EasyChair Preprint

№ 1151

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June 10, 2019

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Abstract

The literature on representative bureaucracy contains a great many studies showing a correlation between bureaucrat-client racial congruence and improved outcomes for the latter. Very little research, however, has examined the actual decision process that leads to active representation. Instead, most studies simply assume that any observed correlation arises because bureaucrats are more sympathetic to clients of the same race due to shared experience, values, or culture, which leads them to act in a way that benefits the latter. We investigate this foundational assumption of representative bureaucracy in order to better understand the causal mechanism underlying representation behavior. For theoretical guidance we look to work in psychology suggesting that sympathy is an important predictor of the willingness to cooperate with strangers and, therefore, to cooperate. We adapt two previously validated experiments testing for the antecedents sympathy and cooperative behavior by adding a manipulation that creates racial congruence or discongruence between subjects and a hypothetical partner. We field the two experiments in separate pools of approximately 200 public employees each. The results provide strong support for the underlying assumption of representative bureaucracy that shared characteristics lead to greater sympathy among individuals, but the results are driven exclusively by the response of African American public administrators. Additionally, they indicate that shared race has an indirect impact on the willingness of public administrators to cooperate with a partner and, again, the effect is driven by black subjects.

Introduction

The literature on representative bureaucracy is built on the foundational assumption that shared characteristics, such as race, lead bureaucrats to be more understanding of and sympathetic to the challenges faced by similar clients. In one of the most recent publications on representative bureaucracy Zwicky and Kubler (2018:52) aptly summarized the assumption as it appeared in Krislov's (1974) foundational work, noting that "people from similar social backgrounds share experiences, norms, values, and worldviews, which makes it more likely that they will understand the needs of people with whom they share these similarities." Under the right conditions, this understanding and sympathy are assumed to be the motivations for actions on the part of bureaucrats, which improve outcomes for clients that share their characteristics. While these assumptions are foundational to the large literature on bureaucratic representation, they have rarely been directly explored or tested.

We address this gap by drawing on literature on sympathy and cooperative behavior in social psychology to address three related research questions. First, does shared race among a public employee and a person they interact with lead to greater sympathy on the part of the public administrator? Second, does shared race increase the likelihood of behaviors on the part of the public administrator that benefit the other person, either directly or indirectly? And finally, are the impact of shared race symmetrical across groups or concentrated among groups that have historically experienced discrimination?

In order to test hypotheses related to these questions, we adapt two previously validated experiments testing for the antecedents of sympathy and cooperative behavior by adding a manipulation that creates racial congruence or discongruence between subjects and a

hypothetical partner. We field the two experiments in separate pools of approximately 200 public employees each. The results provide strong support for the underlying assumption of representative bureaucracy that shared characteristics lead to greater sympathy among individuals, but the results are driven exclusively by the response of African American public administrators. Additionally, they indicate that shared race has an indirect impact on the willingness of public administrators to cooperate with a partner and, again, the effect is driven by black subjects.

The Assumptions of Representative Bureaucracy

Mosher (1968) distinguishes between passive representation and active representation, and lays out the linkage between the two. Such a distinction has informed subsequent analysis and theoretical advancement of representative bureaucracy for decades (e.g., Thompson 1976; Meier and Stewart 1992; Meier 1993; Meier and Nicholson-Crotty 2006; Keiser, Wilkins, Meier and Holland 2002). During that period scholars have developed the insight that the relationship between passive representation and active representation is more likely to manifest when certain conditions are present, including, sufficient discretion for bureaucrats, high relevance for the outcome for both bureaucrats and clients, and sufficient impact of bureaucratic decisions on the demographic group in question.

Numerous studies across a variety policy domains have empirically demonstrated a link between passive representation and bureaucratic decisions favoring the represented demographic group when the above preconditions are met (e.g., Hindera 1993; Meier 1993; Selden 1997; Meier 1993; Meier and Stewart 1992; Meier, Wrinkle and Polinard 1999; Bradbury and Kellough 2008). For example, Meier *et al.* (1999) find that standardized test scores of minority and nonminority students increase as school districts hire more minority teachers (see also Meier

and Stewart 1992; Meier 1993).). Nicholson-Crotty, Grissom and Nicholson-Crotty (2011) find that black teachers are more likely to refer black students into gifted and talented programs than are their white counterparts (see also Grissom, Nicholson-Crotty and Nicholson-Crotty 2009). Fernandez, Malatesta and Smith (2013) find that increasing racial minority representation enables agencies to become more effective at achieving the legislatively mandated goal of promoting minority-owned small business participating in federal contracting. And Selden (1997) finds that the percent of administrators in the U.S. Department of Agriculture's Farmers Home Administration who were Black, Hispanic, and Asian American led to an increase in the number of loan eligibility awards favoring Black, Hispanic and Asian American loan applicants, respectively. Theobald and Haider-Markel (2008) find that black citizens perceive stops to be more legitimate when the officer is black and Hong (2016) finds that an increase in black officers is correlated with a decrease in complaints filed by Black citizens.[1]

In addition to the literature on race and representative bureaucracy, there are also a number of studies across a variety of policy domains on gender and representative bureaucracy. Keiser *et al.* (2002) were the first to find active representation among women bureaucrats when they found a relationship between female math teachers and an increase in girls' math scores. Wilkins and Keiser (2006) also found active representation among female managers in child support agencies, Meier and Nicholson-Crotty (2006) finds a correlation between on female police officers and an increase in reporting of sexual assault seeing those reports through to an arrest, and Andrews and Miller (2014) even found gender representation in the performance of fire authorities.

[1] Though it is important to note that in the area of law enforcement, however, the results have been less consistent. For example, Wilkins and Williams (2008) fail to uncover a link between black representation among police officers and a reduction in racial disparities in vehicle stops.

While much time and scholarship has been devoted to examining outputs and outcomes attributed to active representation, there is far less work empirically investigates the micro-foundations of representation behavior. In other words, we know that shared race leads to improved outcomes for clients, but not that the relationship exists because our assumptions about the decisions of individual bureaucrats are correct. For an important exception, Selden (1997) develops a model of administrative role to depict the underlying processes of representation. The model treats *representative role perception* as the crucial intermediate linkage between demographic and active representation. It is grounded on the premise that factors in a bureaucrat's backgrounds, such as race, are important determines the bureaucrats willingness to adopt a representation rather than an organizational role and that the adoption of that role influences their willingness to take actions responsive to the needs and concerns of minorities (see also Selden 1997; Selden, Bradbury and Kellough 1998; Sowa and Selden 2003).

The work by Selden and colleagues, along with most of the other work cited above, is premised on another micro-level assumption which has not been empirically verified. It begins with Meier and Nigro's (1976) articulation of four variables in representation behavior, including: bureaucrats' social origins, socialization experiences, attitudes, and administrative decisions. The implicit causal model in most representative bureaucracy studies assumes that the connection between these four factors is sequential, where members of a certain social group experience significantly similar socialization processes and thus have life experiences that lead them to adhere to outlooks and values that differ from those of other groups. These shared values in turn lead bureaucrats to develop sympathetic and supportive attitudes toward clients of similar demographic backgrounds. The attitudes translate ultimately into active representation that provides substantive benefits of the clientele being represented. Lim (2006) clearly articulated

this set of connections, when he argued that a fundamental theoretical underpinning of representative bureaucracy is the "empathetic understanding" that arises from identity congruence and provides the impetus for becoming an active representative for one's own social group.

This underlying assumption is, in fact, explicit in many prominent studies of representative bureaucracy. In some of the earliest work in this area Kranz (1976) argued that, "minority and female 'representatives' as a group will more closely mirror the needs and wishes of their group, whether overtly or subconsciously, than non-minorities do." Stewart, Meier and England (1989) contend that "Since a Black teacher shares racial experiences with the Black student, including experience as a Black student, a Black teacher is more likely to be supportive of a Black student who has trouble in class." Meier and Bohte (2001) similarly posit that black and Hispanic teachers "*empathize"* with the problems of minority students, and thus are likely to turn the passive empathy into a proactive approach to solving problems and improving students' performance. In an example from law enforcement, Smith and Holmes (2003) state that Hispanic officers may counteract the force of police socialization and occupational subculture, because they experience a higher degree of "*integration"* into their community, which produces *"empathy"* for Hispanic citizens. Similarly, Andrew and Miller (2013) assert that female officers may evince a "more *sympathetic* attitude towards the life experiences of abuse victims, who are far more likely to be women (Walby, Armstrong and Strid 2010), than their male counterparts."

The assumptions underlying representative bureaucracy theory are consistent with work in group theory, which suggests that individuals are far more likely to show empathy for, and take action to benefit, in-group members (e.g., Batson and Ahmad 2009). Recent work has suggested that this response is not only psychological, but also physiological, demonstrating that

subjects show different empathetic neural responses depending on whether they observe pain being inflicted on someone of their same or a different race (Chiao and Mathur 2010). In an important divergence from this literature, work on in-group bias assumes that it exists in both majority and minority individuals, while the representative bureaucracy literature has focused almost exclusively on the behavior of racial minorities, sometimes suggesting explicitly, that the representative role is most likely to be adopted by those from historically underserved groups.

Research Questions

The existing work on representative bureaucracy, and its relationship to group theory, leads us to three related research questions. First, does shared race among a public employee and a person they interact with lead to greater sympathy on the part of the public administrator. Second, does shared race increase the likelihood of behaviors on the part of the public administrator that benefit the other person, either directly or indirectly? And finally, are the impact of shared race symmetrical across groups, as group theory would suggest, or are they concentrated among groups that have historically experienced discrimination, as representative bureaucracy theorists have intimated?

Interdependence, Sympathy, and Cooperation: A Research Design

We turn to work in social psychology in order to develop empirical tests of these questions. Scholars in this area have long been interested in why people cooperate and numerous studies have confirmed that sympathy plays a particularly strong role in mitigating self-interest, leading to more cooperative behavior between individuals (Batson and Ahmad 2001; Batson and Moran 1999). Scholars in this area define sympathy as comprehension of the emotional state or condition of another person, which prompts feelings of concern for that person's condition (see Eisenberg 2006). Though, there is some disagreement in the recent literature about the degree to

which this concept is the same as empathy, scholars have typically treated them as a comparable "other-oriented emotional response congruent with the perceived welfare of another person" (see Batson 1987:93; Batson 1995). For our purposes, the key takeaway is that sympathy is defined as "taking the others' perspective given the situation they face, and then feeling compassion or concern for the other" (Irwin, McGrimmon and Simpson 2008), which is very similar to the mechanisms described by representative bureaucracy scholars when they assert things such as "since a Black teacher shares racial experiences with the Black student, including experience as a Black student, a Black teacher is more likely to be supportive of a Black student who has trouble in class" (Stewart et al. 1989).

A good deal of the work in social psychology has emphasized familiarity or repeat interaction as an important predictor of sympathy and this is obviously applicable to the concept of representative bureaucracy as it plays out in class rooms and other settings where bureaucrats and clients regularly interact with one another. However, scholars also expect and find evidence of active representation when police make arrest decisions or case workers make initial eligibility decisions; in other words, in cases when bureaucrat and client are unlikely to know one another. For the concepts of sympathy and cooperation to be a useful tools for understanding the assumptions of representative bureaucracy, they also need to be applicable to these cases.

Fortunately, recent work has begun to investigate the causes of sympathetic reactions among strangers and to argue that sympathy is an important predictor of cooperative behavior in these situations as well. As noted above, research suggests that taking another's perspective is a key precursor to feeling sympathy (Batson 1991; Eisenberg 2000). Drawing on longstanding research that expectations about people's intentions are a key predictor of behavior in *interdependent* situations (e.g., Hanley, Orbell, and Morikawa 2003; Parks and Hulbert 1995),

Irwin *et al.* (2008) argue that placing people in a setting where their well-being depends on actions of another, increases perspective taking and, by extension sympathy, even among strangers. They demonstrate experimentally that subjects placed in an interdependent situation express higher levels of sympathy, measured as support and compassion for a hypothetical partner, relative to those in an independent scenario. They also show that the level of sympathy is an important predictor or taking the cooperative, rather than the dominating strategy, in interactions.

While Irwin *et al.* (2008) manipulate interdependence, research suggests that there are a number of other ways in which feelings of shared fate are generated among strangers. For example, , Drury, Cocking and Reicher (2009) demonstrate that shared experience of an emergency can enhance a sense of group identity and shared fate, even among those without preexisting social bonds. That sense of "we-ness" reduces panic and self-serving behavior during the emergency. Most germane to our inquiry, however, are numerous studies suggesting that shared race or ethnicity also lead to a sense of shared fate. These linkages between group identity and perceived interdependence have been found in the context of general attitudes, candidate evaluation, and voting behavior (Dawson 1994; Gay, Hochschild and White 2016; McConnaughy, White and Casellas 2010).

To summarize, research in social psychology has demonstrated that sympathy increases the likelihood of cooperation. It has also shown that perceived interdependence leads individuals to be more sympathetic toward other people, even if they are strangers. Finally, it suggests that shared racial or ethnic identity can lead to perceptions of linked fate or interdependence, even among group members that have never met one another. We believe this set of theoretical

linkages offer a close analog to the causal mechanisms that scholars suggest underlie active representation by bureaucrats.

As a result, we believe that the validated experimental tests used by scholars to uncover the linkages between interdependence, sympathy, and cooperation can also be adapted to test the underlying assumptions of representative bureaucracy. Specifically, we replicate the design used by Irwin *et al*. (2008) in samples of public administrators, adding an additional treatment that matches subjects with a partner of the same or different race. While the specifics of the design and hypotheses tested are discussed below, the assumptions of representative bureaucracy would suggest that racial congruence between subject and partner should produce greater sympathy and cooperative behavior, regardless of whether the subjects are engaged in independent, interdependent, or even a competitive scenario.

Study One

Subjects

Subjects were recruited for our first experiment using Qualtrics, inc. Those included in the sample are from the United States and currently employed by federal, state, or local government. Using those parameters, we were able to recruit 202 subjects from a diverse set of public occupations including Education, Social Services, Health, Parks and Recreation, Environment, City/County Management, and Transportation. The average subject for this study had just under 19 years of experience in the public sector.

Design

All participants were presented with a vignette, which read as follows:

> Imagine that you have been paired with a community member for a fund drive for a local youth sports complex. Together, your primary task is to raise money for the new facility. To do this, you and your partner canvas door to door in the neighborhood and

> make targeted calls to prospective corporate and individual donors. Your partner's summary page from a professional networking site is pasted below. Please take a moment to look it over before moving on.

At this point subjects were randomized into one of two groups, with one viewing a page with a black woman and one viewing a page with a white woman. The pages seen by participants, which are presented in the appendix, closely approximate a popular professional networking platform presented identical information on educational background, work history, and volunteer experience and differed only in race of the "partner." Our key independent variables are indicators of whether the subject's race matched their partner's race and, in subsequent analyses, whether that match was between black subject and partner or white subject and partner.

In order to replicate Irwin et al.'s design, and control for the established finding that interdependence produces more sympathetic responses than perceived independence from a partner, subjects were then randomized into an additional treatment. One group saw text which signaled an interdependent relationship, reading:

> The pair that raises the most money for the complex will be honored at the opening ceremony and receive a $100 gift certificate that can be spent at any downtown merchant. The winner will be determined by the amount of money that both members of the pair raise. Thus, the more you put into your work, the better chance both you and your partner have of winning the competition. Similarly, the more work your partner puts into her work, the greater chance both of you have.

The other group saw text signaling an independent condition, which read:

> The individual that raises the most money for the complex will be honored at the opening ceremony and receive a $100 gift certificate that can be spent at any downtown merchant. The winner will be determined by the amount of money that each individual, rather than the pair, raises. Thus, the more you put into your work, the better chance you have of winning. Alternatively,

> the more work your partner puts into her work, the greater chance she has of winning.

These treatments are substantively identical to those used by Irwin et al., though we modify the context slightly because their experiment utilized students and their vignettes were tailored to be of interest to that group of subjects. Before asking questions used to measure our dependent variable, we mask our interest in subject response to the partner's race by asking a series of questions about their impressions of their partner's experience and background.

Our dependent variable of interest is the subject's sympathy toward their partner. Replicating existing work in social psychology, we measured that concept with two questions that capture *support* and *compassion* for the partner. Specifically, subjects were asked to respond on a 7-point Likert scale (1= Not at all; 7= Extremely) to the questions "How compassionate do you feel toward your partner?" and "How supportive do you feel of your partner?" Following previous work, we factor analyzed responses using a principal components analysis for the primary dependent variable.

The work of Irwin *et al*. suggests that subjects who receive the interdependent treatment will express more support and compassion for their partner. However, based on the assumptions of representative bureaucracy and work showing that shared race promotes a feeling of shared fate, we expect that subjects paired with a partner of their same race will express greater sympathy *regardless* of whether they get the inter- or independent vignette in the second treatment.

Study two

Subjects

Subjects in our second experiment were recruited using Qualtrics, inc. and, again, included only those from the United States and currently employed in the public sector. For this

experiment, we were able to recruit 155 subjects from all of the occupations that appear in the previous sample, as well as police officers. We control for the inclusion of this additional category of public employee in the analysis. This sample was slightly less experienced, with 15.6 years in the public sector on average, but was similar to the sample in Study One in terms of age, gender distribution, and education level

Design

Our second experiment is meant to test whether race congruence with a partner has a direct or indirect impact on the choice to cooperate in a non-cooperative setting. After seeing the study information sheet, subjects were told:

> You have been randomly assigned to a partner for the tasks which you will be asked to complete in the next few minutes. Your partner's page from a professional networking site is pasted below. Please take a moment to look over it before moving on to those tasks.

They were then randomized into the same networking pages as in study one, where the only different was the race of the partner. Again, our independent variables are indicators of racial congruence and then more precise measures of whether the match was between black subject and partner or white subject and partner.

On the next screen subjects are presented with a standard Prisoner's Dilemma Game:

> For this task, you have a personal fund consisting of 5 points worth $0.30 each. Your partner has a personal fund worth the same amount.
> You now have a decision to make regarding this fund. You can keep their entire amount for yourself or you can contribute the entire amount to a group fund which you will share equally with your partner. We will multiply contributions to the group fund by 1.5.

Your partner is being given the same choice regarding what to do with their fund. You will each make your decisions independently, anonymously, and simultaneously.
The possible payoffs for the choices you will be asked to make are represented in the following figure

Both give to group fund: 7.5 points each	Only Candace gives to group fund: 8.75 points for you and 3.75 points for her
Only you give to group fund: 3.75 points for you and 8.75 points for Candace	Neither gives to group fund: 5 points each

After the same set of masking questions about impressions of the partner's background used in Study One, we asked questions that capture our two primary dependent variables in this study. The first set measured the subject's compassion and support for their partner, which we again use to create the measure of sympathy. On the next screen, we captured cooperative behavior by asking whether subjects choose to contribute to the group fund or retain their points in a personal fund. Subjects were paid an incentive beyond what they received for taking the survey based on their choice and the choice of their hypothetical partner and were made aware of this payout at the outset of the experiment.

Findings

Study One

We start the discussion of Study One by presenting the randomization checks in Table 1. The columns present means and standard deviations for subject race, gender, age, education level, and years as a public employee across those that saw the white partner's profile, those that saw the black partner's profile, all race matches, white race matches, black race matches, and

those cases where the subject and partner were of different races. As the table indicates, there were 96 cases of racial congruence, 49 of which were between whites and 47 of which were between African Americans. Subject and partner race did not match in 102 cases. Two way t-tests suggest some significant differences between the race match categories, though the Cohen's D suggests that these are substantively not meaningful. Nonetheless, we will present regressions utilizing subject characteristics as controls in order to ensure that differences among groups are not influencing the results.

We can now turn to tests of our expectations about the impact of shared race on sympathy. Table 2 presents a one-way ANOVA comparing the average of our sympathy factor score across groups with a race match of any kind and those without a match.[2] As the table indicates, the difference between these groups is not significant. In Table 3, we present a one-way ANOVA that breaks the race match category into white and black matches and, in this case we do see significant differences. Specifically, the results suggest that black subjects matched with black partners express significantly higher levels of sympathy relative to subjects not matched with a partner of their same race. The level of sympathy expressed by white subjects for a white partner is not significantly higher than the non race-match group. These results are unchanged if we limit the sample to the 83% of respondents who correctly identified the race of their partner and for whom we can, therefore, assume that race is a more salient characteristic.

While the findings presented thus far are suggestive, our primary expectation is that race match will influence sympathy independent of whether subjects were placed in an independent or interdependent relationship with their partner. In order to test this expectation, we regress the sympathy score on the indicators of white/white race match, black/black race match, and whether

[2] All one-way analyses use the Bonferroni method to adjust for multiple comparisons.

the subject read the interdependent vignette, as well as the demographic variables listed above. The results from this analysis are presented in Table 4 and suggest support for the expectation, at least when the subject and partner are both African American. First we can note that they confirm the findings of previous research, with the interdependent treatment having a large, positive, and significant effect on sympathy. Even after controlling for that effect, however, subjects in that group express significantly higher levels of sympathy for their partner. Substantively, the impact is quite large, equivalent to more than a .27 standard deviation increase in expressed sympathy.

Study Two

We again open the discussion of this study with a table presenting the randomization check across different race match groups. As Table 5 suggests, there were 101 cases in this study where subjects were match with a partner of their same race. In 54 of those cases, both were white, while in the other 47 both were black. Subject and partner race did not match in 113 cases. Again, two way t-tests suggest some significant differences between the race match categories, and in this case the Cohen's D suggests some of these are substantively meaningful. We again show regressions utilizing subject characteristics as controls in order to ensure that differences among groups are not influencing the results.

Turning now to the analyses, in order to test if race congruence increases sympathy in a different setting, Table 6 provides a one-way ANOVA comparing expressed sympathy between subjects matched with a partner of their own race and those who were not. There is not a significant difference between these groups. As in Study One, however, when we split the congruent group up by race (Table 7), significant differences do emerge. Specifically, we see that black subjects matched with black partners express more sympathy than subjects matched

with a partner of a different race. The substantive impact is quite large at .38 standard deviations. Interestingly, in this case, white subjects matched with a white partner express significantly *less* sympathy relative to the non race-congruent group. As a final test, we regress the sympathy score on the different indicators of race match, as well as the demographic controls. The model also includes an indicator of whether the subject is a police officer in order to account for the introduction of that group into the subject pool. The findings, presented in Table 8 confirm that African American subjects express .32 standard deviations more sympathy for an African American partner relative to the non race-match group. In the regression framework, white/white race matches did not result in significantly lower expressed sympathy relative to the non race-match group.

The final analysis from Study 2 tests whether race match has a direct and/or indirect impact on cooperative behavior, measured here as the decision by a subject to contribute to the group fund, rather than retain their points in a personal fund. We utilize a logistic regression to predict the contribution decision with the indicators of race match, the measure of sympathy, and the control variables discussed above. The results presented in Table 9, show that greater sympathy significantly increases the likelihood that the subject contributes to the group fund, which is consistent with the results of previous studies (Irwin *et al*. 2008). The substantive impact is relatively large, with a 1 standard deviation increase in sympathy for the partner causing a 10% increase in the likelihood of contributing. Because race match among African Americans increases sympathy, the relationship between sympathy and contribution to the group fund suggests that racial congruence has an *indirect* impact on cooperation. It does not appear to have a *direct* impact, however, as both the indicators of race match included in the model are not statistically significant.

Discussion and Conclusion

We began with a primary research question regarding the veracity of the assumptions that underlie research in representative bureaucracy. Specifically, asked whether shared race with a citizen or client leads public administrators to have more understanding and sympathy for, and take actions that improve outcomes for, those that share their characteristics. In a related question, we asked whether any impact of racial congruence on sympathy and cooperation are symmetrical across races, or if it is more concentrated in groups that have historically been underserved by or discriminated against by government.

The results from two experiments provide significant support for one of the most foundational assumptions of representative bureaucracy. Whether they were told that they were in an independent or interdependent relationship with a partner, or even forced into a non-cooperative game with that person, sharing the race of that person significantly increased the sympathy that a public administrator expresses. The effect was not, however, equally evident across the race of the bureaucrat. In fact, the results are completely driven by those cases where an African American public administrator is paired with an African American partner. This segmentation further supports the representative bureaucracy story, which expects that the effects of representation will be most evident when race is most salient, as it is among historically underserved groups. The impact of race congruence on African American administrator's expressed sympathy is substantial. Across the two studies, race congruence between a black public administrator and a black partner increases the level of sympathy by more than one quarter of a standard deviation.

Turning now to the question of cooperative behavior. The level of sympathy that a public administrator expresses for their partner has a large impact on whether they choose a cooperative

rather than a dominating strategy in the prisoner's dilemma game. As noted above, racial congruence between African American administrator and partner is a powerful predictor of sympathy. Taken together, these results suggest a significant indirect impact for race congruence on cooperative behavior among African American administrators. The results do not, however, suggest a direct impact for race congruence on cooperation.

We believe that the results have significant implications for our understanding of representation in bureaucratic settings. First and foremost, they confirm the accuracy of one of the underlying assumptions of representative bureaucracy. Specifically, they suggest that shared race leads to greater sympathy among public administrators for the person with which they are working. Recent work exploring representation at the individual level (see for example Nicholson-Crotty et al. 2016) has sometimes challenged the results from organizational level studies that have dominated the literature, leading some to question the soundness of this important research enterprise (Lim 2006). This study suggests, however, that the hypothesized causal mechanisms that authors have long used to explain observed relationships between shared race and improved outcomes for clients are likely accurate.

We believe that the importance of sympathy invites further empirical tests, and a host of additional research questions, that may help to drive theory development in this area moving forward. For example, the impact of shared race on cooperative behavior, an admittedly rough proxy for behaviors often described as "active representation," runs entirely through its influence on sympathy in our study. Obviously, future work needs to focus on tasks and behaviors that more closely approximate the ways in which bureaucrats help clients in order to confirm whether sympathetic reaction completely mediates the impact of shared race. Regardless of the results of those studies, it is likely that at least *some part* of the relationship between shared race and

helping behaviors on the part of bureaucrats works through sympathy. This suggests that the literature on representative bureaucracy should consider and test expectations from the social psychology literature regarding the factors that moderate the relationship between sympathy and prosocial behavior. That work suggests that distress, trust, personal experience, and other individual characteristics and attitudes can influence that relationship (see for example Eisenberg and Miller 1987; Eisenberg et al. 1989), which may help scholars of representative bureaucracy better understand the conditions under which shared race *does not* translate into active representation.

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Table 1. Study One: Randomization Check, by Treatment Group

	Control Group: Race-Incongruence	Treatment Group: Race-Congruence			T-Test		Cohen's D
		White-White	Black-Black	All Matches	t Statistics	Pr (|T| > |t|)	
Race Composition: % Black	49.02 (0.50)			48.96 (0.50)	0.01	0.99	0.00
Gender Composition: % Female	60.78 (0.49)	57.14 (0.5)	74.47 (0.44)	65.63 (0.48)	-0.70	0.48	-0.10
Education:							
% High School	4.90 (0.22)	10.20 (0.31)	4.26 (0.20)	7.29 (0.26)	-0.7	0.48	-0.10
% Some College	19.61 (0.40)	16.33 (0.37)	17.02 (0.38)	16.67 (0.37)	0.53	0.59	0.08
% Bachelor's Degree	36.27 (0.48)	32.65 (0.47)	25.53 (0.44)	29.17 (0.46)	1.06	0.29	0.15
% Graduate School	39.22 (0.49)	40.82 (0.50)	53.19 (0.50)	46.88 (0.50)	-1.09	0.28	-0.15
Age	47.69 (12.14)	48.06 (14.24)	46.85 (10.51)	47.47 (12.50)	0.12	0.90	0.02
Years in Public Service	19.04 (10.64)	21.54 (11.74)	18.9 (11.48)	20.25 (11.63)	-0.77	0.45	-0.11
Political Ideology	3.10 (0.99)	3.08 (0.93)	3.13 (0.95)	3.10 (0.93)	-0.04	0.96	-0.01
Observations	102	49	47	96			

Note: (1) Sample restricted to white and black subjects with less than 40 years of working experience in the public sector; (2) Standard deviation in parentheses; (3) T-test and Cohen's D statistics are computed by comparing the control and all-match treatment groups; (3) T-test at .05 level.

Table 2. Study One: One-Way ANOVA Analysis – Comparing Race-Congruence vs. Race-Incongruence

	Mean of Sympathy Factor Score	Between Groups
Treatment Group: Race Congruence	0.028	F(1,196) = 0.14, p = 0.71
Control Group: Race Incongruence	-0.027	

Note: (1) Treatment group includes both white-white matches and black-black matches; (2) Bonferroni method is used to adjust for multiple comparisons.

Table 3. Study One: One-Way ANOVA Analysis – Comparing Three Groups

		Mean of Sympathy Factor Score	Between Groups
Treatment Group: Race Congruence			
	White-White	-0.23	F(2,195) = 3.55, p = 0.03
	Black-Black	0.30	
Control Group: Race Incongruence		-0.03	

Note:(1) The same analysis was performed on the sample that passed attention check on partner's race, and results are consistent with findings presented above: F(2, 162) = 3.74, p = 0.026; (2) Bonferroni method is used to adjust for multiple comparisons.

Table 4. Study One: Race Congruence and Sympathy

DV: Sympathy	
Race Congruence:	
White-White Match	-0.228 (0.168)
Black-Black Match	0.275+ (0.152)
Interdependence:	
1=Yes	0.259+ (0.150)
Control	
Female (1=Yes)	-0.139 (0.137)
Age	-0.0172* (0.00820)
Political Ideology	0.241** (0.0756)
Education:	
Some College	0.312 (0.293)
Bachelor's Degree	-0.0287 (0.263)
Graduate School	-0.113 (0.262)
Years of Public Service	0.00721 (0.00896)
Constant	-0.118 (0.408)
Observations	198

Note: + p<0.1 * p<0.05 ** p<0.01 *** p<0.001; Standard errors in parentheses

Table 5. Study Two: Randomization Check, by Treatment Group

	Control Group: Race-Incongruence	Treatment Group: Race-Congruence			T-Test		Cohen's D
		White-White	Black-Black	All Matches	t Statistics	Pr (|T| > |t|)	
Race Composition: % Black	47.79 (0.50)			46.53 (0.50)	0.18	0.86	0.03
Gender Composition: % Female	63.72 (0.48)	48.15 (0.50)	46.81 (0.50)	47.52 (0.50)	2.40	0.02	0.33
Education:							
% High School	8.85 (0.29)	11.11 (0.32)	10.64 (0.31)	10.89 (0.31)	-0.50	0.62	-0.07
% Some College	10.62 (0.31)	22.22 (0.42)	27.66 (0.45)	24.75 (0.43)	-2.77	0.01	-0.37
% Bachelor's Degree	45.13 (0.50)	40.74 (0.50)	46.81 (0.50)	43.56 (0.50)	0.23	0.82	0.03
% Graduate School	35.40 (0.48)	25.93 (0.44)	14.89 (0.36)	20.79 (0.41)	2.38	0.02	0.32
Age	40.84 (13.00)	44.19 (12.57)	36.79 (10.81)	40.74 (12.30)	0.06	0.96	0.01
Years in Public Service	15.26 (11.14)	16.78 (11.79)	11.34 (9.84)	14.25 (11.21)	0.66	0.51	0.09
Political Ideology	2.76 (1.06)	2.65 (1.15)	2.94 (1.28)	2.78 (1.21)	-0.14	0.89	-0.02
Observations	113	54	47	101			

Note: (1) Sample restricted to white and black subjects with less than 40 years of working experience in the public sector; (2) Standard deviation in parentheses; (3) T-test and Cohen's D statistics are computed by comparing the control and all-match treatment groups; (3) T-test at .05 level.

Table 6. Study Two: One-Way ANOVA Analysis—
Comparing Race-Congruence vs. Race-Incongruence

	Mean of Sympathy Factor Score	Between Groups
Treatment Group: Race Congruence	0.05	F(1, 212) = 0.57, p = 0.45
Control Group: Race Incongruence	-0.05	

Note: (1) Treatment group includes both white-white matches and black-black matches; (2) Bonferroni method is used to adjust for multiple comparisons.

Table 7. Study One: One-Way ANOVA Analysis—
Comparing Three Groups

		Mean of Sympathy Factor Score	Between Groups
Treatment Group: Race Congruence			
	White-White	-0.17	F(2, 211) = 3.29, p = 0.04
	Black-Black	0.31	
Control Group: Race Incongruence		-0.05	

Note:(1) The same analysis was performed on the sample that passed attention check on partner's race, and results are consistent with findings presented above but with less statistical significance: F(2, 152) = 2.76, p = 0.07; (2) Bonferroni method is used to adjust for multiple comparisons.

Table 8. Study Two: Race Congruence and Sympathy

DV: Sympathy	
Race Congruence:	
White-White Match	-0.0840 (0.174)
Black-Black Match	0.320+ (0.175)
Control	
Female (1=Yes)	0.0161 (0.141)
Age	-0.00141 (0.00864)
Political Ideology	-0.00455 (0.0708)
Education:	
Some College	-0.165 (0.312)
Bachelor's Degree	-0.249 (0.319)
Graduate School	-0.106 (0.323)
Years of Public Service	-0.00972 (0.00885)
Working in Law Enforcement	0.200 (0.159)
Constant	0.224 (0.494)
Observations	214

Note: + p<0.1 * p<0.05 ** p<0.01 *** p<0.001; Standard errors in parentheses

Table 9. Study Two: Race Congruence, Sympathy and Cooperative Behavior (Logit Regression)

DV: Contributing to the group fund	
Race Congruence:	
White-White Match	-0.0678 (0.404)
Black-Black Match	-0.351 (0.448)
Sympathy Factor	0.447** (0.159)
Control	
Female (1=Yes)	0.0349 (0.354)
Age	0.0517* (0.0255)
Political Ideology	0.366* (0.162)
Education:	
Some College	0.265 (0.626)
Bachelor's Degree	0.677 (0.519)
Graduate School	1.498* (0.583)
Years of Public Service	0.00536 (0.0267)
Working in Law Enforcement	0.666+ (0.396)
Constant	-3.388** (1.133)
Observations	214

Note: + p<0.1 * p<0.05 ** p<0.01 *** p<0.001; Standard errors in parentheses