EXAMINING MEANINGS AND CONSEQUENCES OF BUREAUCRATIC REPRESENTATION AND WORKFORCE DIVERSITY: THE UNITED STATES AND SOUTH AFRICA CASES

Hongseok Lee

Submitted to the faculty of the University Graduate School in partial fulfillment of the requirements for the degree Doctor of Philosophy in the School of Public and Environmental Affairs, Indiana University
June 2018
Accepted by the Graduate Faculty, Indiana University, in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Doctoral Committee

Sergio Fernandez, Ph.D.

Michael McGuire, Ph.D.

Jill Nicholson-Crotty, Ph.D.

Thomas M. Rabovsky, Ph.D.

May 31, 2018
**ACKNOWLEDGEMENTS**

During my PhD journey, I was fortunate to meet many people who supported me along the way. First, I would like to thank my dissertation chair, Dr. Sergio Fernandez. He has been a great mentor and friend over the years. I am grateful for his time, support, guidance, and good will throughout my doctoral study. His passion and dedication showed me what it means to conduct careful and rigorous research. Second, I appreciate other dissertation committee members. Dr. Michael McGuire set an example for how to become a great teacher and researcher. He has always been responsive and willing to offer advice. To Dr. Jill Nicholson-Crotty, thank you for encouraging me to expand my research on representation and diversity to different policy and nonprofit settings. Through research assistantship and collaboration, Dr. Thomas Rabovsky taught me how to conduct every step of high-quality research—from framing a paper to reviewing literature to conveying findings.

In addition, I am grateful for faculty, staff, and colleagues who have made my time in SPEA productive and enjoyable. I am thankful for Dr. Amanda Rutherford who shared her experiences, materials, and wisdom and helped me prepare for the academic job market. Through years of mentorship, Dr. Henry Wakhungu taught me how to effectively design courses and encourage student motivation. I appreciate Ms. Donna Pritchett and Ms. Kelli Jacobs for the warm support and smiles that made SPEA feel like home. Lastly, I am grateful for my PhD colleagues, who are too numerous to name here. They have helped me expand the scope of my knowledge on research areas and enjoy doctoral study and life.
I must thank my parents, Sikyung Lee and Miyoung Lee, for their unconditional love, support, and guidance. Without them, I would not have been able to accomplish a doctoral study. They have taught me to be thankful for blessings in life and to make steady efforts in following my dreams. To my brother, Dongho Lee, thank you for your thoughts, well wishes, and visits that have offered support and made me feel connected with family. In addition, I appreciate my grandparents, father-in-law, mother-in-law, and other family members in South Korea for their support, encouragement, and patience—all of which made this achievement possible.

Lastly, I would like to give special thanks to my wife, Mina Min, for her enduring love, support, and prayers. As a fellow PhD and my best friend, Mina understands me and helps me believe in myself, even in tough times. She encouraged me to stay persistent in pursuit of my degree. Without her, I would not have been able to balance my doctoral study with everything else. Thank you.
As the population and workforce become more demographically diverse, managers of organizations face increasing challenges concerning how to manage diversity to improve responsiveness, equity, and effectiveness in decision-making and service delivery. To address this trend, this dissertation examines: 1) different conceptualizations and measures of representation and diversity, two different phenomena informing the demographic composition of the workforce; and 2) the impacts of representation and diversity on employee and organizational outcomes when the roles played by contextual factors are considered.

This dissertation consists of a literature review (Chapter 2) and three empirical studies (Chapters 3 to 5). Chapter 2 proposes different conceptualizations and measures of representation (as ordinary representation and representativeness) and diversity (as separation, variety, and disparity). This chapter also reviews different theoretical mechanisms by which the two demographic phenomena influence employee or organizational outcomes. Chapter 3 finds that the increased number of minorities is associated with higher goal achievement by U.S. federal agencies that have social justice-oriented missions and aim to foster inclusive workplace cultures. Chapter 4 investigates the asymmetrical effects of gender and racial dissimilarities on overall satisfaction with job and organization among four employee groups in U.S. federal agencies: minority women, minority men, White women, and White men. I find that women react more negatively than men to demographic dissimilarities. Chapter 5 examines how racial representation and racial diversity in the South African national government affect organizational performance. This chapter shows that racial representation
is related to agencies’ higher goal achievement. In addition, I find that racial diversity among managers is positively associated with agencies’ goal achievement, while racial diversity among front-line employees is negatively associated with the same outcome.

Overall, this dissertation urges scholars and practitioners not to conflate representation and diversity with different meanings and consequences. In addition, I call for study and practice of representation and diversity to consider the target population’s diversity; the nature of the policy or task in question; and the intergroup power differences in organizations that condition the impacts of the two demographic phenomena on employee or organizational outcomes.

Sergio Fernandez, Ph.D.

Michael McGuire, Ph.D.

Jill Nicholson-Crotty, Ph.D.

Thomas M. Rabovsky, Ph.D.
TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION .............................................................................. 1

CHAPTER 2: LITERATURE REVIEW ................................................................. 6

Conceptualizing Passive Representation .......................................................... 6
Conceptualizing Active Representation ............................................................ 15
The Link between Passive and Active Representation .......................................... 19
The Link between Passive Representation and Performance .............................. 22
Conceptualizing Diversity ................................................................................ 28
The Link between Diversity and Performance .................................................. 37
Conclusion ........................................................................................................ 41

CHAPTER 3. MINORITY REPRESENTATION AND PERFORMANCE: THE ROLE
OF AGENCY MISSION AND DIVERSITY CLIMATE .................................. 42

Representative Bureaucracy and Performance ...................................................... 44
Institutional Context in the Link between Passive Representation and Performance .... 46
Minority Representation in the U.S. Federal Government and Implications for Performance .................................................................................. 48
Data and Method ................................................................................................. 54
Findings and Discussion ..................................................................................... 60
Conclusion ........................................................................................................ 66

CHAPTER 4. THE ROLE OF INTERSECTIONALITY IN EXPLORING THE
ASYMMETRICAL EFFECTS OF DEMOGRAPHIC DISSIMILARITY ON
EMPLOYEES .................................................................................................. 70

Relational Demography and Theoretical Foundation ............................................ 72
Asymmetrical Effects of Demographic Dissimilarity ............................................ 75
Linking Relational Demography with Intersectionality ......................................... 76
Data and Method ................................................................................................. 80
Findings and Discussion ..................................................................................... 85

CHAPTER 5. BUREAUCRATIC REPRESENTATION, WORKFORCE DIVERSITY,
AND ORGANIZATIONAL PERFORMANCE: EVIDENCE FROM SOUTH AFRICA
......................................................................................................................... 92

Conceptualizing Bureaucratic Representation and Workforce Diversity ................. 93
The Link between Demographic Representation (and Diversity) and Performance .... 98
The South Africa Case ......................................................................................... 102
Data and Method ............................................................................................... 105
Findings and Discussion ................................................................................... 111

CHAPTER 6. CONCLUSION .............................................................................. 122

Summary of Findings ......................................................................................... 122
Theoretical Contributions .................................................................................... 123
Practical Contributions ....................................................................................... 126
Limitations and Suggestions for Future Research ............................................... 129
LIST OF TABLES

Table 1. Conceptualizing Passive Representation ................................................. 7
Table 2. Conceptualizing Active Representation .................................................. 17
Table 3. Conceptualizing Diversity ........................................................................ 30
Table 4. Descriptive Statistics and Correlation Matrix ........................................... 59
Table 5. OLS and RE Regression Results ............................................................... 63
Table 6. Effects of Representation by Different Racial Minority Groups ................. 66
Table 7. Descriptive Statistics .............................................................................. 83
Table 8. Coding of Control Variables ...................................................................... 84
Table 9. Asymmetrical Effects of Racial Contexts .................................................... 88
Table 10. Asymmetrical Effects of Gender Contexts ............................................... 89
Table 11. Conceptualizations of Demographic Representation and Workforce Diversity ................................................................................................................. 94
Table 12. Variables, Measures, and Descriptive Statistics ........................................ 106
Table 13. Results for Representation by Race and Gender ...................................... 112
Table 14. Results for Racial Representativeness ..................................................... 115
Table 15. Results for Racial Diversity ..................................................................... 118
LIST OF FIGURES

Figure 1. Distribution of goal achievement .................................................................56
Figure 2. Interaction effect of social outlay and minority representation on goal achievement .............................................................................................................64
Figure 3. Interaction effect of government source outlay and minority representation on goal achievement ..........................................................................................................................64
Figure 4. Interaction effect of diversity climate and minority representation on goal achievement ..........................................................................................................................65
CHAPTER 1: INTRODUCTION

The population and workforce have become increasingly demographically and culturally diverse due to globalization, immigration, and various initiatives for social justice, such as affirmative action and equal opportunity employment. According to Colby and Ortman (2015), “by 2044, more than half of Americans are projected to belong to a minority group (any group other than non-Hispanic White alone); and by 2060, nearly one in five of the nation’s total population is projected to be foreign born” (p. 1). In this increasingly diverse environment, managers in public agencies increasingly face difficulties concerning how to manage diversity effectively. An important question is how managers can leverage diversity for higher performance while addressing structural inequalities experienced by historically disadvantaged groups, particularly along gender and racial lines (Pitts & Wise, 2010; Riccucci, 2002; Sabharwal, Levine, & D’Agostino, 2018).

The concepts of bureaucratic representation and workforce diversity have become central to discussions on creating a more equitable, inclusive, and productive workforce (Kennedy, 2014; van Knippenberg & Schippers, 2007). On the one hand, the term representation implies a workforce reflecting the demographic characteristics of the general population. Focusing on fairness and equity, the term denotes that every group in a society has a right to participate in governing processes (Long, 1952; Mosher, 1968). From this perspective, adequate systems and provisions should exist to identify and address structural inequalities experienced by disadvantaged groups (e.g. minorities, women). These systems and provisions may involve giving primary consideration to certain groups in employment, management opportunities, and service provision through legislation and regulation. On the other hand, the term diversity implies a workforce consisting of employees with various demographic characteristics. Proponents of “business case for diversity” do not limit their focus to disadvantaged groups and distance the issue from legal and moral arguments for
representation. Instead, this approach emphasizes valuing individual differences that are based on various surface-level (e.g. gender, race) and deep-level attributes (e.g. political ideology, religious belief) and leveraging those differences for higher performance (Ricucci, 2002; Thomas, 1990).

Despite the different values and aims that the terms representation and diversity represent, they have been used interchangeably in both academia and practice. In their review of diversity in the public administration literature, Pitts and Wise (2010) did not distinguish between the two concepts in terms of their meaning, antecedents, and consequences, regarding diversity as an umbrella concept embracing representation. Andrews, Ashworth, and Meier (2014) held a view that, “more representative bureaucracy is, by definition, in general, a more diverse bureaucracy” (p. 5), arguing that research on representation and diversity in the workforce can build upon one another. Weisinger, Borges-Méndez, and Milofsky (2016) remarked that, “in practice, the term diversity is often used interchangeably with representation, implicitly if not explicitly” (p. 11). Miller (1999) noted that, “few reports have made clear the distinction between diversity and representation. An implicit assumption exists that a diverse board is a more representative board. This simply is not the case” (p. 3).

Gooden and Portillo (2011) pointed out this problem as follows and highlighted the importance of differentiating the terms for advancing social equity:

When social equity discussions ensue…terms, such as diversity, diversity management, representative bureaucracy, and cultural competency are often co-mingled. However, this often leads to confusion and questions such as “What is the relationship between these terms?” and “Are they synonymous that can be causally interchanged?” In response to the latter question, we answer a firm NO. To truly advance social equity in the field of public administration, we first need a firm understanding of the relationship of social equity to its related subunits, namely
To date, however, little work in public administration scholarship has attempted to clarify the distinction and relationships between representation and diversity. In addition, scholars studying representative bureaucracy and workforce diversity even disagree amongst themselves as to the meaning of representation and diversity. Kennedy (2014) noted the lack of consensus in the literature on how to define and measure representation. Similarly, Harrison and Klein (2007) argued that diversity scholars describe diversity in several ways and that they offer “only sparse or generic definitions of the principle construct” (p. 1201). This lack of analytical clarity between representation and diversity poses challenges to integrating research findings, developing and refining theories, coming up with research questions, and offering sound practical advice (Gooden & Portillo, 2011; Harrison & Klein, 2007).

Another reason why the distinction between the two terms merits consideration is that theories suggest that representation and diversity affect organizational performance through different mechanisms. Considering the congruence between intra- and extra-organizational diversity, Lim (2006) suggested that representation of a certain group in a public organization leads to positive policy outcomes or organizational performance through improving the public employee-citizen relationship. Focusing on intra-organizational diversity, diversity scholars suggested that the increased workforce diversity, a source for intergroup conflicts as well as new perspectives and synergies, can have positive or negative effects on employee and organizational outcomes (van Knippenberg & Schippers, 2007).

Despite the theoretical discussions, few studies examined different effects of representation and diversity on organizational performance. For example, Pitts (2005) found that racial representation and racial diversity in school workforces are differently associated
with several student outcomes, suggesting that “diversity and representation affect performance differently…results drawn from studies of diversity effects and representative bureaucracy, then should not attempt to build on research in the other area of study” (p. 628). King et al. (2011) showed that racial representation in the health care workforce enhances patient experiences and thus improves organizational performance while racial diversity in the workforce is negatively associated with patient experiences.

Instead of considering representation and diversity at the same time, most studies focused on either of them and its effects on employee or organizational outcomes. These studies yielded mixed findings. In response to the inconsistent findings, scholars have emphasized the role of context in the relationship between representation (or diversity) and employee or organizational outcomes (Andrews, Groeneveld, Meier, & Schröter, 2015; van Knippenberg & Schippers, 2007). According to Johns (2006), context works as “situational opportunities and constraints that affect the occurrence and meaning of organizational behavior as well as functional relationships between variables” (p. 386). Thus, an appropriate question is when and how representation and diversity lead to higher performance rather than whether they do.

Based on the discussion above, this dissertation will examine 1) different conceptualizations and measures of representation and diversity, and 2) the impacts of representation and diversity on employee and organizational outcomes while considering the role of contextual factors. This dissertation consists of literature review and three empirical studies. The rest of the dissertation proceeds as follows.

First, drawing from the literature on representative bureaucracy and workforce diversity, the chapter 2 will propose different conceptualizations and measures of representation and diversity. In addition, the chapter 2 will review different theoretical
mechanisms by which representation and diversity influence employee or organizational outcomes.

Second, the chapter 3 will examine the impact of (racial) minority representation in the U.S. federal government on agencies’ goal achievement depending on agency mission and the employee perception about their agencies’ commitment to diversity and inclusion.

Third, by adopting the intersectionality approach suggesting that more than two identities can jointly determine an individual’s experiences in a social group, the chapter 4 will investigate the asymmetrical effects of gender and racial dissimilarities on various employee groups’ overall satisfaction with job and organization in U.S. federal agencies.

Fourth, the chapter 5 will examine how racial representation and racial diversity in the South African national government affect organizational performance differently. South Africa, the racially homogenous country, provides a desirable setting for demonstrating how racial representation and racial diversity diverge, not only conceptually, but also empirically, and thus allows me to examine the varying effects of racial representation and racial diversity on organizational performance.

Sixth, the chapter 6 discusses theoretical and practical implications, limitations, and directions for future research on representation and diversity.
CHAPTER 2: LITERATURE REVIEW

This chapter will present an overview of different conceptualizations and measures of representation and diversity along the level of analysis—individual or unit—and theoretical mechanisms by which the two demographic phenomena in the workforce affect employee or organizational outcomes.

**Conceptualizing Passive Representation**

Mosher (1968) distinguished between passive representation and active representation. Passive representation refers to the extent to which a bureaucracy resembles the demographic composition of the population it serves. Active representation refers to bureaucratic behaviors that promote the interests of the people represented. Mosher (1968) suggested that passive representation situates in the unit-level.

According to Mosher (1968), passive representation concerns the source of origin of individuals and the degree to which, collectively, they mirror the total society … in terms, for example, of locality of origin and its nature (rural, urban, suburban, etc.), previous occupation, father’s occupation, education family income, family social class, race, religion. (p. 12)

Despite its common definition, two perspectives exist in representative bureaucracy literature when it comes to the level of passive representation: unit- and individual-level. Unit-level passive representation is further divided into *representativeness* and *ordinary representation*. This section will discuss each conceptualization of passive representation, with a summary of conceptual definitions, examples, measurement, and examples of empirical studies in Table 1.
Table 1

<table>
<thead>
<tr>
<th>Conceptualizing Passive Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Unit-level passive representation</td>
</tr>
<tr>
<td>Representativeness</td>
</tr>
<tr>
<td>Conceptual definition</td>
</tr>
<tr>
<td>Example</td>
</tr>
<tr>
<td>Measurement</td>
</tr>
</tbody>
</table>

Unit-level Passive Representation

In the unit-level approach, two conceptualizations of passive representation exist as representativeness and ordinary representation. Representativeness refers to the extent to which individual social groups or an entire bureaucracy reflect the demographic make-up of their referent groups in the population, using representation index, regression analysis, Gini index of concentration, and measure of variation as measures. The ordinary representation...
concerns the proportion of individual social groups within a bureaucracy, without reference to referent groups in the population, and uses group percentage as a measure.

**Passive representation as representativeness.** Passive representation as representativeness (or proportional representation) concerns the extent to which the public workforce reflects the demographic or social composition of the population it serves that can be “the whole people or some segment of the people” (Mosher, 1968, p. 12). Some classic representative bureaucracy literature adopts this conceptualization. In his analysis of the level of representation in legislatures and bureaucracies in the U.S., Long (1952) concluded that bureaucracies are “much more representative of the American people in its composition than the Congress” (p. 814) in terms of the various social and demographic characteristics in the society. Van Riper (1958) argued that a representative bureaucracy is realized when it “consists of a reasonable cross-section of the body politic in terms of occupation, class, geography, and the like, and must be in general tune with the ethos and attitudes of the society of which it is part” (p. 552). Kranz (1976) defined a representative bureaucracy as “one in which the ratio of a particular group in an agency equals that group’s percentage in the population in the geographical area served by that office” (p. 79).

In the U.S. context, the discussion of the meaning of passive representation has focused on the underrepresentation of disadvantaged groups (e.g. minorities, women). Mosher (1968) noted that, “the importance of passive representativeness … rests on the absence, or conspicuous underrepresentation, of certain categories of people, suggesting or reflecting barriers to their entry or advancement” (p. 14). The root of this egalitarian approach can be traced to the Founding Fathers and the Civil Rights Movement. Focusing on legislative representation, the Founding Fathers argued that legislatures “derive all [their] powers directly or indirectly from the great body of the people” (Madison, 1788) and “all classes of citizens should have some of their own numbers in the representative body, in
order that their feelings and interests may be better understood and attended to” (Hamilton, 1788). Since the Civil Rights Movement in the 1950s, the study and practice of representative bureaucracy have encompassed equal opportunity as a core value. To combat discriminations toward disadvantaged groups and promote their interests, proponents of representative bureaucracy support affirmative action or equal opportunity policies designed to recruit a larger number of these groups in bureaucratic organizations.

Representative bureaucracy scholars have used several measures to assess the extent to which bureaucracies are passively representative of their clients or citizens. These measures of representativeness take the demographic or social composition of the referent group into account. Representation index (Subramaniam, 1967), regression analysis (Stewart, Meier, & England, 1989), and the Gini index of concentration (Meier, 1975) measure the representativeness of individual social groups in a bureaucracy, while measure of variation (Nachmias & Rosenbloom, 1973) and Pitts's (2005) representation index measure the representativeness of an organization’s workforce as a whole.

Representation index, which is calculated by dividing the percentage of a social group within a public organization by a percentage of a social group in a target population, has mostly been used to document the representativeness of minorities and women in public organizations. Sigelman (1976) used the representation index to assess the extent to which women are present in the state and local government. By using the representation index, Dometrius (1984) found a lack of representativeness for minorities and women in high-level positions within state governments and the extent of representativeness for those groups.

1 A representation index of 1 (e.g. 30% of women in an organization and 30% of women in a target population) indicates perfect representation. A representation index of less than 1 (e.g. 30% of women in an organization and 40% of women in a target population) indicates underrepresentation, whereas a representation index greater than 1 (e.g. 40% of women in an organization and 30% of women in a target population) indicates overrepresentation.

2 The Gini index of concentration is similar to the representation index, except that this measure provides both a graphical illustration of and numerical information related to the representativeness of the social group. This measure was rarely used in the literature.
varied by functional areas. In addition to descriptive purposes, few studies used the representation index to examine the relationship between the representativeness of minorities and citizen satisfaction (Andrews, Boyne, Meier, O’Toole, & Walker, 2005) and public service outcomes (Andrews et al., 2014).

Despite its usefulness, scholars have noted limitations of the representation index. Nachmias and Rosenbloom (1973) explained that the representation index ignores a number of relevant factors, including the geographical distribution of both social groups and government offices, the distribution of social groups in the working age population, and differentiated images with regard to the desirability of working in public bureaucracies and in connection with obtaining [the] educational and occupational prerequisites required to do so. (p. 591)

In addition, Meier (1993b) contended that this measure was susceptible to extremely positive outliers when the percentage of the represented group (denominator in the equation) was too small. For this reason, a regression analysis was suggested as an alternative for the representation index; however, this measure was rarely used in the literature. A regression analysis uses a regression slope obtained by running a regression of the percentage of public employees of a social group on the percentage of citizens of the same group. The closer the slope is to 1, the more proportionally represented the social group is in the public organization. While the regression analysis allows researchers to account for various factors affecting the level of employment of a social group in a public organization, this method cannot be used to assess the extent of representativeness of a social group in a single organization. Instead, the regression analysis can only provide an average level of representativeness for a social group across organizations due to the nature of the regression technique (Meier, 1993b).
In contrast to the representation index, the measure of variation and Pitts’s representation index assess the extent of representativeness of the entire public workforce.

The measure of variation, which was proposed by Nachmias and Rosenbloom (1973), is used to assess “the degree of integration within the organizational unit as a whole (e.g. the agency, office, bureau, national bureaucracy)” (p. 592) in terms of a certain social characteristic. The measure is computed by dividing the “total observed differences”\(^3\) by the “maximum possible differences.”\(^4\) The values range from 0 to 1, with 1 indicating a situation when all social groups in question are equally represented in a bureaucracy (e.g. six employees comprised of two Whites, two Blacks, and two Asians).

By using the measure of variation, Nachmias and Rosenbloom (1973) found that federal agencies are less racially integrated, implying the underrepresentation of minorities, as general schedule grades go up. Kellough (1990) used the measure of variation to assess the progress of minority recruitment in federal agencies between 1973 and 1988. He showed that, in general, more minorities and women were present in federal agencies with higher scores of measure of variation. Unlike the representation index, the measure of variation does not take the composition of the referent group into account. That is, the measure of variation captures the extent to which each social group is equally represented in an organization, without reference to shares of each group in a population.

Pitts (2005) proposed a representation index that is calculated as follows \(1 - \sum (p_{ti} - p_i)^2 \times 100\), where \(p_{ti}\) is the proportion of the target population in the given social category \(i\) and \(p_i\) is the proportion of public employees in the given social category \(i\). The index scores

\[ \sum f_i f_j, \text{ where } f \text{ is the number of employees of different categories } i, j, \ldots, k \text{ (e.g. White, Black, Asian) of a certain social characteristic (e.g. race). If a group has two Whites, five Blacks, and four Asians, then the “total observed differences” are } (2*5)+(2*4)+(5*4)=38.\]

\[ \frac{n(n-1)}{2} \times \left( \frac{f}{n} \right)^2, \text{ where } n \text{ is the number of social groups considered (e.g. three racial groups—White, Black, and Asian), and } f \text{ is the total number of employees in an agency. Staying with the example for “total observed differences,” the “maximum possible differences” is approximately 40 ( } \frac{3(3-1)}{2} = 6 \text{).} \]
range from 0 and 100 and 100 denotes the perfect proportional match. In contrast to the measure of variation, Pitt’s representation index takes the composition of the social groups under investigation into account. Similar to the measure of variation, this representation index provides a single score that expresses the extent of the representativeness of the public workforce as a whole. Pitts and his colleagues used this representation index to measure how the school workforce of administrators and teachers mirrored the racial make-up of the students and examined the relationship between the level of representativeness and school performance (Pitts, 2005; Roch, Pitts, & Navarro, 2010).

**Passive representation as ordinary representation.** On the other hand, passive representation is conceptualized as ordinary representation, referring to the extent to which a social group is represented in a public organization, without reference to the composition of the referent group in the population. Ordinary representation deviates from the broadly accepted definition of passive representation that compares the resemblance between demographic compositions of the public workforce and population (Mosher, 1968). This conceptualization of passive representation can be traced to Kingsley’s work and the critical mass theory.

In the U.K. context, Kingsley (1944), who first coined the term representative bureaucracy, argued that bureaucracies should be representative of dominant social groups (the middle class in his time) in society, rather than all members of society, focusing on social class as a source for representation. Adopting a principal-agent perspective, he argued that the goal alignment between legislative and executive branches occurs when public employees are “drawn overwhelmingly” (Kingsley, 1944, p. 151) from the dominant social groups, which results in bureaucratic responsibility, legitimacy, stability, and effectiveness. In other words, by reflecting the dominant social groups in the composition of the U.K. civil service, the U.K. civil service can “be trusted to function within the framework of the common desires
of the governing classes” (Kingsley, 1944, pp. 186–187). Otherwise, the U.K. civil service would encounter challenges from the dominant social groups, which would make administration unstable and ineffective. Kingsley did not provide any precise figures by which to explain the degree to which the middle class should be represented in the U.K. civil service. Instead, he implied that the more a dominant social group is represented in a bureaucracy, the better the bureaucracy is.

Turning to the critical mass theory, Kanter (1977), the pioneer of the theory, posited that women in a male-dominated organization can act more collectively to pursue their interests only when the proportion of women reaches a certain tipping point. Without their presence in the greater numbers necessary for creating a counterculture, these women cannot overcome their token status, meaning that they have “little choice about accepting the culture of dominants” (Kanter, 1977, p. 231). She was ambivalent about the tipping point at which the female proportion within a group “begins to shift so do social experiences” within organizations (Kanter, 1977, p. 207), leading to various tipping points suggested by subsequent research (Childs & Krook, 2008). In the representative bureaucracy literature, scholars suggested different levels of group percentages at which the focal groups can bring meaningful changes to policy outcomes (Keiser et al., 2002; Meier, 1993b). Despite its original focus on female workers in male-dominated organizations, the critical mass theory has expanded its application to other disadvantaged groups in organizations. In addition, the theory provided a basis for subsequent empirical research that can be used to assess whether the greater presence of a social group within an organization is related to equitable policy outcomes for that group in the general population.

In the representative bureaucracy literature, a number of studies that operationalized passive representation as a percentage of a social group within an organization have focused on the passive-active link. That is, these studies have investigated whether increasing the
proportion of a particular social group leads to more policy benefits to that social group in the
general population (Hindera, 1993; Meier & Stewart, 1992; Meier & Nicholson-Crotty, 2006;
Smith & Fernandez, 2010; Wilkins & Keiser, 2006). An increased proportion of a social
group implies growing power and leverage for that group within an organization (Meier &
Stewart, 1992; Thompson, 1976). For example, Hindera (1993) argued that, “the group
percentages per district office indicate the proportion of administrative decisions made by
members of each group” (p. 418).

**Individual-level Passive Representation**

Although a majority of the representative bureaucracy literature has conceptualized
passive representation as a unit-level concept and used aggregate measures of passive
representation, some studies have viewed passive representation as an individual-level
concept (Selden, 1997; Theobald & Haider-Markel, 2009; Wilkins, 2007). In the individual-
level approach, passive representation has been conceptualized as an individual demography
(e.g. a Black employee) or a demographic match between an employee and citizen (e.g. a
Black employee and a Black citizen). Focusing on a one-on-one interaction between public
employees and citizens, the individual-level approach is interested in whether public
employees actually advocate for their social groups and whether their presence affects
perceptions or behaviors of citizens with shared demography. In Watkins-Hayes's (2011)
words, the individual-level approach focuses on “processes of representation” (p. 237).

Proponents of the individual-level approach claim that the unit-level approach does
not allow researchers to examine the links between the public employee’s demography,
attitudes, and behaviors and, thus, makes it difficult to uncover evidence for active or
symbolic representation. In addition, they argue that the unit-level approach, which typically
uses the group percentage and policy outcomes as the independent and dependent variable,
respectively, fails to tell whether changes in the policy outcomes are attributable to the
behaviors of the focal employee groups (e.g. minorities), other employee groups (e.g. Whites), or service recipients (Nicholson-Crotty et al., 2016; Theobald & Haider-Markel, 2009).

Conceptualizing Active Representation

Active representation is defined as “an individual (or administrator) [who] is expected to press for the interests and desires of those whom he is presumed to represent, whether they be the whole people or some segment of the people” (Mosher, 1968, p. 12). This definition is similar to Meier’s (1993b) definition for active representation: “A is responsive to B if A acts as B would act if B were in A’s position” (p. 7). More specifically, active representation can be understood as a “decision-making behavior on the part of a specific group of civil servants, which tends to affect systematically the resource allocation of a specific group of citizens” (Hindera, 1993, p. 419). Mosher’s (1968) words in the below paragraph indicate that he originally viewed active representation as partiality, public employees’ “bias in favor of social groups and against other groups” (Lim, 2006, p. 195).

It may be noted that active representativeness run rampant within a bureaucracy would constitute a major threat to orderly democratic government. The summing up of the multitude of special interests seeking effective representation does not constitute the general interest. The strengths of different private interest groups within administration are vastly unequal, and the establishment of anything approaching equity would be nearly impossible. (p. 12)

In this regard, (Subramaniam, 1967) raised a concern that “if the various classes represented have all different and conflicting interests and if their members in the bureaucracy advocate mainly class interests … the result is likely to be a divided and even ineffectual bureaucracy” (p. 1014).

With viewing active representation as partiality, representative bureaucracy scholars are divided into one group that rejects bureaucratic partiality and another group that supports
it (Lim, 2006). Beginning with the rejecters, they view bureaucratic partiality conflicts with bureaucratic neutrality. As noted previously, Mosher and Subramaniam rejected bureaucratic partiality. Lim (2006) also rejected bureaucratic partiality because it is disadvantageous to both the public employees and citizens of the same groups. With the case of minority public employees, Lim (2006) suggested that the bureaucratic partiality of these minority public employees would allow for the partiality of White public employees. As a result, the bureaucratic partiality of these minority public employees would lead to a loss of opportunities related to reducing discrimination toward their groups by changing the perceptions and behaviors of White colleagues.

Turning to the supporters of bureaucratic partiality, they believe that bureaucratic partiality helps address inequalities experienced by disadvantaged groups (Meier, 1993b). The supporters emphasize the idea of equal opportunity and fairness and view partiality by minority public employees as a main source for incorporating minority views and interests that have been largely overlooked in the governing process. In addition, Meier (1993b) argued that “active representation [or partiality] by bureaucracies is a fact of life (p. 29). That is, all forms of bureaucracies or governing processes deciding the distribution of resources are subject to biases (Meier & Morton, 2015). Meier and Morton (2015) argued that, “the real question … is not whether representative bureaucracy generates favoritism or biases, but whether representative bureaucracy generates less equitable results than unrepresentative bureaucracy” (p. 110).

Despite the term’s broadly accepted conceptualization, scholars have not reached a consensus on how to measure active representation (Kennedy, 2014; Saltzstein, 1979). Representative bureaucracy literature has adopted one of the two following approaches: active representation measured as 1) potential for active representation, and 2) policy outputs (or outcomes) that substantively benefit the represented group.
<table>
<thead>
<tr>
<th>Conceptual definition</th>
<th>Public employees’ decision-making behaviors that bring substantive benefits to their own social groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement</td>
<td>Potential for active representation (value congruence between a public employee and citizen of the same demographic group, the individual public employee’s policy relevant attitudes)</td>
</tr>
<tr>
<td>Example</td>
<td>A minority public employee presses interests for her group in an agency decision-making process</td>
</tr>
<tr>
<td>Examples of empirical studies</td>
<td>Bradbury &amp; Kellough, 2011; Dolan, 2002; Rosenbloom &amp; Featherstonhaugh, 1977; Selden, 1997</td>
</tr>
</tbody>
</table>

**Potential for Active Representation**

Although active representation is public employees’ decision-making behaviors that specially consider their own social groups (partiality or advocacy), most representative bureaucracy studies have not directly addressed bureaucratic behaviors due to a difficulty in measurement. Instead, scholars have worked on potential for active representation. These scholars have tested the link between the public employee’s demography and her policy attitudes (Meier & Nigro, 1976; Saidel & Loscocco, 2005; Selden, 1997) or the value congruence between public employees and citizens of the shared demography (Bradbury & Kellough, 2011; Dolan, 2002; Rosenbloom & Featherstonhaugh, 1977). These studies empirically tested the presumed linkage between public employees’ demographic origins and their value congruence with citizens of the shared demography, which had been the core of the representative bureaucracy theory but had also drawn skepticism from scholars (Krislov, 1974; Mosher, 1968).
In this approach, scholars viewed that active representation does not necessarily require tangible policy outputs or outcomes benefiting the represented. Indeed, a key point is whether a public employee attempts to advocate for the represented group, regardless of its success (Kennedy, 2014; Saltzstein, 1979). Some scholars have noted that the representative bureaucracy literature has been too much focused on policy outputs and has failed to consider attempts (even unsuccessful ones) made by public employees to advocate for their groups (Bradbury & Kellough, 2011; Kennedy, 2014).

**Active Representation as Policy Benefits to Certain Social Groups**

A majority of the representative bureaucracy literature has operationalized active representation as policy outputs that benefit the represented, or what Saltzstein (1979) called “the group-benefit approach” (p. 472). The group-benefit approach deviates from the original definition of active representation in that this approach does not necessarily require public employees to articulate what the represented exactly want in making decisions and implementing policies. Thompson (1976) claimed that active representation occurs as long as “it increases the wealth, prestige, or other advantages [associated] with belonging to [the represented]” (p. 203). To him, using policy outputs made more operational sense because it is difficult to operationalize a public employee’s advocating behavior that is consistent with the intentions and preferences of those individuals she represents.

A majority of subsequent research embraced Thompson’s approach to examine empirical evidence demonstrating active representation. These studies commonly assessed the relationship between the passive representation of disadvantaged groups and policy outputs or outcomes benefiting those groups, while accounting for other factors that affect the policy outputs. Examples of policy outputs at the aggregate level are educational attainment (Keiser et al., 2002; Meier & Stewart, 1992), assignment of contracting (Smith & Fernandez,
The positive correlation between passive representation and policy outputs indicates evidence for advocating the behaviors of the focal employee groups in question (or active representation). However, the group-benefit approach also has a caveat. As the substantive policy benefits accrued for the represented group can be attributed to other sources (Lim, 2006) as well as public employees’ advocating behaviors, it is difficult to conclude that a positive correlation between passive representation and a policy output demonstrates active representation (Lim, 2006; Meier & Morton, 2015).

The Link between Passive and Active Representation

A question that has received much attention in representative bureaucracy literature is whether passive representation leads to active representation. The passive-active link builds on the logic that public employees’ social origins (e.g., race, gender) influence their socialization experiences, which, in turn, shape their attitudes and affect their decision-making behaviors and policy outputs (Meier, 1993b; Saltzstein, 1979). The classic representative bureaucracy literature expresses different perspectives on the presumptive passive-active link. Kranz (1976) claimed that minorities “as a group will more closely mirror the needs and wishes of their group, whether overtly or subconsciously, than non-minorities do” (p. 435). On the other hand, Mosher (1968) argued that passive representation does not always guarantee active representation. He explained that a public employee of a certain social group may not advocate for the interests of his social group because of several intervening variables, such as “the length of time in the organization or the time-distance from his background; the nature and strength of the socialization process within the organization; the nature of the position” (p. 13).
What are the approaches for examining the link between passive and active representation? Previous research tested 1) the relationship between the public employee’s demography and attitudes, 2) the relationship between the demographic composition of a bureaucracy and policy outputs derived from bureaucratic behaviors, or 3) the links among demography, attitude, and policy outputs. These studies have yielded mixed findings.

First, some scholars sought to assess the potential for active representation by examining the relationship between public employees’ demographic origins and their policy-relevant attitudes. Rosenbloom and Featherstonhaugh (1977) showed that Black administrators and citizens expressed similar attitudes on measures of political participation, concluding that “passive bureaucratic representation can serve as a prerequisite for greater active representation” (p. 879). Dolan (2002) provided evidence that women in Senior Executive Service (SES) share similar views with female citizens regarding prioritizing government spending on different types of social programs. Bradbury and Kellough (2008) found the value congruence between Black citizens and administrators regarding the local government’s policies bringing benefits to the Black community and argued that this value congruence served as a potential for subsequent policy outputs benefitting Black citizens.

On the other hand, some studies did not support for the link between the public employee’s demography and attitudes. Meier and Nigro (1976) identified agency affiliations as a stronger predictor for public employees’ policy-relevant attitudes than their demography. Likewise, Sadel and Loscocco (2005) stressed the role of agency affiliation by showing that top-level administrators working at redistributive agencies are more likely to prioritize policies designed to press interests for women than other women working at other agencies.

Second, most previous studies have examined the relationship between the demographic composition of a bureaucracy and policy outputs derived from bureaucratic behaviors. Scholars have garnered broad support for the passive-active link in terms of race
in several policy areas. Meier and Stewart (1992) found that the increased presence of Black teachers was positively associated with several educational achievements for Black students. Meier (1993a) found similar results for Hispanic students: the increased presence of Hispanic teachers was positively associated with the number of Hispanic students assigned to the gifted program, while it decreases the number of Hispanic students placed in educable mentally retarded (EMR) programs. In the social service setting, Hindera (1993) uncovered a positive relationship between the proportion of Black employees in the Equal Employment Opportunity Commission (EEOC) district offices and the percentage of total charges filed on behalf of Blacks. Smith and Fernandez (2010) found that minority-owned firms received more contracts as the proportion of minority administrators increased in federal agencies.

However, studies provided mixed findings related to gender representation. Although the empirical evidence is relatively sparse, some studies have supported the passive-active link in terms of gender. Meier and Nicholson-Crotty (2006) found that female victims increasingly reported sexual assault incidents to law enforcement in the presence of an increased number of female police officers. In addition, Keiser et al. (2002) showed that an increased proportion of female teachers was positively associated with the educational outcomes of female students.

Third, Selden (1997) tested the links among demography, attitudes, and policy outputs. In her study of the Farmers Home Administration, Selden (1997) found that a public employee’s race, along with other individual and organizational factors, strongly predicted the public employee’s willingness to advocate for the interests of minorities, or what she called the “minority representative role.” She also found that the higher the level of the minority representative role, the more enhanced the percentage of eligibility determinations awarded to minority clients. Naff (1998) showed that Hispanic supervisors were more likely to recruit Hispanic individuals than their White supervisors, although their attitudes about
hiring Hispanics were not significantly different from the White supervisors. In contrast to Selden’s work, Naff’s findings indicate that a relationship exists between demography and behavior, but not between demography and attitude.

In response to the mixed evidence for the passive-active link, a growing body of research has emphasized the intervening factors that facilitate or deter the passive-active link. For these researchers, “the appropriate question is less whether a link exists than under what circumstances it exists” (Thompson, 1976, p. 213). Scholars have reached a broad consensus on the following three pre-conditions for the passive-active link (Keiser et al., 2002; Meier, 1993a; Riccucci & Van Ryzin, 2017). First, public employees have sufficient discretion over policy formulation or implementation. Second, the policies in question are salient or significant to the social group under investigations. Third, bureaucratic behaviors and decisions have significant influences on the focal social group as a whole. In addition, representative bureaucracy literature identifies several factors intervening the passive-active link, including agency mission, socialization, hierarchy, stratification, critical mass, political support, and professionalization (Meier, 1993b; Meier & Morton, 2015).

The Link between Passive Representation and Performance

A growing body of representative bureaucracy research has begun to address the relationship between passive representation and performance (Andrews et al., 2005; Andrews et al., 2014; Hong, 2016; Pitts, 2005). Performance is a multifaceted concept and its meaning can shift depending on the situation (e.g. time, place), constituents, and level of analysis (Rainey, 2009). In the public sector, where numerous constituents with conflicting interests exist (Boschken, 1994), this issue of inconclusiveness is more evident (Rainey, 2009). Boyne (2002) divided organizational performance into five categories—outputs, efficiency, service outcomes, responsiveness, democratic outcomes—with 15 sub-categories. Public administration researchers have used different approaches to measure organizational
performance: the goal approach, system-resource approach, participant-satisfaction approach, and human resource and internal process approach (Rainey, 2009). Although scholarly efforts continued to propose integrative performance measures (Quinn & Rohrbaugh, 1983), due to the term’s comprehensiveness, most previous public administration research has narrowly defined performance as only pertaining to the policies or constituents in question (Amirkhanyan, Kim, & Lambright, 2014; Boschken, 1994).

An important question to address is how we distinguish between performance and active representation. Can we treat performance as being inclusive of active representation? Prior research on representative bureaucracy has not provided a clear distinction between the two terms. The distinction between the two terms is necessary to advance further investigation of the link between passive representation and performance.

The organizational goal literature may provide guidance on filling this gap in the literature. Management scholars have described an organization as a goal-directed entity in which individuals pursue common or compromised goals (March & Simon, 1958; Simon, 1964). Etzioni (1964) defines an organizational goal as “a desired state of affairs which the organization attempts to realize” (p. 6). Organizational goals provide a basis for an organization’s objectives and policies. With the view that the goal attainment is one of an organization’s main purposes, organizational performance indicates the extent to which an organization achieves its goals derived from the organizational process involving adjustments and compromise among individuals. Individuals, particularly those working in the public sector and being subject to multiple constituents, might possess conflicting goals for the organization; however, organizational goals reflect priorities and consensus that guide or limit organizational behaviors (Simon, 1964).

The distinction between personal and organizational goals provides insights on where to draw the line between active representation and performance. Gross (1969) defines a
personal goal as “a future state that the individual desires for himself” (p. 278) or an organization as a whole. An individual can set personal goals without considering the other organizational members’ opinions.

Given that active representation encompasses public employees’ partiality or advocacy towards their social groups, this is comparable with attaining personal goals, but not with performance, when no formal or informal endorsement at the organizational level exists regarding such advocating behaviors or policy outputs derived from these behaviors. Conversely, active representation might correspond with performance when organizational goals or leaders embrace advocacy towards particular social groups. For example, Smith and Fernandez (2010) examined the relationship between minority administrators’ passive representation and the proportion of federal contracts awarded to minority-owned small firms. In this case, seeing more contracts awarded to minority-owned firms corresponds with performance because the Small Disadvantaged Business (SDB) Certification Program and the Section 8(a) Program officially aim to award more federal contracts to small firms run by historically marginalized groups.

How did previous studies examine the relationship between passive representation and performance? They embraced one of the following approaches: testing 1) whether passive representation leads to performance pertaining to certain groups and 2) whether passive representation leads to performance pertaining to all groups.

Starting with the first approach, most studies examined the relationship between demographic composition and policy outputs or outcomes that benefit certain social groups, but these also contribute to pursuing general organizational goals (Keiser et al., 2002; Meier & Nicholson-Crotty, 2006; Smith & Fernandez, 2010). Although the main goal of these studies was to find evidence for active representation and its link with passive representation, Lim (2006) argued that active representation is only one source of substantive policy benefits.
for certain groups (minorities in his study). Thus, it is more appropriate to say that these studies test the relationship between passive representation and performance pertaining to certain social groups.

According to Lim (2006), there are direct and indirect sources of substantive policy benefits for the represented group. Direct sources have to do with minority public employees’ advocating behaviors based on their partiality, shared values (or attitudes) with their social groups, and empathic understanding. Similarly, Hindera (1993) noted that public employees are likely to bring more benefits for their social groups because of value congruence, smooth communications, and a sense of responsibility to serve the interests of their social groups. Lim (2006) regarded shared attitudes and empathic understanding as more reliable sources than a sense of partiality or advocacy that can potentially result in zero-sum game among different social groups.

In addition to direct sources, Lim (2006) suggested that the presence of minority public employees can bring substantive benefits to their social groups via indirect effects on the perceptions and behaviors of White public employees and minority clients who receive public service. He argued that the increased presence of minorities changes the attitudes and behaviors of White public employees through monitoring by minority public employees, self-control of biased behaviors, and increased empathy for the concerns and needs of minority clients. Meier and Nicholson-Crotty (2006) found that a greater number of female police officers increased the number of sexual assaults reported. They attributed this finding to the resocialization of male police officers due to their increased interactions with female police officers. Roch et al. (2010) found that schools with greater racial representation in their teacher workforce tended to choose learning-oriented disciplines over sanction-oriented disciplines, suggesting a shift in the organizational culture to a greater inclusiveness of minorities.
Although the aforementioned sources focused on the attitudes and behaviors of public employees (supply side), the recipients of government services can also contribute to substantive policy benefits (demand side). The presence of public employees with shared demography makes minority clients feel more comfortable about seeking and participating in governmental services. For example, Riccucci, Van Ryzin, and Li (2016) found that women are more willing to support and participate in a recycling program in the presence of female public employees. Theobald and Haider-Markel (2009) showed that the presence of Black police officers enhanced Black citizens’ perceived legitimacy regarding policing practices. In addition, passive representation of minority groups can motivate minority clients to contribute to achieving policy goals. Keiser et al. (2002) found that female teachers can be positive role models for female students, which leads to the students’ identification with their teachers and, thus, fosters their motivation for educational attainment.

In addition to Lim’s direct and indirect sources for performance, Meier, Wrinkle, and Polinard (1999) argued that a representative bureaucracy performs better than its non-representative counterpart because the former can tap into a broader range of qualified human resources. The authors claimed that discrimination toward minority workers can lead to the loss of potential sources of qualified workforce that can contribute to higher organizational performance; thus, the organization should address such discrimination by giving increased recruitment and promotion opportunities to minorities. In a similar vein, Andrews et al. (2014) argued that a representative bureaucracy diversifies the workforce and, thus, the organization can benefit from new ideas and perspectives that can potentially contribute to organizational performance.

While most previous studies examined the relationship between the passive representation of certain social groups and substantive policy benefits exclusive to those social groups, some scholars investigated how passive representation (of certain groups or a
population as a whole) leads to policy outputs or outcomes that benefit a population as a whole, or what Andrews et al. (2005) called, “higher-levels of organizational performance” (p. 492).

As a related subject, one of the unresolved questions in the representative bureaucracy literature is whether passive representation is a win-win or zero-sum game. In other words, scholars have tried to answer “the process by which a representative bureaucracy becomes responsive to sectional as well as general interests” (Subramaniam, 1967, p. 1014). Scholars are concerned that pursuing the interests of certain social groups can conflict with other organizational goals and generate tensions among organizational members with different priorities and clients (Mosher, 1968; Romzek & Hendricks, 1982; Thompson, 1976).

To address whether passive representation benefits all, previous studies have used performance measures indicative of “the aggregation of benefits for all of these groups” (Pitts, 2005, p. 617) as the outcome variables. In other words, these performance measures reflected collective interests or expectations at the organizational-level rather than particular interests. Pitts (2005) found that the racial representativeness of managers and teachers at schools have varying effects on overall student performance. Andrews et al. (2014) found positive effects of female and minority representativeness on fire service performance that benefits all residents within jurisdictions. In the law enforcement setting, Hong (2016) showed that an increased proportion of minority police officers decreased the number of crimes reported within a year. However, not all studies found a positive relationship between representation and performance. For example, Andrews et al. (2005) found that minority representativeness was negatively associated with overall citizen satisfaction toward local governments in the U.K.

In addition to studies examining outcomes for the group as a whole, some studies tested how the bureaucratic representation of certain social groups affected client outcomes
for different social groups. For example, Meier et al. (1999) found that an increase in the proportion of minority teachers had a positive effect on student performance for both minority and White students. They pointed out that the benefits of representative bureaucracy can spread to all groups of the general population rather than only the minority population. In the school context, Pitts (2007) provided contradictory findings that showed that the racial representativeness of the entire teacher workforce led to benefits to the student body as a whole, while the racial representativeness had positive effects on the minority students and negative effects on the White students. The question of a zero-sum game was not only limited to the minority versus White context. It also extended to intra-racial minority situations. For example, Rocha and Hawes (2009) showed that the increased presence of Black teachers lowered the discrimination experienced by Hispanic and Black students.

**Conceptualizing Diversity**

Although workforce diversity is commonly defined as “any attribute people use to tell themselves that another person is different” (Williams & O’Reilly, 1998, p. 81), diversity is a multifaceted concept with little consensus as to its meaning (Harrison & Klein, 2007; van Knippenberg & Schippers, 2007). Compared to representation studies that have focused on a few attributes (e.g. gender and race in the U.S. context), diversity studies have embraced a greater variety of attributes, including both surface-level (e.g. gender, race, age) and deep-level (e.g. political ideology, religious beliefs) attributes. Among these attributes, gender, age, ethnicity, tenure, educational background, and functional background have been studied extensively (van Knippenberg & Schippers, 2007; Williams & O’Reilly, 1998).

Despite little consensus as to what workforce diversity means, two approaches are typically used to understand the meaning of diversity. The first approach is *organizational demography*, referring to the degree to which one or more attribute (e.g. gender, race) is distributed within a unit, confining the unit of analysis to a collective level (e.g. organization,
The second approach is *relational demography*; that is, the degree to which similarity or dissimilarity with respect to one or more attributes exists between an individual and others or the composition of a group (Riordan, 2000; Tsui, Egan, & O’Reilly, 1992). In this case, the unit of analysis can be at the individual- or cross-level (e.g. individual X group).

In addition, Harrison and Klein (2007) provided three conceptualizations of diversity: separation, variety, and disparity. Simply put, diversity as separation reflects similarity (or dissimilarity) with respect a lateral attribute among members. Diversity as variety reflects the amount of information that comes from diversity in an organization. Diversity as disparity reflects the degree to which valuable organizational resources are distributed among members.
Table 3

Conceptualizing Diversity

<table>
<thead>
<tr>
<th></th>
<th>Relational demography</th>
<th>Organizational demography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit of analysis</td>
<td>Individual, cross-level (individual X organization)</td>
<td>Unit-level (e.g. team, organization)</td>
</tr>
<tr>
<td>Conceptualization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptual definition</td>
<td>The demographic difference between an individual and others in the organization (or the composition of the organization)</td>
<td></td>
</tr>
<tr>
<td>Separation</td>
<td>The extent to which members of an organization differ along a lateral continuous attribute</td>
<td>The extent to which members of an organization are spread across the categories of that attribute</td>
</tr>
<tr>
<td>Variety</td>
<td>The extent to which members of an organization are spread across the categories of that attribute</td>
<td></td>
</tr>
<tr>
<td>Disparity</td>
<td>The extent to which members of an organization differ in the possession of valued or desirable resource</td>
<td></td>
</tr>
<tr>
<td>Example</td>
<td>Racial match between a supervisor and employee (e.g. female supervisor and female employee)</td>
<td>The difference in the levels of organizational commitment among employees in an agency</td>
</tr>
<tr>
<td></td>
<td>The difference in the levels of organizational commitment among employees in an agency</td>
<td>The distribution of members of an agency across racial groups</td>
</tr>
<tr>
<td></td>
<td>The distribution of power among members of an agency</td>
<td></td>
</tr>
<tr>
<td>Measurement</td>
<td>Euclidean distance, interaction term, perceptual measure</td>
<td>Standard deviation, Mean Euclidean distance</td>
</tr>
<tr>
<td></td>
<td>Standard deviation, Mean Euclidean distance</td>
<td>Blau’s index, Teachman’s entropy index</td>
</tr>
<tr>
<td></td>
<td>Blau’s index, Teachman’s entropy index</td>
<td>Coefficient of variation, Gini coefficient</td>
</tr>
<tr>
<td>Examples of empirical studies</td>
<td>Kirchmeyer, 1995; Riordan &amp; Shore, 1997; Tsui, Egan, &amp; O’Reilly, 1992</td>
<td>Langbein &amp; Stazyk, 2013; Siddiki, Kim, &amp; Leach, 2017</td>
</tr>
<tr>
<td></td>
<td>Langbein &amp; Stazyk, 2013; Siddiki, Kim, &amp; Leach, 2017</td>
<td>Gazley, Chang, &amp; Bingham, 2010; Opstrup &amp; Villadsen, 2015; Pitts, 2005</td>
</tr>
<tr>
<td></td>
<td>Gazley, Chang, &amp; Bingham, 2010; Opstrup &amp; Villadsen, 2015; Pitts, 2005</td>
<td>Bloom &amp; Michel, 2002; Siegel &amp; Hambrick, 2005</td>
</tr>
</tbody>
</table>

Organizational Demography

According to Pfeffer (1983), diversity is defined as “the composition of basic attributes, such as age, sex, educational level, length of service or residence, or race, of the social entity under study” (p. 308). Pfeffer (1985) noted that “organizational demography is based on the data gathered on individuals, but is, in fact, a collective or unit-level property” (p. 68). In the organizational demography perspective, demographic variables are strong indicators for invisible characteristics, such as attitudes and cognitive abilities, and are useful when attempting to predict organizational outcomes (Lawrence, 1997). Organizational
demography scholars explain that demographic attributes at the aggregate level (e.g. the proportion of women in an organization) affect individual behaviors and experiences independent of the individual-level attributes.

By adopting the organizational demography approach, Harrison and Klein (2007) proposed three conceptualizations of diversity: as separation, variety, and disparity. First, diversity as separation refers to “compositions of differences in lateral position or opinion among unit members, primarily of value, belief, or attitude; disagreement or opposition” (p. 1203). Take an employee’s attitude toward his or her supervisor as an example. A maximum separation occurs when employees are evenly divided into two extreme endpoints of ‘strong supporter’ and ‘strong rejecter.’ On the other hand, a minimum separation occurs when most of the employees stand on any single position on the attitude continuum (e.g. strongly support, moderately support, or reject).

Standard deviation (SD) is a typical measure of diversity as separation and requires interval or ratio data. SD indicates how closely all of the values are clustered around the mean. The higher the SD, the more dispersion exists in the unit as a whole. The measure varies from 0 to \((u-l)/2\), where \(u\) is the highest value and \(l\) is the lowest value. If employees of one team are asked to rate their satisfaction with a team reader, from 1 (mostly dissatisfied) to 7 (mostly satisfied), the maximum SD (3) would occur when the ratings are equally positioned on the lower (1) and the upper bound (7). While the SD is not sensitive to sample size, this measure cannot be used to compare the level of separation between variations in different scales (e.g. 1 to 5 versus 1 to 7).

Second, diversity as variety can be understood as the “composition of differences in kind, source, or category of relevant knowledge or experience among unit members; unique or distinctive information” (Harrison & Klein, 2007, p. 1203). It is important to note that unlike diversity as separation, diversity as variety has to do with categorical attributes like
gender, race, experience, and skills that do not fall along a continuum. A maximum variety is achieved in the case of a “uniform distribution, with [an] even spread of members across all possible” types of an attribute in question (Harrison & Klein, p. 1203).

Blau’s index is a typical measure of diversity as variety and this measure is viable for categorical data. In a statistical sense, Blau’s index indicates the probability that “two randomly selected group members belong to different categories” (Harrison & Klein, 2007, p. 1211). The index is computed as follows: \(1 - \sum p_i^2\), where \(p_i\) is the proportion of individuals in the given \(i\) category. The index ranges from 0 to \((k-1)/k\), where \(k\) is the number of categories of the diversity attribute under investigation. The maximum value would occur when all of the individuals of a unit are evenly represented in terms of a certain attribute. Suppose that a team is composed of four race groups (e.g. Black, White, Asian, and Hispanic), the maximum value (0.75) is obtained when each race group is equally represented (25%) in the team. The minimum level of variety is obtained when all of the members share the same race.

Third, diversity as disparity focuses on the “composition of vertical differences in proportion of socially valued assets or resources held among unit members; inequality or relative concentration” (Harrison & Klein, 2007, p. 1203). Compared to diversity as separation or variety, a relatively small number of studies conceptualize diversity as disparity. Examples of socially valued resources are pay, power, prestige, and status. Take pay levels among employees in an organization as an example. A maximum disparity occurs when one employee receives a significantly higher wage than the rest of the employees. Contrarily, it can be described as a low disparity when all employees are paid the same wages.

The coefficient of variation (CV) is a typical measure of diversity as disparity and this measure requires ratio data. The CV is calculated by dividing the standard deviation by the mean. The measure “reflects both the distances between unit members and the dominance (concentration of the resources in) of those who have higher amounts of [an attribute]”
(Harrison & Klein, 2007, p. 1212). The CV ranges from 0 to $\sqrt{(n - 1)}$, where $n$ is the total number of employees. Take pay as an example. The maximum CV value would occur when one employee receives all of the earnings, while the rest of the employees (n-1 employees) receive nothing, although this hypothetical case is not practical. The CV produces lower values when the mean (the denominator) increases, meaning that the extent of disparity for a certain attribute decreases as people have higher amounts of that attribute on average. Unlike the SD, the CV can be used to compare two attributes in different metrics; however, research needs to take into account sample size because the maximum CV increases as the sample size grows.

Harrison and Klein (2007) emphasized the importance of a “precise specification of diversity type” (p. 1210) and the match between “the specified conceptualization and index of diversity” (p. 1214). They explained that researchers can conceptualize such a diversity attribute as separation, variety, or disparity. For example, most studies have conceptualized gender diversity as variety and used Blau’s index as a measure (Gazley, Chang, & Bingham, 2010; Opstrup & Villadsen, 2015; Pitts, 2005). In this case, a gender difference denotes a source for varying information and perspectives. However, gender might also reflect the idea of separation when men and women hold conflicting views on some issues, which potentially affects work-related outcomes, such as cohesion and job satisfaction. Gender might also reflect the idea of disparity when such asymmetry exists between men and women in terms of the distribution of resources or power (e.g. most top-level administrators are men). In short, Harrison and Klein (2007) argued that no single way exists for conceptualizing and, thus, measuring a particular diversity attribute. The authors claimed that “the meaning of within-unit diversity in demographic attribute X is likely to be shaped by the unit’s primary purpose or superordinate goal and unit members’ beliefs regarding the association between demographic attribute X and deeper-level attributes” (p. 1209).
In practice, however, the level of measurement largely determines the choice of diversity measures and conceptualizations. According to Joshi, Liao, and Roh (2011), previous studies have predominantly used Blau’s index to measure the level of diversity in categorical variables, such as gender and race. For continuous variables, such as age or tenure, researchers have typically used the CV to measure the level of diversity. The operationalization of diversity in accordance with the level of measurement, but not with the conceptualization of diversity, sometimes leads to erroneous research findings. Harrison and Klein (2007) noted that some studies have improperly used the CV to assess separation or variety. Harrison, Price, and Bell (1998), for example, used the CV to measure separation in ages and employee attitudes about organizational practices. In this research, a measure of separation (e.g. SD) should have been the right choice over the CV because no clue exists that these attributes imply inequality among the individuals in the research setting. Indeed, the authors are interested in the relationship between the level of separation in these attributes and work group cohesiveness, implying that age and attitudes serve as the basis for social categorization rather than inequality.

Few studies have adopted Harris and Klein’s (2007) recommendation for matching diversity measures with diversity conceptualization. For example, Kearney, Gebert, and Voelpel (2009) transformed age and education (continuous variables) into category variables to use Blau’s index in accordance with their conceptualization of these attributes as variety. They showed that models with Blau’s index or the CV produced equivalent research findings, providing evidence that it is possible to have operationalization be in line with conceptualization, while addressing issues regarding level of measurement.

**Relational Demography**

While organizational demography researchers view diversity as a group characteristic, relational demography researchers critique organizational demography’s lack of attention to
different interactions among members, and understand diversity as an individual’s “comparative similarity or dissimilarity in given demographic attributes” to “members of dyads or groups who are in a position to engage in regular interactions” (Tsui & O’Reilly, 1989, p. 403). In contrast to organizational demography, which assumes that diversity influences organizational members in a similar way, relationship demography explains diversity as an individual’s relative distance with respect to a certain attribute, resulting from psychological processes in which the person compares his or her own attribute with others or her affiliated group (Riordan, 2000). Suppose there is a team with three Blacks and seven Whites. In the view of relational demography, the level of racial similarity or dissimilarity differs between Black and White workers (i.e. the three Black workers are more dissimilar from the team than the seven White workers) and, thus, it affects their work processes and outcomes in a different way. In the relational demography approach, the unit of analysis is the individual (i.e. dyads) or cross-level (i.e. comparing an individual’s attribute with the attribute composition of a unit) (Riordan & Wayne, 2007).

Riordan (2000) argued that researchers can assess an individual’s similarity (or dissimilarity) to others by focusing on either actual or perceptual differences. In the formal approach, researchers compared an actual demographic or social attribute (e.g. gender, race) of an individual to the attributes of other people or the entire group, with the assumption that actual similarity (or dissimilarity) shapes the person’s attitudes and behaviors within an organization (Riordan & Wayne, 2007). In contrast, some studies argued that perceptual differences, not actual differences, drive variation in individual attitudes and behaviors and, thus, the individual or organizational outcomes in question (Kirchmeyer, 1995; Riordan & Weatherly, 1999). In their perspective, it is imprecise to predict individual’s attitudes and behaviors from actual differences. Instead, researchers should assess the extent to which
individuals vary in their recognition of differences and psychological reactions that accompany those differences (Riordan & Wayne, 2007).

In relational demography research, measures of diversity include Euclidean distance, interaction term, and perceptual measure (Riordan & Wayne, 2007). Euclidean distance (D score) is a measure of the extent to which actual demographic similarity exists between an individual and a unit to which he or she belongs. It is computed as $\sqrt{\frac{1}{n} \sum (s_i - s_j)^2}$, where $s_i=$ focal individual and $s_j=$ each other work group members. A higher score indicates greater dissimilarity (Tsui et al., 1992).

This measure is subject to some limitations. First, the index treats every dyad equally and does not take into account the nonsymmetrical nature of differences among individuals (e.g. person 1 vs. person 2, person 1 vs. person 3). Second, the index averages all possible pairwise differences into one value, thus ignoring potential effects of individual differences, rather than an individual’s similarity to a unit as whole, on individual attitudes or behaviors. In other words, “being greatly different from just one person in the group may dramatically influence an individual’s D score even though the individual may be quite similar to the rest of the group members” (Joshi et al., 2011, p. 524).

The interaction term approach measures an individual’s actual demographic similarity relative to the attribute composition of a unit as a whole (i.e. individual demographic attribute X demographic composition of unit). In most research, a proportion of a particular attribute is the typical measure for the unit’s composition. Many scholars agree that a proportion demonstrates “the experience of a woman in a group of all or mostly women will be different from that of another woman in a group of mostly men” (Tsui & Gutek, 1999, p. 23). These words can apply to other demographic characteristics (e.g. race, tenure). Regardless of its usefulness, the interaction terms has an issue of lower statistical power, thus being subject to
Type 2 errors. In addition, like the D score approach, the interaction term does not capture meaningful pairwise differences among individuals.

Researchers can obtain the perceptual measure by asking each individual about his or her perceived level of similarity within a unit (e.g. I am similar to the rest of the team members in terms of skills). Riordan and Wayne (2007) noted that “the perceptual approach is based on the theoretical assumption that individuals assign their own psychological meaning to the differences in demographic characteristics between themselves and others” (p. 10). Proponents of this approach argue that perceptual similarity better explains individuals’ attitudes and behaviors than actual similarity (Kirchmeyer, 1995). However, as the perceptual approach uses the survey approach, it is susceptible to the self-report issues that are common in survey research.

The Link between Diversity and Performance

Considerable research on workforce diversity has explored how workforce diversity, operationalized in different ways, is associated with individual or organizational outcomes. Two theoretical frameworks have been widely used to address this research question: social categorization and information/decision-making approaches. Guided by these two approaches, previous research has yielded mixed results regarding the effects of diversity on individual or organizational outcomes (van Knippenberg & Schippers, 2007; Williams & O’Reilly, 1998).

Social Categorization and Similarity-attraction Theories

Most relational demography researchers have adopted the social categorization, similarity-attraction, and other related theories to assess the effects of diversity on individual and organizational outcomes, particularly attitudinal and behavioral ones, such as job satisfaction, turnover intentions, and organizational commitment (Joshi et al., 2011; Tsui & Gutek, 1999). Exploring an individual’s attitudes and values relative to his reference basis, affected by similarity (or dissimilarity), relational demography researchers suggest that
increased similarity (less diversity) is positively related to employees’ attitudinal and behavioral outcomes (Tsui & O’Reilly, 1989).

The main idea of the social categorization theory is that the increased diversity in groups brings about negative outcomes attributed to the increase in process difficulty related to communication, trust, and coordination issues. The social categorization theory explains that people tend to categorize others around them into the in-group (similar group) and out-group (dissimilar group) according to salient attitudes and values, and they disparage the out-group to heighten their own self-esteem (Turner, Oakes, Haslam, & McGarty, 1994). Similarly, the similarity-attraction theory (Byrne, 1971) and attraction-selection-attrition (ASA) model (Schneider, 1987) explain that people are more likely to be attracted to others who are similar to them in terms of personality, values, and other attitudes and, thus, organizations can enhance work-related outcomes by attracting, selecting, and retaining similar people rather than dissimilar others. Together, these theories posit that increased workforce diversity generates problems of communication, trust, and collaboration among organizational members and, thus, leads to negative work-related outcomes, such as a high turnover rate (Wagner, Pfeffer, & O’Reilly, 1984), low cohesion (O’Reilly, Caldwell, & Barnett, 1989), and low performance (Jehn, Northcraft, & Neale, 1999).

**Information and Decision-making Theory**

Viewing the organization as an information processing instrument, the information/decision-making perspective predicts that greater diversity brings new knowledge, expertise, and perspectives that lead to innovation, synergy, group learning, deliberation, and task performance. Proponents of this approach argue that these advantages can outweigh any coordination and integration problems caused by greater workforce diversity (Cox & Blake, 1991; Thomas, 1990). Several studies have corroborated this perspective. For example, Dahlin, Weingart, and Hinds (2005) found that increased
educational diversity was positively associated with the range, depth, and integration of the team members’ information use. Ancona and Caldwell (1992) showed that a high level of functional diversity promoted team members’ interactions with others outside of the team, resulting in a higher rating on innovation and team performance in turn.

Although the majority of the literature has been concentrated on the effects of diversity in less visible and task-related attributes, such as education and function, some studies have found positive effects of demographic diversity on performance. In their experimental brainstorming study, McLeod, Lobel, and Cox (1996) reported that racially heterogeneous groups scored higher on a measure of the quality of ideas rather than racially homogenous counterparts. Herring (2009) found that increased racial diversity was positively associated with the sales revenue, number of customers, market shares, and relative profits of firms. Together, these researchers concurred that diversity enlarged the pool of information and produced high-quality outcomes in organizations.

**Combining Two Streams of Diversity Theories**

In response to the inconclusive findings regarding the effects of diversity on performance, van Knippenberg, De Dreu, and Homan (2004) proposed a categorization-elaboration model (CEM) that sought to integrate the social-categorization and information/decision-making perspectives. The authors pointed out that a majority of diversity literature is grounded in the weak proposition that the effects of diversity depend upon diversity types. They argued that many studies had treated the visible demographic attributes (e.g. gender, race, age) as sources for social-categorization and less visible and job-related attributes (e.g. education, function, information) as sources for information processing. The main idea of CEM is that both of the processes occur simultaneously. In other words, all of the diversity attributes may elicit both social categorization and information and decision-making processes, indicating that they might affect performance positively or negatively.
In addition, van Knippenberg et al. (2004) stressed that researchers should pay more attention to occasions when the social-categorization process prevents the organization from reaping benefits from the information, resources, and perspectives introduced by increased workforce diversity. The authors suggested three contingencies to facilitate or deter the social categorization process in a diverse workforce: cognitive accessibility, normative fit, and comparative fit. According to the authors,

cognitive accessibility refers to the ease with which the social categorization implied by the differences is cognitively activated. Normative fit reflects the extent to which the categorization makes subjective sense to group members. Comparative fit refers to the extent to which the categorization yields subgroups with high intragroup similarity and high intergroup differences (p. 1010).

Furthermore, they argued that the social categorization process leads to intergroup bias and, thus, prevents potential gains from information processing only when there is a challenge or threat to the identity implied by the social categorization.

Finally, the authors suggested several intervening variables that could potentially moderate the relationship between the informational aspects of diversity and group performance, such as task knowledge and task motivation. The appropriate question is not simply whether workforce diversity improves or impairs performance; rather, it is how, when, and why workforce diversity leads to better performance. Similar to this idea, other scholars have called for researchers to pay more attention to moderating variables that can affect the relationship between diversity and performance (Choi & Rainey, 2010; Pitts & Wise, 2010; van Knippenberg et al., 2004). Guillaume, Dawson, Otaye-Ebede, Woods, and West (2017) suggested several contingency factors including strategy, leadership, culture, human resource practices, unit design, climate, and individual differences.
Conclusion

This chapter confirms the need to distinguish between the two concepts in theory building. Representation and diversity not only indicate different demographic phenomena (i.e. a match between intra- and extra-organizational diversity vs. intra-organizational diversity) but also underscore different values (i.e. equity and justice vs. efficiency and effectiveness). The distinction between the two concepts also has practical significance because they influence organizational performance through different mechanisms utilized by public managers. In addition, the overview shows that representation and diversity can take on different conceptualizations (along with measures). Thus, scholars and practitioners should recognize different conceptualizations and their consequences. Among different conceptualizations and measures, they should select options that are in line with context and purpose of research or practice. Chapter 6 will discuss more implications and suggestions for future research along with other findings from subsequent chapters.
CHAPTER 3. MINORITY REPRESENTATION AND PERFORMANCE: THE ROLE OF AGENCY MISSION AND DIVERSITY CLIMATE

With the increase in the demographic diversity of populations and the workforce, the demographic similarity between a workforce and its clients has become more salient in promoting equity and fairness in public service delivery. While many representative bureaucracy studies have focused on equity and fairness, performance-oriented reforms (e.g., New Public Management) have led scholars and practitioners to grapple with how bureaucratic representation is related to performance (Andrews et al., 2014, 2015). The performance claim of representative bureaucracy can be related to the zero-sum game, whether the increased representation by a certain group benefits that population at the expense of other groups (Hindera, 1993; Meier et al., 1999; Mosher, 1968). Previous research has examined the relationship between bureaucratic representation by a certain group and performance by using collective policy outcomes (Andrews et al., 2005; Hong, 2016) or separately analyzing different groups regarding the same policy outcomes (Meier et al., 1999; Rocha & Hawes, 2009).

Scholars have called for more studies that consider the roles that contextual factors play in the relationship between demographic representation and performance (Andrews et al., 2015; Meier & Morton, 2015). A more appropriate question is when representative bureaucracy leads to higher performance rather than whether it does. Keiser et al. (2002) stated that research should consider “the larger institutional features that shape the circumstances in which bureaucrats exercise discretion and act to affect policy outcomes” (p. 554).

The previous research has not addressed the role that agency mission plays in the relationship between representation and performance. This question is relevant because public employees might face institutional pressures that facilitate or hinder their personal
goals, including advocacy for their social groups (Herbert, 1974). Previous research showed that public employees in redistributive agencies are more likely to hire women and prioritize policies for them (Kelly & Newman, 2001; Saidel & Loscocco, 2005), offering conducive environments for female public employees in pursuing advocacy goals with less conflict with general organizational interests (Romzek & Hendricks, 1982). These findings can extend to minority representation cases (Hindera, 1993; Selden, 1997).

Diversity climate, “employees’ perceptions of their organizations’ commitment to diversity as indicated by its diversity policies and how they are implemented” (Oberfield, 2016, p. 765), is another contingency factor that previous studies on the relationship between representation and performance did not address. As agency socialization embraces not only formal tactics, such as policies or rules, but also informal ones, such as organizational cultures and social interactions among employees (Oberfield, 2010), collegial pressures or organizational climates influence public employees’ work motivation and other employee outcomes (Ashikali & Groeneveld, 2015; Choi & Rainey, 2010). The positive diversity climate could help public employees compromise personal and organizational goals effectively, and this effect might be stronger for employees of disadvantaged groups (e.g. minorities, women) with low power and status.

To fill these gaps in the literature, this study examines how the relationship between minority representation and organizational goal achievement, one type of organizational performance, depends on the agency’s mission and diversity climate in the U.S. federal government. This study proceeds as follows. First, this study reviews the literature on representative bureaucracy and the contextual factors that might facilitate or hinder the relationship between bureaucratic representation and performance. Second, research hypotheses and a discussion of the U.S. federal government’s institutional environment are
presented. Third, this study explains the data, methods, and findings. Fourth, theoretical and practical implications from the findings are discussed.

**Representative Bureaucracy and Performance**

The theory of representative bureaucracy explains that bureaucrats who share demographic characteristics with the represented populations (and, thus, have similar socialization experiences and values) tend to make and implement policies that advocate for the represented population’s interests (Kingsley, 1944; Mosher, 1968). By promoting equal employment opportunities and demographic diversity in the governmental workforce, the theory argues that bureaucratic decision-making incorporates diverse perspectives, making bureaucracies more effective and legitimate (Krislov, 1974). Mosher (1968) differentiated between passive and active representation. Passive representation is the extent to which the bureaucracy mirrors the demographic composition of the represented population. Active representation occurs when bureaucrats advocate for the interests of the represented populations.

One of the literature’s key questions is whether passive representation leads to active representation (Kennedy, 2014; Meier, 1993b). A broad consensus exists on the three conditions when the passive-active link occurs: 1) the policy is salient to the focal group through historical or political processes, 2) the focal group directly benefits from the policy, and 3) the bureaucrats have discretion in policy making and implementation (Keiser et al., 2002; Meier, 1993b; Sowa & Selden, 2003; Wilkins & Keiser, 2006). Given that the conditions are satisfied, several studies have supported the passive-active link with respect to race in different contexts (Meier & Stewart, 1992; Selden, 1997; Smith & Fernandez, 2010; Theobald & Haider-Markel, 2009). When it comes to gender, however, relatively little evidence exists on the passive-active link (Meier & Nicholson-Crotty, 2006; Wilkins & Keiser, 2006).
While many studies have focused on the link between passive representation and active representation (in the form of organizational outputs or outcomes that advance certain groups’ interests), few studies examined whether passive representation by a certain group (e.g. Black) brings benefits to that group in the population at the expense of other groups (Mosher, 1968; Subramaniam, 1967). This idea of zero-sum game is related to debates on how to define performance and how it is different from active representation (Andrews et al., 2005; Kennedy, 2014). Given that active representation can be understood as public employees’ advocacy toward their social groups, it might constitute performance when it, at least partially, aligns with general organizational goals. In contrast, active representation might not constitute performance when it does not or hardly contribute to achieving general organizational goals (Cornwell & Kellough, 1994; Romzek & Hendricks, 1982).

Few studies explored the relationship between passive representation by a certain group and policy outcomes pertaining to both focal and other groups in the general population. Based on the finding that minority teacher representation was positively related to higher pass rates for both minority and nonminority students, Meier et al. (1999) claimed that the increased minority teachers had brought new knowledge and cultural perspectives to schools from which all student had benefited. Focusing on the inter-minority relationship, Rocha and Hawes (2009) found that the increased representation of Black teachers lowered both Black and Hispanic students’ chances for experiencing discriminatory assignment to segregated classes or facilities. In addition, other studies that used measures of performance at the collective level displayed the positive relationship between representation and performance (Andrews et al., 2014; Hong, 2016).

In contrast, some studies, albeit few, found the negative or null relationship between representation and performance. Andrews et al. (2005) showed that minority representation in the U.K. local government was negatively associated with overall citizen satisfaction toward
the government, and an effective management strategy mitigated this relationship. Pitts (2007) found that the teacher workforce reflecting the student body’s racial make-up was positively related to Black and Hispanic students’ pass rates, but the relationship was opposite for White students’ pass rates. Overall, these findings suggest that the relationship between passive representation and performance is not simple, and research should embrace a contingent approach.

**Institutional Context in the Link between Passive Representation and Performance**

Organizations operate within institutional environments that influence their structures and procedures. Frumkin and Galaskiewicz (2004) showed that institutional pressures were stronger in public organizations that have ambiguous goals and are susceptible to governmental or political authority. In response to institutional pressures, organizations try to control their employees’ attitudes and behaviors, making them conform to the norms and values that the organizations deem appropriate (March & Olson, 1983). To instill and reinforce their goals, values, and practices to employees, organizations use several socialization tactics, such as policies, rules, training, and other formal mechanisms. Organizational socialization also occurs in informal ways, such as organizational culture and interactions among members (Oberfield, 2010). While organizational socialization could contribute to role clarity and cohesiveness among employees, it could also suppress any of the employees’ personal goals that are inconsistent with organizational ones, leading to negative employee outcomes, such as low job satisfaction and low organizational commitment (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007).

Although public employees’ advocacy toward their social groups (i.e. active representation) is one of sources for high performance (Lim, 2006; Meier et al., 1999), its activation and effectiveness depend on institutional context (Keiser et al., 2002; Meier & Morton, 2015). Herbert (1974) explained that minority public employees face competing
demands from different stakeholders, including minority communities, organizational leaders, colleagues, and external actors. Under these pressures, minority public employees struggle with serving minority citizens’ interests as well as organizational roles. In this situation, minority public employees could take one of the following approaches: 1) abandon individual advocacy goals and conform to organizational expectations, 2) compromise their expected roles for minority citizens and for organizations, or 3) avoid conflicting situations (Martinez, 1991). These explanations can also apply to other employee groups (e.g. Whites, women).

Relatedly, Mosher (1968) argued that the passive-active link can be weakened by organizational socialization, despite an opposing argument that individuals’ values and attitudes shaped by pre-organizational experiences remain through their organizational lives (Oberfield, 2010). Meier and Nigro (1976) showed that agency socialization exerted stronger influences on U.S. federal administrators’ policy preferences than demographic characteristics did. Wilkins and Williams (2008) found that increased representation of Black and Hispanic police officers increased racial profiling of those groups, arguing that police socialization prevented those police officers from advocating for minorities.

Selden (1997) examined how public employees adopt “minority representative roles,” their willingness to advocate for minorities, accounting for individual, organizational, and environmental factors. By focusing on individuals’ role perceptions, her study addressed whether organizational socialization outweighed pre-organizational socialization. In the study on the Farmers Home Administration’s Rural Housing Loans program, Selden (1997) found that minority status was positively associated with a minority representative role that leads to decisions to award more loans to minorities.
Minority Representation in the U.S. Federal Government and Implications for Performance

This study’s research context is the U.S. federal government. The federal government encompasses different policy areas—redistributive, distributive, regulatory, and constituent types—and has different institutional characteristics that lead to variations in organizational structures and processes (Kelly & Newman, 2001; Meier & Bohte, 2007). Therefore, the U.S. federal government is a desirable setting to investigate the roles of institutional factors in the relationship between passive representation and performance. Among several types of performance, this study focuses on the federal agency’s goal achievement. Examining organizational goals is one of typical approaches to evaluating organizational performance (Rainey, 2009).

This study posits that the increased minority representation would be negatively associated with federal agencies’ goal achievement in general because it might lead to the goal misalignment between the U.S. federal agencies and U.S. Congress. First, goals of U.S. federal agencies are likely to much reflect Whites’ interests than minorities’ ones. Based on their disadvantage in political, social, economic, and intellectual power, minorities have fewer opportunities to influence public policies than Whites do. Several sources have indicated that Whites have held a dominant position over minorities in terms of income, education, housing, health, and other metrics (Krivo & Kaufman, 2004; Oliver & Shapiro, 2006). Minorities’ relatively low socioeconomic statuses might hinder their political participation, including voting, making campaign donations, signing petitions, and staging demonstrations, which are important methods to influence policy agendas and bureaucratic decision-making (Leighley & Vedlitz, 1999; Segura & Rodrigues, 2006).

Second, despite their discretion in interpreting legislation and formulating and implementing policies, the U.S. federal agencies are subject to legislative influences to a
greater or less degree (Wood & Waterman, 1991). The U.S. Congress has been highly unrepresentative of the country’s racial demography, posing challenges in considering diverse racial groups’ interests and needs in decision-making. The subsequent links among demography, socialization, value, and behavior apply to the legislature setting (Mansbridge, 1999; Pitkin, 1967). A White-dominant legislature tends to create legislation that promotes Whites’ interests while caring relatively less about minorities’ needs (Bratton & Haynie, 1999; Mansbridge, 1999).

In sum, there is a high chance that the U.S federal government and Congress in general pursue Whites’ interests more than minorities’ ones. Thus, a goal alignment between Congress and the federal government is more likely when more Whites are represented in the both institutions, promoting collaboration and reducing transaction costs (Kingsley, 1944; McCubbins, Noll, & Weingast, 1989; Wood & Waterman, 1991). Both lawmakers and public employees have advantages over one another in different areas. Public employees have better technical expertise and institutional knowledge, while lawmakers exert influence over public employees by setting policy agendas and exerting control mechanisms. In the changing dynamics between the two parties over time, a goal misalignment between lawmakers and public employees could generate problems, such as bureaucratic shirking, increased oversight costs, and conflicts between the two parties, which might have negative effects on federal agencies’ goal achievement in turn (Waterman & Meier, 1998).

*Hypothesis 1: Minority representation will be negatively associated with the U.S. federal government’s goal achievement.*

This study discusses three potential contextual factors that would positively moderate the relationship between minority representation and federal agencies’ goal achievement: agency mission, financial publicness, and diversity climate. Agency mission that explains variation in policy areas and organizational culture exerts significant influence on
bureaucratic attitudes and behaviors. Meier and Bohte (2007) explained that redistributive policy “taxes one group of people to provide benefits for another group” (p. 92), including areas of income stabilization, welfare, healthcare, housing, and income distribution. In the US context, historically disadvantaged groups such as minorities and women have been considered as main beneficiaries of redistributive policies (Ripley & Franklin, 1991). I expect that the increased minority representation will be positively associated with high goal achievement of redistributive federal agencies for the following rationales.

In organizations mainly tasked with redistributive policies, minority public employees might press for minorities’ interests with less conflict with general organizational goals and White public employees. As redistributive policies mainly target minorities and other less-privileged groups, it would be easier to garner organizational support for minority public employees’ advocacy towards minorities that is likely to contribute to achieving general organizational goals (Cornwell & Kellough, 1994; Romzek & Hendricks, 1982). In addition, minority public employees in redistributive agencies who find a good fit with their organizations might have stronger organizational commitment and contribute to higher agency performance.

Besides active representation, increased minority representation can affect organizational performance by changing the minority-White relationship within agencies and organizational policies (Lim, 2006). In redistributive agencies, the goal alignment between minority and White public employees is more likely to happen, which might facilitate intra-group interaction and help overcome social categorization processes. Therefore, in redistributive agencies, the increased minority representation might promote White public employees’ cultural and empathetic understanding of minorities, ultimately contributing to achieving agency goals. Corroborating this argument, Saidel and Loscocco (2005) showed
that both male and female administrators in redistributive agencies in the state government prioritized women-related issues more than other policy issues.

On the demand side, a certain group’s passive representation can lead to symbolic representation that might positively influence organizational performance, by changing attitudes and behaviors in service recipients, that is independent of bureaucratic behaviors (Lim, 2006). The increased minority representation in redistributive agencies might help obtain more cooperation and trust from minorities who are the main recipients of redistributive programs, which contributes to implementing policies successfully and achieving redistributive goals (Hindera, 1993; Wilkins & Keiser, 2006). In agencies accomplishing tasks that are not relevant to racial identities, minority representation is less likely to result in any symbolic representation that is a source for higher agency performance.

Hypothesis 2: Minority representation will be positively associated with the goal achievement of U.S. federal agencies with redistributive missions.

The publicness literature provides insights about institutional contexts conducive to pressing for minority interests. Publicness is defined as “the degree to which the organization is affected by political authority” (Bozeman, 1987, p. xi), and a broad consensus exists on the three dimensions of publicness: ownership, funding, and political authority, which are not mutually exclusive (Rainey, 2009). This study focuses on the moderating role of financial publicness in the relationship between minority representation and organizational performance. Previous research has typically operationalized financial publicness as the proportion of government funding for agency operation. Financial publicness is deemed high when an agency receives most of its funding from governmental sources (Rainey, 2009).

Different types of financial resources link to different goals and priorities (Feeney & Welch, 2012), and organizations with high levels of publicness tend to enhance equity in public service delivery (Amirkhanyan, Kim, & Lambright, 2008; Moulton, 2009). Because
government agencies rely on tax revenues that are often accompanied by restrictions and external oversights, public employees tend to experience more pressure to pursue social equity in organizational procedures, policies, and outcomes. According to neo-institutional theory, even without legal or regulative requirements of pursuing equity (regulative perspective), large tax revenues might shape organizational structure and culture (normative and cultural perspectives) in a way that considers the interests of broad constituent groups (rather than those of particular groups) (Moulton, 2009).

Based on the above discussion, the higher level of financial publicness might imply more recognition of disadvantaged groups in setting and implementing agency goals or policies, which might help minority public employees compromise their advocacy and general organizational goals. Empirical studies have supported this possibility. Amirkhanyan et al. (2008) found that public nursing homes receive more Medicaid patients than for-profit and non-profit nursing homes receive and that such public nursing homes do so without compromising the quality of patient care. Kulis (1997) showed that female faculty tend to experience more gender-based disadvantages in universities that generate large portions of operating budgets from endowments. Thus, this study posits that organizational reliance on government funding can make minority representation more effective.

*Hypothesis 3: Minority representation will be positively associated with the goal achievement of U.S. federal agencies that receive more government funding.*

Minority employees who have been historically marginalized in organizations may feel pressured to conform to organizational norms established by dominant groups (Herbert, 1974). This pressure can make them risk averse and hinder them from actively engaging in organizational processes. After undergoing organizational socialization, minority employees are more prone to act against interests of minorities to fit in with majority groups (Nicholson-Crotty, Nicholson-Crotty, & Fernandez, 2017; Wilkins & Williams, 2008).
The above discussion underscores the importance of inclusive culture that supports minority employees in bringing their unique perspectives and knowledge to organizational processes. Research has shown how a diversity climate that allows more collegial endorsements of personal initiatives and discretion at work is positively associated with employee outcomes such as low turnover intention and high job satisfaction, organizational commitment, and perceived performance (Ashikali & Groeneveld, 2015; Choi & Rainey, 2010). Because diversity climate might signal a stronger sense of care for minority public employees who have experienced relatively more inequity in the workplace, such employees would benefit more than White employees would from positive diversity climate (McKay et al., 2007). Specifically, a positive diversity climate could provide minority employees with buffers from agency socialization that assimilates them into dominant organizational norms (Kelly & Newman, 2001).

A diversity-friendly climate could also contribute to overcoming social categorization processes by promoting intergroup contact between minority and White employees. Social categorization theory explains that employees naturally prefer working with similar others and discriminate against dissimilar others to promote the status of their groups (van Knippenberg & Schippers, 2007). Under increased minority representation, White employees who perceive a threat to their dominant status might show negative attitudes toward minority groups. An effective way to reduce the conflict between minority and White employees is to provide the groups with opportunities to communicate and establish a cultural understanding (Pettigrew & Tropp, 2008). Creating a strong climate of mutual respect can encourage intergroup interactions.

**Hypothesis 4:** Minority representation will be positively associated with the goal achievement of U.S. federal agencies that have a positive diversity climate.
Data and Method

Data

This study uses a four-year (2012-2015) unbalanced panel data set. The unit of analysis is the parent-level US federal agency. The sample sizes vary from 129 to 204 agencies, including executive departments, independent agencies, and the executive office of the president. The data set was compiled from several sources, including the Office of Personnel Management’s (OPM) FedScope, Performance and Accountability Report (PAR), FEVS, federal budget by agency, U.S. government manual, and federal regulatory directory.

Dependent Variable

The dependent variable is the agency’s goal achievement rate, which previous research has used (Lee & Whitford, 2013; Moon, 2017). To create this variable, this study gathered performance data from each federal agency’s PAR. In compliance with the Government Performance and Result Act (GPRA) of 1993, each federal agency annually generates a PAR with sections outlining the management’s discussion and analysis, performance information, and financial information. According to the GPRA Modernization Act of 2010, which provides the most up-to-date guidelines for the federal government’s goal-setting and evaluation, each federal agency should submit an agency strategic plan, annual performance plan (APP), and PAR.

At the beginning of every four-year presidential term, each federal agency is required to provide an agency strategic plan that addresses general and long-term goals. In the agency strategic plan, the agency should provide justifications for its goals, plans to achieve them, expected challenges, and budget planning.

In the APP, each agency develops performance goals that the agency aims to achieve during the current and upcoming fiscal years. A performance goal is “a target level of performance expressed as a tangible, measurable objective, against which actual achievement
can be compared, including a goal expressed as a quantitative standard, value, or rate” (GPRA, 1993). Unlike performance metrics that are externally imposed on public organizations (e.g. crime rates and test scores), federal agencies develop performance goals on their own and thus may have incentives to set mostly easier ones. However, several monitoring systems exist to promote agencies to set achievable but meaningful goals. In developing and adjusting performance goals, the federal agency should periodically consult with its stakeholders, such as the Office of Management and Budget (OMB), the President, and several congressional committees. The APP should describe how the agency’s goals that vary across agencies contribute to the entire federal government’s priority goals.

Performance goals accompany performance indicators that “[assess] the relevant outputs, service levels, and outcomes of each program activity” (GPRA, 1993), typically expressed as targets that are expected to be achieved by the end of fiscal year (e.g. reduce the number of homeless veterans on any given night to 35,000 by June 2012). Generally, performance indicators should be “objective, quantifiable, and measurable” (GPRA, 1993). Performance indicators vary depending on the agency’s strategic goals and programs and encompass customer service, efficiency, input, intermediate outcome, process, outcome, and output (OMB, 2016). For goals that are not appropriate to quantify, the agency can use alternative forms of reporting, such as descriptions.

The PAR reports the achievement status for each performance goal by comparing the results against the targets. In addition, the PAR explains how the agency ensures the validity and reliability of the performance measures, including information about the data sources and level of accuracy required to use the data. For any unmet goals, the agency must report the challenges and provide plans for improvement. This performance information is included in the agency’s congressional budget justification report and shared on the agency’s website and performance.gov for public viewing.
This study creates the dependent variable, the goal achievement rate, by dividing the number of exceeded and achieved performance indicators by the total number of indicators (i.e. the sum of exceeded, achieved, not achieved, and uncertain indicators) within the single fiscal year and multiplying the calculated proportion by 100. Uncertain goals do not have targets or results. As performance indicators include broad aspects of organizational effectiveness, this study argues that the goal achievement rate indicates the competing values approach to organizational performance (Quinn & Rohrbaugh, 1983). Figure 1 displays the distribution of the dependent variable.

![Figure 1. Distribution of goal achievement](image)

**Figure 1. Distribution of goal achievement**

**Independent Variable of Interest**

The independent variable of interest is minority representation. This study uses the minority percentage within the federal agency. A group percentage is the appropriate choice because this study focuses on effects of the increased presence of minority public employees (instead of the racial similarity between the federal workforce and population), which indicates more decisions made by those employees (Hindera, 1993), on an agency’s goal
achievement. This study creates the independent variable by using racial demographic data from the OPM’s FedScope. To account for a potential simultaneous relationship between minority representation and goal achievement, the minority percentage is lagged by one year.

**Control Variables and Moderators**

Analytic models include agency-level control variables that could influence an agency’s goal achievement. First, the models control for the agency’s structural characteristics by including whether the agency belongs to the executive branch of the federal government, whether the agency head has fixed terms, and whether the agency is a regulatory one. Second, the percentage of political appointees in an agency is included, because agency politicization may influence agency processes and outputs (Wood & Waterman, 1991). Third, agency age and the total number of employees (logged) are included to control for agency history and size. Fourth, the models include average employee tenure, average salary, the percentage of employees with administrative or professional occupations, and the percentage of employees with more than a bachelor’s degree to account for organizational resources’ effects on an agency’s goal achievement (Lee & Whitford, 2013). Fifth, the percentage of uncertain goals is included to control for organizational accountability and transparency to goal setting and implementation. Sixth, the models include the total number of agency goals because it would be easier for an agency to achieve a low number of goals. Seventh, the models include the percentage of female employees to account for the effects of the workforce’s gender demography on an agency’s goal achievement. Lastly, year dummies are included to control for time trends that could stem from different causes, such as economic situations and changes in federal policies.

The models include three moderators. As a measure of the extent to which the agency performs redistributive tasks, this study uses the percentage of the agency’s gross outlay spent on social justice-related functions, proposed by Cornwell and Kellough (1994).
Using federal budget data, this study aggregates gross outlays in the six budget functions: (1) community and regional development, (2) education, training, employment, and social services, (3) health, (4) Medicare, (5) income security, and (6) social security. Next, the proportion of all gross outlays in these functions is generated by dividing the aggregate total by the total gross outlays. The proportion is multiplied by 100.

This study also uses federal budget data to calculate the percentage of agency outlay from governmental sources, a measure of financial publicness (Rainey, 2009). In addition, this study calculates minority employees’ perception of their workplace’s diversity climate by using the one-to-five Likert scale (strongly disagree to strongly agree) questions from the FEVS. The three questions are 1) “policies and programs promote diversity in the workplace (e.g. recruiting minorities and women, training in awareness of diversity issues, mentoring),” 2) “supervisors work well with employees of different backgrounds,” and 3) “my supervisor is committed to a workforce representative of all segments of society” (Choi & Rainey, 2010; Oberfield, 2016). The minority employees’ responses are averaged to the agency level. Table 4 reports the descriptive statistics and correlation matrix of all variables used in this study.
Table 4

Descriptive Statistics and Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Goal Achievement</td>
<td>66.88</td>
<td>18.46</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Minority</td>
<td>37.42</td>
<td>12.23</td>
<td>.33</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Women</td>
<td>51.08</td>
<td>10.22</td>
<td>-.22</td>
<td>.57</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Executive</td>
<td>.29</td>
<td>.43</td>
<td>-.08</td>
<td>-.08</td>
<td>-.23</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Fixed Term</td>
<td>.51</td>
<td>.50</td>
<td>.04</td>
<td>.12</td>
<td>.29</td>
<td>-.65</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Political Appointee</td>
<td>1.62</td>
<td>3.89</td>
<td>.03</td>
<td>.05</td>
<td>.28</td>
<td>-.18</td>
<td>.30</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Average Tenure</td>
<td>14.63</td>
<td>2.83</td>
<td>.20</td>
<td>.02</td>
<td>.05</td>
<td>-.13</td>
<td>.23</td>
<td>-.04</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Average Salary</td>
<td>100461.60</td>
<td>2296.99</td>
<td>.16</td>
<td>.32</td>
<td>.23</td>
<td>-.40</td>
<td>.49</td>
<td>.13</td>
<td>.18</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Total Employee</td>
<td>7.95</td>
<td>2.43</td>
<td>-.08</td>
<td>-.08</td>
<td>-.25</td>
<td>.73</td>
<td>-.62</td>
<td>-.38</td>
<td>-.10</td>
<td>-.46</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Agency age</td>
<td>66.36</td>
<td>50.36</td>
<td>.12</td>
<td>-.16</td>
<td>-.02</td>
<td>.54</td>
<td>-.35</td>
<td>-.14</td>
<td>.07</td>
<td>-.30</td>
<td>.50</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Total goal</td>
<td>55.84</td>
<td>63.29</td>
<td>-.02</td>
<td>-.18</td>
<td>-.28</td>
<td>.39</td>
<td>-.42</td>
<td>-.13</td>
<td>-.02</td>
<td>-.16</td>
<td>.44</td>
<td>.12</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Professional</td>
<td>13.94</td>
<td>5.01</td>
<td>.01</td>
<td>-.13</td>
<td>.10</td>
<td>-.33</td>
<td>.27</td>
<td>.24</td>
<td>-.10</td>
<td>.34</td>
<td>-.51</td>
<td>-.20</td>
<td>.25</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Bachelor or more</td>
<td>66.28</td>
<td>16.28</td>
<td>.17</td>
<td>-.29</td>
<td>-.11</td>
<td>-.40</td>
<td>.51</td>
<td>.13</td>
<td>.26</td>
<td>.78</td>
<td>-.38</td>
<td>-.24</td>
<td>-.01</td>
<td>.09</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Social Outlay</td>
<td>26.45</td>
<td>41.64</td>
<td>-.03</td>
<td>.22</td>
<td>.40</td>
<td>.12</td>
<td>.04</td>
<td>.10</td>
<td>.06</td>
<td>-.32</td>
<td>.02</td>
<td>-.07</td>
<td>-.07</td>
<td>-.11</td>
<td>-.16</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Government Outlay</td>
<td>93.69</td>
<td>18.15</td>
<td>-.18</td>
<td>.16</td>
<td>.18</td>
<td>-.09</td>
<td>.05</td>
<td>.12</td>
<td>-.05</td>
<td>-.10</td>
<td>.01</td>
<td>-.07</td>
<td>.00</td>
<td>.10</td>
<td>-.16</td>
<td>.02</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Uncertain Goal</td>
<td>9.91</td>
<td>14.38</td>
<td>-.66</td>
<td>.17</td>
<td>.04</td>
<td>.16</td>
<td>-.12</td>
<td>-.12</td>
<td>-.05</td>
<td>-.03</td>
<td>.07</td>
<td>-.13</td>
<td>.04</td>
<td>-.11</td>
<td>-.04</td>
<td>.09</td>
<td>-.05</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>17 Regulatory Agency</td>
<td>.34</td>
<td>.48</td>
<td>.18</td>
<td>-.06</td>
<td>-.02</td>
<td>-.42</td>
<td>.44</td>
<td>-.08</td>
<td>.18</td>
<td>.44</td>
<td>-.23</td>
<td>.14</td>
<td>-.14</td>
<td>.09</td>
<td>.47</td>
<td>-.02</td>
<td>-.23</td>
<td>-.09</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Sample size = 204. Diversity climate (Mean = 0.17, SD = 0.17) is not included in the table because it significantly decreases the sample size. SD = standard deviation.
Analysis

For analysis, this study uses ordinary least squares (OLS) and random effects (RE) with robust standard errors. The two methods yield consistent results in terms of the variables of interest. A series of Hausman tests fail to reject the null hypothesis that the random effects model is preferred at 0.1 level. In addition, there is relatively little within-variation in the minority representation, the key independent variable, across years (between-group standard deviation is 12.40 and within-group standard deviation is 1.65). Therefore, the fixed effect model that purely relies on within-group variation and introduces a large number of dummy variables is less suitable in the present case. To reduce high correlations between original and squared terms, this study centers the minority representation and the moderators (i.e. social gross outlay, governmental gross outlay, and diversity climate) to their grand means. As a robustness check, this study conducts the same analyses with fractional logit regression (family—binomial, link—logit) with robust standard errors because the OLS, with a proportion-dependent variable (e.g. goal achievement in the present case), might lead to violation of its several OLS assumptions and predict values beyond 0 and 1 (Papke & Wooldridge, 1996). The results of fractional logit analyses are consistent with those of OLS and RE analyses. Table 5 reports OLS and RE results.

Findings and Discussion

This study interprets coefficients of OLS results because they are comparable with the counterparts of RE results. To render the results of interaction terms more substantively meaningful, marginal effect plots are reported in Figures 2, 3, and 4. In model 1 of Table 5, minority representation is negatively associated with the agency’s goal achievement ($\beta = -0.36, p < .05$). This finding supports the Hypothesis 1 by demonstrating that organizational or political authority that places more emphasis on Whites’ interests could offer minority public employees fewer opportunities and resources to influence goal setting and implementation.
Even if minority employees have discretion, they might experience conflicts with organizational goals that pursue general interests rather than advocate for particular groups, decreasing their work motivation and increasing turnover intention (Kristof, 1996). In addition, this finding supports previous findings that agency socialization outweighed pre-organizational socialization (Meier & Nigro, 1976; Wilkins & Williams, 2008) unless minority issues gained saliency through organizational or political processes (Keiser et al., 2002). To examine the potential role of critical mass in the relationship between minority representation and agency performance (Meier, 1993a), model 1 includes the squared term of the minority representation variable. This variable has no significant relationship with the dependent variable.

In model 2 of Table 5, the relationship between minority representation and the agency’s goal achievement becomes more positive as the agency’s social outlay, the extent to which the agency commits to redistributive tasks, increases \((\beta = 0.01, p < .01)\). Figure 2 shows that the slope indicating how minority representation influences the agency’s goal achievement becomes positive as the percentage of social outlay increases from the 10th to 90th percentile. Thus, I find support for Hypothesis 2.

The model 2 of Table 5 shows that minority representation is more positively associated with the agency’s goal achievement as the percentage of governmental source outlay increases \((\beta = 0.01, p < .01)\). However, Figure 3 provides little support for this finding because the two slopes’ (the percentages of government outlay at the 10th and 90th percentiles respectively) 95% confidence intervals are largely overlapped. A potential explanation is that the aggregated federal budget lacks the strong political control necessary to influence organizational structure and management practices (Andrews, Boyne, & Walker, 2011).

In model 3 of Table 5, the relationship between minority representation and the agency’s goal achievement becomes more positive as the diversity climate increases \((\beta =
2.60, \( p < .01 \). Figure 4 shows that the slope indicating how minority representation affects the agency’s goal achievement becomes positive as the level of diversity climate changes from the 10\(^{th}\) percentile to the 90\(^{th}\) percentile. As a result, I find support for Hypothesis 4.

Turning to control variables across the models, higher average tenure is positively associated with the agency’s goal achievement rate, indicating that agencies with more experienced employees can better pursue organizational goals. In addition, the percentage of uncertain goals, indicating the lack of accountability and transparency in goal setting and implementation, has a negative relationship with the agency’s goal achievement.
Table 4

**OLS and RE Regression Results**

<table>
<thead>
<tr>
<th>DV: Goal Achievement</th>
<th>Model 1 OLS</th>
<th>Model 1 RE</th>
<th>Model 2 OLS</th>
<th>Model 2 RE</th>
<th>Model 3 OLS</th>
<th>Model 3 RE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minority Representation</td>
<td>-.36***</td>
<td>-.39***</td>
<td>-.66***</td>
<td>-.18</td>
<td>-.11</td>
<td>-.24</td>
</tr>
<tr>
<td></td>
<td>(.14)</td>
<td>(.20)</td>
<td>(.14)</td>
<td>(.14)</td>
<td>(.15)</td>
<td>(.20)</td>
</tr>
<tr>
<td>Minority Representation²</td>
<td>.00</td>
<td>.01</td>
<td>.01***</td>
<td>.01**</td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>Minority Representation*SO</td>
<td>.01***</td>
<td>.01**</td>
<td>(.00)</td>
<td>(.00)</td>
<td>.26</td>
<td>.33*</td>
</tr>
<tr>
<td>Minority Representation*GO</td>
<td>.01***</td>
<td>.01**</td>
<td>(.00)</td>
<td>(.00)</td>
<td>.26</td>
<td>.33*</td>
</tr>
<tr>
<td>Minority Representation*DC</td>
<td>2.60***</td>
<td>2.13**</td>
<td>(.96)</td>
<td>(1.11)</td>
<td>.09</td>
<td>.09</td>
</tr>
<tr>
<td>Women</td>
<td>-.15</td>
<td>-.12</td>
<td>-.30***</td>
<td>-.26</td>
<td>-.33*</td>
<td>-.09</td>
</tr>
<tr>
<td>Executive</td>
<td>3.00</td>
<td>.63</td>
<td>4.52</td>
<td>2.40</td>
<td>10.91**</td>
<td>7.92</td>
</tr>
<tr>
<td>Fixed Term</td>
<td>-5.32*</td>
<td>-4.23</td>
<td>-1.11</td>
<td>-.84</td>
<td>-2.09</td>
<td>-1.72</td>
</tr>
<tr>
<td>Political Appointee</td>
<td>.04</td>
<td>.21</td>
<td>.36</td>
<td>.26</td>
<td>(1.69)</td>
<td>(1.64)</td>
</tr>
<tr>
<td>Average Tenure</td>
<td>1.00***</td>
<td>1.05**</td>
<td>.82**</td>
<td>.83*</td>
<td>1.12**</td>
<td>.69</td>
</tr>
<tr>
<td>Average Salary</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Total Employee</td>
<td>-1.38*</td>
<td>-.79</td>
<td>-1.12*</td>
<td>-.83</td>
<td>-.86</td>
<td>-1.61</td>
</tr>
<tr>
<td>Agency Age</td>
<td>.01</td>
<td>.02</td>
<td>.02</td>
<td>.03</td>
<td>-.03</td>
<td>-.04</td>
</tr>
<tr>
<td>Total Goal</td>
<td>-.02</td>
<td>.00</td>
<td>-.02*</td>
<td>-.01</td>
<td>-.03**</td>
<td>-.02</td>
</tr>
<tr>
<td>Professional</td>
<td>-.37</td>
<td>-.22</td>
<td>-.23</td>
<td>-.15</td>
<td>-.15</td>
<td>.16</td>
</tr>
<tr>
<td>Bachelor or more</td>
<td>.01</td>
<td>-.03</td>
<td>.17</td>
<td>.11</td>
<td>.28*</td>
<td>.06</td>
</tr>
<tr>
<td>Social Outlay (SO)</td>
<td>.05*</td>
<td>.05</td>
<td>-.01</td>
<td>.02</td>
<td>.06</td>
<td>.06</td>
</tr>
<tr>
<td>Government Outlay (GO)</td>
<td>-.10**</td>
<td>-.11**</td>
<td>-.03</td>
<td>-.06</td>
<td>.14</td>
<td>.02</td>
</tr>
<tr>
<td>Uncertain Goal</td>
<td>-.83***</td>
<td>-.72***</td>
<td>-.79***</td>
<td>-.72***</td>
<td>-.83***</td>
<td>-.82***</td>
</tr>
<tr>
<td>Regulatory</td>
<td>3.44</td>
<td>2.80</td>
<td>2.40</td>
<td>1.90</td>
<td>2.97</td>
<td>1.32</td>
</tr>
<tr>
<td>Diversity Climate (DC)</td>
<td>29.71***</td>
<td>35.15***</td>
<td>(9.85)</td>
<td>(10.59)</td>
<td>.69</td>
<td>.69</td>
</tr>
</tbody>
</table>

**Note.** *p<.1, **p<.05, ***p<.01 (two tails). Year dummies (2013-2015, 2012 is a base year) are omitted in the table. Unstandardized coefficients and robust standard errors (in parentheses) are reported.
**Figure 2.** Interaction effect of social outlay and minority representation on goal achievement

**Figure 3.** Interaction effect of government source outlay and minority representation on goal achievement
Figure 4. Interaction effect of diversity climate and minority representation on goal achievement

As a robustness check, this study further examines the roles that agency mission and diversity climate might play in the relationship between different racial minority groups’ (i.e. Asian, Black, American Indian, Native Hawaiian, and Hispanic) representations and the agency’s goal achievement. Scholars have called for a nuanced understanding of inter-minority relationships and their effects on organizational outcomes. They argued that treating all racial minority groups as a singular minority masks such organizational dynamics (Riccucci, 2009). Table 6 with OLS results shows that a redistributive mission positively moderates the relationship between Black representation and goal achievement ($\beta = 0.01, p < .01$), but no significant relationships are found for the other groups. Further, a receptive diversity climate positively moderates the relationships between Asian ($\beta = 5.76, p < .01$) and Hispanic ($\beta = 3.23, p < .05$) representations and goal achievement, but these results do not hold for the other groups.
Table 5

Effects of Representations by Different Racial Minority Groups

<table>
<thead>
<tr>
<th></th>
<th>SO</th>
<th>DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian*SO</td>
<td>.01</td>
<td>(.01)</td>
</tr>
<tr>
<td>Black*SO</td>
<td>.01</td>
<td>*** .00</td>
</tr>
<tr>
<td>American Indian*SO</td>
<td>.00</td>
<td>(.01)</td>
</tr>
<tr>
<td>Native Hawaiian*SO</td>
<td>-.15</td>
<td>(.21)</td>
</tr>
<tr>
<td>Hispanic*SO</td>
<td>.00</td>
<td>(.01)</td>
</tr>
</tbody>
</table>

| Asian*DC     | 5.76*** | (1.52) |
| Black*DC     | .80     | (.96)  |
| American Indian*DC | 4.46 | (5.78) |
| Native Hawaiian*DC | -63.44 | (51.90) |
| Hispanic*DC  | 3.23**  | (1.55) |

Note. * p<.1, ** p<.05, *** p<.01 (two tails). All other variables in Table 5 are included but not reported. Due to the high collinearity, this study runs each interaction term separately in different models. SO = social outlay, DC = diversity climate. Unstandardized coefficients and robust standard errors (in parentheses) are reported.

Conclusion

This study provides evidence that agency mission and positive diversity climate matter in making minority representation effective for enhancing organizational performance.

There are several points to discuss. First, this study offers evidence that a certain group’s passive representation leads to high performance when the zero-sum game is minimized. Given that passive representation can lead to active representation involving advocacy towards a certain group, the question is whether a trade-off exists between pursuing that group’s interests and general organizational ones. In the U.S. federal government in general, pursuing minorities’ interests could mean decreased benefits for Whites or less commitment to other important organizational agendas. In redistributive agencies with goals of addressing inequity experienced by disadvantaged groups, however, increased representation by minorities, accompanying advocacy towards minority communities and more cooperation from them, could also benefit White employees and the organization as a whole to some extent (e.g. achieving the agency’s goals). In sum, passive representation by a certain group is likely to promote organizational performance that is aligned with active representation (i.e. bureaucratic advocacy towards the represented population).

This explanation can used to interpret previous studies on the relationship between passive representation by a certain group and performance pertaining to all groups. Benefits of some policy outputs and outcomes are not exclusive for certain groups and have spillover
effects. For example, Andrews et al. (2014) found that the increased representation by minority fire fighters was positively associated with fire service effectiveness, measured as index of several fire service indicators that pertain to both minority and White residents, and provision of fire-prevention education to communities. When minority fire fighters offered more education to minorities on fire prevention (i.e. active representation), information could spread to White residents and the decrease in fire accidents could benefit communities as a whole. In Hong’s (2016) study done at the law enforcement setting, minority police officers’ advocacy toward minorities could increase their police legitimacy, contributing to public safety that benefits all community residents.

Second, studies on the relationship between passive representation and performance should consider institutional contexts, as agency and pre-organizational socializations unfold simultaneously in shaping employees’ attitudes and behaviors (Andrews et al., 2015; Keiser et al., 2002). Public managers who pursue representative bureaucracy to enhance organizational performance should consider the person-organization fit when hiring and assigning work roles to minority employees. Given that agency goals shift over time and employees try to maximize their values and norms (Meier et al., 1999), public managers should adopt strategic approaches by assigning minority employees organizational roles that fit with their personal goals, minimizing the conflict between active representation and performance. A value congruence between an employee and organization leads to desirable employee outcomes, such as high job satisfaction and low turnover intention (Kristof, 1996). Thus, the increase in minority representation alone is not sufficient for achieving intended outcomes; effective management is important as a means to leverage representative bureaucracy for performance (Andrews et al., 2005).

Third, as discussed in Hypothesis 2, minority employees can contribute to agency performance in areas where the agency and constituents support their active representation.
However, a weakness of this approach is that it can limit minorities to certain roles (e.g. serving minority citizens) and block their potential contributions to other areas (Thomas & Ely, 1996). In addition to active representation, organizations can utilize unique knowledge and perspectives that minority employees bring to the workplace to encourage innovation and performance. Due to social categorization processes and power differences between minority and White employees, just making the workforce more representative is not sufficient for realizing expected outcomes. Public managers should also put more effort into creating inclusive work environments in which minorities work as change agents and Whites embrace different views of minorities. Individual-level analyses or qualitative studies may offer additional insights on the role of a strong diversity climate in making minority representation effective for promoting organizational performance.

Fourth, this study found that agency mission and diversity climate did not influence all racial minority groups to the same degree, which calls for considering inter-minority relationships and each racial minority group’s relationship with White employees within organizations (McClain, 1993; Rocha & Hawes, 2009). McClain (1993) explained that racial minority groups tend to compete with one another under zero-sum game situations, whereas cooperation is more likely to happen when gains are not exclusive to certain groups. Compared to other racial minority groups, Blacks have constituted the majority of minorities and, thus, their issues could gain more saliency than others’ in setting and implementing organizational goals. Further, due to the difference in bureaucratic power and resources, certain racial minority groups could have a greater advantage over others in promoting their racial groups’ interests. In sum, it is worth considering both minority-White and inter-minority relationships in leveraging representative bureaucracy for performance.

This study has some suggestions and limitations for future studies. First, because this study uses one performance indicator, goal achievement, future studies could use other
indicators that provide additional insights on the effects of representative bureaucracy on performance. As performance can be understood in several aspects (Rainey, 2009), it is reasonable to expect variation in bureaucratic representation’s effects on different performance dimensions (Andrews et al., 2005). Second, although this study interpreted findings concerning roles that agency mission and an agency’s diversity climate might play, qualitative research at the individual level could offer further explanations about processes through which minority representation leads to changes in organizational performance. Third, this study examines how representative bureaucracy contributes to performance improvement at the high organizational level, compared to many previous studies that focused on single policy areas; future studies could consider state or local governments in which more close interactions between bureaucrats and citizens occur as research contexts.
CHAPTER 4. THE ROLE OF INTERSECTIONALITY IN EXPLORING THE ASYMMETRICAL EFFECTS OF DEMOGRAPHIC DISSIMILARITY ON EMPLOYEES

The workforce has become demographically diverse, and organizations have attempted to leverage such diversity to better serve diverse customer bases and enhance organizational performance. Previous research has offered mixed findings on whether workforce diversity has a positive or negative effect on organizational performance (Pitts & Wise, 2010; Sabharwal et al., 2016). Such inconsistent findings have led scholars to grapple with the process through which workforce diversity affects organizational outcomes.

Relational demography scholars have examined how changes in organizations’ demographic compositions affect employee attitudes, which can serve as antecedents to organizational outcomes. Relational demography suggests that employees compare themselves to their social units on certain demographic characteristics, which determines whether such employees are demographically dissimilar. Based on the social identity theory, relational demography posits that employees tend to exhibit negative work attitudes in demographically dissimilar work organizations (Riordan, 2000; Tsui et al., 1992).

By linking intersectionality to relational demography, this study examines the effects of different gender and racial contexts on the overall job and organization satisfaction of the following employee groups in U.S. federal agencies: minority women, minority men, White women, and White men. Many empirical studies have shown that effects of demographic dissimilarity within work organizations vary among employee groups. Some studies found that majority groups (e.g. men and Whites) were more sensitive than disadvantaged groups (e.g. women and racial minorities) were to demographic dissimilarity (Chattopadhyay, 1999; Tsui et al., 1992); other studies found the opposite (Avery & McKay, 2008; Avey, West, & Crossley, 2008). The asymmetrical effects of demographic dissimilarity are reasonable.
because various employee groups “do not share a common culture of organizational life; rather, each group identifies, defines, and organizes its experience in the organization in unique ways” (Fine, Johnson, & Ryan, 1990, p. 317). To date, only a single public administration study has analyzed the asymmetrical effects of racial dissimilarity on employees’ work attitudes. Choi (2017) examined the effects of different racial contexts (categorized by the percentage of minority employees) on minority and White employees’ job satisfaction. Her study found that White employees exhibited lower job satisfaction in minority-majority agencies while minority employees felt indifferent to different racial contexts.

In studying the effects of workforce diversity on employees, scholars have also suggested that the intersection of multiple identities offers a nuanced understanding of various employee groups’ organizational experiences (Bearfield, 2009; Breslin, Pandey, & Riccucci, 2017). As opposed to an approach that views each identity as an independent category, intersectionality suggests that more than two identities jointly shape employees’ experiences. For example, many studies have found that minority women who are subject to two marginalized statuses (i.e. female and minority) experience more disadvantages in the workplace than minority men and White women do (Browne & Misra, 2003; Crenshaw, 1991). Despite the value in investigating employees’ attitudinal differences within group (e.g. minority women vs. White women), to my knowledge, no study has addressed the potential role of intersectionality in examining the asymmetrical effects of demographic dissimilarity on various employee groups.

This study extend Choi’s (2017) work (which addressed the asymmetrical effects of racial dissimilarity on White and minority employees in U.S. federal agencies) with the hypothesis that the interplay between gender and race leads to more variation in employee groups’ overall satisfaction with their jobs and organizations. Additionally, the present study
helps avoid oversimplifying the effects of workforce diversity on employee attitudes. The following sections will examine relational demography and its theoretical foundation; previous discussion concerning the asymmetrical effects of demographic dissimilarity on employees’ work attitudes; and intersectionality and its application for studying relational demography.

**Relational Demography and Theoretical Foundation**

Although scholars may vary in their definition of the term, diversity typically refers to the various personal attributes that distinguish people within a work unit. Scholars who study diversity adopt the approach of either organizational demography or relational demography. While organizational demography views diversity as the distribution of a demographic attribute within a work unit, relational demography considers diversity either a similarity or dissimilarity that employees assess by comparing their demographic attributes against the demographic composition of the referent group (e.g. work unit or organization) or the demographic attributes of the referent individual (e.g. supervisor).

Group membership is an important source of self-esteem, and people want to build positive social identities by favoring their in-groups and downplaying out-groups. Relational demography proposes that employees exhibit negative work attitudes when they find themselves dissimilar to others (Riordan, 2000; Tsui et al., 1992). For example, previous research found negative relationships between demographic dissimilarity and several work attitudes such as job satisfaction (Choi, 2013), turnover (Grissom, Nicholson-Crotty, & Keiser, 2012), and organizational commitment (Tonidandel, Avery, Bucholtz, & McKay, 2008). The subsequent paragraphs discuss the theoretical foundation for the relational demography hypothesis.

The similarity-attraction theory suggests that employees prefer working in groups of similar others rather than in groups of dissimilar others because demographic similarity
increases interpersonal attraction among group members, thereby improving group cohesion and work-related outcomes (Byrne, 1971). Montoya, Horton, and Kirchner (2008) conducted a meta-analysis and found that both actual \((r = .47)\) and perceived \((r = .39)\) similarities are strongly associated with interpersonal attraction. According to the social identity theory, employees’ perceptions of similarity or dissimilarity are based on social categorization processes in which they use salient demographic attributes to categorize themselves and others in work units into in-groups (of similar others) and out-groups (of dissimilar others). Among several demographic attributes, employees select those for social categorization that are consistent with their expectations about social identities or that help them enhance their self-esteem (Taifel & Turner, 2004; Turner, 1987). For example, Oakes, Turner, and Haslam (1991) showed that gender categorization is strong when individuals with the same gender have similar attitudes on topics.

In addition to identifying with in-groups, employees enhance their self-esteem by unfairly favoring their in-groups over other groups in evaluations, resource allocation, and other organizational processes; such trends negatively affect work attitudes of out-group members. This intergroup bias can intensify in the presence of threats to employees’ group identities, which range from competition over power and resources to suppression of the groups’ distinctiveness or values (van Knippenberg et al., 2004). According to Dovidio, Gaertner, and Validzic (1998), intergroup bias is lower when subgroups have distinguished roles that are equally valued in an organization and when they perceive positive interdependence with other groups.

A group’s demographic composition affects the extent to which social categorization occurs and intergroup bias increases. Employees are more likely to self-categorize in work settings where they perceive high intragroup similarities and intergroup dissimilarities. The increased presence of out-group members can encourage employees to perceive higher
intergroup dissimilarities. By focusing on the group’s gender context, Kanter (1977) discussed how female employees’ organization experiences varied in different gender contexts. She proposed that female employees were more likely to exhibit a negative work attitude in work units where they constituted the numerical minority because they perceived higher gender dissimilarity and threats to gender identity due to gender-based stereotypes and inequitable treatment. Furthermore, male-dominant work units in which female employees’ gender was more salient activated male employees’ stereotypes toward and increased their downward bias of female employees. In addition, female employees whose gender was more visible in male-dominant work units experienced performance pressures that suppress their gender identity and made them conform to dominant organizational norms (Kanter, 1977).

Kanter (1977) posited that an increase in female proportion is likely to alleviate female employees’ negative work attitudes because female employees would perceive higher gender similarity and have more chances of raising their collective voice to challenge gender-based stereotypes or inequitable treatment. The increased presence of female employees may provide male employees with resocialization experiences that enhance their understanding of and alleviate their evaluative bias toward female employees (Lim, 2006).

Together, in relational demography research, a group’s demographic composition serves as the context variable that influences the employees’ social categorizations, perceptions of demographic dissimilarity, intergroup biases, and work attitudes. Additionally, the similarity-attraction and social identity theories suggest that due to their natural preferences for demographic similarity or due to unfair treatment received from other groups with intergroup biases, employees in demographically dissimilar units are more likely to exhibit negative work attitudes. The two theories assume the symmetrical effect of demographic dissimilarity across various employee groups. Likewise, Kanter did not
explicitly state but suggested that male employees exhibit negative work attitudes in female-dominant groups as their female counterparts exhibit the same in male-dominant groups.

**Asymmetrical Effects of Demographic Dissimilarity**

While theoretical explanations assume that the effects of demographic dissimilarity are symmetrical across various employee groups, studies found that demographic dissimilarity has asymmetrical effects on various employee groups (Tonidandel et al., 2008). Some studies determined that the effects of demographic dissimilarity were stronger for majority groups (Chattopadhyay, 1999; Tsui et al., 1992); however, other studies determined that the same was true for disadvantaged groups (Avery & McKay, 2008; Avey et al., 2008).

In the first group of studies, Tsui et al. (1992) found that White employees perceiving racial dissimilarity exhibited high turnover intention, low organizational commitment, and high absences; minority employees were indifferent to racial dissimilarity in terms of the same work attitudes. Chattopadhyay (1999) showed that racial dissimilarity was negatively related to employees’ organization-based self-esteem, peer relations, and altruism; also, negative effects were stronger for Whites than for minorities. Randel and Jaussi (2008) found that male employees working in female-dominant teams reported higher rates of interpersonal conflicts than those reported by female employees working in male-dominant teams.

Based on these studies, scholars have offered interpretations for the negative effects of demographic dissimilarity on majority groups. Demographic dissimilarity may be more salient to majority groups that have typically enjoyed higher statuses than those of disadvantaged groups in society and organizations. Thus, in work groups where disadvantaged groups constitute the numerical majority, majority group members are more likely to regard the increased presence of disadvantaged group members as increased competition for positions and resources, which may challenge favorable and dominant images of themselves. In contrast, demographic dissimilarity may be less salient for disadvantaged
group members who have been typically underrepresented in several organizational contexts that socialized them to conform to dominant organizational norms. In addition, disadvantaged group members may prefer working in majority-dominant organizations with high levels of power and resources to receive some benefits (Tonidandel et al., 2008; Tsui et al., 1992).

In contrast, other studies showed stronger effects of demographic similarity or dissimilarity on disadvantaged groups than on majority groups. Avery et al. (2008) found that gender congruence between a supervisor and employee reduced perceived gender discrimination for female employees but not for male employees. Similarly, Avey et al. (2008) discovered that race congruence between a supervisor and employee positively associated with promotion opportunities for Blacks and Whites, with a stronger effect for Blacks.

A possible explanation is that disadvantaged group members who experience inequitable treatment and suppression of their demographic identities have a greater desire to develop a strong and positive sense of belonging to their social groups (i.e. identity affirmation), which leads to greater psychological well-being (Kanter, 1977; Tonidandel et al., 2008). Some studies supported Kanter’s tokenism hypothesis among women in numerical minority status (Goldenhar, Swanson, Hurrell, Ruder, & Deddens, 1998; Mellor, 1995). In contrast, others suggested that men in numerical minority status were indifferent to gender contexts and that they sometimes enjoyed more privileges in female-dominant work units due to a higher status associated with men (Budig, 2002; Cognard-Black, 2004).

**Linking Relational Demography with Intersectionality**

As opposed to treating identities (e.g. gender and race) as independent categories, intersectionality literature has suggested that multiple identities interactively affect employees’ organizational experiences and thus work attitudes (Crenshaw, 1991). Scholars have argued that considering intersectionality offers a more nuanced understanding of
varying organizational experiences not only *across* but also *within* different employee
groups—for example, the difference between the experiences of minority women and White
women (Bearfield, 2009; Breslin et al., 2017). By focusing on the interplay between gender
and race, many studies have examined whether minority women experience more
disadvantages associated with gender and racial biases than minority men or White women
do; the increased bias is due to having two subordinate identities—female and minority
(Browne & Misra, 2003). For example, in the context of the U.S. federal government,
Hamidullah and Riccucci (2017) found that minority women reported lower satisfaction than
White women did with their agencies’ work-life balance programs.

Research on the intersection between gender and race and its effects on employees’
organizational experiences is not limited to minority women (Browne & Misra, 2003). McCall
(2000) discovered that White women received higher pay than minority men did, indicating
that the former group enjoyed racial privilege over the latter. Furthermore, Maume (1999)
found that Black men working in female-dominant work units had fewer promotion
opportunities than White men working in the same work units did. This result suggested the
latter group’s racial privilege over the former.

To the best of my knowledge, previous research concerning the effects of
demographic dissimilarity on work attitudes has not considered intersectionality. A
reasonable assumption is that employees’ races (genders) influence their gender-based (race-
based) categorization and perceived threats to gender (racial) identities, which determine their
reactions to gender (racial) dissimilarity. Lau and Murnighan (1998) proposed that the
interplay among various demographic attributes serves as a stronger base for social
categorization and subgroup formation than can be accomplished by a single attribute alone.

By linking relational demography to intersectionality between gender and race, the
present study examines whether gender and racial dissimilarities have asymmetrical effects
on the following employee groups’ overall satisfaction with their jobs and organizations: minority women, minority men, White women, and White men. As discussed, intersectionality literature has suggested that multiple identities jointly determine intragroup and intergroup status hierarchies that give more or less relative power to particular groups (Breslin et al., 2017). Relational demography research has shown inconsistent findings on whether dominant or marginalized groups react negatively to demographic dissimilarity. Building on the insights of both theories, I propose that an employee’s reaction to demographic dissimilarity is contingent upon power differences between groups determined by multiple social categories.

Through the lens of intergroup power relations, the first possibility is that the effects of gender and racial dissimilarities are most salient for minority women because they have two subordinate identities. Minority women who have received unfair treatment due to intersecting marginalized identities may have a greater motive than other groups do for heightening the low group status (Ellemers, Wilke, & van Knippenberg, 1993). Minority women are more likely than White women are to show negative attitudes to the increased number of men in organizations. For minority women subject to gender and racial biases, the increased number of men might mean deterioration of the minority women’s current low status. On the other hand, perceived threats might not be as great as they are for White women, who enjoy the dominant racial status. Similarly, when working under an increased number of Whites, minority women with two marginalized identities are more likely than minority men (who have the dominant gender identity) are to exhibit negative attitudes.

Hypothesis 1: Racial dissimilarity will negatively influence minority women’s overall satisfaction with their jobs and organizations.

Hypothesis 2: Gender dissimilarity will negatively influence minority women’s overall satisfaction with their jobs and organizations.
In contrast, White men with two privileged identities may be the group that is most negatively influenced by demographic dissimilarity. Enhancing self-esteem is human nature, and group identification is an easy way to satisfy this need. High-status employees such as White men tend to have a stronger attachment to their social groups than low-status employees such as minority men do. Just belonging to a high-status group may allow several privileges (e.g. in areas of authority and pay) to group members even with little effort, thereby increasing their self-esteem. Because they enjoy the most benefits coming from gender and racial statuses, White men are likely to have a greater motive than other groups do to sustain or increase the dominant status through strong group identification and intergroup bias. This suggests that they are the most likely to react negatively to gender and racial dissimilarities that they perceive as challenges to the status quo. Specifically, White men might be more sensitive than minority men are to gender dissimilarity; due to minority status, minority men enjoy relatively fewer benefits associated with the male identity. In the increased presence of minorities in organizations, White men might have a greater motive than White women do for sustaining racial similarity because White women benefit relatively less from the White identity.

Hypothesis 3: Racial dissimilarity will negatively influence White men’s overall satisfaction with their jobs and organizations.

Hypothesis 4: Gender dissimilarity will negatively influence White men’s overall satisfaction with their jobs and organizations.

In the above cases, I arrived at the opposing hypotheses that the most dominant (i.e. White men) or disadvantaged groups (i.e. minority women) have negative reactions to gender and racial dissimilarities. I posited that minority men and White women, who both have one privileged and one subordinate identity, show less negative reactions than minority women and White men do to gender or race dissimilarities. However, making predictions about
whether these two groups are sensitive or indifferent to gender and racial dissimilarities is difficult. Thus, I created non-directional hypotheses.

_Hypothesis 5a_: Gender and racial dissimilarities will negatively influence minority men’s and White women’s overall satisfaction with their jobs and organizations.

_Hypothesis 5b_: Gender and racial dissimilarities will not influence minority men’s and White women’s overall satisfaction with their jobs and organizations.

**Data and Method**

**Data**

The present study collected data from two sources. The dependent variable of overall satisfaction with job and organization; demographic variables; and employee attitudes that may influence the dependent variable came from the U.S. Office of Personnel Management’s (OPM’s) Federal Employee Viewpoint Survey (FEVS) 2015. The FEVS is an online survey that asks U.S. federal employees’ opinions on fairness, leadership, and other work experiences. The present study also collected female and minority proportions from the OPM’s FedScope, an online database that compiles variables at the agency and sub-agency levels. The next section explains variables used in this study. Table 7 reports the descriptive statistics of the variables.

**Dependent Variable**

The dependent variable of this study is the employee’s overall satisfaction with her job and organization. To create this variable, the present study followed Choi’s (2017) and Pitts’s (2009) approach and computed a factor score (Cronbach alpha = 0.88) of the following survey questions from FEVS 2015: “Considering everything, how satisfied are you with your job?” and “Considering everything, how satisfied are you with your organization?” Both questions offered five answer options: “Very dissatisfied (=1),” “Dissatisfied (=2),” “Neither satisfied nor dissatisfied (=3),” “Satisfied (=4),” and “Very satisfied (=5).” Studies have
shown that single items asking employees about their overall job satisfaction performed better than summated scales made from multiple items asking different aspects of their jobs because the latter method may overlook specific dimensions of satisfaction that are critical for employees’ overall job satisfaction (Scarpello & Campbell, 1983; Wanous, Reichers, & Hudy, 1997). I propose that similar logic applies to overall satisfaction with an organization.

**Independent Variables**

For gender and racial contexts, this study created two sets of dummy variables defined by minority and female percentages, respectively (Choi, 2017; Joecks, Pull, & Vetter, 2013; Torchia, Calabrò, & Huse, 2011). I selected this measure over the D-score (the average of an individual’s dyadic differences on a particular attribute in her work group), which may ignore plausible differences in directions and nature of dyadic relationships (Tonidandel et al., 2008). In addition, creating dummy variables allows me to compare multiple racial and gender contexts in a single regression model.

Kanter (1977) proposed the following gender contexts defined by different female percentages: uniform group (0% women), skewed group (15% women), tilted group (35% women), and balanced group (40%–50% women). I adapted this categorization and created the following dummy variables representing different racial contexts: white-dominant agency (1 = 0% ≤ minorities ≤ 15%, 0 = otherwise), white-majority agency (1 = 15% < minorities ≤ 35%, 0 = otherwise), racially balanced agency (1 = 35% < minorities ≤ 50%, 0 = otherwise), and minority-majority agency (1 = minorities > 50%, 0 = otherwise). The present study used the same procedures for creating gender context variables through different female percentages. However, the study merged the male-dominant category to the male-majority category because the former only included seven observations.
Control Variables

The present study controlled several factors that potentially affect employees’ overall satisfaction (see Table 8 for coding). First, I accounted for a number of demographic variables including supervisory status, gender, race, agency tenure, age, and education level. Second, this study controlled for the employees’ perceptions regarding fairness in the agency’s personnel practice and arbitrary action. I hypothesized that higher levels of fairness are positively associated with overall satisfaction. Third, separate models testing the effects of gender and racial contexts included minority percentage and female percentage, respectively. Fourth, other control variables included employees’ perceptions of sufficient resources, talent usage, diversity climate, workload, and physical work conditions—all of which have been considered important predictors of job satisfaction in previous research (Choi, 2017; Fernandez & Moldogaziev, 2015). I expected that all variables would be positively associated with the dependent variable. Diversity climate is a factor score created by using the three survey questions from FEVS 2015 (see Table 8 for the questions) (Choi, 2017). Lastly, analytic models included sub-agency dummies to account for mission and other unobservable sub-agency characteristics that may affect the dependent variable.

Method

The models used ordinary least squares (OLS) with robust standard errors. The models applied a probability sampling weight to mitigate potential bias coming from nonresponse errors and sample representativeness in terms of supervisory status and agency affiliation (OPM, 2015). To examine nonsymmetrical effects of gender and racial dissimilarity on different employee groups divided by gender and race, in addition to full sample analysis, I analyzed four subsamples of minority women, minority men, White women, and White men.
Table 6

**Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall satisfaction</td>
<td>.06</td>
<td>.99</td>
<td>-2.42</td>
<td>1.36</td>
</tr>
<tr>
<td>White dominant</td>
<td>.02</td>
<td>.15</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>White majority</td>
<td>.43</td>
<td>.49</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Race mixed</td>
<td>.51</td>
<td>.50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Minority majority</td>
<td>.04</td>
<td>.19</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Men majority</td>
<td>.29</td>
<td>.45</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Gender mixed</td>
<td>.30</td>
<td>.46</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Women majority</td>
<td>.40</td>
<td>.49</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Women percent</td>
<td>44.31</td>
<td>15.12</td>
<td>18.05</td>
<td>71.84</td>
</tr>
<tr>
<td>Minority percent</td>
<td>35.03</td>
<td>11.63</td>
<td>12.91</td>
<td>81.61</td>
</tr>
<tr>
<td>Non-supervisor</td>
<td>.76</td>
<td>.42</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Women</td>
<td>.46</td>
<td>.50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Minority</td>
<td>.33</td>
<td>.47</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Tenure</td>
<td>2.26</td>
<td>.75</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Age</td>
<td>2.47</td>
<td>.99</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Education</td>
<td>1.98</td>
<td>.81</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Resource</td>
<td>3.06</td>
<td>1.27</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Fair (arbitrary action)</td>
<td>3.41</td>
<td>1.24</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Fair (personnel)</td>
<td>3.74</td>
<td>1.12</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Talent</td>
<td>3.47</td>
<td>1.21</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Diversity climate</td>
<td>.02</td>
<td>.98</td>
<td>-2.60</td>
<td>1.74</td>
</tr>
<tr>
<td>Work load</td>
<td>3.34</td>
<td>1.17</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Work condition</td>
<td>3.71</td>
<td>1.14</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

*Note.* Sample size = 206,017
Table 7

Coding of Control Variables

*Non-supervisor* (1 = non-supervisor; 0 = supervisor)

*Women* (1 = women; 0 = men)

*Minority* (1 = minority; 0 = white)

*Tenure* (1 = 5 or fewer years; 2 = 6-14 years; 3 = 15 or more years)

*Age* (1 = Under 40; 2 = 40-49; 3 = 50-59; 4 = 60 or older)

*Education* (1 = Education Prior to a Bachelor’s Degree; 2 = Bachelor’s Degree; 3 = Post Bachelor's Degree)

*Resource*: I have sufficient resources (for example, people, materials, budget) to get my job done (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree; 4 = Agree; 5 = Strongly Agree)

*Fair (arbitrary action)*: Arbitrary action, personal favoritism and coercion for partisan political purposes are not tolerated (1 = Strongly Disagree to 5 = Strongly Agree)

*Fair (personnel)*: Prohibited Personnel Practices (for example, illegally discriminating for or against any employee/applicant, obstructing a person's right to compete for employment, knowingly violating veterans' preference requirements) are not tolerated (1 = Strongly Disagree to 5 = Strongly Agree)

*Talent*: My talents are used well in the workplace (1 = Strongly Disagree to 5 = Strongly Agree)

*Diversity climate*: Factor score
  - Policies and programs promote diversity in the workplace (for example, recruiting minorities and women, training in awareness of diversity issues, mentoring)
  - My supervisor is committed to a workforce representative of all segments of society
  - Supervisors work well with employees of different backgrounds

*Work load*: My workload is reasonable (1 = Strongly Disagree to 5 = Strongly Agree)

*Work condition*: Physical conditions (for example, noise level, temperature, lighting, cleanliness in the workplace) allow employees to perform their jobs well (1 = Strongly Disagree to 5 = Strongly Agree)
Findings and Discussion

Table 9 reports the asymmetrical effects of different racial contexts on employees’ overall satisfaction. In the full sample, racial context variables did not show significant statistical association with the dependent variable. However, subsample analyses yielded some statistically significant relationships. Minority women exhibited higher overall satisfaction in minority-majority ($\beta = 0.23, p < .05$) and racially balanced ($\beta = 0.12, p < .1$) agencies, but minority men were indifferent to the racial contexts. White women’s overall satisfaction dropped in racially balanced ($\beta = -0.2, p < .01$) and minority-majority ($\beta = -0.24, p < .01$) agencies.

The results indicated that gender and race jointly influenced employees’ reactions to a shift in racial contexts. As a result, the present study supports Hypothesis 1 and suggests that minority women may be more sensitive to racial similarity because (due to gender and racial prejudices) they may have greater needs than minority men do for developing positive group identity (Berdahl & Moore, 2006; Sevelius, 2013). Conversely, racial dissimilarity may be less salient to minority men who enjoy advantages from their male status, which can compensate for some disadvantages of their minority status.

Perhaps the similar interpretation based on status hierarchy jointly determined by gender and race can apply to White women. Contrary to my expectation, White women (who are in a vulnerable position in terms of gender) may be more sensitive than White men are to racial dissimilarity. This is because White women perceive more challenges from the increased presence of minority employees (Berdahl & Moore, 2006). Particularly, minority men privileged from the male identity might be White women’s major competitors for positions and resources. In contrast, White men may be less concerned about being in a numerical minority as they believe that their prestige persists regardless of the demographic composition of organizations.
While this study found asymmetrical effects of racial contexts among employee groups, minority women were only sensitive to gender similarity (see Table 10). Minority women exhibited higher overall satisfaction in gender-balanced agencies ($\beta = 0.14, p < .1$); however, the other groups were indifferent to gender contexts. Results indicated that gender is less salient than race for social organization. Some studies discussed that individuals were prone to exhibit gender-based bias to others regardless of their genders (Fernandez, Malatesta, & Smith, 2013). This may increase the difficulty of finding consistency between individuals’ expectations about gender identity and their corresponding group affiliations and thus reduces the meaningfulness of gender-based categorization.

However, gender-based categorization and threats may be salient for minority women who have intersecting subordinate identities and strive for identity affirmation. This differed from the theory found in tokenism literature that women in male-dominant work units eschew their gender identities and assimilate with the organizational culture set by men. Thus, the present study suggests that minority women with additional subordinate identity (i.e. minority status) are more motivated than White women are to address gender-based threats by increasing power and resources of women as a group. Therefore, I find support for Hypothesis 2.

In terms of control variables, employees with nonsupervisory status, longer tenure, and higher levels of education exhibited lower overall satisfaction. In addition, older employees’ overall satisfaction was higher than younger employees’ overall satisfaction. Consistent with my expectation, the positive work attitudes on resources, workloads, diversity climate, fairness, and work conditions were all positively associated with employees’ overall satisfaction.

While previous research documenting the effects of demographic dissimilarity on work-related outcomes has yielded mixed findings, the current study shows that gender and
race jointly determine power relations within and across different employee groups. By considering intersectionality, this study’s findings indicate nuanced differences from previous studies, which suggested that demographic dissimilarity was more or less pronounced in majority groups (e.g. men and Whites) than in disadvantaged groups (e.g. women and minorities), both defined by single identities (Choi, 2017; Tsui et al., 1992). Based on these findings, I suggest that the status hierarchy determined jointly by gender and race moderates the relationship between demographic dissimilarity and an employee’s work attitude.
### Table 9

**Asymmetrical Effects of Racial Contexts**

<table>
<thead>
<tr>
<th>DV: Overall satisfaction</th>
<th>Full</th>
<th>Minority women</th>
<th>Minority men</th>
<th>White women</th>
<th>White men</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>SE</td>
<td>β</td>
<td>SE</td>
<td>β</td>
</tr>
<tr>
<td>White majority</td>
<td>.05</td>
<td>(.06)</td>
<td>-.02</td>
<td>(.13)</td>
<td>.15</td>
</tr>
<tr>
<td>Race mixed</td>
<td>-.03</td>
<td>(.03)</td>
<td>.12*</td>
<td>(.07)</td>
<td>.08</td>
</tr>
<tr>
<td>Minority majority</td>
<td>-.01</td>
<td>(.05)</td>
<td>.23**</td>
<td>(.10)</td>
<td>.13</td>
</tr>
<tr>
<td>Women percent</td>
<td>-.00</td>
<td>(.00)</td>
<td>-.01**</td>
<td>(.00)</td>
<td>-.01**</td>
</tr>
<tr>
<td>Non-supervisor</td>
<td>-.01**</td>
<td>(.00)</td>
<td>-.02*</td>
<td>(.01)</td>
<td>-.01</td>
</tr>
<tr>
<td>Women</td>
<td>.05***</td>
<td>(.00)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minority</td>
<td>.06***</td>
<td>(.00)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td>-.03***</td>
<td>(.00)</td>
<td>.00</td>
<td>(.01)</td>
<td>-.02***</td>
</tr>
<tr>
<td>Age</td>
<td>.03***</td>
<td>(.00)</td>
<td>.04***</td>
<td>(.01)</td>
<td>.05***</td>
</tr>
<tr>
<td>Education</td>
<td>-.01***</td>
<td>(.00)</td>
<td>.01</td>
<td>(.01)</td>
<td>-.02***</td>
</tr>
<tr>
<td>Resource</td>
<td>.08***</td>
<td>(.00)</td>
<td>.07***</td>
<td>(.01)</td>
<td>.08***</td>
</tr>
<tr>
<td>Fair (arbitrary action)</td>
<td>.08***</td>
<td>(.00)</td>
<td>.07***</td>
<td>(.01)</td>
<td>.07***</td>
</tr>
<tr>
<td>Fair (personnel)</td>
<td>.06***</td>
<td>(.00)</td>
<td>.06***</td>
<td>(.01)</td>
<td>.06***</td>
</tr>
<tr>
<td>Talent</td>
<td>.25***</td>
<td>(.00)</td>
<td>.20***</td>
<td>(.01)</td>
<td>.22***</td>
</tr>
<tr>
<td>Diversity</td>
<td>.27***</td>
<td>(.00)</td>
<td>.30***</td>
<td>(.01)</td>
<td>.27***</td>
</tr>
<tr>
<td>Work load</td>
<td>.08***</td>
<td>(.00)</td>
<td>.05***</td>
<td>(.01)</td>
<td>.08***</td>
</tr>
<tr>
<td>Work condition</td>
<td>.04***</td>
<td>(.00)</td>
<td>.04***</td>
<td>(.01)</td>
<td>.06***</td>
</tr>
</tbody>
</table>

**N** 205,017 36,135 32,323 57,938 79,521

**R square** .63 .62 .64 .61 .64

**F** 1581.47 281.66 272.06 458.78 718.01

*Note. ™ p < .1, † p < .05, ‡ p < .01 (two-tails). Unstandardized coefficients are reported. White dominant is the base category and omitted. Sub-agency dummies are included but reported.*
Table 10

*Asymmetrical Effects of Gender Contexts*

<table>
<thead>
<tr>
<th>DV: Overall satisfaction</th>
<th>Full β (SE)</th>
<th>Minority women β (SE)</th>
<th>Minority men β (SE)</th>
<th>White women β (SE)</th>
<th>White men β (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men majority</td>
<td>-.08 (.08)</td>
<td>.10 (.15)</td>
<td>-.08 (.28)</td>
<td>-.17 (.16)</td>
<td>-.05 (.11)</td>
</tr>
<tr>
<td>Gender mixed</td>
<td>-.00 (.04)</td>
<td>.14* (.08)</td>
<td>.01 (.14)</td>
<td>-.03 (.08)</td>
<td>-.02 (.06)</td>
</tr>
<tr>
<td>Minority percent</td>
<td>-.01* (.01)</td>
<td>.01 (.01)</td>
<td>-.01 (.02)</td>
<td>-.01 (.01)</td>
<td>-.01 (.01)</td>
</tr>
<tr>
<td>Non-supervisor</td>
<td>-.01** (.00)</td>
<td>-.05*** (.01)</td>
<td>-.01 (.01)</td>
<td>.00 (.01)</td>
<td>-.01 (.01)</td>
</tr>
<tr>
<td>Women</td>
<td>.05*** (.00)</td>
<td>.00</td>
<td>.00 (.01)</td>
<td>.00 (.01)</td>
<td>.00 (.00)</td>
</tr>
<tr>
<td>Minority</td>
<td>.06*** (.00)</td>
<td>.00</td>
<td>.00 (.01)</td>
<td>.00 (.01)</td>
<td>.00 (.00)</td>
</tr>
<tr>
<td>Tenure</td>
<td>-.03*** (.00)</td>
<td>.00 (.01)</td>
<td>-.02*** (.01)</td>
<td>-.03*** (.01)</td>
<td>-.04*** (.00)</td>
</tr>
<tr>
<td>Age</td>
<td>.03*** (.00)</td>
<td>.04*** (.01)</td>
<td>.03*** (.01)</td>
<td>.03*** (.00)</td>
<td>.03*** (.00)</td>
</tr>
<tr>
<td>Education</td>
<td>-.01*** (.00)</td>
<td>.01 (.01)</td>
<td>-.02*** (.01)</td>
<td>.00 (.00)</td>
<td>-.01*** (.00)</td>
</tr>
<tr>
<td>Resource</td>
<td>.08*** (.00)</td>
<td>.07*** (.01)</td>
<td>.08*** (.01)</td>
<td>.07*** (.00)</td>
<td>.08*** (.00)</td>
</tr>
<tr>
<td>Fair (arbitrary action)</td>
<td>.08*** (.00)</td>
<td>.07*** (.01)</td>
<td>.07*** (.01)</td>
<td>.08*** (.01)</td>
<td>.09*** (.00)</td>
</tr>
<tr>
<td>Fair (personnel)</td>
<td>.06*** (.00)</td>
<td>.06*** (.01)</td>
<td>.06*** (.01)</td>
<td>.06*** (.01)</td>
<td>.06*** (.01)</td>
</tr>
<tr>
<td>Talent</td>
<td>.25*** (.00)</td>
<td>.20*** (.01)</td>
<td>.22*** (.01)</td>
<td>.27*** (.01)</td>
<td>.26*** (.00)</td>
</tr>
<tr>
<td>Diversity climate</td>
<td>.27*** (.00)</td>
<td>.30*** (.01)</td>
<td>.27*** (.01)</td>
<td>.27*** (.01)</td>
<td>.26*** (.01)</td>
</tr>
<tr>
<td>Work load</td>
<td>.08*** (.00)</td>
<td>.05*** (.01)</td>
<td>.08*** (.01)</td>
<td>.09*** (.00)</td>
<td>.08*** (.00)</td>
</tr>
<tr>
<td>Work condition</td>
<td>.04*** (.00)</td>
<td>.04*** (.01)</td>
<td>.06*** (.01)</td>
<td>.03*** (.00)</td>
<td>.04*** (.00)</td>
</tr>
</tbody>
</table>

N 208,017 36,135 32,323 57,938 79,621
R square .63 .62 .64 .61 .64
F 1581.47 281.66 272.06 458.78 718.01**

*Note.* "p <.1," "p <.05," "p <.01" (two-tails). Unstandardized coefficients are reported. Female majority is the base category and omitted. Sub-agency dummies are included but not reported.
Conclusion

By approaching gender and race together, this study examined the asymmetrical effects of gender and racial dissimilarities on minority women, minority men, White women, and White men in U.S. federal sub agencies. Findings of the present study are as follows: (1) minority women and White women were sensitive to racial dissimilarity, and (2) minority women were sensitive to gender dissimilarity.

Moving beyond previous research concerning the asymmetrical effects of demographic dissimilarity on different groups defined by single identities, scholars must consider the joint effect of gender and race in determining employees’ reactions to gender or racial dissimilarity. This is because employees with at least one marginalized identity that is often associated with low power and resources may be more subject than employees with at least one superior identity are to identity threats and thus more sensitive to being demographically different within organizations. Insights of intersectionality may contribute to addressing inconsistent findings in relational demography research.

This study also provided practical implications. Overlooking subtle differences within groups can hinder practitioners from developing effective strategies for managing workforce diversity. For example, diversity management programs typically target entire minorities in organizations. For such efforts, this study (Hypothesis 1) suggested prioritizing minority women, who are more vulnerable due to two subordinate identities, over minority men. In addition, when addressing Whites’ backlash against diversity management practices, efforts should focus on White women, who have less secure status and resources, rather than White men.

The current study has some limitations that future studies can address. First, a more sophisticated analysis is possible by further breaking down minorities into different racial groups (e.g. Black and Hispanic) (Hamidullah & Riccucci, 2017). This procedure was not
possible due to the limitation of the data source. However, such analysis is worth attempting in the future because each racial group has different cultural heritages that engender variation in organizational experiences. Second, examining the effects of demographic dissimilarity in work units where employees are most likely to experience daily intergroup interactions would be desirable. Third, future studies can address the role of potential mediators or moderators such as diversity management and procedural fairness in the relationships between demographic dissimilarity and various groups’ reactions to it.
CHAPTER 5. BUREAUCRATIC REPRESENTATION, WORKFORCE DIVERSITY, AND ORGANIZATIONAL PERFORMANCE: EVIDENCE FROM SOUTH AFRICA

The demographic composition of public organizations is of critical importance to the field of public administration. The concepts of bureaucratic representation and workforce diversity are not only central to discussions of equality and responsiveness (Long, 1952; Mosher, 1968), researchers are increasingly exploring their link to performance (Andrews et al., 2015; Pitts, 2005). Research on bureaucratic representation addresses a range of issues regarding representation of different social groups in public organizations and how it influences administrative decisions and outcomes. Empirical studies show that representation of racial minorities and women can produce substantive benefits for these groups and improve the effectiveness of public programs designed to improve their well-being (Hindera, 1993; Keiser et al., 2002; Meier & Stewart, 1992; Selden, 1997). Similarly, research on workforce diversity has been concerned with the demographic composition of public organizations, the management of diverse workforces and their influence on performance. In response to calls to make bureaucracies more efficient and effective, many public organizations have embraced the business case for diversity by adopting diversity management programs to harness the benefits of diversity (Kellough & Naff, 2004; Riccucci, 2002). Research showed that diversity management, and under some conditions workforce diversity itself, can improve public sector performance (Choi & Rainey, 2010; Opstrup & Villadsen, 2015; Pitts, 2005).

Bureaucratic representation and workforce diversity are distinct concepts, with their own particular antecedents and outcomes. Public administration researchers often conflate them, however, or take one as synonymous with the other (Gooden & Portillo, 2011; Miller, 1999; Weisinger et al., 2016). The problem is made worse by the fact researchers studying these concepts disagree about each one’s meaning (Harrison & Klein, 2007; Kennedy, 2014;
Selden, 1997). Kennedy (2014) notes the lack of consensus in the literature on how to define and measure bureaucratic representation. In a similar vein, Harrison and Klein (2007) argue that diversity scholars describe diversity in a variety of ways and that they offer “only sparse or generic definitions of the principle construct” (p. 1201). This lack of analytical clarity between bureaucratic representation and workforce diversity poses challenges to our understanding of these phenomena, the development of theory and our ability to offer sound practical advice (Gooden & Portillo, 2011; Harrison & Klein, 2007).

This study aims to provide such clarity by examining and comparing the various conceptualizations of bureaucratic representation and workforce diversity. In addition, I explain the particular causal logic of how bureaucratic representation and workforce diversity influence performance. Finally, focusing on the South African Public Service, I examine the empirical relationship between these two concepts and how each one impact’s the organizational effectiveness of national departments in that country.

Conceptualizing Bureaucratic Representation and Workforce Diversity

I begin by reviewing the literature to uncover how researchers operationalize bureaucratic representation and workforce diversity in order to draw a clearer distinction between these two concepts. Table 1 summarizes conceptual definitions and measures of different types of the two concepts.
Table 11  
**Conceptualizations of Demographic Representation and Workforce Diversity**

<table>
<thead>
<tr>
<th>Conceptual Definition</th>
<th>Demographic (Passive) Representation</th>
<th>Workforce Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ordinary Representation</td>
<td>Separation</td>
</tr>
<tr>
<td></td>
<td>Representativeness</td>
<td>Variety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disparity</td>
</tr>
<tr>
<td>Example</td>
<td>The extent to which a social group is represented in an organization</td>
<td>The extent to which members of an organization differ along a lateral continuous attribute</td>
</tr>
<tr>
<td></td>
<td>The extent to which a social group is represented in an organization compared to the extent to which it is represented in the population</td>
<td>The extent to which members of an organization are spread across categories of that attribute</td>
</tr>
<tr>
<td></td>
<td>The extent to which members of an organization differ in the extent to which they hold a valued or desirable resource</td>
<td></td>
</tr>
<tr>
<td>Measurement</td>
<td>The percent of minorities in an agency</td>
<td>Differences in levels of organizational commitment among employees in an agency</td>
</tr>
<tr>
<td></td>
<td>The percent of minorities in an agency compared to their percent in the population</td>
<td>The distribution of members of an agency across racial groups</td>
</tr>
<tr>
<td></td>
<td>Group percent</td>
<td>The distribution of power among members of an agency</td>
</tr>
<tr>
<td></td>
<td>Representation index and Gini index of concentration</td>
<td>Blau’s index and Teachman’s entropy index</td>
</tr>
<tr>
<td></td>
<td>Standard deviation and Euclidean distance</td>
<td>Coefficient of variation and Gini coefficient</td>
</tr>
<tr>
<td>Examples of Empirical Studies</td>
<td>Maier &amp; Stewart, 1992; Selden, 1997</td>
<td>Maier, 1993a; Subramanian, 1967</td>
</tr>
<tr>
<td></td>
<td>Langbein &amp; Stazyk, 2013; Tsui, Egan, &amp; O’Reilly, 1992</td>
<td>Gazley, Chang, &amp; Bingham, 2010; Pitts, 2005</td>
</tr>
<tr>
<td></td>
<td>Bloom &amp; Michel, 2002; Siegel &amp; Hambrick, 2005</td>
<td></td>
</tr>
</tbody>
</table>
Turning first to bureaucratic representation, Mosher (1968) distinguishes between two types of bureaucratic representation: passive representation (or demographic representation) of social groups in the bureaucracy, and active representation, meaning efforts by bureaucrats to advocate for the interests and desires of the group they represent. Focusing just on passive bureaucratic representation since it pertains to the demographic composition of organizations, I find two definitions of this concept in the representative bureaucracy literature. On the one hand, I encounter the notion of passive bureaucratic representation as representativeness, or proportional representation, referring to the extent to which a social group is represented in the public organization compared to its representation in the general population. Mosher (1968) states, “the passive (or descriptive) meaning of representativeness (italics added) concerns the origin of individuals and the degree to which, collectively, they mirror the whole society” (p. 15). Both Van Riper (1958) and Krislov (1974) consider representative bureaucracies to be those that closely resemble the general public in terms of demographic identity and interests. Passive bureaucratic representation as representativeness has been measured, one social group at a time, using the representation index (Subramaniam, 1967) and Gini index of concentration or Lorenz Curve (Meier, 1975). Pitts (2005) developed a variant of the representation index that takes into account all relevant social groups (e.g. all racial groups) at once to describe the overall representativeness of the organization.

In addition to representativeness, representative bureaucracy researchers also view passive bureaucratic representation as the extent to which a social group is represented in the bureaucracy but without regard for the same group’s representation in the general population. I refer to this as ordinary representation. According to this conceptualization, passive bureaucratic representation is the percent of a social group in the bureaucracy. Studies of the effects of ordinary representation (Keiser et al., 2002; Meier & Stewart, 1992; Smith & Fernandez, 2010; Wilkins & Keiser, 2006) appear more numerous than those of
representativeness in the representative bureaucracy literature. Early traces of this concept of ordinary representation can be found in Kingsley’s (1944) seminal work, which examines the consequences of having a civil service populated primarily by members of the ruling class in British society. The actual demographic composition of the civil service and the degree to which it mirrored the British population is of minor concern to Kingsley. Another root of ordinary representation can be found from the critical mass theory that deals mainly with different policy outcomes for disadvantaged groups with certain percentages of those groups in organizations (Kanter, 1977).

Shifting the focus to how scholars conceptualize workforce diversity, Harrison and Klein (2007) explain that “researchers use a variety of labels, often interchangeably, to refer to diversity, including dispersion, heterogeneity, dissimilarity, disagreement, divergence, variation, or inequality, or their opposites, including homogeneity, similarity, agreement, consensus, convergence, and equality” (p. 1201). Thus, they developed a diversity typology that distinguishes between three types of within-unit differences: separation, variety, and disparity. The concept of diversity as separation refers to how members of a unit differ along a lateral continuous attribute (e.g. organizational commitment). Units differ in the extent to which their members are collocated along the continuum of the attribute, with some units having members that are closer to one another and others having members that are more spread out across the continuum. Minimum separation occurs when there is perfect agreement among members on any point along the continuum, moderate separation when members are roughly evenly spread along the continuum, and maximum separation when members are evenly split at two ends of the continuum. Research on diversity of values, beliefs, and attitudes among team members adopts this notion of diversity as separation. The main predicted outcome from research on diversity as separation is that as separation increases, cohesiveness, trust and performance decline and interpersonal conflict increases.
Simple standard deviations and the more complex Euclidean distance are used to measure diversity as separation (Harrison & Klein, 2007).

The concept of diversity as *variety* refers to how members of a unit differ from one another qualitatively or on a categorical attribute (e.g. race). Units differ in the extent to which they are evenly spread across categories of that attribute, with some units having members that fall mostly in one category of the attribute and others that have their members spread out in clusters of different categories. Minimum variety occurs when all members fall in a single category, moderate variety when members are clustered in several categories, and maximum variety when each member falls in a unique category. Research on information processing and decision making in teams that examines how the functional background and experience of team members influence team outcomes views diversity as variety. A key proposition from this research is that as variety increases among members of a team, members can tap a wider array of sources of information and knowledge, thereby producing higher quality decisions and more creative solutions. Blau’s index is by far the most commonly used measure of diversity as variety, although some studies rely on Teachman’s entropy index (Harrison & Klein, 2007). Importantly, the concept of diversity as variety, and its measurement using Blau’s index, predominate in research on workforce diversity in the public sector (Gazley, Chang, & Bingham, 2010; Opstrup & Villadsen, 2015; Pitts, 2005).

Finally, there is the concept of diversity as *disparity*, which refers to how members of a unit differ in the extent to which they hold a valued or desirable resource (e.g. pay, high position). In some units the resource is evenly distributed among its members, while in others just one or a few members hold an unequal share of the resource compared to the majority of members. Minimum disparity occurs when all members possess an equal share of the resource, moderate disparity when members possess the resource in varying amounts, and maximum disparity when one member is in complete possession of the resource. Diversity as
disparity appears to be the least popular conceptualization of diversity in the literature. Research on pay dispersion in organizations adopts this notion of diversity. The main proposition emerging from research on disparity in groups is that as disparity increases among members of a group, competition, pressure to conform and resentfulness will increase. Diversity as disparity is operationalized in ways that capture asymmetry within groups, such as the coefficient of variation and the Gini coefficient (Harrison & Klein, 2007).

Comparing conceptualizations of bureaucratic representation and workforce diversity, ordinary representation and different types of workforce diversity clearly diverge in that the former focuses on a single social group at a time (e.g. the percent of Blacks or Whites in the organization), while the latter are concerned with comparing two or more social groups and assessing differences between them. The distinction between representativeness, or proportional representation, and conceptualizations of workforce diversity is even more stark. Representativeness fundamentally concerns how a social group’s representation in an organization relates to its presence in the population (e.g. percent of Blacks in the organization compared to the percent of Blacks in the population), with greater congruence indicating greater representativeness. Diversity, on the other hand, deals with differences among social groups within an organization (with greater separation/variety/disparity indicative of greater diversity), without reference to the composition of the population. As I shall demonstrate below, in a situation where the population is racially homogenous, racial representation and racial diversity will be negatively associated across a set of organizations, since a representative workforce will be racially homogenous while a diverse one will by definition be more racially heterogeneous.

**The Link between Demographic Representation (and Diversity) and Performance**

In addition to being distinct concepts, bureaucratic representation and workforce diversity can influence performance in different ways. Beginning with bureaucratic
representation, empirical research across a range of policy settings has established a positive link between passive bureaucratic representation and actions taken by bureaucrats to promote the interests and well-being of their social group (Hindera, 1993; Meier & Stewart, 1992; Selden, 1997). Mosher (1968) called bureaucratic advocacy or partiality of this sort active representation. The belief is that throughout their lives, public employees of a particular social identity (e.g. Black) undergo socialization experiences that cause them to share distinct attitudes and interests that set them apart from other social groups. When subsequently granted discretion at work, public employees end up acting in ways that promote the values and interests of their social group over those of others.

In addition, a growing number of studies have found evidence of a positive link between passive bureaucratic representation and performance or effectiveness of public organizations and programs, including evidence from public education (Keiser et al., 2002; Meier et al., 1999), local law enforcement (Meier & Nicholson-Crotty, 2006), federal procurement (Smith & Fernandez, 2010) and child support enforcement (Wilkins & Keiser, 2006). A common feature of these studies is the presence of a program or policy to promote the interests and well-being of a particular social group (e.g. federal programs to promote awarding of government contracts to minority-owned small businesses). Group socialization aligns the values and interests of public employees and citizens, setting the stage for passive bureaucratic representation to result in active representation or advocacy. However, for passive bureaucratic representation to impact performance, the goals of public employees should align with those of policymakers and the policies and programs they establish. From a principal-agent perspective, increasing passive bureaucratic representation of a racial or gender group that is the primary beneficiary of a policy serves to align the goals of policymakers and bureaucrats, thereby reducing the likelihood of moral hazard (McCubbins et al., 1989; Wood & Waterman, 1991). In his explanation of the success of the British civil
service, Kingsley (1944) alluded to this, stating “the essence of responsibility is psychological rather than mechanical. It is to be sought in an identity of aim and point of view, in a common background of social prejudice, which leads the agent to act as though he were the principal” (p. 282).

Lim (2006) offers additional clues into how passive bureaucratic representation can lead to better performance or effectiveness. Public employees advocating for their social group can result in better performance when the policy or program they implement is designed specifically to advance the interests of that group. In addition, a public employee that closely mirrors the population it serves in terms of ethnic and racial identity can be much more effective at understanding the needs of citizens and at communication with them. Finally, a bureaucracy that generally looks like the population can appear more legitimate in the eyes of citizens and bring about positive changes in their behavior toward bureaucracy, including more cooperation, coproduction, program uptake and compliance with the law.

I turn now to research on workforce diversity, which aims to explain how diversity affects groups. Two competing theoretical perspectives have emerged to explain the impact of diversity on group processes and performance (van Knippenberg & Schippers, 2007; Williams & O’Reilly, 1998). The first is the social categorization perspective. This perspective posits that similarities and differences among members of a group lead to social categorization, whereby members form into subgroups based on perceived similarities and come to distinguish themselves from other subgroups. Members trust, communicate, and cooperate more with others in their group than with members of different groups. More homogenous groups, therefore, are expected to be more cohesive and perform better than diverse ones, which are more prone to conflict.

An alternative perspective, the information/decision-making perspective, emphasizes the benefits of cognitive diversity for work groups. According to this perspective, greater
diversity infuses groups with a wider range of knowledge, skills, abilities, experiences, and perspectives. This enables group members to pool diverse cognitive resources to improve decision quality, especially when confronting non-routine problems, as well as to integrate diverse information to arrive at creative solutions. As a result, more diverse groups are expected to perform better and be more innovative. Given these competing perspectives, it is not surprising why some experts view workforce diversity as a double-edge sword that can be both beneficial and costly for organizations (Horwitz & Horwitz, 2007; van Knippenberg & Schippers, 2007).

Meta-analyses of the impact of diversity on performance have offered a complex and somewhat mixed set of findings. Diversity researchers often draw a distinction between two types of diversity: task-related diversity, which pertains to highly job-related attributes like functional and education background, occupation and length of employment, and relations-oriented diversity based on demographic attributes like age, race and gender. Meta-analyses generally show that task-oriented diversity has a small positive main effect on team performance (Horwitz & Horwitz, 2007; Joshi & Roh, 2009) and that this effect is enhanced by moderators such as employee interdependence and use of high levels of technology (Joshi & Roh, 2009). Webber and Donahue's (2001) meta-analysis, however, failed to find evidence of any relationship between task-oriented diversity and team performance. Bell, Villado, Lukasik, Belau, and Briggs (2011) found that diversity in terms of specific task-related attributes like functional background had a small positive main effect on team performance that became even stronger when the main performance criterion was either innovation or creativity; diversity in regards to educational background and level, however, had no main effects on team performance.

Meta-analyses offer even weaker evidence that relations-oriented diversity can lead to improved team performance. Webber and Donahue (2001) and Horwitz and Horwitz (2007)
conclude that there is no evidence linking relations-oriented diversity and team performance. Joshi and Roh (2009) find that relations-oriented diversity generally has a small negative main effect on team performance, but under certain conditions such as in service industries, when teams perform for short periods of time and in gender- and ethnic-balanced occupations, the effect can become positive. Focusing specifically on diversity in terms of race and gender, two relations-oriented attributes, find both to be weakly negatively related to team performance, with this relationship becoming stronger when the main performance criterion was either innovation or creativity (Bell et al., 2011). Similarly, individual studies from the public sector also indicate that racial or ethnic diversity can adversely impact performance, but moderators such as diversity management can turn the negative impact into a positive one (Choi & Rainey, 2010; Pitts & Jarry, 2007). In short, relations-oriented diversity seems to promote social categorization, which in many cases can lead to miscommunication, conflict and lower performance, although this can be offset at least in part by managerial interventions and team processes.

The South Africa Case

South Africa offers an especially suitable case in which to study the demographic composition of bureaucracy. First, South Africa experienced a long history of colonization, White minority rule and racial discrimination that profoundly skewed the racial composition of its bureaucracy. At the dawn on nonracial democracy in 1994, blacks (Africans, Coloureds, and Indians) comprised nearly 90% of the population but filled closer to 70% of the positions across the various public services then in existence, including the national, provincial and local authorities and the African homeland territories (Cameron & Milne, 2013). Outside of the African homelands, the percent of bureaucrats who were black was closer to 60% and in the national bureaucracy just around 50% (Naidoo, 2008). In the upper echelons of the public service in 1995, black underrepresentation was even more acute, as only 37% of senior
managers and 41% of highly skilled supervisors were black. In regard to gender representation, in 1995, women filled 49% of the positions across the entire public service, but only a partly 8% of senior managers and 18% of highly skilled supervisors were women.

The South African case is also remarkable in the extent to which a government has taken deliberate and rapid steps to fundamentally transform the entire public service into a representative bureaucracy. The Constitution of 1996 calls for a public service that is broadly representative of the people. Since then, a number of reforms have been introduced to promote representation of historically disadvantaged groups – blacks, women and people with disabilities – and ensure their proportional representation in the public service. These include the White Paper on the Transformation of the Public Service, the Employment Equity Act and the White Paper on Affirmative Action in the Public Service, which requires government departments to develop and implement comprehensive affirmative action plans, including targets and monitoring systems, and develop and empower newly hired black and female employees.

Considerable progress has been made toward creating a representative bureaucracy in South Africa (DPSA, 2016). By 2016, overall black and female representation in the public service stood at nearly 92% and 60%, figures comparable and above those found in the general population, respectively. In 2016, blacks filled 86% of senior management positions, well above the target of 75%. In that same year, the percent of women in senior management positions had risen to 41%, below the 50% target but still a significant increase from 1995.

Finally, South Africa appears to be without parallel in that in addition to promoting equality and representativeness, affirmative action in the public service has been advanced under the explicit notion that a representative bureaucracy will perform better (DPSA, 1997). In formal policy statements, the African National Congress (ANC) government has argued that a more representative public service will have intimate knowledge of the conditions
historically disadvantaged communities face and be more responsive to their needs. A more representative public service will also be able to communicate better with citizens and clients in their native language. In addition, greater representativeness is believed to improve effectiveness as a result of bureaucrats advocating for historically disadvantaged groups. Furthermore, a public service that employs increasing numbers of blacks and women will sensitize white and male employees to the challenges and barriers marginalized communities have faced. Finally, a more representative public service will appear more legitimate and credible in the eyes of citizens, reducing distrust and hostility toward public institutions and increasing compliance and participation in public programs.

While the concepts of representation and diversity have appeared prominently in the discourse surrounding administrative reform in South Africa, the former has been prioritized by the government. The Constitution of 1996 specifies representation or representativeness as a guiding principle for the new public service, while making no mention of diversity. The Department of Public Service and Administration (DPSA) has repeatedly stressed the need to promote representation of historically disadvantaged groups in the public service (DPSA, 1995, 1997, 1998). And as noted above, the DPSA has taken pains to articulate why a more representative public service will be a more effective bureaucracy. To be sure, the government has at times pointed to a diverse workforce as a source of desperately needed experience, skills and talent and remarked that greater workforce diversity can promote innovativeness, customer satisfaction and productivity (DPSA, 1997). Workforce diversity, however, has also been declared a challenge that must be managed lest it become a source of conflict, inter-cultural misunderstanding and discord (DPSA, 1995, 1997).

Despite the positive rhetoric of a “rainbow nation,” South Africa is a largely racially homogenous country. In 2014, almost 80% of the population was African and 91% was black (African, Coloured, and Indian) (Statistics South Africa, 2014). A public service that is
representative of such a homogenous population should be less diverse if we think of
diversity as variety or heterogeneity. Using measures of representativeness and diversity
described further below, we can confirm that this is the case, as the variable *racial
representativeness* and *racial diversity* are negatively correlated ($r = -0.68$).

In light of research linking passive bureaucratic representation to performance and the
theoretical rationale for this relationship offered by Lim (2006) and others, I expect
representation of historically disadvantaged groups – blacks and women – and overall racial
representativeness to be positively related to organizational effectiveness in South Africa.
However, considering the mixed findings from meta-analyses, particularly when those
pertaining to relations-oriented diversity, I have no clear expectation of how racial diversity
will impact organizational effectiveness, if at all. It is reasonable to believe that racial
diversity can positively impact organizational effectiveness at higher echelons where
managers face more task uncertainty and more complex problems compared to lower
echelons (Opstrup & Villadsen, 2015). To explore this possibility, I will examine the
relationship between racial diversity and organizational effectiveness at different levels of the
public service.

**Data and Method**

**Data**

The unit of analysis is the department of the national government of South Africa. I
gathered data over nine years (2006 to 2014) from 61 different departments to create an
unbalanced panel ($N = 269$). The main sources of data are the annual reports that departments
are required to prepare to comply with the Public Finance Management Act of 1999, with
some additional data gathered from the Auditor-General and the Presidency. The final sample
used in the analysis includes 188 observations, with the rest dropped due to missing data on
one or more variables.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Measure</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent goals achieved</td>
<td>Percent of goals achieved in year</td>
<td>245</td>
<td>0.63</td>
<td>0.14</td>
<td>0.24</td>
<td>0.98</td>
</tr>
<tr>
<td>Percent african</td>
<td>Percent of workforce African</td>
<td>269</td>
<td>0.75</td>
<td>0.10</td>
<td>0.41</td>
<td>0.93</td>
</tr>
<tr>
<td>Percent coloured</td>
<td>Percent of workforce Coloured</td>
<td>269</td>
<td>0.08</td>
<td>0.05</td>
<td>0.01</td>
<td>0.38</td>
</tr>
<tr>
<td>Percent indian</td>
<td>Percent of workforce Indian</td>
<td>269</td>
<td>0.03</td>
<td>0.02</td>
<td>0.00</td>
<td>0.13</td>
</tr>
<tr>
<td>Percent black</td>
<td>Percent of workforce Black (African, Coloured and Indian)</td>
<td>269</td>
<td>0.86</td>
<td>0.07</td>
<td>0.56</td>
<td>0.99</td>
</tr>
<tr>
<td>Percent female</td>
<td>Percent of workforce female</td>
<td>269</td>
<td>0.53</td>
<td>0.10</td>
<td>0.23</td>
<td>0.69</td>
</tr>
<tr>
<td>Percent african male</td>
<td>Percent of workforce African male</td>
<td>269</td>
<td>0.36</td>
<td>0.08</td>
<td>0.19</td>
<td>0.55</td>
</tr>
<tr>
<td>Percent coloured male</td>
<td>Percent of workforce Coloured male</td>
<td>269</td>
<td>0.04</td>
<td>0.03</td>
<td>0.00</td>
<td>0.15</td>
</tr>
<tr>
<td>Percent indian male</td>
<td>Percent of workforce Indian male</td>
<td>269</td>
<td>0.02</td>
<td>0.01</td>
<td>0.00</td>
<td>0.09</td>
</tr>
<tr>
<td>Percent african female</td>
<td>Percent of workforce African female</td>
<td>269</td>
<td>0.39</td>
<td>0.09</td>
<td>0.12</td>
<td>0.60</td>
</tr>
<tr>
<td>Percent coloured female</td>
<td>Percent of workforce Coloured female</td>
<td>269</td>
<td>0.04</td>
<td>0.03</td>
<td>0.00</td>
<td>0.26</td>
</tr>
<tr>
<td>Percent indian female</td>
<td>Percent of workforce Indian female</td>
<td>269</td>
<td>0.02</td>
<td>0.01</td>
<td>0.00</td>
<td>0.07</td>
</tr>
<tr>
<td>African representativeness</td>
<td>Percent of workforce African divided by percent of population</td>
<td>279</td>
<td>0.91</td>
<td>0.21</td>
<td>0.00</td>
<td>1.17</td>
</tr>
<tr>
<td>Coloured representativeness</td>
<td>Percent of workforce Coloured divided by percent of population</td>
<td>279</td>
<td>0.81</td>
<td>0.54</td>
<td>0.00</td>
<td>4.31</td>
</tr>
<tr>
<td>Indian representativeness</td>
<td>Percent of workforce Indian divided by percent of population</td>
<td>279</td>
<td>1.26</td>
<td>0.80</td>
<td>0.00</td>
<td>4.83</td>
</tr>
<tr>
<td>Female representativeness</td>
<td>Percent of workforce female divided by percent of population</td>
<td>279</td>
<td>0.99</td>
<td>0.27</td>
<td>0.00</td>
<td>1.36</td>
</tr>
<tr>
<td>Overall racial representativeness</td>
<td>1-(\sum (p_{ti} - p_{r})^2)*100, where (p_{ri}) is the proportion of the target population in the given racial category (i) and (p_{ri}) is the proportion of department employees in the given racial category (i) (African, Coloured, Indian and White)</td>
<td>279</td>
<td>95.96</td>
<td>12.42</td>
<td>34.14</td>
<td>99.98</td>
</tr>
<tr>
<td>Overall racial diversity</td>
<td>(\sum p_{i}^2), where (p_{i}) is the proportion of department employees in the given (i) racial category (African, Coloured, Indian and White)</td>
<td>269</td>
<td>0.39</td>
<td>0.11</td>
<td>0.12</td>
<td>0.64</td>
</tr>
<tr>
<td>Racial diversity – top management</td>
<td>See above, only employees in top management</td>
<td>255</td>
<td>0.41</td>
<td>0.22</td>
<td>0.00</td>
<td>0.73</td>
</tr>
<tr>
<td>Racial diversity – senior management</td>
<td>See above, only employees in senior management</td>
<td>267</td>
<td>0.49</td>
<td>0.13</td>
<td>0.00</td>
<td>0.69</td>
</tr>
<tr>
<td>Racial diversity – prof &amp; qualified</td>
<td>See above, only professional and qualified employees</td>
<td>268</td>
<td>0.44</td>
<td>0.13</td>
<td>0.00</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>N</td>
<td>Mean</td>
<td>Std. Dev.</td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----</td>
<td>------</td>
<td>----------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>Racial diversity – skilled</strong></td>
<td>See above, only skilled employees</td>
<td>268</td>
<td>0.37</td>
<td>0.15</td>
<td>0.00</td>
<td>0.64</td>
</tr>
<tr>
<td><strong>Racial diversity – semiskilled</strong></td>
<td>See above, only semiskilled employees</td>
<td>265</td>
<td>0.22</td>
<td>0.16</td>
<td>0.00</td>
<td>0.75</td>
</tr>
<tr>
<td><strong>Racial diversity – unskilled</strong></td>
<td>See above, only unskilled employees</td>
<td>189</td>
<td>0.15</td>
<td>0.16</td>
<td>0.00</td>
<td>0.63</td>
</tr>
<tr>
<td><strong>Black department head</strong></td>
<td>Coded 1 for African, Coloured or Indian department head</td>
<td>253</td>
<td>0.91</td>
<td>0.29</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Female department head</strong></td>
<td>Coded 1 for female department head</td>
<td>253</td>
<td>0.18</td>
<td>0.39</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Black minister</strong></td>
<td>Coded 1 for African, Coloured or Indian department minister</td>
<td>252</td>
<td>0.90</td>
<td>0.30</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Female minister</strong></td>
<td>Coded 1 female department minister</td>
<td>252</td>
<td>0.35</td>
<td>0.48</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Vacancy rate</strong></td>
<td>Percent of positions unfilled</td>
<td>251</td>
<td>0.17</td>
<td>0.10</td>
<td>0.01</td>
<td>0.77</td>
</tr>
<tr>
<td><strong>Turnover rate</strong></td>
<td>Percent of employees who departed during year</td>
<td>264</td>
<td>0.11</td>
<td>0.08</td>
<td>0.00</td>
<td>0.68</td>
</tr>
<tr>
<td><strong>Total expenditures (log)</strong></td>
<td>Log transformation of department’s total expenditures</td>
<td>254</td>
<td>14.88</td>
<td>1.90</td>
<td>10.21</td>
<td>18.53</td>
</tr>
<tr>
<td><strong>Total employees (log)</strong></td>
<td>Log transformation of department’s total employees</td>
<td>269</td>
<td>7.20</td>
<td>1.91</td>
<td>3.43</td>
<td>12.20</td>
</tr>
<tr>
<td><strong>Total goals</strong></td>
<td>Number of goals set</td>
<td>245</td>
<td>144.66</td>
<td>106.2</td>
<td>7.00</td>
<td>587.00</td>
</tr>
<tr>
<td><strong>Percent employees trained</strong></td>
<td>Percent of employees trained</td>
<td>242</td>
<td>0.62</td>
<td>0.36</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Median skill level</strong></td>
<td>Median skill level for department (6 = top management, 5 = senior management, 4 = professional and qualified, 3 = skilled 2 = semiskilled, and 1 = unskilled)</td>
<td>269</td>
<td>3.37</td>
<td>0.59</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td><strong>Reporting rate</strong></td>
<td>Percent of years department filed an annual report from 2006 to 2014</td>
<td>269</td>
<td>0.89</td>
<td>0.14</td>
<td>0.50</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Percent goals uncertain</strong></td>
<td>Percent of goals that could not be coded as either achieved or not achieved</td>
<td>245</td>
<td>0.03</td>
<td>0.06</td>
<td>0.00</td>
<td>0.36</td>
</tr>
<tr>
<td><strong>Audit result</strong></td>
<td>Coded 1 if department earned clean audit (unqualified with no findings)</td>
<td>261</td>
<td>0.14</td>
<td>0.35</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Percent black trained</strong></td>
<td>Percent African employees trained</td>
<td>224</td>
<td>0.63</td>
<td>0.37</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Percent female trained</strong></td>
<td>Percent female employees trained</td>
<td>225</td>
<td>0.63</td>
<td>0.36</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Percent black promoted</strong></td>
<td>Percent African employees promoted</td>
<td>225</td>
<td>0.22</td>
<td>0.25</td>
<td>0.00</td>
<td>0.86</td>
</tr>
<tr>
<td><strong>Percent female promoted</strong></td>
<td>Percent female employees promoted</td>
<td>242</td>
<td>0.23</td>
<td>0.26</td>
<td>0.00</td>
<td>0.86</td>
</tr>
</tbody>
</table>
Dependent Variable

The dependent variable is the percentage of programmatic goals achieved by a department in a year. This measure is calculated by dividing the number of achieved programmatic goals by the total number of programmatic goals set for the year. The annual report lists the department’s programmatic goals and their achievement (met, partially met, unmet, and uncertain). In this study, partially met goals are regarded as unmet ones. For goals without an obvious indication of their achievement, I used my judgement to decide whether or not they had been met. The mean number of goals set by a department is approximately 152, and the mean number of goals achieved is approximately 94. The dependent variable, percent goals achieved, has a mean of 0.63 with a standard deviation of 0.14. A slight upward trend in the average percent of goals achieved by these organizations during a given year can be observed, from about 64% in 2006 to 70% in 2014.

Senior managers in these departments are required to set goals that are suitable to the mission of their organization, that reflect targets reported to Parliament in the Estimates of National Expenditures and the Annual Performance Plans, and that closely align with the strategic priorities of the government (Department of National Treasury, 2012). A large majority of the indicators and targets focus on program outputs and outcomes; significantly fewer pertain to ongoing processes and activities or to compliance with legislative or regulatory mandates. As such, my dependent variable is a “competing values” measure of organizational effectiveness, a commonly used approach to assessing performance (Quinn & Rohrbaugh, 1983). Goal achievement measures resembling this dependent variable have been used in previous research on performance in the U.S. federal bureaucracy (Lee & Whitford, 2013; Moon, 2017), and as archival measures or performance, they are less susceptible to common method bias and producing spurious results (Meier & O’Toole, 2013).

The correlations between my dependent variable and two others measures of
performance – the Auditor-General’s annual audit result, which largely captures stewardship of public funds and compliance with key legislation, and the Department of Performance Monitoring and Evaluation’s average Management Performance Assessment Tool (MPAT) score, which measures managerial practices and capacity – are only $r = 0.25$ and $r = 0.31$, respectively. This evidence of discriminant validity supports an interpretation of the dependent variable as a competing values indicator of organizational effectiveness that focuses primarily on programmatic outputs and outcomes.

**Independent Variables**

The main independent variables represent simple representation, representativeness, and workforce diversity. To measure simple racial and gender representation, I created the variables *percent african*, *percent coloured*, *percent indian* and *percent female*. In some of my models, I also use a set of variables measuring gender representation by race: *percent male african*, *percent male coloured*, *percent male indian*, *percent female african*, *percent female coloured* and *percent female indian*. All models include dummy variables indicating the race and gender of the department head, *department head black* and *department head female*, respectively.

To measure representativeness, I use representation indexes, operationalized as the percent of a racial or gender group in the department divided by the percent of the group in the general population in a given year (Andrews et al., 2014; Subramaniam, 1967). These variables include *african representativeness*, *coloured representativeness*, *indian representativeness* and *female representativeness*. To capture the overall representativeness of the bureaucracy, or the extent to which the department’s total workforce resembles the racial composition of the general population, I created the variable *racial representativeness*. I adopted Pitts’s (2005) operational definition, $1 - \sum (p_{ti} - p_{li})^2 \times 100$, where $p_{ti}$ is the proportion of the target population in the given racial category $i$ and $p_{li}$ is the proportion of
department employees in the given racial category $i$. This variable’s range is from 0 to 100, with 100 signifying a department that is fully representativeness in terms of race.

I also analyze the impact of racial diversity as variety, operationalized using Blau’s index, $\sum p_i^2$, where $p_i$ is the proportion of department employees in the given $i$ racial category. In contrast to the representation index, the Blau index captures the extent to which each racial group is equally represented in the department, without consideration of the racial composition of the population. The maximum level of racial diversity (Blau index = 0.75) occurs when the proportion of each of the four racial groups is 0.25. I have computed Blau index measures of racial diversity for the entire workforce in a department, racial diversity, as well as for each of the six echelons of the South African public service, racial diversity - top management, racial diversity – senior management, racial diversity - prof & qual, racial diversity – skilled, racial diversity – semiskilled and racial diversity – unskilled.

**Control Variables**

The analysis includes a wide range of control variables, including the race and gender of the department’s minister (minister black and minister female), funding available to the department (total expenditures log), total number of employees (total employees log) and department vacancy and turnover rates (vacancy rate and turnover rate). Since the policy of affirmative action calls for increased training and empowerment of employees, particularly blacks and women, I include the variables percent employees trained, percent blacks trained, percent females trained, percent blacks promoted and percent females promoted. The models also control for the department’s total number of goals (total goals), the department’s median skill level (median skills level), the rate at which the department submits annual performance reports during the nine-year period of observation (reporting rate), the percent of goals that could not be classified as either achieved or not achieved (percent goals uncertain), and the department’s audit result from the Auditor-General (audit result). Finally, the models include
dummy variables for the department’s policy area or cluster (economic and infrastructure cluster, governance and administration cluster, social protection and development cluster, international cooperation and trade cluster and justice crime security cluster, Chapter 9 institutions are the omitted category) and for years 2006-2014 (2006 is the omitted category).

**Modeling**

The dataset represents an unbalanced panel of 61 departments over a nine-year period. Since ordinal least squares (OLS) estimation can lead to biased estimates, I use panel data methods to analyze the data. The Hausman test failed to reject the null hypothesis that the coefficients from fixed effects and random effects models are not systematically different, indicating that the random effects coefficients are not biased. Since a random effects estimator is also more efficient than a fixed effects estimator, I use the former along with robust cluster errors by department.

**Findings and Discussion**

Turning now to the results of the empirical analysis, I begin by examining the relationship between simple racial and gender representation and the dependent variable, the percent of goals achieved by a department. In Model 1, I find that percent african, percent coloured and percent indian are positively related to the dependent variable and statistically significant at $p < 0.05$ or better. The magnitude of the effect for Indian representation seems quite large, but it is important to keep in mind that Indians constitute less than three percent of the South African population and that their representation in the public service is similarly small. In Model 2, I combine representation of all blacks – Africans, Coloureds and Indians – and find that black representation is positively related to percent goals achieved ($p < 0.01$). Combined, these results from Models 1 and 2 indicate that increasing representation of historically disadvantaged racial groups, the primary victims of apartheid, makes departments more effective at achieving their goals.
Table 9

Results for Representation by Race and Gender

<table>
<thead>
<tr>
<th>Model 1 Coef.</th>
<th>Model 2 Coef.</th>
<th>Model 3 Coef.</th>
</tr>
</thead>
<tbody>
<tr>
<td>percent african</td>
<td>0.84***</td>
<td>1.09***</td>
</tr>
<tr>
<td>percent coloured</td>
<td>1.28**</td>
<td>1.55**</td>
</tr>
<tr>
<td>percent indian</td>
<td>2.84***</td>
<td>3.19***</td>
</tr>
<tr>
<td>percent black</td>
<td>0.65***</td>
<td>0.56***</td>
</tr>
<tr>
<td>percent african male</td>
<td>-0.45**</td>
<td>-0.45**</td>
</tr>
<tr>
<td>percent coloured male</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>percent indian male</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>percent black department head</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>percent coloured department head</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>black minister</td>
<td>-0.07</td>
<td>-0.08*</td>
</tr>
<tr>
<td>female minister</td>
<td>0.05**</td>
<td>0.05*</td>
</tr>
<tr>
<td>vacancy rate</td>
<td>-0.05*</td>
<td>-0.07*</td>
</tr>
<tr>
<td>turnover rate</td>
<td>0.00*</td>
<td>0.00*</td>
</tr>
<tr>
<td>total expenditures (log)</td>
<td>0.02*</td>
<td>0.02*</td>
</tr>
<tr>
<td>total employees (log)</td>
<td>-0.06***</td>
<td>-0.04***</td>
</tr>
<tr>
<td>total goals</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>percent employees trained</td>
<td>-0.09</td>
<td>-0.08</td>
</tr>
<tr>
<td>median skill level</td>
<td>0.11***</td>
<td>0.08***</td>
</tr>
<tr>
<td>reporting rate</td>
<td>0.20**</td>
<td>0.22**</td>
</tr>
<tr>
<td>percent goals uncertain</td>
<td>-0.59***</td>
<td>-0.60***</td>
</tr>
<tr>
<td>audit result</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>percent black trained</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>percent female trained</td>
<td>0.02</td>
<td>0.04</td>
</tr>
<tr>
<td>percent black promoted</td>
<td>-0.06</td>
<td>-0.06</td>
</tr>
<tr>
<td>percent female promoted</td>
<td>0.28**</td>
<td>0.25*</td>
</tr>
<tr>
<td>economic and infrastructure cluster</td>
<td>-0.01</td>
<td>-0.04</td>
</tr>
<tr>
<td>governance and administration cluster</td>
<td>0.03</td>
<td>0.01</td>
</tr>
<tr>
<td>social protection and development</td>
<td>-0.10**</td>
<td>-0.10</td>
</tr>
<tr>
<td>constant</td>
<td>0.52**</td>
<td>0.64***</td>
</tr>
</tbody>
</table>

N | 188 | 188 | 188 |
R-square, Within/Between/Overall | 0.36/0.65/ | 0.37/0.55/ | 0.35/0.66/ |
| | 0.54 | 0.47 | 0.54 |

Note. ***p < 0.01, **p < 0.05, *p < 0.10 (two-tails). Models include dummy variables for years (2006-2014, 2006 is excluded year)
Models 1 and 2 fail to show that increasing representation of women improves organizational effectiveness. In fact, *female representation* is negatively related to *percent goals achieved* at $p < 0.10$ or better. In Model 3, I explore the impact of gender further by unpacking gender representation by race. Doing this reveals that *percent african male*, *percent coloured male* and *percent male indian* are all positively related to the percent of goals achieved by a department at $p < 0.05$ or better. Interestingly, representation of African women is positively related to the dependent variable ($p < 0.01$). Representation of Indian women is also positively related to the percent goals that are achieved but only at $p < 0.10$, and representation of Coloured women is unrelated to *percent goals achieved*. In short, these results show that an increase in female representation can indeed lead to greater organizational effectiveness but that this is conditional on women in the public service being either African or Indian.

Next, I turn my attention to proportional representation, or the representativeness of the bureaucracy. The results from Model 4 indicate that an increase in *african representativeness*, *coloured representativeness* and *indian representativeness* lead to an increase in *percent goals achieved*. Unlike simple representation, proportional representation of Africans, who constitute nearly 80% of the population, appears to have a much larger effect on the dependent variable than proportional representation of Coloureds and Indians, the two other much smaller historically disadvantaged racial groups. Importantly, the results from Model 5 show that increasing the overall racial representativeness of a department’s workforce so that it more closely reflects the racial composition of the population leads to higher levels of organizational effectiveness.

When it comes to female representativeness, I find that it matters far less when it comes to organizational effectiveness than racial representativeness. The variable *female representativeness* has a weak negative relationship with *percent goals achieved* in Model 4.
that is marginally significant \((p < 0.10)\). In Model 5, female representation is no longer related to the dependent variable.

The discussion now turns to the influence of racial diversity on organizational effectiveness. Model 6 shows that the variable *racial diversity*, a measure of racial diversity that takes into account all employees in a department, has a negative coefficient that fails to achieve statistical significance. More racial diversity across the entire workforce, therefore, does not improve the effectiveness of national departments. This result is consistent with meta-analyses of the impact of relations-oriented diversity on performance, most of which fail to find any evidence of a positive relationship between these two concepts (Bell et al., 2011; Horwitz & Horwitz, 2007; Webber & Donahue, 2001).

In Model 7, I include measures of racial diversity by echelon. Those results indicate that diversity at the highest echelon, top management, is positively related to the percent of goals achieved by a department \((p < 0.05)\). Conversely, in one of the lowest echelons, semiskilled employees, racial diversity is negatively correlated with the dependent variable \((p < 0.05)\). At the four other echelons, I find no apparent relationship between racial diversity and organizational effectiveness.
Table 10

Results for Racial Representativeness

<table>
<thead>
<tr>
<th></th>
<th>Model 4 Coef.</th>
<th>Model 5 Coef.</th>
</tr>
</thead>
<tbody>
<tr>
<td>african representativeness</td>
<td>0.67***</td>
<td></td>
</tr>
<tr>
<td>coloured representativeness</td>
<td>0.11**</td>
<td></td>
</tr>
<tr>
<td>indian representativeness</td>
<td>0.07***</td>
<td></td>
</tr>
<tr>
<td>racial representativeness</td>
<td>-0.23*</td>
<td>-0.18***</td>
</tr>
<tr>
<td>female representativeness</td>
<td>0.00</td>
<td>-0.01***</td>
</tr>
<tr>
<td>black department head</td>
<td>0.00</td>
<td>0.01</td>
</tr>
<tr>
<td>female department head</td>
<td>-0.07**</td>
<td>-0.10**</td>
</tr>
<tr>
<td>black minister</td>
<td>0.05**</td>
<td>0.05*</td>
</tr>
<tr>
<td>female minister</td>
<td>-0.05</td>
<td>-0.04</td>
</tr>
<tr>
<td>vacancy rate</td>
<td>0.00*</td>
<td>0.01*</td>
</tr>
<tr>
<td>turnover rate</td>
<td>0.02*</td>
<td>0.01</td>
</tr>
<tr>
<td>total expenditures (log)</td>
<td>-0.06***</td>
<td>-0.04***</td>
</tr>
<tr>
<td>total employees (log)</td>
<td>0.00</td>
<td>-0.00</td>
</tr>
<tr>
<td>percent employees trained</td>
<td>-0.09</td>
<td>-0.08</td>
</tr>
<tr>
<td>median skill level</td>
<td>0.11***</td>
<td>0.08***</td>
</tr>
<tr>
<td>reporting rate</td>
<td>0.20**</td>
<td>0.20**</td>
</tr>
<tr>
<td>percent goals uncertain</td>
<td>-0.59***</td>
<td>-0.62***</td>
</tr>
<tr>
<td>audit result</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>percent black trained</td>
<td>0.00</td>
<td>-0.01</td>
</tr>
<tr>
<td>percent female trained</td>
<td>0.02</td>
<td>0.04</td>
</tr>
<tr>
<td>percent black promoted</td>
<td>-0.06</td>
<td>-0.07</td>
</tr>
<tr>
<td>percent female promoted</td>
<td>0.28**</td>
<td>0.28*</td>
</tr>
<tr>
<td>economic and infrastructure cluster</td>
<td>-0.01</td>
<td>-0.04</td>
</tr>
<tr>
<td>governance and administration cluster</td>
<td>0.03</td>
<td>0.01</td>
</tr>
<tr>
<td>social protection and development cluster</td>
<td>-0.10**</td>
<td>-0.11**</td>
</tr>
<tr>
<td>international cooperation and trade cluster</td>
<td>0.08*</td>
<td>0.04</td>
</tr>
<tr>
<td>justice crime security cluster</td>
<td>-0.08**</td>
<td>-0.08</td>
</tr>
<tr>
<td>constant</td>
<td>0.52**</td>
<td>0.02</td>
</tr>
</tbody>
</table>

N 188 188  
R-square, Within/Between/Overall 0.36/0.65/0.54 0.36/0.54/0.46

Note. ***p < 0.01, **p < 0.05, *p < 0.10 (two-tails). Models include dummy variables for years (2006-2014, 2006 is excluded year)

Taken together, the results for racial diversity suggest that diversity indeed can be a double-edged sword. Any advantages in information processing and better decision making that may be derived from racial diversity, in terms of a wider range of knowledge, skills, abilities and experiences that can be brought to bear on problems, appear to be minimal and in most cases are offset by the negative effects of social categorization, such as
miscommunication and conflict. It is important to note that racial diversity, as a form of relations-oriented diversity, is less relevant to performance compared to diversity based on job-related attributes like functional background and education. Had the measure of diversity been a measure of task-related diversity, it is more likely that I would have found some link between it and organizational effectiveness.

One explanation for why I find no relationship between racial diversity across the entire workforce and the percent of goals achieved by departments has to do with the fact that racial diversity is negatively related to black representation. In a racially homogenous country where blacks constitute nearly 90% of the population, a more diverse and heterogeneous workforce is less representative of the population. Thus, by increasing racial diversity, these organizations become less representative of the people they serve, denying them the benefits of a representative bureaucracy, which in this country includes greater legitimacy, a bureaucracy that is better at communicating with a multi-ethnic and multilingual population, more empathetic understanding of the needs of the population, and a more positive response from citizens to the bureaucracy. This probably accounts for why more racial diversity across all echelons fails to improve organizational effectiveness and why racial diversity among semiskilled employees, who are close to the frontlines and in frequent contact with citizens, has an adverse effect on departments’ ability to achieve their goals. Simply stated, in South Africa, a more diverse workforce, particularly on the frontlines, means fewer people fluent in the nine vernacular languages spoken by the African majority and fewer bureaucrats who empathize with historically disadvantaged communities. At the highest echelon, however, where problems and tasks tend to be less structured and more complex, I find that more racial diversity results in greater organizational effectiveness. Senior managers appear able to capitalize on diverse life experiences and cultural perspectives and values to come up with more creative solutions and make better decisions while overcoming the adverse effects of
social categorization.

Regarding the control variables in these models, I find some evidence that departments under the direction of a female minister are slightly better at achieving their goals (Models 1-5 and 7). The variable total expenditures (log) is positively related to percent goals achieved (Models 1-6), suggesting that larger and more complex organizations are harder to manage and impose significant coordination costs. I find some evidence of vacancy rates having a small negative effect on organizational effectiveness (Models 1, 2 and 6), indicating that the inability to attract and hire human capital adversely effects these organizations. In a similar vein, the median skill level in a department is positively related to the percent of goals achieved in all seven models tested, pointing to the importance of having a skilled and capable workforce. Importantly, the variables reporting rate and percent goals uncertain are positively and negatively related to the dependent variable, respectively, in all seven models. This could be a sign of moral hazard, as managers may be concealing poor performance by not submitting an annual report when organizational effectiveness declines and by obfuscating their true performance on certain goals by not clearly stating whether or not they were achieved. I find some evidence of empowerment of historically disadvantaged groups being beneficial to these organizations, as the percent of women who are promoted is positively related to percent goals achieved in nearly all the models tested (Models 1-6). Finally, departments that are part of the social protection and development cluster and the justice, crime and security cluster appear to be less effective at achieving their goals than Chapter 9 organizations.
Table 11

**Results for Racial Diversity**

<table>
<thead>
<tr>
<th></th>
<th>Model 6 Coef.</th>
<th>Model 7 Coef.</th>
</tr>
</thead>
<tbody>
<tr>
<td>racial diversity</td>
<td>-0.15</td>
<td></td>
</tr>
<tr>
<td>racial diversity – top management</td>
<td>0.17**</td>
<td></td>
</tr>
<tr>
<td>racial diversity – senior management</td>
<td>-0.21</td>
<td></td>
</tr>
<tr>
<td>racial diversity - prof &amp; qual</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>racial diversity - skilled</td>
<td>-0.12</td>
<td></td>
</tr>
<tr>
<td>racial diversity - semiskilled</td>
<td>-0.30**</td>
<td></td>
</tr>
<tr>
<td>racial diversity - unskilled</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>percent female</td>
<td>-0.24</td>
<td>-0.12</td>
</tr>
<tr>
<td>black department head</td>
<td>-0.01</td>
<td>0.05*</td>
</tr>
<tr>
<td>female department head</td>
<td>0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>black minister</td>
<td>-0.09*</td>
<td>-0.05</td>
</tr>
<tr>
<td>female minister</td>
<td>0.04</td>
<td>0.10***</td>
</tr>
<tr>
<td>vacancy rate</td>
<td>-0.07**</td>
<td>0.04</td>
</tr>
<tr>
<td>turnover rate</td>
<td>0.00*</td>
<td>0.00</td>
</tr>
<tr>
<td>total expenditures (log)</td>
<td>0.00</td>
<td>0.01</td>
</tr>
<tr>
<td>total employees (log)</td>
<td>-0.03**</td>
<td>-0.02</td>
</tr>
<tr>
<td>total goals</td>
<td>-0.00</td>
<td>-0.00</td>
</tr>
<tr>
<td>percent employees trained</td>
<td>-0.07</td>
<td>-0.11</td>
</tr>
<tr>
<td>median skill level</td>
<td>0.06**</td>
<td>0.11***</td>
</tr>
<tr>
<td>reporting rate</td>
<td>0.23**</td>
<td>0.28***</td>
</tr>
<tr>
<td>percent goals uncertain</td>
<td>-0.59***</td>
<td>-0.68***</td>
</tr>
<tr>
<td>audit result</td>
<td>-0.01</td>
<td>0.03</td>
</tr>
<tr>
<td>percent black trained</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>percent female trained</td>
<td>0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>percent black promoted</td>
<td>-0.07</td>
<td>-0.04</td>
</tr>
<tr>
<td>percent female promoted</td>
<td>0.29**</td>
<td>0.18</td>
</tr>
<tr>
<td>economic and infrastructure cluster</td>
<td>-0.04</td>
<td>0.01</td>
</tr>
<tr>
<td>governance and administration cluster</td>
<td>-0.00</td>
<td>0.05</td>
</tr>
<tr>
<td>social protection and development cluster</td>
<td>-0.10*</td>
<td>-0.07</td>
</tr>
<tr>
<td>international cooperation and trade cluster</td>
<td>0.05</td>
<td>0.07</td>
</tr>
<tr>
<td>justice crime security cluster</td>
<td>-0.08</td>
<td>-0.09</td>
</tr>
<tr>
<td>constant</td>
<td>1.20***</td>
<td>0.95***</td>
</tr>
<tr>
<td>N</td>
<td>188</td>
<td>188</td>
</tr>
</tbody>
</table>

R-square, Within/Between/Overall 0.35/0.53/0.44  0.39/0.75/0.57

*Note.* ***p < 0.01, **p < 0.05, *p < 0.10 (two-tails). Models include dummy variables for years (2006-2014, 2006 is excluded year)
Conclusion

The aim of this study was to draw a clearer analytical distinction between the concepts of bureaucratic representation and workforce diversity, describe each concept’s relationship to performance and empirically examine how bureaucratic representation and workforce diversity impact organizational effectiveness in the South African Public Service. Several key conclusions emerge from the analysis. First, researchers, managers, and policymakers should be precise in how they define bureaucratic representation and workforce diversity and not treat the two concepts as if they are synonymous. In addition to having distinct meanings, demographic representation and workforce diversity can influence performance in different ways and under different conditions. Bureaucratic representation can positively influence performance, as the findings show when it comes to representation of blacks in South Africa, but this is more likely to be occur when the values and interests of citizens, bureaucrats, and importantly, policymakers align. The link between workforce diversity and performance, on the other hand, is contingent on different factors. Specifically, task-related diversity is more likely to improve performance than relations-oriented diversity, more workforce diversity of either kind is more likely to improve performance when tasks and problems are more unstructured and involved greater uncertainty, and diversity management practices enhance the effects of workforce diversity.

A second and related conclusion is that not only are bureaucratic representation and workforce diversity conceptually distinct, it is not safe to assume that the two concepts will be positively related across a population of organizations, particularly when diversity is conceived of as variety or heterogeneity. In societies that are becoming more racially and/or ethnically heterogeneous like the United States, a more representative bureaucracy may become more diverse at the same time. However, in countries like South Africa that are becoming more racially homogenous, workforces that are more racially diverse are less
representative of the population and thus unable to fully capitalize the advantages of representative bureaucracy for improving performance. In cases like the former, organizations can enjoy the benefits of both representation and diversity, while those like the latter experience a trade-off of sorts between the gains in performance that are derived from having a bureaucracy that mirrors the citizenry and those that come from having a diverse workforce.

Third, as the results of meta-analyses and this study’s findings suggest, it is wise not to overstate the benefits of workforce diversity. Diversity can enable people to draw from a wider array of cognitive resources with which to perform tasks and solve problems, but it also precipitates social categorization, making communication and cooperation more difficult to achieve. In many instances, the costs and benefits can cancel each other out, so that no gains in performance are achieved from greater diversity. This is what findings suggest, as increasing racial diversity across all levels of the workforce fails to improve performance. Importantly, workforce diversity in terms of highly-job related attributes such as functional and educational background is more likely to improve performance than relations-oriented diversity based on attributes like race and gender, which are more likely to trigger the process of social categorization. The findings suggest relations-oriented diversity generally, and racial diversity specifically, may only be beneficial for performance when managers face so much complexity and uncertainty that any form of diversity that enriches the cognitive pool of resources available to them, including different racial experiences and perspectives, outweighs the adverse effects of such diversity.

The analysis points to several directions for future research. More research is needed on task-related diversity in the public sector, since factors like occupational and educational background and experience are more relevant to work and thus more likely to impact performance than race and gender. In addition, those studying workforce diversity in public organizations should pay more attention to conceptualizations of diversity as disparity or
separation, since these other types of diversity may also have consequences for performance. Finally, additional work is needed to better understand the full range of organizational and environmental conditions that enhance or diminish the impact of different types of workforce diversity on public sector performance.
CHAPTER 6. CONCLUSION

This chapter integrates the previous chapters and discusses the summary of findings, theoretical contributions, practical contributions, and limitations, and makes suggestions for future research.

Summary of Findings

This dissertation aims to find conceptual clarity about concepts of bureaucratic representation and workforce diversity (Chapter 2) and to examine contingency factors moderating the effects of representation and diversity on outcomes for employees and organization (Chapters 3-5).

In Chapter 2, I give an overview of different conceptualizations and measures of representation and diversity. These conceptualizations are situated on both individual and collective levels. I also discuss different theorized causal mechanisms for the effects of representation and diversity on organizational performance. The literature on representative bureaucracy posits that passive representation brings positive impacts to organizational performance through active and symbolic representation. However, social categorization and information and decision-making perspectives offer competing explanations for the effects of diversity.

In Chapter 3, I investigate how agency mission and a climate of diversity moderate the effects of minority representation on U.S. federal agencies’ achievement of goals. I find that minority representation in general has negative effects on goal achievement, but its effects become positive in agencies that mainly pursue the interests of disadvantaged groups and have positive diversity climates.

In Chapter 4, I examine the influence of gender and racial dissimilarities on overall job- and organization-satisfaction among minority women, minority men, White women, and White men in U.S. federal agencies. The empirical analysis shows that minority women and
White women with one or more marginalized identities are negatively affected by
demographic dissimilarity, but minority men and White men are relatively indifferent to
demographic dissimilarity.

In Chapter 5, I examine the effects of racial representation and diversity on
government performance in South Africa, a racially homogenous setting where racial
representation and diversity are divergent organizational phenomena. I find that black
representation (African, Coloured, and Indian) is positively associated with goal achievement
by national government departments. The effects of racial diversity on performance vary by
organizational level. Racial diversity at the top level has positive effects on goal achievement,
but the relationship is opposite at low levels.

**Theoretical Contributions**

First, the different effects of representation and diversity on performance
demonstrate the need to avoid conflating the two. The difference between them is more
evident in contexts where public employees serve demographically homogenous groups. In
South Africa, where blacks constitute the majority of the population (Chapter 5), racial
representation and racial diversity conflict with one another, as an increase in one means a
decrease in the other. The demographic diversity of an organization’s target population also
provides organization members with cues about whether to harness representation or
diversity as a source of effectiveness. Some studies have shown that minority teachers
(passive representation) press more actively for the interests of minority students (active
representation) in minority majority regions than in racially diverse ones (Capers, 2018;
Grissom, Nicholson-Crotty, & Nicholson-Crotty, 2009; Roch & Edwards, 2017). Their
authors argued that minority teachers in racially segregated school districts were more
sensitized about racial inequalities in schools and perceived more internal and external
support for their advocacy. For diverse target populations with multiple groups championing
conflicting demands, organizations may benefit from diverse workforces by utilizing their varying viewpoints and ideas to satisfy several needs (Andrews et al., 2015).

Besides the extent of diversity in the target population, it is worth distinguishing between representation and diversity because they have different value orientations and causal mechanisms for affecting performance. Whether representation or diversity will be a more important source for performance depends on the nature of tasks under investigation. As shown in Chapter 5, considering the match between intra- and extra-organizational diversity (i.e. representation) may be more effective for high performance than considering only intra-organizational diversity, at least in settings where public employees strongly share socialization experiences and values with their clients and interact with them frequently to achieve policy or organizational outcomes (e.g. service-delivery goals). The finding that minority representation leads to high performance in redistributive agencies in the U.S. federal government (Chapter 3) is in line with this argument, in that the racial alignment between service providers and recipients results in the co-production and take-up of public services. By contrast, in light of the finding that racial diversity at the administrative level is associated with high performance (Chapter 5), it may be more important to consider intra-organizational diversity to improve tasks requiring diverse knowledge, expertise, and creativity more than advocacy and empathy toward recipients.

Second, scholars should be more careful about which conceptualization of representation or diversity to adopt in their research. In the case of representation, one question is when we should view representation as an increase in the power of a certain group in an organization (i.e. ordinary representation) and when we should view it as demographic matching between the public workforce and general population (i.e. representativeness). This distinction matters because the former focuses more on the role of public employees using their discretion to affect the distribution of policy benefits (i.e. active representation), and the
latter on how an organization’s demographic make-up is viewed by its service recipients (i.e. symbolic representation). Although it is hard to disentangle these sources for high performance (Lim, 2006), conceptualizing (and thus operationalizing) representation as either ordinary representation or representativeness may be contingent on the outcome of interest. For example, if an outcome involves policy decisions that are determined largely by bureaucratic discretion (e.g. an assignment of contracts), ordinary representation adopting power and critical mass perspectives might be appropriate. By contrast, when the outcome of interest is citizen satisfaction or anything else that depends on legitimacy and public trust, representativeness may be appropriate.

As with representation, when conceptualizing diversity scholars should think carefully about its nature and its hypothesized relationship with the outcome of interest. According to Harrison and Klein (2007), it is possible to understand the diversity of a given attribute as “position” (separation), “information” (variety), or “possession” (disparity; p. 1207). In the public administration literature, diversity scholars have focused mainly on racial and gender diversity (Pitts & Wise, 2010), conceptualizing diversity as variety and using the Blau index as the measure, with only a few exceptions (Langbein & Stazyk, 2013; Siddiki et al., 2017). However, researchers might be able to conceptualize gender or racial diversity as separation or disparity. For example, male and female employees might have opposing opinions about organizational leadership, in which case disagreement along gender lines (i.e. diversity as separation) is more important than the numbers of male and female employees in the organization (i.e. diversity as variety). This consideration is important because diversity-as-variety proposes positive outcomes (e.g. great innovation), whereas diversity-as-separation suggests negative outcomes (e.g. low cohesiveness among employees).

Third, this dissertation demonstrates that research into the effects of representation and diversity on organizational and employee outcomes should be context dependent.
Contexts involve both the internal and external environments of an organization. Chapter 3 shows that active representation can be a source of improved organizational performance when there is goal alignment between focal employees and organizations. Chapter 5 shows that South Africa’s history of apartheid and its political regime aiming to address racial inequalities work as contextual factors allowing the advocating behaviors of black employees in national agencies to contribute to the political goals of the Congress and garner positive cooperation by citizens. From an open-system perspective, the external environment that provides organizations with resources and constraints influences public employees’ decision-making, including their advocacy for their social groups (Andrews et al., 2015; Capers, 2018; Keiser et al., 2002).

Studies of representative bureaucracy should thus embrace the roles of political, external, and organizational contexts in the relationships between passive representation, active representation, and organizational performance. An employee’s demographics can even serve as a contextual factor: Chapter 4 shows that employees with two marginalized identities (e.g. woman and minority) respond more negatively to demographic dissimilarity than those with only one. In sum, theories on the effectiveness of representation and diversity can be better developed by consideration of the roles of contextual factors categorized by environment (internal or external), level (individual, group, or organization), or interactions among them (Andrews et al., 2015; Guillaume et al., 2017; Meier & Rutherford, 2016).

Practical Contributions

First, public managers should distinguish and choose strategically between bureaucratic representation and workforce diversity (as variety) by considering the target population’s diversity and the nature of the policies or programs in question. In some cases, the similarity between the workforce and the clients might be more important than workforce diversity per se. In the police shooting of Michael Brown in Ferguson in 2014, for example,
one problem was that White police officers made up most of the city’s law enforcement, even though most residents were Blacks. One suggested remedy for police misconduct against Blacks is to increase the number of Black police officers, who can improve police-citizen interactions with their cultural sensitivity (Hong, 2016; Theobald & Haider-Markel, 2009). In this case, hiring enough Black police officers to match the racial composition of the police with that of the residents would not be the same as making the city’s law enforcement racially more diverse.

When public organizations serve diverse populations, the distinction between representation and diversity might be less salient—a more representative workforce is similar to a more diverse workforce. This is one underlying rationale for interchangeably applying representation and diversity theories in discussions of the effects of demographic composition on organizational performance (Andrews et al., 2014). However, because representation and diversity do follow different theoretical processes, public managers should still understand the differences between them.

To illustrate, an organization could promote a racially representative as well as a diverse workforce by hiring more employees from historically disadvantaged groups; however, this can also be done for different purposes (e.g. social equity vs high-quality decision-making; Miller, 1999), which depends on the internal and external contexts. Conflating representation and diversity practices can lead managers to overlook either the normative demand for equity or the pragmatic demand for effectiveness. In light of the growing tendency of public organizations to adopt business cases for diversity and to develop diversity management programs, some scholars are concerned that diversity management programs have overlooked the enduring issues of the underrepresentation of disadvantaged groups (e.g. minorities and women) and the inequity that they experience in the workplace (Caudron & Hayes, 1997; Elias, 2013).
Second, promoting a representative or diverse workforce is not sufficient for realizing positive outcomes, so public managers should not limit their pursuit of either to the recruitment and hiring processes (Pitts, 2006). Managing representation or diversity should be a comprehensive and ongoing process that considers the internal and external influences on bureaucratic behavior and thus policy outcomes (Chapters 3 and 5). This claim is consistent with research into inclusion that examines the implications of organizational demographic changes on employees (Andrews & Ashworth, 2015; Selden & Selden, 2001). This line of research implies that a representative or diverse workforce does not necessarily translate into representative or diverse perspectives that promote equity or effectiveness. As Chapter 3 shows, for example, organizations can benefit from bureaucratic representation by developing a culture of providing employees from disadvantaged groups with a sense of belonging.

Public managers should also take more individualized approaches to employee groups. From a relational demography perspective, employee groups with intersecting identities (e.g. gender and race) generating unique needs and experiences can interpret and respond to changes in an organization’s demographic composition differently (Chapter 4). Even among racial minorities who are regarded to share pre-organizational and organizational experiences, not all groups will take advantage of environments that support advocacy for them in the general population (Chapter 3). In light of these findings, I argue that public managers trying to leverage representation or diversity should avoid a one-size-fits-all approach and account for other factors that have received less attention (e.g. intersectionality, inter-minority competition) in developing and carrying out human-resources practices. In designing sensitivity-training programs, for example, it would be helpful to consider the different stereotypes that different racial groups face (Ricucci, 2002), and which sub-population within the larger group (e.g. minority women vs. white women, among
women in general) receives more or fewer privileges in human-resources practices such as promotion and work-life balance (Hamidullah & Riccucci, 2017).

**Limitations and Suggestions for Future Research**

This dissertation has limitations. First, Chapters 3 and 5 use panel data sets for short spans of years in certain presidencies. Using the four-year (2012–2015) data sets, Chapter 3 examines the effects of minority representation on federal agencies’ goal achievement during the Obama administration, which prioritized diversity and inclusion in government practices. It is possible that the finding—that minority representation is positively associated with goal achievement of redistributive agencies—would not hold under a presidency with priorities that conflict with diversity and inclusion. Chapter 5 uses a nine-year (2006–2014) data set that does not include several post-apartheid years when public service was transforming, making it difficult to infer causality in the effects of black representation and racial diversity on national government agencies’ goal achievement.

Second, there are limitations associated with the goal achievement rate used as the dependent variables in Chapters 3 and 5. First, this measure gives equal weight to each agency goal. However, it is possible that some goals are more important than others to an agency’s missions and to key stakeholders. Although some U.S. federal agencies identify the priorities among their goals, these agencies are too few for regression analyses. Second, instead of competing values framework, an agency’s goals might be divided into different categories. Given that this dissertation’s main explanation of the positive effects of representation on organizational performance is goal alignment between political actors and public employees, it would be worth comparing the role of representation in pursuing agency goals with and without political support (Davis & Stazyk, 2015).

Despite these limitations, this dissertation lays the ground for conceptual clarity about bureaucratic representation and workforce diversity and for further contextualized
research on their effects on employee and organizational performance. I propose the following lines of study. First, the conceptualization of diversity as disparity warrants further consideration. Most diversity research in public administration has viewed diversity as separation, variety, or a mixture of the two (Choi & Rainey, 2010; Opstrup & Villadsen, 2015; Pitts & Jarry, 2007). In the light of theories of organizational justice and status hierarchy, inequalities and power struggles among employees could be important sources for explaining employees’ attitudes and performances (Harrison & Klein, 2007). Researchers studying workforce diversity may find it worth investigating both horizontal (e.g. within supervisory level) and vertical (e.g. between supervisory and nonsupervisory levels) differences in certain attributes.

Second, I call for representative bureaucracy researchers to conduct more studies in varied policy and county settings. By shifting away from redistributive policy areas, scholars can examine the links between passive representation, active representation, and organizational performance in different contexts and organization types (Schröter & von Maravic, 2015; Smith & Monaghan, 2013) to address questions of when and how bureaucratic representation does or does not lead to positive outcomes. In addition, theories of representative bureaucracy can be further developed by conducting and integrating more studies in countries with different political systems, administrative traditions, and cultures, all of which shape the processes and effects of bureaucratic representation. Cross-national research could reveal more attributes serving as bases for bureaucratic representation (e.g. religion, language) that could inform the U.S. and U.K., where the majority of research has centered on gender and race.

Third, both representative bureaucracy and workforce diversity scholarships can be advanced if the two streams of research are bridged at the individual and organization levels rather than being pursued separately. In the case of representation, the links that organization-
level research typically presumes to hold between a public employee’s demographics, value, and behavior, and various organizational outcomes or policies can actually be validated through individual-level research (e.g. by comparing policy preferences between male and female employees). As for methodology, an experimental approach offering hypothetical scenarios regarding representation issues would allow scholars to test the impact of public employees’ demographics on their decisions (instead of their intentions) while accounting for many confounding factors.

Turning to diversity, relational demography research can inform organizational demography research into the impact of an organization’s demographic composition on outcomes at the collective level. By drawing from social identity and other psychological theories, relational demography can address questions of how workforce diversity influences employee attitudes or behaviors by worsening or mitigating the social categorization process. These employee-level findings could serve as mediators or moderators for the elaboration of the diverse perspectives and knowledge that lead to positive organizational outcomes (van Knippenberg et al., 2004). It would be worth examining the direct and indirect effects of individual-level diversity outcomes on group-level outcomes. One methodological approach to these questions would be a latent-variable multilevel model that would allow researchers to investigate the effects of low-level factors (e.g. job satisfaction in demographically dissimilar environments) on high-level outcomes (e.g. team performance; Croon & van Veldhoven, 2007).
References


Meier, K. J., Wrinkle, R. D., & Polinard, J. L. (1999). Representative bureaucracy and
1025–1039.

Relationships between women’s participation in local office and women’s
participation in local activities. *Journal of Applied Psychology, 80*(6), 706–720.

diversity and representatives. In *Perspectives on nonprofit board diversity* (pp. 4–11).

Montoya, R. M., Horton, R. S., & Kirchner, J. (2008). Is actual similarity necessary for
attraction? A meta-analysis of actual and perceived similarity. *Journal of Social and

Moon, K. K. (2017). Fairness at the organizational level: Examining the effect of
organizational justice climate on collective turnover rates and organizational

Press.


150.


years of diversity research in Public Administration. *Review of Public Personnel
Administration, 38*(2), 248-267.

Saidel, J. R., & Loscocco, K. (2005). Agency leaders, gendered institutions, and

Saltzstein, G. (1979). Representative bureaucracy and bureaucratic responsibility: Problems

Psychology, 36*(3), 577–600.


bureaucracy: Does organization matter? In G. B. Peters, P. von Maravic, & E.
Schröter (Eds.), *Politics of representative bureaucracy: Power, Legitimacy and
Performance*. Edward Elgar Publishing.


responsiveness in a government agency*. M.E. Sharpe.

Century: Moving toward a multicultural model. *Administration & Society, 33*(3),
303–329.


Curriculum Vitae

Hongseok Lee

Academic Positions

Assistant Professor, Department of Public Administration and Policy, Rockefeller College of Public Affairs and Policy, University at Albany, State University of New York, August 2018–

Education

Ph.D. Public Affairs, School of Public and Environmental Affairs (SPEA), Indiana University, June 2018
Dissertation: Examining Meanings and Consequences of Bureaucratic Representation and Workforce Diversity: The United States and South Africa Cases
Committee: Sergio Fernandez (Chair), Michael McGuire, Jill Nicholson-Crotty, Thomas Rabovsky
Minor: Inquiry Methodology

M.P.A. Public Affairs, School of Public and Environmental Affairs, Indiana University, 2013

B.A. Public Administration, Hankuk University of Foreign Studies, South Korea, 2011

Peer Reviewed Journal Articles

Lee, Hongseok. (Conditionally Accepted). The Implications of Organizational Structure, External Scrutiny, and Internal System Responsiveness on Internal and External Whistleblowing. Review of Public and Personnel Administration.


Teaching Experience

Spring 2016-Spring 2018  SPEA-K300 Statistical Techniques (Sole Instructor)
Spring 2013  SPEA-K300 Statistical Techniques (TA)
Spring 2012  SPEA-V241 Management Foundations and Approaches (TA)
Spring 2012  SPEA-V366 Management Behavior in Public Organization (TA)

Conference Presentations


Rabovsky, Thomas, and Hongseok Lee. Gender Pay Equity in U.S. Universities. Midwest Political Science Association Annual Conference, Chicago, April, 2016. (Presenter)


Fernandez, Sergio, and Hongseok Lee. Representative Bureaucracy in South Africa. Presented at the Project for Equity, Representation, and Governance, Texas A&M University, College Station, Texas, October 2014.


Research Interests

Representative Bureaucracy, Workforce Diversity, Workplace Inclusion, Ethical Behavior, Organizational Behavior
**Honors & Awards**

Best Paper Award in Public Management, SPEA Doctoral Student Conference, 2017
Research Assistantship and Associated Instructorship, Indiana University, 2013-2017

**Grant**

2017 Volcker Junior Scholar Research Grant (Unfunded)

**Professional Experience**

Fall 2015-Spring 2018  Associate Instructor, SPEA, Indiana University
Summer 2016  Research Assistant, Jill Nicholson-Crotty, SPEA, Indiana University
2014-2015  Research Assistant, Thomas Rabovsky, SPEA, Indiana University
2012-2015  Research Assistant, Sergio Fernandez, SPEA, Indiana University

**Professional Service**

Panel Discussant, Civic Interactions with Bureaucracy, Midwest Political Science Association Conference, 2017
Reviewer, *International Journal of Public Sector Performance Management*  
*Journal of Policy Analysis and Management*
Conference Committee, Association of SPEA PhD Students 16th Annual Conference, SPEA, Indiana University, 2016

**Professional Associations**

Public Management Research Association  
American Society for Public Administration  
American Political Science Association  
Midwest Political Science Association

**Press**

IU research shows diversity in public service improves effectiveness of South African government. IU Newsroom, June 13, 2016