suggestions of Meier (2019) as well as the technical recommendations of Brambor, Clark, and Golder (2006) to fully evaluate the conditional impact of both gender and race-ethnicity within agencies. Further research should also seek to identify other barriers for people of doubly underrepresented identities in joining, remaining, and advancing in leadership roles in public service. For example, we find that ethical behavior in the workplace impacts women of color, but other behaviors like sexual harassment may also impact the pipeline of women of color's advancement in the federal bureaucracy.

Although social equity is a fundamental goal of public servants (Lopez-Littleton, Blessett, and Burr 2018), this research exposes that ethical perceptions and experiences are multiplied and increasingly negative for women of color. Specifically, we determined that the effect of being a woman on the ethics index score is only significant for administrators of color, but the effect of being an administrator of color is always negative. Therefore, the most impactful negative ethical perceptions are for those who are underrepresented both by race and gender. This means that women of color consistently report perceiving higher levels of unethical behavior. Our results extend the generalizability of applying a gender-race intersectional framework, as well as highlight the persistent headwinds that women of color face within their workplace.

Based on these findings, we recommend that the federal government invest in updating its current ethics programming to address power imbalances and other unethical behaviors that more critically affect women of color. Combs and Milosevic (2016) note that organizations need to be proactive in preventing hostile or stressful work environments for women and people of color rather than waiting for reports of misbehavior. Being proactive can potentially lead to better retention of underrepresented employees, particularly women of color who are lacking from the Federal bureaucracy, especially in leadership positions (Clark Jr., Ochs, and Frazier 2013). This is also significant because discrimination leads women of color to contemplate leaving their jobs (Combs and Milosevic 2016). As such, we propose that the initiatives from the Executive Order on DEIA in the Federal Workforce that aims to expand

DEIA training should be done in conjunction with current ethics training practices. While current ethics training for federal employees covers topics of financial conflicts of interest, impartiality, misuse of position, and gifts, this training lacks content on issues of DEIA. Based on our findings, we suggest that federal ethics training occurs on a consistent basis for *all* federal employees and includes information about power dynamics and increased barriers to equitable treatment in the workplace for women of color and other underrepresented employees. This recommendation is supported by findings from Kim (2021), who suggests that ethics programs can make a positive impact on the ethical behavior of public employees. If federal ethics training contained comprehensive information about the ethical challenges faced by employees with marginalized identities, women of color may experience fewer inequities.

Recruitment and retention of underrepresented individuals is key for a representative bureaucracy and its ideal of being able to better serve underrepresented populations (Keiser, Wilkins, Meier, and Holland 2002; Meier 2019). An actively representative bureaucracy can “produce policy outputs that benefit the individuals who are passively represented” (Meier 1993, 393). Proactively creating ethical workplace environments within the federal bureaucracy will hopefully help recruit and retain a more diverse workforce. More research is needed to directly identify the potential negative effects on the mental and physical well-being of women of color who we find are observing and experiencing unethical behavior in the workplace. We also recommend identifying the impact of such experiences and the likelihood of losing women of color from the “leadership pipeline,” as they may leave their positions due to the unethical environment. This may help explain why women of color are so woefully underrepresented in top-level leadership positions.

In addition, we advise supervisors and leaders in public agencies to demonstrate ethical behavior themselves to counter this disproportionate perception of ethics by women of color that we uncovered. Scholarship regarding ethical leadership finds that public employees tend to mirror the ethical behavior of their leaders (Demir, Reddick, and Perlman 2023; Hassan 2015; Hassan, Wright, and Yukl 2014; Meng and Neill 2022; Raile 2013). According to Lopez-Littleton, Blessett, and Burr (2018), “an organizational culture that embodies ethical practices and values equitable

outcomes typically has leadership that prioritizes and models said behavior,” (460). This previous scholarship coupled with our findings allow us to reasonably suggest a top-down approach to promoting a more ethical work environment in bureaucratic settings. Having ethical leaders may increase the retention of women of color in government and provide more opportunities for them to advance to such positions of authority themselves. Future research should investigate if reports of unethical behavior decrease when women of color serve in leadership positions in the federal government. It should also be explored if having women of color in these positions increases the recruitment and retention of underrepresented employees.

One limitation of this study was the lack of detail available with the demographic data. Notably, the race of respondents was categorized as either “minority” or “not minority” rather than with the multiple racial and ethnic categories included in the survey. This decision protects the identity of the participants but resulted in a less detailed analysis of the experiences of individuals of different races. We were also unable to identify individuals with gender identities outside of the binary. This information was blinded, but research on transgender and non-binary individuals would be an excellent avenue for further study. This research also only addressed the questions on the MPS that asked respondents for their perceptions of their workplace, rather than for direct observations. We also recognize that we use cross-sectional data from the 2021 wave of the MPS. This does not allow us to identify changing impressions of ethical behavior by women of color that may have been heightened over the last decade about racial and gender disparities in the form of the #MeToo and the Black Lives Matter movements.

This research is a vital addition to the existing literature because estimating racial-gender intersectionality as an interaction uncovers important nuances in how women of color approach ethics within the public bureaucracy. However, we are left with additional questions. Are women of color more perceptive of unethical behavior? Do women of color have a different understanding of ethical behavior? Future research should use a qualitative approach to investigate these unanswered questions. To conclude, public agencies must recognize these discrepancies between how federal employees with multiple underrepresented identities experience the ethical climate of their workplace.

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## Appendix A. Survey Instrument

*Indicate your level of agreement or disagreement with each of the following statements.*

- Supervisors and managers at my agency demonstrate ethical behavior.
- In my job, I am sometimes put under pressure to break the rules.
- In my organization, ethical conduct is valued highly.
- My senior leaders tolerate unethical supervisors.
- In the past four months, a supervisor or manager discussed organizational ethics or values with employees.

*In the past two years, an agency official (e.g., supervisor, manager, senior leader, etc.) in my work unit has . . .*

- solicited or considered improper employment recommendations.
- tried to pressure someone to support or oppose a particular candidate or party for elected office.
- obstructed someone's right to compete for employment.
- tried to influence someone to withdraw from competition for a position for the purpose of helping or injuring someone else's chances.
- tried to define the scope of manner of a recruitment action, or the qualifications required, for the purpose of improving the chances of a particular person.
- advocated for the appointment, employment, promotion, or advancement of a personal friend of the agency official.
- advocated for the appointment, employment, promotion, or advancement of a relative.
- discriminated in favor or against someone in a personnel action on the basis of off-duty conduct that was entirely unrelated to the job.
- knowingly violated a lawful form of veteran's preference or veteran's protection laws.
- inappropriately favored a veteran.
- asked an employee to sign a non-disclosure agreement limiting the individual's ability to blow the whistle on wrongdoing.
- accessed the medical record of an employee or applicant in an attempt to commit a prohibited personnel practice.

*How many years have you been a Federal civil service employee?*

*What is your annual salary, including locality pay but excluding any awards or bonuses?*

*What is your supervisory status?*

*When will you be eligible to retire from Federal service?*

*Are you . . . ? (Please mark all that apply)*

- Hispanic or Latino?
- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or other Pacific Islander
- White

*Are you . . . ?*

- Female
- Male
- I prefer to self-identify:
- I prefer not to say.

*Do you consider yourself to be transgender?*

- Yes
- No
- Other:
- I prefer not to say.

*Is your immediate supervisor . . . ?*

- Male
- Female
- I prefer not to say.

*Is your immediate work group (you and other employees who also report to your supervisor) composed of:*

- Substantially more males than females.
- Slightly more males than females.
- About the same number of males and females.
- Slightly more females than males.
- Substantially more females than males.

*What is your age?*

- 25 years or less.
- 26 to 29 years.
- 30 to 39 years.
- 40 to 49 years.
- 50 to 59 years.
- 60 to 64 years.
- 65 or older.

*What is the highest level of education you have completed?*

- Less than a high school diploma.
- High school, equivalent diploma, or GED.
- Associate's college degree.
- Bachelor's college degree.
- Master's degree.
- Professional or academic doctorate degree (e.g., JD, MD, DDS, PhD, EdD).

*Telework includes working from home or at a location such as a telework center. It does not include fieldwork. How many days per week did you typically telework before the COVID-19 pandemic?*

- 1 day per week.
- 2 days per week.
- 3 days per week.
- 4 days per week.
- 5 days per week.
- I did not telework regularly.
- I was not eligible to telework.
- I chose not to telework.

### Appendix B. Re-estimation Using Factor Analysis

In this section, we re-estimate the models reported in Table 1 of the main body of the article to test if our results are sensitive to calculating our measure of administrator ethical preferences using principal component factor analysis. A Bartlett's test of sphericity ( $p$ -value = 0.000) indicated no problem of intercorrelation between our five survey items. A Kaiser-Myer-Olkin measure of sampling adequacy test was conducted ( $KMO = 0.782$ ), which was above the critical threshold of 0.5 needed to proceed with an analysis. After estimating the Pearson's correlation matrix, a principal factors analysis was applied to ascertain factors. Although these questions ask about a variety of different ethical actions each question loads onto a single factor (eigenvalue = 3.05, variance explained 61.01%). This suggests that these questions all tap into the same underlying latent concept of ethical preferences. We normalize the ethical scale between 0 and 1—where 0 represents the agency with the administrator with the lowest observed ethics score and 1 represents the administrator with the highest ethics score. We then re-estimate the results, and marginal effects, used to evaluate hypothesis 1 and find results consistent with the findings reported in the main body of the article.

**Table B.1. Principal Components Factor Analysis Ethics**

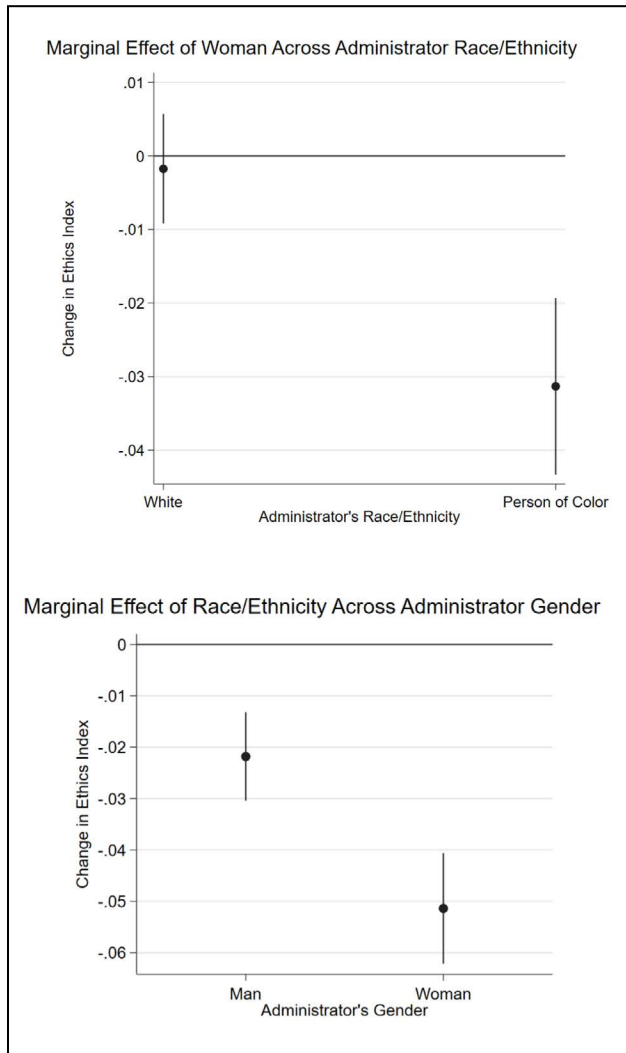
Variable	Factor Loading
ETH_01	0.868
ETH_02 (reverse coded)	0.700
ETH_03	0.873
ETH_04 (reverse coded)	0.787
ETH_05	0.652
Eigenvalue	3.051
Variance Explained	61.0%

Table B.2. Factor Ethics Score

	(1) Ethics Score b/se		
Woman	-0.002 (0.004)	Slightly more men than women	-0.004 (0.004)
Person of Color	-0.022** (0.004)	Slightly more women than men	-0.012** (0.004)
Woman x Person of Color	-0.030** (0.006)	Substantially more women than men	-0.026** (0.006)
Length of Service (reference, less than 4 years)		Educational Attainment (reference, high school or less)	
4 to 11 years	-0.087** (0.008)	AA or BA/BS degree	-0.000 (0.006)
12 to 19 years	-0.117** (0.008)	Master's, professional, or doctoral degree	-0.003 (0.007)
20 to 27 years	-0.126** (0.006)	Telework (reference, 0 day/week)	
More than 28 years	-0.122** (0.007)	1 day/week	-0.007 (0.007)
Salary (reference, less than \$75,000)		2 days/week	-0.018 (0.009)
\$75,000-\$99,999	0.012* (0.005)	3 days/week	-0.007 (0.008)
\$100,000-\$149,999	0.024** (0.006)	4 days/week	0.000 (0.013)
\$150,000 or more	0.040** (0.011)	5 days/week	-0.024** (0.007)
Supervisor Status (reference, no supervisory role)		No telework (ineligible)	-0.047** (0.006)
Team leader	0.013** (0.005)	No telework (choice)	-0.009 (0.007)
Supervisor	0.038** (0.006)	Agency Ideology (reference, moderate agency)	
Manager	0.058** (0.011)	Liberal Agency	-0.037** (0.012)
Executive	0.100** (0.012)	Conservative Agency	-0.024* (0.011)
Eligible to retire	0.014* (0.006)	Constant	0.857** (0.013)
Age: 40 or older	0.003 (0.006)	N. of observations	20,271
Work Group Gender Composition (reference, about the same number of men and women)		N. of groups (agencies)	25
Substantially more men than women	-0.044** (0.004)	R-squared within	0.09
		R-squared between	0.43
		R-squared overall	0.10

Notes: \* p < 0.05, \*\* p < 0.01, two-tailed tests. Random effects at agency level. Robust standard errors in parentheses.

**Figure B.1. Marginal Effects of Gender and Race–Ethnicity on Ethics Factor Score**



**Appendix C. Full Model of the Determinants of Ethical Perceptions**

	(Model 1) Ethics Index b/se
Woman	-0.046 (0.074)
Person of Color	-0.415** (0.086)
Woman x Person of Color	-0.573** (0.126)
Length of Service (reference, less than 4 years)	
4 to 11 years	-1.729** (0.154)
12 to 19 years	-2.315** (0.159)
20 to 27 years	-2.502** (0.124)
More than 28 years	-2.416** (0.137)
Salary (reference, less than \$75,000)	

\$75,000-\$99,999	0.235* (0.108)
\$100,000-\$149,999	0.460** (0.123)
\$150,000 or more	0.775** (0.224)
Supervisor Status (reference, No supervisory role)	
Team leader	0.272** (0.103)
Supervisor	0.779** (0.118)
Manager	1.182** (0.225)
Executive	2.072** (0.237)
Eligible to retire	0.277* (0.120)
Age: 40 or older	0.081 (0.128)
Work Group Gender Composition (reference, about the same number of men and women)	
Substantially more men than women	-0.887** (0.080)
Slightly more men than women	-0.080 (0.077)
Slightly more women than men	-0.237** (0.087)
Substantially more women than men	-0.517** (0.122)
Educational Attainment (reference, high school or less)	
AA or BA/BS degree	-0.009 (0.124)
Master's, professional, or doctoral degree	-0.065 (0.127)
Telework (reference, 0 day/week)	
1 day/week	-0.149 (0.131)
2 days/week	-0.370* (0.178)
3 days/week	-0.142 (0.151)
4 days/week	-0.009 (0.256)
5 days/week	-0.481** (0.132)
No telework (ineligible)	-0.922** (0.120)
No telework (choice)	-0.184 (0.148)
Agency Ideology (reference, moderate agency)	
Liberal Agency	-0.723** (0.229)
Conservative Agency	-0.452* (0.225)
Constant	16.946** (0.260)
N. of observations	20,271
N. of Groups (Agencies)	25
R-squared within	0.09
R-squared between	0.42
R-squared overall	0.10

Notes: \* p < 0.05, \*\* p < 0.01, two-tailed tests. Random effects at agency level. Robust standard errors in parentheses.

## Appendix D. Full Model of the Determinants of Ethical Experiences

	Model 2			
	Outcome Someone Else Affected b/se	Pred. Prob.	Outcome Personally Affected b/se	Pred. Prob.
Woman	0.149** (0.044)	0.018	0.020 (0.072)	
Person of Color	0.110 (0.084)		0.350** (0.074)	0.035
Woman x Person of Color	0.312** (0.101)	0.065	0.253* (0.108)	0.057
Length of Service (reference, less than 4 years)				
4 to 11 years	0.689** (0.105)	0.060	1.064** (0.129)	0.068
12 to 19 years	0.894** (0.092)	0.082	1.298** (0.146)	0.090
20 to 27 years	0.945** (0.102)	0.090	1.291** (0.136)	0.087
More than 28 years	0.780** (0.111)	0.068	1.251** (0.170)	0.086
Salary (reference, less than \$75,000)				
\$75,000-\$99,999	0.046 (0.074)		-0.180 (0.097)	
\$100,000-\$149,999	-0.112 (0.086)		-0.303* (0.119)	-0.031
\$150,000 or more	-0.195 (0.113)		-0.384* (0.164)	-0.037
Supervisor Status (reference, No supervisory role)				
Team leader	0.025 (0.074)		-0.048 (0.095)	
Supervisor	-0.436** (0.088)	-0.042	-0.744** (0.145)	-0.065
Manager	-0.506** (0.133)	-0.050	-0.738** (0.139)	-0.064
Executive	-0.592** (0.130)	-0.056	-0.941** (0.172)	-0.077
Eligible to retire	-0.004 (0.079)		-0.150* (0.066)	-0.015
Age: 40 or older	0.074 (0.070)		0.342** (0.089)	0.031
Work Group Gender Composition (reference, about the same number of men and women)				
Substantially more men than women	0.368** (0.052)	0.039	0.468** (0.083)	0.042
Slightly more men than women	0.087 (0.075)		0.059 (0.098)	
Slightly more women than men	0.117 (0.074)		0.164 (0.086)	
Substantially more women than men	0.259* (0.101)	0.026	0.359** (0.059)	0.031

Educational Attainment (reference, high school or less)				
AA or BA/BS degree	-0.109 (0.077)		0.222* (0.093)	0.020
Master's, professional, or doctoral degree	0.054 (0.072)		0.526** (0.130)	0.049
Telework (reference, 0 day/week)				
1 day/week	-0.140 (0.085)		0.199* (0.096)	0.021
2 days/week	-0.093 (0.141)		0.424** (0.138)	0.045
3 days/week	0.026 (0.085)		0.188 (0.125)	
4 days/week	-0.252 (0.187)		0.163 (0.179)	
5 days/week	-0.092 (0.093)		0.382** (0.095)	0.040
No telework (ineligible)	0.126 (0.096)		0.508** (0.081)	0.051
No telework (choice)	-0.098 (0.088)		-0.029 (0.115)	
Agency Ideology (reference, moderate agency)				
Liberal Agency	0.357** (0.116)	0.038	0.367** (0.129)	0.031
Conservative Agency	0.175 (0.121)		0.143 (0.120)	
Constant	-2.591** (0.131)		-3.745** (0.221)	
N. of observations	15,522			
N. of Groups (Agencies)	25	23100.111		
AIC		23100.111		
BIC		23283.711		

Notes: \*  $p < 0.05$ , \*\*  $p < 0.01$ , two-tailed tests. Random effects at agency level. Robust standard errors in parentheses. Base outcome of unethical behavior has not occurred. Predicted probabilities represent the change in the outcome from the baseline "Did not observe" with all other variables held at their mean value.

### Appendix E. Full Model Re-evaluating Results with Coarsened Exact Matching

Having established support for our hypotheses we now present a sensitivity analysis leveraging coarsened exact matching. While our findings presented in Tables 2 and 3 are robust, our models may suffer from omitted variable bias. Any variable not included in our original models that correlates with both an administrator's gender-race composition and perceptions of ethical behavior in the workplace could potentially introduce bias in our model. Through matching, we can attempt to decrease the chance of bias by balancing variation in our independent variable of interest on theoretically relevant control variables. By matching on observed covariates, we also match on unobserved covariates if they are correlated with observed variables (Imbens 2004; Stuart 2010). While matching is by no means a panacea, it is the best tool we have to assess the quality of our findings with this particular set of data. This test should be viewed as a robustness check and not an indication that we are establishing a causal relationship between our independent and dependent variables of interest.

We use the CEM package in Stata (Blackwell et al. 2009; King and Neilson 2019), to use exact matching in our data. Our control group is White male administrators and our treatment group is women of color administrators. White women and men of color administrators are excluded from the analysis. We include an exact match on length of service, salary, supervisory status, retirement status, age, and educational attainment. We also include an exact match on the federal agency.

	Model: OLS Regression		Model: Multinomial Logistic Regression		
	Ethics Index b/se	Outcome Else Affected b/se	Pred. Prob.	Outcome Personally Affected b/se	Pred. Prob.
Woman of Color	-1.095** (0.131)	0.609** (0.100)	0.066	0.540** (0.106)	0.053
Work Group Gender Composition (reference, about the same number of men and women)					
Substantially more men than women	-1.039** (0.197)	0.538** (0.144)	0.059	0.456** (0.155)	0.041
Slightly more men than women	-0.114 (0.196)	0.055 (0.173)		0.005 (0.176)	
Slightly more women than men	-0.436* (0.187)	0.189 (0.152)		0.467** (0.166)	0.052
Substantially more women than men	-0.758** (0.200)	0.324* (0.147)	0.028	0.512** (0.154)	0.055
Telework (reference, 0 day/week)					
1 day/week	-0.356 (0.190)	-0.226 (0.159)		0.354 (0.186)	
2 days/week	-0.488 (0.347)	-0.128 (0.256)		0.686** (0.234)	0.090
3 days/week	-0.311 (0.208)	-0.021 (0.165)		0.361* (0.177)	0.041
4 days/week	-0.709 (0.441)	-0.451 (0.293)		0.410 (0.277)	
5 days/week	-0.445* (0.223)	0.015 (0.180)		0.674** (0.182)	0.084
No telework (ineligible)	-1.002** (0.203)	0.236 (0.149)		0.427** (0.147)	0.043
No telework (choice)	-0.178 (0.231)	-0.109 (0.179)		0.037 (0.235)	
Agency Ideology (reference, moderate agency)					
Liberal Agency	-0.359* (0.169)	0.244 (0.128)		0.332* (0.137)	0.032
Conservative Agency	-0.516** (0.162)	0.229 (0.126)		0.436** (0.137)	0.046
Constant	15.926** (0.197)	-2.223** (0.153)		-2.689** (0.186)	
N. of observations	7,129	5,444		5,444	
R-squared	0.04				
AIC		8360.979		8360.979	
BIC		8559.047		8559.047	

Notes: \*  $p < 0.05$ , \*\*  $p < 0.01$ , two-tailed tests. Robust standard errors in parentheses. Predicted probabilities represent the change in the outcome from the baseline "Did not observe" with all other variables held at their mean value.

Of the 14,634 observations in our data—white male and women of color administrators—8,880 respondents have an exact match in our data and are included in the analysis. 4,284 White male administrators and 1,470 women of color administrators do not have an exact match and are excluded from the dataset. We then re-estimate the models previously presented in this paper—regressing gender-race intersectionality on the perceptions of ethics index and on observing unethical behavior in the workplace.

In the following table, we continue to find support for our hypotheses. Looking first at perceptions of ethics in the workplace—column 1 in the table—we observe that women administrators of color report significantly lower scores on the ethics index relative to white male administrators. On average, a woman of color is expected to score 1.095 points lower in the ethics index relative to a white male administrator. This represents a 5.48% decrease in the overall ethics score ( $1.095/20 \times 100$ ). The effect size of this coefficient is larger than any other control variable included in the model.

In columns 2 and 3, we re-estimate the multinomial logistic regression predicting the likelihood that an administrator will observe unethical actions in their agency. Again, the baseline outcome is not observing any unethical behavior in the agency, column 2 reports the chance of witnessing unethical behavior in the agency, and column 3 represents being personally affected by unethical behavior within the agency. Predicted probabilities reporting the effect of a one-unit increase in statistically significant independent variables are reported to the left of coefficients. Women administrators of color report a significantly higher likelihood of both observing and personally experiencing unethical behavior within their workplace. On average, a woman of color is 6.6% more likely to observe unethical behavior in the workplace compared to a white man. Similarly, a woman of color administrator is 5.3% more likely to have been personally affected by unethical behavior in an agency compared to a white man. In totality, our sensitivity analysis continues to find strong support for our hypotheses that women of color face significant headwinds with respect to ethics in federal agencies.

## Appendix F. Full Model Re-evaluating Results with Agency Fixed Effects

	Model: Regression	Model: Multinomial Logistic Regression			
	Ethics Index b/se	Outcome Someone Else Affected b/se	Pred. Prob.	Outcome Personally Affected b/se	Pred. Prob.
Woman	-0.032 (0.069)	0.152** (0.045)	2.95	0.023 (0.072)	
Person of Color	-0.404** (0.096)	0.110 (0.085)		0.348** (0.075)	4.35
Woman x Person of Color	-0.591** (0.126)	0.316** (0.101)	4.34	0.253* (0.108)	5.71
Length of Service <i>(reference, less than 4 years)</i>					
4 to 11 years	-1.726** (0.162)	0.686** (0.107)	5.70	1.063** (0.128)	6.57
12 to 19 years	-2.308** (0.163)	0.893** (0.093)	7.89	1.300** (0.146)	8.71
20 to 27 years	-2.477** (0.139)	0.943** (0.104)	8.58	1.293** (0.136)	8.52
More than 28 years	-2.444** (0.136)	0.787** (0.115)	6.60	1.260** (0.171)	8.46
Salary <i>(reference, less than \$75,000)</i>					
\$75,000-\$99,999	0.200 (0.114)	0.054 (0.073)		-0.174 (0.098)	
\$100,000-\$149,999	0.439** (0.124)	-0.092 (0.087)		-0.292* (0.125)	-2.91
\$150,000 or more	0.617** (0.187)	-0.146 (0.120)		-0.339 (0.174)	
Supervisor Status <i>(reference, No supervisory role)</i>					
Team leader	0.238* (0.096)	0.019 (0.074)		-0.049 (0.096)	
Supervisor	0.848** (0.117)	-0.451** (0.090)	-4.25	-0.756** (0.145)	-6.49
Manager	1.302** (0.195)	-0.535** (0.133)	-5.09	-0.766** (0.136)	-6.49
Executive	2.296** (0.193)	-0.634** (0.130)	-5.86	-0.981** (0.168)	-7.81
Eligible to retire	0.290* (0.111)	-0.010 (0.080)		-0.154* (0.066)	-1.46
Age: 40 or older	0.086 (0.117)	0.066 (0.069)		0.333** (0.088)	2.93
Work Group Gender Composition <i>(reference, about the same number of men and women)</i>					
Substantially more men than women	-0.887** (0.065)	0.354** (0.052)	3.58	0.458** (0.082)	4.00

Slightly more men than women	-0.076 (0.073)	0.080 (0.075)	0.055 (0.099)	
Slightly more women than men	-0.244* (0.089)	0.124 (0.074)	0.167 (0.087)	
Substantially more women than men	-0.529** (0.105)	0.266** (0.103)	2.62 (0.060)	3.13
Educational Attainment (reference, high school or less)				
AA or BA/BS degree	-0.012 (0.120)	-0.109 (0.077)	0.223* (0.093)	1.98
Master's, professional, or doctoral degree	-0.066 (0.116)	0.055 (0.073)	0.530** (0.131)	4.82
Telework (reference, 0 day/week)				
1 day/week	-0.134 (0.109)	-0.130 (0.083)	0.200* (0.094)	2.01
2 days/week	-0.398* (0.173)	-0.060 (0.140)	0.438** (0.145)	4.49
3 days/week	-0.165 (0.130)	0.047 (0.083)	0.200 (0.123)	
4 days/week	0.016 (0.222)	-0.234 (0.188)	0.169 (0.178)	
5 days/week	-0.436** (0.126)	-0.084 (0.090)	0.385** (0.093)	3.92
No telework (ineligible)	-0.908** (0.088)	0.124 (0.093)	0.505** (0.082)	4.93
No telework (choice)	-0.146 (0.143)	-0.101 (0.089)	-0.036 (0.115)	
Agency FE				
Constant	Yes 17.076** (0.220)	Yes -2.238** (0.131)	Yes -3.650** (0.199)	
N. of observations	20,271	15,522	15,522	
R-squared	0.108			
AIC		22893.346	22893.346	
BIC		23076.947	23076.947	

Notes: \* p < 0.05, \*\* p < 0.01, two-tailed tests. Standard errors clustered by agency in parentheses. Predicted probabilities represent the change in the outcome from the baseline "Did not observe" with all other variables held at their mean value.