

WORKPLACE DEMOGRAPHY AND ATTITUDINAL OUTCOMES: THE ROLE OF
POWER, STATUS, AND DIVERSITY CLIMATE WITHIN GROUPS

By

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ABSTRACT

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The study explored to what extent various environmental features can explain away the asymmetrical effects found in the relational demography literature. We used two theoretical paradigms stemming from different scientific disciplines: status and power dynamics from sociology and inclusion and diversity climate from management. We posited the composition of group members as well as those occupying managerial positions would serve as status and power signals for out-group employees (women, minorities). These signals would in turn have implications for the type of attitudes (i.e., job satisfaction, organizational commitment, turnover intentions) women and minority employees endorse. Further, we posited that an inclusive climate would inhibit social categorization processes for both in-group and out-group employees therefore leading to better attitudinal outcomes. Across two samples, we found that the status and power perspective did not account for the asymmetrical effects, whereas the diversity climate perspective did in most of our hypotheses. We highlight the implications for research utilizing both theoretical perspectives and make recommendations to companies regarding ways to address composition and diversity climate issues within workgroups.

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INTRODUCTION

Workgroups are invariably diverse, whether that may be surface-level differences such as educational background and age or deep-level differences, for instance values and beliefs. Such heterogeneity in the workplace can have a profound effect on an individual's attitudes and behavior as well as organizational effectiveness. To this end, proponents for the business case for diversity argue that such heterogeneity leads to beneficial outcomes (i.e., creativity and innovation, better decision-making, customer satisfaction (Bell, Villado, Lukasik, Belau, & Briggs, 2011; van Dijk, van Engen, & van Knippenberg, 2012). However, such proponents are confronted with voluminous countervailing evidence highlighting the negative effects of heterogeneity (e.g., increased conflict, performance decrements; Williams & O'Reilly, 1998) and the tendency for individuals to engage in homophily processes (McPherson, Smith-Lovin, & Cook, 2001). In response to the mixed findings, diversity scholars have expended a great deal of effort into understanding the consequences of diversity within the workplace (see Hebl & Avery, 2012 for a review). A particular interest of this paper is examining the extent to which workplace demography influences individual level outcomes (job satisfaction, organizational commitment, and turnover intentions).

Workplace demography or "the relational and compositional demographic attributes of individuals and collectives" (Joshi, Liao, & Roh, 2011; p. 523) has drawn attention from both scholars and practitioners alike because of the idea that heterogeneity yields beneficial outcomes. However, as we highlight in this paper, the accumulated knowledge in this domain provides an unclear picture pertaining to how and when differences in demography influence outcomes. A recent review by Joshi and colleagues urges demography scholars to connect research in

relational demography with sociological perspectives as a way to enhance understanding and bring coherence to this literature.

In light of this, the aims of this study are three-fold. First, we review relevant empirical work and theoretical perspectives that guide relational demography predictions. Second, we introduce theoretical paradigms that are predominately in sociology and articulate their utility in propelling our understanding of the effects of group composition. Third, we integrate the psychological and sociological perspectives to yield specific predictions regarding how and when group compositions should lead to various attitudinal outcomes. Finally, we address some of the methodological criticisms in this domain by taking a multilevel perspective to studying relational demography as well as testing the proposed hypotheses in two distinct organizational settings.

THEORETICAL BACKGROUND

Relational Demography

Workplace demography and the determinants of successful group functioning have been extensively examined in organizational science. A key theoretical perspective in this domain deals with understanding the ways in which group characteristics affect outcomes that are important for group success. Relational demography, defined as the degree to which individuals are demographically similar or different from their work unit (Joshi et al., 2011) is a framework that attempts to explain variation in attitude outcomes among demographically diverse groups. Before the emergence of relational demography, researchers focused on attempting to explain attitudinal differences based on nominal characteristics (e.g., gender, race/ethnicity; Mock, 1980; Friday, Moss, & Friday, 2004). The research findings that accumulated at that point were inconsistent, thus focusing the efforts toward group characteristics and how that might affect outcomes across different levels of analysis (Tsui & O'Reilly, 1989).

There are three theoretical perspectives that inform relational demography research: social identity theory, self-categorization theory, and the similarity-attraction paradigm. These theoretical perspectives propose that individuals categorize others and themselves based on salient characteristics (e.g., race/ethnicity, gender) and these classifications, in turn, are used to form the basis for in-group and out-group membership (Tajfel & Turner, 1986). Further, individuals associate positive attributes to groups they belong to and this is a source of self-esteem enhancement as well as the maintenance of positive social identity (Tajfel, 1982). One way to sustain a positive self-view is to surround oneself with similar others as predicted by the similarity-attraction paradigm (Byrne, 1971). As such, these theoretical frameworks underlying relational demography make similar predictions such that higher degree of similarity on nominal

characteristics within a work unit yields positive outcomes. This linear and symmetrical relationship between workgroup composition and outcomes, however, has been only partially supported.

The next few paragraphs will highlight the empirical evidence from the relational demography literature. The focus will be on two primary work group characteristics—gender and race—and their relations with attitudinal outcomes. The rationale for this particular focus is twofold: (1) the nominal characteristics mentioned have been by far the most extensive features studied in this domain (Joshi et al., 2011; Williams & O'Reilly, 1998), and (2) attitudinal outcomes are the primary focus of this study in that workgroup composition affects such outcomes which then have influence on retaining employees of diverse background (Elvira & Cohen, 2001; McKay, Avery, Tonidandel, Morris, Hernandez, & Hebl, 2007; Williams & O'Reilly, 1998).

When the focal nominal characteristic is gender composition, research focused on attitudinal outcomes, as in the case of job satisfaction, organizational commitment, and turnover intentions, finds asymmetrical relationships. These converge on the idea that greater gender similarity has positive implications for men—albeit the effect sizes are small. For instance, Tsui, Egan, and O'Reilly, (1992) found that men reported higher organizational commitment in groups where they were the majority. Such effects are consistent with recent findings as Gonzales and DeNisi (2009) concluded in their study “men are less identified and committed to their organizations the more dissimilar they are from others in their units in terms of gender, but this did not occur for women.” (p. 30). Further, these findings remain true for job satisfaction as well in that gender similarity is positively related to job satisfaction for men, but not for women (Konrad, Winter, & Gutek, 1992; Smith, Smits, & Hoy, 1998; Wharton & Baron, 1991). Finally,

for turnover intentions, Chatman and O'Reilly (2004) found asymmetrical effects such that men were more eager to leave work units that had higher proportions of women, but this effect did not occur for women in male dominated work groups.

The findings for racial composition and attitudinal outcomes are less straightforward than the conclusions drawn from research on gender composition. In certain contexts, the evidence seems to coincide with predictions forwarded by relational demography. For instance, Zatzick, Elvira, and Cohen (2003) found that for voluntary turnover, employees were more willing to stay in groups that have higher proportions of similar others. Other studies, yet, find evidence that converge on as well as diverge from relational demography predictions. Riordan and Shore (1997) found that for African American employees, the degree of similar others they had in their work group did affect their work group productivity as well as their perceptions of advancements. This goes against the linearity proposition for the relationship between work group composition and outcomes. The only consistent prediction with relational demography was with work group commitment for African American participants. The authors provide an explanation as to why the findings were not fully consistent with relational demography predictions; they suggested that "it may be that affective outcomes that tap feelings of identification and attraction, such as work group commitment, may be more likely to be affected by relational demography for all race-ethnic groups than outcomes reflecting productivity or advancement in the organization" (p. 354). In addition, other studies find asymmetrical effects that show positive benefits of similarity for only White members (Hoppe, Fujishiro, & Heaney, 2013) while others such as Gonzales and DeNisi (2009) find no effect of racial composition on attitudinal outcomes, thus complicating the true nature of the effects of racial composition.

Finally, the effect sizes for racial dissimilarity range from “.00 to .11 in absolute values” (Joshi et al., 2011; p. 527).

The symmetrical effects forwarded by relational demography, which are based on social psychology theories, may in fact be an oversimplification of how group composition influences individual-level outcomes. Although we have gained much insight incorporating psychological perspectives to explain intergroup dynamics, there are several issues that these theoretical frameworks cannot fully account for regarding relational demography findings. The first issue pertains to the prediction of linearity, such that higher similarity on nominal characteristics with group members leads to positive outcomes, irrespective of the nature of the group under consideration (i.e., all male versus all female employees). The empirical evidence presents a different perspective, one that supports that more similarity is not always better—at least not for employees who belong to low-status groups—and highlights the shortcomings of psychological theories in addressing the full breadth of complex relations (Chattman & O’Reilly, 2004; Riordan & Shore, 1997). The second issue considers the frequent findings of asymmetrical effects. Indeed this issue is at the forefront of relational demography research and many scholars have provided different explanations as to why such asymmetries exist (see Joshi et al. [2011] for a recent discussion). A few scholars have gone so far as to suggest the asymmetrical findings to be a methodological artifact due to unequal sample size across groups, a topic we will discuss more in the methodology section (Tonidandel, Avery, Bucholtz, & McKay, 2008). In any case, these limitations warrant the search for alternative explanations that could account for the inconsistencies presented in the empirical relational demography literature.

Conceptual Clarification in Relational Demography Literature

One way to tease apart the myriad findings is to understand what diversity perspective is

under consideration when focusing on group composition. To do so, what is meant by diversity has to be articulated. The typology presented by Harrison and Klein (2007) is a step in the right direction in that it attempts to bring coherence to the diversity literature. The three types of diversity in this typology—separation, variety, and disparity—are briefly reviewed, and their implication for how to reconcile relational demography findings is discussed.

Separation refers to “composition of differences in (lateral) position or opinion among unit members, primarily of value, belief, or attitude; disagreement or opposition” (Harrison & Klein, 2007; p. 1203). Because this form of diversity is conceptualized as continuous, maximum separation within a work-unit occurs when members are equally split at the opposite endpoint of the continuum, as is the case when group members are split in terms of their opposing views; for example, exactly how to distribute resources between two competing projects. Social identity and self-categorization, and the similarity-attraction hypothesis are primary theoretical perspectives when considering diversity as separation. As mentioned before, all these theories forward similar predictions such that positive outcomes are expected with least separation.

Variety refers to “composition of differences in kind, source, or category of relevant knowledge or experience among unit members; unique or distinctive information” (p. 1203). Because of the categorical nature of variety, minimum variety occurs when all unit members share the same category, as in the case of all members having similar functional background. On the other end, maximum variety is achieved when unit members each represent a unique aspect of the possible value (e.g., there is no redundancy in functional background within the work unit). Information processing theories are important when considering variety because they postulate diversity in information can translate to better decision-making, efficiency, and higher productivity, among other outcomes. Thus, positive outcomes are expected with greater variety.

Disparity refers to “composition of (vertical) differences in proportion of socially valued assets or resources held among unit members; inequality or relative concentration” (p. 1203). Disparity focuses on inequality/asymmetrical distributions on a particular variable. Minimum disparity occurs when all members have similar quantities on the focal attribute; for instance, when all group members have uniform pay. In this example, maximum disparity would occur when all members have low pay and one member has maximum pay. Sociological theories of power and status are most central to the study of disparity as diversity. Thus, the extent to which outcomes (e.g., competition versus decision-making) are positive or negative depends on the specific form of disparity under consideration (e.g., pay disparity versus control of valued resources).

When the focus in relational demography research is on the effects of nominal characteristics, the conceptualization of diversity as separation appears to be the dominating perspective (Tsui et al., 1992). Relational demography emphasizes the *degree* to which individuals are different from or similar to their work-unit, with greater similarity leading to better outcomes. As noted in the empirical evidence, however, the effects of relational demography may not be symmetrical across nominal characteristics. Further, Harrison and Klein (2007) make the case that when demographic attributes (e.g., gender, race, tenure, age) are the focal consideration for examining diversity, all three conceptualizations are plausible. As such, when different conceptualizations are meaningful, Harrison and Klein suggest “precise specification of diversity is essential [because] it allows theorists to differentiate and compare conceptual models, facilitating understanding and cross-fertilization and paving the way for empirical tests of contrasting conceptions” (p. 1210).

Given that all three types of diversity seem appropriate when examining demographical

differences, the exact conceptual advantage or clarity, as is the case with relational demography research, of adopting one typology over the other has to be articulated. As mentioned previously, it appears that the separation perspective is limiting in that it does not explain why such asymmetries exist, and therefore alternative conceptual perspectives that provide us with such explanations are warranted. To this end, Joshi et al. (2011) discussed in their review for the need to bridge *micro* and *macro-level* perspectives in order to enhance our understanding of relational demography and the underlying causes for asymmetrical reactions. One way to introduce such macro-level perspectives is to conceptualize relational demography from a disparity viewpoint. This is useful because, as we discuss in the following section, it highlights the power and status differentials associated with different group members. Therefore, higher degree of similarity, as predicted by psychological theories, should have direct positive effects, in this case, attitudinal outcomes, for in-group members (men, Whites), whereas for out-groups, the degree to which similarity has positive effects will depend on various contextual factors that redefine power and status relations within group members. The usage of variety as a conceptual perspective does not apply in relational demography research because theoretical underpinnings for variety (i.e., resource based theory; Barney, 1991) have been used to connect with organizational-level outcomes as is with case with firm performance and not so much on individual attitudinal outcomes (e.g., Richard, 2000; Richard, McMillan, Chadwick, & Dwyer, 2003). The following section illuminates the idea that relational demography research can benefit from incorporating a disparity lens and borrowing from the sociological research on power and status. Also, Figure 1 depicts the conceptual model for this study.

Power, Status, and Group Dynamics

Social stratification in the form of power and status are part of organizational reality. If we consider workgroups and their nominal (e.g., race and gender) composition to be part of a larger system (occupation, society), it becomes difficult not to take into consideration the distribution of status and power associated with different groups, and to the extent it has influence on key outcomes. The effects of power and status dynamics have been the interest of sociologists (Ridgeway, 2014; Thye, 2000), although such perspectives attract attention in organizational science as well, but to a lesser extent (Magee & Galinsky, 2008; Ragins, 1997). Power, in this case, is defined as “asymmetrical control over valued resources in social relations” (Magee & Galinsky, 2008; p. 361), whereas status refers to “one’s standing in a social hierarchy as determined by respect, deference, or social influence” (Thye, 2000; p. 408). As highlighted, one of the primary distinctions between power and status is the focus on either control over valued resources or the esteem value associated with individuals particularly as a function of group membership. Historically, in the United States, minority groups—women and non-whites—have largely been underrepresented in occupational positions that afford such power and status (Barnett & Baron, 2000; Daley, 1996; Ridgeway, 2001a), and the differentiation along these dimensions become meaningful when considering intergroup dynamics in the workgroup context.

Status characteristics theory offers a rich explanation as to how nominal characteristics become associated with differentiated levels of status and power (Ridgeway, 2001b). The theory states that status acquisition occurs because, at the cultural level, a value premium is attached to certain characteristics of the individual. These status characteristics lead to various levels of performance expectation and intergroup interaction. Specifically, as to when such characteristics

lead to various expectations depends on whether the status is categorized as a *diffuse* or a *specific* characteristic. Diffuse characteristics are general beliefs that “link greater social significance and general competence, as well as specific positive and negative skills, with one category of a social distinction compared to another” (Ridgeway, 2001b; p. 638). An instance of a diffuse characteristic is the differential attributes ascribed to women as being more communal versus those ascribed to men as being more agentic (Eagly & Karau, 2002). Moreover, specific status characteristics focus on a particular domain that is relevant to the task, for example, the consideration of auto-repairing ability when fixing a car. Thus, the theory suggests that in work group settings, both diffuse and specific status characteristics will influence how individuals view each other when working on collective tasks because these characteristics activate certain expectations for performance levels. It is through these interactions that social hierarchies emerge with varying distribution of power and status afforded to different groups.

Relational demography research utilizes social psychology frameworks to explain group functioning. From this perspective, the categorization of who is an in-group versus an out-group member is often times based on salient characteristics such as gender and race. Since the view of the self is enhanced through according positive attributes to the in-group, individuals who belong to certain categories that have positive social identities in the larger societal context (e.g., male, White) will exert effort to maintain such identity. Indeed, social identity research does note that the degree to which in-group members favor similar others is not true for out-group members (Tajfel & Turner, 1986). This makes sense since higher-status employees tend to have more power and status afforded to them in organizations than lower-status employees (Daley, 1996). As such, it appears the expected effects of similarity on outcomes cannot be divorced from status characteristics associated with different groups. This idea is echoed by Skaggs and DiTomaso

(2004) in their review of workforce diversity research when they noted, “in order to formulate meaningful hypotheses about groups that have real status distinctions in the larger society (why else are we interested in gender or race), it does not make sense to develop generic hypotheses about social identity without linking these cognitive processes to the overall status structure of the company, the industry or the occupation (e.g. “male dominated” or “female dominated”)” (p. 293). Thus, by incorporating an additional element to the relational demography paradigm—the status characteristics of the groups—it affords us to make much more nuanced predictions about the effects of various workgroup compositions on attitudinal outcomes.

To understand the extent to which status characteristics influence how in-group and out-groups react to workgroup composition, however, attributes of the larger organizational context need to be included as to account for individual sensemaking activities that transpire (Skaggs & DiTamsio, 2004). As of now, the discussion has been isolated to similarity comparisons that occur within a particular workgroup. This is to say, the focus has been on *lateral comparisons*—individual attitudes are shaped by the degree of similarity with the immediate workgroup. But, this seems to be ignoring the *vertical comparison* that also occur when individuals assess the degree to which they are similar to employees at higher levels within the organization as is the case with managers and individuals who wield power (see Figure 2 for a graphical depiction of these various comparisons). Further, beyond similarity factors that could influence attitudinal outcomes, we also consider the role of the environment, mainly, the extent to which diversity climate—“shared perceptions regarding the organizational valuation of diversity and inclusion”—has on individual outcomes (Hebl & Avery, 2012; p. 688). Accordingly, the following section will incorporate research on organizational demography (Pfeffer, 1983) and highlight how power and status differentials are maintained at such levels. Further, the

organizational diversity and inclusion literature is reviewed as it relates to relational demography. These two contextual features in conjunction with viewing compositional diversity from a disparity perspective are expected to provide a deeper insight about *how* and *when* nominal characteristics within workgroups will affect attitudinal outcomes.

Managerial Diversity and Supervisor-Subordinate Similarity

Workgroups differ as a function of the various attributes associated with their nominal characteristics. Here, it is argued that exactly when group similarity or dissimilarity leads to better or worse outcomes depend on the demographic characteristics at higher levels within the organization. Specifically, two vertical signals that are relevant in this situation are: (1) organizational demography, particularly managerial composition, and (2) supervisor-subordinate similarity. There is reason to believe such factors not only affect processes that direct the extent to which individuals identify with their in-group as function of composition, but also factors that contribute to the maintenance of power and status differentials.

Organizational demography. The basis of organizational demography centers around the idea that social structures can have a profound effect on individual attitudes and behavior (Pfeffer, 1991). Organizational actors who hold positions of power, for instance managers, affect many outcomes (e.g., pay raises, who gets training and development) that are pertinent to employee success (Reskin, 2000). Given that these managerial positions tend to be occupied by the dominant in-group (e.g., male, White), it is expected through social identity mechanisms (i.e., status maintenance strategy), opportunities will be afforded to similar others in the organization. Such thinking is not new and empirical evidence abounds to support that inequalities between groups transpire as a function of in-group favoritism and homophily processes (Baldi & McBrier 1997; Reskin, McBrier, & Kmec, 1999). However, research also seems to suggest in specific

organizational contexts where power resides with out-group members, opportunities within the organization tend to flow toward the enhancement of lower status employees (Cohen, Broschak, Haveman, 1998). For example, Cohen and Broschak (2013) demonstrated using archival data spanning 13 years that higher proportion of women managers positively related to more women occupying created management positions. The authors connect their findings with Kanter's strength-in-numbers perspective that posits increases in women representation positively affects the experience of women in the workplace—higher collective esteem—and affords them greater accumulation of power (Kanter, 1977a). Thus, evident from the macro-level perspective and as echoed by Joshi et al. (2011), larger organizational context and the demographic composition of individuals in power are likely going to affect intergroup dynamics.

Supervisor-subordinate similarity. The argument for the specific focus on examining vertical dyadic relationships stems from the idea that organizational demography does not capture interacting agents within the workplace. Relational demographers thus have focused on similarity between interacting agents within a particular unit (Tsui & O'Reilly, 1989). Similar to the intergroup processes that transpire between employees who occupy the same organizational level, the logic extends to dyadic relationships with inherent power and status asymmetries. Thus, from this perspective, it is argued that supervisors will be attracted to subordinates who are similar to them in nominal characteristics because it signifies in-group membership (Bryne, 1971; Tajfel & Turner, 1986), which is assumed to relate to underlying value congruence. Because supervisors hold an authority position, it follows that in-group subordinates will benefit in the form of higher social support, access to additional resources (e.g., enhanced organizational network), thus positively affecting individual attitudes and behavior (Foley, Linnehan, Greenhaus, & Weer, 2006; Jeanquart-Barone, 1996; Winfield & Rushing, 2005). These

similarity effects have also been found to influence performance ratings, salary, and subordinates' position within the organization (Avey, West, Crossley, 2008; Kraiger & Ford, 1985). For instance, in their meta-analytic review, Kraiger and Ford, (1985) found that performance ratings were affected by supervisor-subordinate race similarity with the effects being strong for both race groups (White and Black). Thus, it appears that such dyadic similarities have profound effects on the experiences of subordinates, which could shape the ways in which individuals react to group composition.

The two interrelated perspectives reviewed above suggest that organizational agents who are in positions of power engage in behaviors that are consistent with predictions forwarded by psychological theories. As noted by macro levels perspectives as well (see Reskin, et al. 1999), these behaviors are one possible mechanism that reinforces power and status dynamics within organizations. In line with macro explanations, what is important to highlight here regarding composition is not just sheer numerical representation per se, but rather having representation in positions that provide access to power and status. This then leads to differential distribution of opportunities within organizations, with more afforded to the in-group, although sometimes it is the reverse. Thus, the composition of high-status agents within organizations become rather important because such forces are seen as one process of inequality production that could explain the asymmetrical effects with respect to workgroup dissimilarity and attitudinal outcomes for women and minority members (Joshi et al., 2011).

The need to examine both vertical signals is highlighted by the paucity of empirical work attempting such integration. A literature search in top tier organizational psychology/management (e.g., *Academy of Management*, *Journal of Applied Psychology*, *Journal of Management*, *Administrative Science Quarterly*, *Personnel Psychology*, *Organization*

Science) and sociology (e.g., *American Sociological Review*, *American Journal of Sociology*) journals since 2000 yielded 15 articles that examined either managerial diversity/composition or supervisor-subordinate demographic similarity in its relations with various outcomes (e.g., job performance, organizational citizenship behavior, salary, firm performance, turnover, organizational attraction). However, none of the reviewed articles examined these vertical signals in the same model. Further, there was only one article that focused on attitudinal outcomes in that the researchers examined the effects of demographic similarity on satisfaction with supervisor (Vecchio & Bullis, 2001). Examining the simultaneous effects of vertical and lateral signals on attitudinal outcomes is one main aim of this study.

Diversity Climate

Another contextual element that is important for understanding individual behavior is climate, which is, “the perception of formal and informal organizational policies, practices, procedures, and routines” that occur within the organizations (Ostroff, Kinicki, & Muhammad, 2013; p. 651). Such subjective experience of the immediate environment is expected to guide behavior and attitude formation. When these attitudes are shared amongst individual agents within the organization, a collective phenomenon is said to emerge that could be localized within a particular unit or can permeate throughout the organization. Various strategic or focused climates have been studied in the organizational literature and have been linked with outcomes at all levels in the organization. For instance, positive organizational-level service climate has been shown to lead to increases in firm performance and higher customer service satisfaction (Schneider, Macey, Lee, & Young, 2009). Thus, it is evident that climate is an important aspect of the environment that has impact on organizational functioning and individual attitudes and behavior (Schneider, Ehrhart, & Macey, 2013).

A specific strategic climate that could explain the asymmetrical effects of dissimilarity within work units is diversity climate—the extent to which employees perceive their organization values differences and institutes inclusive practices (McKay, Avery, & Morris, 2008). Here, the specific focus is on fostering an environment where individuals are valued for their uniqueness and being different on nominal characteristics is seen beneficial to organizational success. The literature thus far has shown ample evidence for the effects of instilling a positive diversity climate. When organizations espouse values of inclusiveness and establish practices in the workplace that reflect those beliefs, it is expected such situations to improve the asymmetrical effects of dissimilarity on attitudinal outcomes.

The importance of diversity climate is highlighted by recent work providing evidence that diversity climate “may be vital to attracting, promoting, and retaining traditionally underrepresented employees” (Hebl & Avery, 2012; p. 689). For instance, when focusing on unit performance, McKay and colleagues (2008, 2009) have shown that higher diversity climate leads to smaller sales per hour mean-difference between Black-White and Hispanic-White, and when managers and subordinates have similar pro-diversity perceptions, it tends to lead to higher sales growth. These results provide insight into the importance of a shared climate for diversity at all levels of the organization, and further demonstrate the monetary rewards it could potentially yield for organizations. Extending on previous literature that reports on ethnic differences in absenteeism, Avery, McKay, Wilson, and Tonidandel (2007) examined whether perceived organizational value of diversity—a construct conceptually similar to diversity climate—could attenuate the differences in absenteeism between Black-White and Hispanic-White employees. Their results suggest when the organization values diversity, there tends to be a smaller absenteeism difference between Blacks and Whites, but no significant difference between

Hispanics and Whites, thus providing some evidence for the importance of valuing diversity. The typical effect size for diversity climate ranges from small to medium.

According to Cox's (1994) interactional model of cultural diversity (IMCD), it is expected that diversity climate influences individual career outcomes, as in the case of affective (i.e., job/career satisfaction, organizational identification, and job involvement) and achievement (i.e., job performance rating, compensation, promotion/horizontal mobility rates) outcomes, which then influence organizational effectiveness (e.g., attendance, turnover, productivity, etc...). Surprisingly, the vast majority of the literature on diversity climate has focused on achievement outcomes or organizational effectiveness outcomes (see Table 1 for review). There has not been a clear focus on affective outcomes, in particular job satisfaction, organizational identification and commitment, and turnover intentions; studies that have examined such person-centric outcomes with respect to diversity climate have not explicitly focused on unit-level diversity climate (Avery et al., 2007; King, Michelle, George, & Matusik, 2010; Wolfson, Kraiger, & Finkelstein, 2011), which raises a levels-of-analysis issue. For example, of the studies reviewed in Table 1 only 38% examined diversity climate at the unit-level, and of those studies, none have connected diversity climate with the focal variables in this study. Even more central to this study, the integration of the diversity climate literature in explaining asymmetrical effects within the relational demography research has been scant. The only recognizable paper in this area comes from Gonzalez and DeNisi (2009) who attempted to use diversity climate as a potential buffer in examining the effects of dissimilarity on attitudinal outcomes. Their findings suggested diversity climate attenuates the negative effects of gender dissimilarity on intentions to quit. For nominal characteristics, African American employees reported high levels of commitment when diversity climate was high, but these effects decreased with lower levels of

diversity climate. And finally, a three-way interaction highlighted that when Hispanic employees were dissimilar from their workgroup and diversity climate was low, they reported higher levels of turnover intentions. Although these findings provide preliminary evidence of the importance of diversity climate in reducing dissimilarity effects, more work is needed in this area, especially with better research designs (see Table 1 for the breakdown of study designs). Thus, in this study, we take a multilevel perspective to studying the effects of diversity climate and not only link it with individual-level attitudinal outcomes, but also further delineate the ways in which it should moderate the effects of dissimilarity at the individual level.

HYPOTHESIS DEVELOPMENT

The Effects of Dissimilarity

Self-categorization, social identity, and similarity-attraction theories tell us we are attracted to similar others because it enhances our self-esteem. Thus, it is expected that individuals will respond favorably to settings where the social groups to which they belong to are the majority. The extent to which this is the case, however, depends on the characteristics of the social group. Specifically, whether such members belong to groups that have been traditionally afforded higher power and status in organizations will likely influence overall identification levels. Thus, employees who belong to dominant groups (male, White) will identify with their group and engage in self-enhancement strategies as a way to maintain their higher social status (Chattopadhyay, Tluchowska, & George, 2004). According to this perspective, then, we would expect employees with dominant status to report higher positive attitudinal outcomes in work contexts where their group is the majority. Conversely, when the focus is on members who belong to lower status groups (e.g., women, racial minorities) the effects of similarity can be quite complex. Social identity theory would suggest that individuals who belong to lower status groups may engage in various identity enhancement strategies as a way to cope with the negative attributes associated with their social groups (Tajfel & Turner, 1986). As Chattopadhyay et al. (2004) articulated within the relational demography framework, the extent to which women and minorities prefer workgroups that are similar or different from their social groups depends on the particular strategy employed such that individuals who adopt a social competition and social creativity strategy will prefer workgroups that are more homogenous, whereas those who adopt a social mobility strategy will tend to prefer dissimilar workgroups. As an example, Chatman and O'Reilly (2004) predicted that because of the prestige and power associated higher status groups,

women would prefer working in male-dominated groups. Consistent with their results, they found that women were more likely to request a transfer from work groups that were women-dominated. Further, studies focused on racial dissimilarity find either positive or negative effects on work outcomes for minority members, thus signifying the potential use of different identity enhancing strategies (Liao, Joshi, & Chaung, 2004; Riordan & Shore, 1997). Thus, we propose the following generic hypothesis, which is in line with past findings. We build on this by incorporating the contextual factors, which we posit will assist in teasing apart the exact nature of dissimilarity effects across social groups.

Hypothesis 1. There will be an interaction between nominal characteristics (gender and race) and workgroup composition to predict attitudinal outcomes (job satisfaction, organizational commitment, turnover intentions). Men and White employees will be more committed, report higher job satisfaction, and lower turnover intentions in groups that have low women and low minority employees than women and minority employees will be in groups that have higher women and minorities.

Individual-Level Contextual Moderator

Supervisor-subordinate similarity. Supervisors can provide a great deal of support to their subordinates. Research findings tend to show subordinates benefit from having a supervisor who belongs to the same social categories. For instance, gender and race congruency has been linked with higher performance ratings (Kraiger & Ford, 1985), higher salary (Avey et al. 2008), and receiving greater general support (Elsass & Graves, 1997) as well as specific support as is the case with family-supportive supervision (Foley et al., 2006). These findings are consistent with predictions advanced by social psychology perspectives in that individuals are attracted to similar others, and in the work context, these attractions between similar others breeds in-group

favoritism (Brewer & Miller, 1984; Tsui & Gutek, 1999). Thus, it is expected that the development of such connections between dyads will elicit favorable outcomes. As we have discussed, subordinates engage in sensemaking behaviors as a way to deal with their immediate surroundings. In a workgroup setting, the degree to which individuals react to dissimilarity may depend on whether they share the same in-group with their supervisor. Because supervisors are in positions of power and tend to possess more resources than the typical subordinate, subordinates who are part of the in-group stand to gain from such a relationship. Further, research pertaining to leader-member exchange finds that in some instances demographic similarity leads to higher quality exchanges (Green, Anderson, & Shivers, 1996), whereas in others, there seems to be no effect of similarity (Bauer & Green, 1996). However, in this study, we consider supervisor-subordinate similarity as a potential moderator, in that we suggest when individuals are dissimilar from their immediate workgroup, being similar to their supervisor could potentially mitigate the negative effects of dissimilarity on attitudinal outcomes.

Unit-Level Contextual Moderators

Managerial composition. From a relational demography perspective, attitude formation and behavioral influences are informed by interacting agents, as is the case with immediate workgroup and supervisory relationships (Tsui and O'Reilly, 1989). However, the organizational demography perspective would argue that such structural factors, for example, the demographic composition of the organization, have direct implications on individual attitudes and behavior. Thus a specific composition we focus on relates to managerial diversity within a particular organizational unit. Such macro level phenomenon may prove rather useful in offering a different lens by which we can begin to examine the differential reactions to workgroup dissimilarity. Further, this perspective also allows for the consideration of power and status

dynamics within organizations, and how such forces either dismantle or maintain systems of inequality. Similar to the argument forwarded when focusing on dyadic phenomenon, the same goes for managerial composition in that individuals holding such positions belong to various social groups, which could affect the functioning of the entire organization.

Diversity within the management ranks is expected to reduce the inequalities individuals with lower status encounter in that such representation at higher levels should lead to access in a wide array of opportunities. This perspective is connected with Kanter's (1977a) strength-in-numbers argument whereby increasing the representation of women or racial minorities reduces inequality via a process of homosocial reproduction, which is akin to ingroup favoritism (Elliot & Smith, 2004). For instance, the integration of women across different levels within the organization increases when women are represented in management positions (Huffman, Cohen, & Pearlman, 2010). In line with our argument that higher managerial diversity serves as a signal for lower-level employees about whether certain opportunities will be granted, McGinn and Milkman (2013) found that when there were higher proportions of senior women in the workgroup, junior women were less likely to turnover, thus providing evidence that such signals convey messages of mobility. Further, the authors also found a lateral comparison effect for both women and minority junior employees such that increasing the proportion of women and minorities in such groups led to higher turnover whereas these effects did not occur for groups where Asian and White juniors were the majority. This finding is consistent with the idea that access to power and status tends to decrease in settings where there is large representation of lower status members (Mehra, Kilduff, & Brass, 1998), and as such, lower-status members will tend to engage in distancing behaviors with their in-group (Chattopadhyay et al., 2004).

Although McGinn and Milkman's study is informative in understanding the effects of

various signals (lateral versus vertical) on turnover outcomes, it is still unclear the extent to which the outcomes might change if both signals are compared simultaneously. Along these lines, we propose that when the proportion of lower status employees is high within a workgroup (lateral comparison), such individuals will tend to look upward to assess the degree to which occupants in managerial positions represent social in-groups and this will determine whether they endorse higher withdrawal attitudes. If the vertical comparison suggests dissimilarity with managerial composition, this will signal fewer opportunities for mobility amongst women and minority employees, thus lowering levels of organizational commitment and job satisfaction and increasing turnover intentions. Indeed, some preliminary findings exist to support this line of thinking. Although Choi (2013) did not find a main effect for managerial diversity on job satisfaction, this relationship was moderated by race such that racial minorities reported higher levels of satisfaction when there was higher representation of racial minorities in management positions.

Diversity climate. Being demographically different from workgroup members can enhance identity salience, especially when certain demographics represent a small number within the group. Because lower status employees are considered part of the out-group, being underrepresented could potentially lead to negative interactions with the in-group and feelings of social exclusion (Ely, 1994; Tajfel & Turner, 1986; Tsui & O'Reilly, 1989). In such instances, underrepresented groups may be sensitive to contextual factors that signal the organizations' orientation toward diversity-related issues. Research in this area has documented the effects of adopting different diversity policies could have on intergroup relations (Ely & Thomas, 2001). The seminal work by Ely and Thomas demonstrated that when organizations institute an integration-and-learning perspective—a perspective that is grounded on the idea that differences

in organizational members serves as a learning opportunity—it is effective in dealing with intergroup conflict, therefore enhancing individual attitudes and behavior and increasing organizational performance. The notion of diversity climate is in alignment with the integration-and-learning perspectives (Nishii, 2013), and as such believed to be significant in reducing the negative effects associated with being dissimilar from one's own workgroup.

Diversity management is key to intergroup relations and organizational success (Avery & McKay, 2010). A sense of inclusion and belonging should help to reduce the effects of dissimilarity in that inclusive environments should ease the development of a higher-order group—the organization—in which all individuals belong (Hewstone, Martin, Hammer-Hewstone, Crisp, & Voci, 2001). Such identification, which is engendered by an inclusive climate, is expected to reduce conflict among different members within workgroups (Shore, Randel, Chung, Dean, Ehrhart, & Singh, 2011). A recent study by Niishi (2013) provides evidence for the idea that the diversity climate tends to reduce workgroup conflict as a function of demographic diversity. Her study found that gender diversity was positively related to relationship conflict when unit-level inclusion climate was low, while gender diversity negatively related to relationship conflict in units where there was high inclusive climate. Further, the study reported a positive relationship between inclusion climate and unit-level job satisfaction and a negative relationship with unit-level turnover. These findings demonstrate the utility in fostering an inclusive climate, in that such environments dampen the activation of status differences that propel individuals to engage in in-group biases and out-group denigration (Nishii, 2013; Oldmeadow, Platow, Foddy, & Anderson, 2003). In this fashion, it is expected that the extent to which dissimilarity relates to attitudinal outcomes will be shaped by the immediate environment, as in this case, how inclusive the workplace is.

Up to this point, we have forwarded predictions that help to contextualize the effects of dissimilarity on attitudinal outcomes. A critical contribution of this work, however, is an attempt to explain the asymmetrical effects of dissimilarity as a function of nominal characteristics in conjunction with the contextual factors. Thus, in what follows, we propose specific moderation effects that differ on the basis of nominal group membership.

Asymmetry

The relational demography literature is replete with asymmetrical effects across nominal characteristics (e.g., gender, race) as a function of workgroup dissimilarity. The evidence thus far, however, is equivocal about how and when such asymmetries emerge and particularly for which group (Joshi et al., 2011). The contextual variables we advanced as well their theoretical underpinnings are expected to produce useful predictions that begin to answer the questions of *how* and *when*.

First, we propose that both managerial composition and supervisor-subordinate similarity will produce similar effects regarding the nature of the asymmetry. To do so, we thus far have discussed two meta-processes that are simultaneously occurring: intra and inter-group dynamics that create and maintain status and power relations, and social group comparison (lateral versus vertical). Organizational hierarchies are stratified based on status and power, and traditionally higher-level positions have been accorded to White and male employees (Konrad & Gutek, 1987). In turn, it is believed that psychological and structural processes facilitate in-group favoritism and homosocial reproduction, which not only enhances cohesion amongst in-group members, but also further maintains the power and status asymmetries with the out-group (Kanter, 1977b; Skaggs & DiTomaso 2004). This perspective is predominately used to explain research findings that show positive outcomes when congruency in nominal characteristics exists

between supervisory relations and managerial composition (Elvira & Cohen 2001; Foley et al., 2006; Reskin et al., 1999). Moreover, individuals engage in social comparison processes to make sense of their environment. These social processes can take the form of comparisons in contrast with out-group members as to assess relative standing in terms of power and status, as well as in-group comparisons (Chattopadhyay et al. 2004; Tajfel & Turner, 1986). It is expected that such comparisons provide useful signals regarding the extent to which individuals will engage in various identity enhancement strategies. Given these two meta-processes, we expect asymmetrical effects to emerge for both traditional in-group (male, White) and out-group (women, racial minorities) members, but the nature of the asymmetry, however, will be in stark contrast to each other between groups.

When the focus is on dominant group members, we predict that they will report higher organizational commitment and job satisfaction, and lower turnover intentions when both lateral and vertical differences are minimized, that is, these individuals find themselves in situations where they are similar to their work group, have a supervisor who is part of their ingroup, and they constitute a majority in managerial positions. Further, it is expected that there will be a reduction in commitment and job satisfaction and increases in turnover intentions when majority members find themselves in units where they are not well represented in positions of power and status (supervisor and managers). When the focus is on out-group members, higher commitment and job satisfaction and lower turnover intentions are dictated by vertical comparison as higher out-group representation in such positions sends a signal of the possibility of upward progress (Chattopadhyay et al. 2004; McGinn & Milkman, 2013). Conversely, women and people of color are more likely to endorse higher turnover intentions and lower levels of organizational commitment and job satisfaction when they are in units where they are vertically dissimilar but

laterally similar; such context would signal structural closure (Ibarra, 1992) and would suppress opportunities for upward mobility, thus leading to turnover (McGinn & Milkman, 2013).

Therefore, we forward the following three-way interactions.

Hypothesis 2. There will be a three-way interaction between workgroup composition—that is, the proportion of women and racial minorities—nominal characteristics (gender and race), and (a) supervisor-subordinate similarity and (b) managerial composition—that is, the proportion of women and racial minorities in managerial positions within each unit to predict attitudinal outcomes (job satisfaction, organizational commitment, turnover intentions. The nature of the relationship will differ based on status—that is, nominal characteristics. For men and White members: They will report positive attitudinal outcomes when they are similar to their unit as well higher organizational representatives and report negative attitudinal outcomes in units where they are dissimilar to higher organizational positions. For women and racial minorities: They will report positive attitudinal outcomes when they are dissimilar to their unit and are similar to higher organizational representatives and report negative attitudinal outcomes in units where they similar to their unit and are dissimilar to higher organizational representatives.

Pertaining to diversity climate, the theoretical arguments shift from a competition and comparison perspectives and orient the discussion around managing differences by creating a superordinate identity—one that is shared by all members (Gaertner & Dovidio, 2000; Hewstone et al., 2001). Organizations that are high on diversity/inclusive climate embed such ideology not only into their formal systems (e.g., human resource practices), but also integrate it with the social fabric of the organization (Groggins & Ryan, 2013). In such environments, organizational identification increases because basic needs for belonging are satisfied (Shore et al., 2011). In a

truly inclusive climate, “both minority and majority members feel that they belong and feel respected such that resistance and conflict are minimized” (Shore et al., 2011; p. 1277). For instance, Hofhuis, van der Zee, and Otten (2012) found that when diversity climate was high, a process was facilitated whereby employees from both majority and minority groups identified with their own groups as well as their organization. Thus, environments that embrace uniqueness as well as foster a shared identity should lead to the minimization of in-group/out-group categorization processes that activate various status characteristics associated with different groups. Thus, for both disadvantaged and advantaged groups, differences in attitudinal outcomes will be pronounced in environments where diversity climate is low. Further, it is expected that women and racial minorities will endorse lower levels of attitudinal outcomes in groups where not only diversity climate is low, but they also constitute a larger proportion in their workgroup. It follows that in such contexts (that is, high representation of women and racial minorities and low diversity climate) would signal disparity, specifically the depletion of power at higher levels. Such members might interpret this type of context as a place where there are fewer resources afforded to diverse members and therefore fewer opportunities for upward mobility. In line with this thinking, the following hypothesis is proposed.

Hypothesis 3. There will be a three-way interaction between workgroup composition—that is, proportion of women and racial minorities—nominal characteristics (gender and race), and diversity/inclusion in predicting attitudinal outcomes (job satisfaction, organizational commitment, turnover intentions). The nature of the relationship will differ based on status—that is, nominal characteristics. For men and White members: They will report lower attitudinal outcomes in units where they are dissimilar from their workgroup and diversity/inclusion climate is low. For women and racial minorities: They will report lower attitudinal outcomes in units

where they are similar to their workgroup and diversity/inclusion climate is low.

Research Questions

Beyond our hypothesized predictions, there are several questions we seek to answer given our conceptual model. First, it is evident that managers, given their positional standing within the organization, have access to resources to execute certain objectives. Research has highlighted that managerial diversity is related to the reduction of workplace inequality (Huffman, 2013; Huffman et al., 2010). The question then becomes: Does a diverse management group engender a positive diversity climate? Indeed, the literature on climate in general has established that leaders play a significant part in the development and maintenance of various climates (Ostroff et al., 2012). Thus, it is possible that managers with diverse backgrounds use their resources in ways that foster an inclusive climate (Avery & McKay, 2010). From an organizational demography perspective, then, diversity climate could further serve as a mediator explaining why having managerial diversity is positively related to attitudinal outcomes (Lawrence, 1997). Therefore, we explore the extent to which managerial diversity is positively related to attitudinal outcomes indirectly through the facilitation of a positive unit-level diversity climate.

Research Question 1. Does diversity/inclusion climate mediate the relationship between managerial composition and attitudinal outcomes?

Second, when it comes to group functioning, there is a great deal of scholarly debate as where organizations should expend their efforts for dealing with diversity. That is to say, which perspective—composition versus diversity climate—is more impactful in terms of individual outcomes as well as organizational effectiveness? The conclusion drawn from empirical work exploring both of these perspectives is equivocal (See Hebl & Avery, 2012 for a summary).

However, a second glance at the articles highlight possible limitations. First, most if not all the articles examine distal outcomes that are at the unit or organizational level (Gonzales & DeNisi, 2009; McKay et al., 2008; 2009; 2012) which could suppress the true effects of composition and climate. Second, little discussion surrounds composition and climate's relative influence when it comes to person-centered outcomes. Given that diversity is important because it affects intergroup dynamics, one possible way to extend this conversation is to assess the relative importance of unit-level attributes—workgroup and managerial composition, and diversity climate—on attitudinal outcomes. Doing so will allow probing the question of what matters to individuals; is it more diverse representation either at the workgroup and/or higher levels or is it working in an environment that has a positive diversity climate or both? Thus, the following research question will assess which predictor is more important for attitudinal outcomes using multilevel dominance analysis (Luo & Azen, 2013).

Research Question 2. What is the relative influence of workgroup composition, managerial composition, and diversity/inclusion climate on attitudinal outcomes?

In summary, we test our proposed model using two different samples. First, we examine our model in the public sector setting; in this sample, we will not be testing hypothesis 2a because such information was not gathered at the time of data collection. Second, we examine our model in the private sector; in this sample, all aspects of the model were tested.

SAMPLE 1: GOVERNMENT

Method

Participants and Procedure

Participants were employees who volunteered to complete an engagement survey as part of a larger organizational initiative during 2012. The full dataset contained a total of 20,354 non-management employees across 126 units representing various agencies. The majority of participants were White (77.2 %) and women (58.2%). All racial minority employees were grouped together because of the sensitivity surrounding these data. All age categories were represented: (20.6% for 34 and under), (27.8% for 35-44), (30.7% for 45-54), and (18% for 55 and over). The majority of the participants were either on the job between 3-10 years (26.6%) or 10-20 years (32.2%). Because the research questions are focused on examining the effects of group composition on individual attitudes, units that lacked clear intact groups were deleted from further analyses. For instance, certain units were combined to represent entire agencies, thus making it impossible to ascertain whether employees within that unit ever interact with each other; this is critical for computing a meaningful workgroup composition score and the subsequent interpretation of its effects. Given these constraints, we did not include data from participants who clearly were not part of an intact unit (i.e., units where the members composed of it interact with each other). The reduced dataset included responses from 5,986 participants across 101 units (average unit size = 56 employees, $SD = 85$; SD is skewed because of few large units¹). The race and gender proportion remained relatively the same with White and women employees comprising 79.3% and 58.4% of the reduced sample respectively

¹ We tested the extent to which the results would change as a function of deleting units with large number of group members, defined here as units where there are more than 100 employees.

Measures

Diversity Climate. Five items that captured diversity climate/inclusion were used by the organization (see Appendix A). These items overlap with those used in the diversity climate literature (Choi, 2013; McKay et al., 2007). Using the referent shift method, individual responses to the five diversity climate items were aggregated to the unit-level (Chan, 1998). In order to justify aggregation, three common statistical techniques were used: within-group agreement as calculated by the r_{wg} and intraclass correlation (ICC) 1 and 2 (LeBreton & Senter, 2008). r_{wg} captures within-group agreement on the focal construct, diversity climate, with higher values indicating stronger agreement. Aggregation is justified when $r_{wg} > .70$ (LeBreton & Senter, 2008). ICC (1) provides information regarding the extent to which ratings of diversity climate are shared by unit members. According to LeBreton and Senter (2008), a group effect of .01 is considered small where an effect of .10 is considered medium. The authors point out that a group effect of .05 is enough justification to aggregate to a higher level. ICC (2) captures reliability of the group mean, and the recommended cutoff for aggregation is .70 or higher. The r_{wg} was .68 (range = .22, .91) and the ICC (1) was .02 and ICC (2) was .53. These indices suggests that there is moderate agreement between groups members in their ratings of diversity climate; however, a small portion of the variance in diversity climate is at the group level and further, the groups cannot be reliably differentiated in terms of average diversity climate (Bliese, 2000). Based on these findings, there was not enough justification to aggregate to the group level. Therefore, diversity climate was analyzed at the individual level. The internal consistency for this measure was .86.

There were 15 such units. There was no difference in the pattern of relationships found across all hypotheses.

Composition Measures. For group diversity, we computed the percentage of women and minorities in each unit. Similarly, we computed the percentage of women and minorities in the managerial team of each unit. Consistent with relational demography, workgroup composition captures the “normative demographic standard within the group (Riordan & Wayne, 2007; p. 568) and as such, the cross-level perspective will be used. This analytical perspective has been shown to be a superior alternative to the Euclidean distance (D-score) approach (Joshi, Liao, & Jackson, 2006; Sacco, Scheu, Ryan, & Schmitt, 2003; Tonidandel et al. 2008). *Gender diversity* is defined as the proportion of women employees in each unit. Across all 101 units, women comprised 58 percent (range = .00 to 1; variance = .05) of work group members. *Managerial gender diversity* is defined as the proportion of women (i.e., non-White) managers in each unit. Across all 101 units, women managers comprised 46.5 percent (range = .00 to 1; variance = .06) of management positions. *Racial diversity* is defined as the proportion of minority (i.e., non-White) employees in each unit. Across all 101 units, minorities comprised 20 percent (range = .00 to .89; variance = .02) of work group members. *Managerial racial diversity* is defined as the proportion of minority (i.e., non-White) managers in each unit. Across all 101 units, minority managers comprised 22 percent (range = .00 to 1; variance = .03) of management positions.

Outcome Measures. For *job satisfaction*, three items were used ($\alpha = .66$). For *organizational commitment*, three items were used ($\alpha = .80$), and for *turnover intentions*, a single item was used (see Appendix A). The items in these measures, although not strictly coming from specific validated measures, map onto the constructs under consideration. Such adaptations are common in the diversity literature (Choi, 2013; Kaplan, Wiley, & Maertz, 2011; McKay et al. 2007).

Controls. Education was controlled because it is considered a formal status instead of a diffuse status such as gender and race/ethnicity, which is the focus of this study (Chatman & O'Reilly, 2004). We tested both individual education and group-level education diversity (as measured by the Blau's index) and only the group-level control was related to the outcomes. Therefore, all subsequent analyses only used education diversity at the group-level.

Analytical Strategy: Applies to Both Studies

All hypotheses were examined using random coefficients modeling (RCM) with the MPlus software package (Muthén & Muthén, 1998-2010). Below are some RCM models we examined.

Model 1. Unconditional or Intercepts-Only Model

This model will test whether there is a non-independence issue by exploring the extent to which variability exists within-and-between agencies/branches for the focal outcome variables. We use turnover intentions as an exemplar.

Level-1 Model:

$$\text{Turnover intentions}_{ij} = \beta_{0j} + r_{ij},$$

β_{0j} = The mean turnover intentions for each agency/branch

r_{ij} = The variability in turnover intentions within each agency/branch

Level-2 Model:

$$\beta_{0j} = \gamma_{00} + u_{0j},$$

γ_{00} = The grand mean for turnover intentions across all agencies/branches

u_{0j} = The variability in turnover intentions between agencies/branches

Overall Model:

$$\text{Turnover intentions}_{ij} = \gamma_{00} + u_{0j} + r_{ij}$$

Calculating the Interclass Correlation: Test the existence of non-independence, using the following equation.

$$ICC = \tau^2 / (\tau^2 + \sigma^2) = \text{level-2 var.} / (\text{level-2 var.} + \text{level-1 var.})$$

After the establishment of between agency/branch variance on the focal outcome variables, we will proceed with testing specific hypotheses. Below are examples of testing the three-way interactions.

Hypothesis 2a: We use turnover intentions as an outcome.

Model. Cross-Level Model

Level-1 Model:

Turnover intentions_{ij} = β_{0j} + β_{1j} *(*Individual Demography_{ij}*) + β_{2j} *(*Supervisor-Subordinate Similarity_{ij}*) + β_{3j} *(*Individual Demography* Supervisor-Subordinate Similarity_{ij}*) + r_{ij} ,

Level-2 Model:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}*(\textit{Group Diversity}_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}*(\textit{Group Diversity}_j) + u_{1j}$$

$$\beta_{2j} = \gamma_{20} + \gamma_{21}*(\textit{Group Diversity}_j) + u_{2j}$$

$$\beta_{3j} = \gamma_{30} + \gamma_{31}*(\textit{Group Diversity}_j) + u_{3j}$$

Overall Model:

Turnover Intentions_{ij} = γ_{00} + γ_{01} **Group Diversity_j* + γ_{10} **Individual Demography_{ij}* + γ_{11} **Individual Demography_{ij}*Group Diversity_j* + γ_{20} **Supervisor-Subordinate Similarity_{ij}* + γ_{21} **Supervisor-Subordinate Similarity_{ij}*Group Diversity_j* + γ_{30} **Individual Demography*Supervisor-Subordinate Similarity_{ij}* + γ_{31} **Individual Demography*Supervisor-Subordinate Similarity_{ij}*Group Diversity_j* + u_{0j} +

$$u_{1j} * \text{Individual Demography}_{ij} + u_{2j} * \text{Supervisor-Subordinate Similarity}_{ij} + u_{3j} * \text{Individual Demography} * \text{Supervisor-Subordinate Similarity}_{ij} + r_{ij}$$

For hypothesis 2a, we are interested in whether the cross-level, three-way interaction is significant (γ_{31}). Hypothesis 2b and 3 mimic the model set forth for hypothesis 2a.

The following analyses will be for the two research questions.

Test of Research Question 1: We use turnover intentions as an exemplar.

Model. 2-2-1 Multilevel Mediation

Step 1: Establish the effect of managerial diversity on turnover intentions

Level-1 Model:

$$\text{Turnover intentions}_{ij} = \beta_{0j} + r_{ij},$$

Level-2 Model:

$$\beta_{0j} = \gamma_{00} + \gamma_{01} * (\text{Managerial Diversity}_j) + u_{0j}$$

Step 2: Establish the effect of managerial diversity on diversity climate

Level -2 Model:

$$\text{Diversity Climate}_j = \gamma_{00} + \gamma_{01} * (\text{Managerial Diversity}_j) + u_{0j}$$

Step 3: An integrated model

Level-1 Model:

$$\text{Turnover intentions}_{ij} = \beta_{0j} + r_{ij},$$

Level-2 Model:

$$\beta_{0j} = \gamma_{00} + \gamma_{01} * (\text{Managerial Diversity}_j) + \gamma_{02} * (\text{Diversity Climate}_j) + u_{0j}$$

Testing the mediation effect. A mediation effect is present when there is a significant decrease in the coefficient associated with managerial diversity in step 1 of the mediation model as compared to what is found for the same coefficient in the step 3 with the integrated mediation

model (Zhang, Zyphur, & Preacher, 2009). The Sobel (1982) test of significance will be used to test whether the product of the two coefficients ([Step-1 γ_{01}] * [Step-3 γ_{01}]) is indeed a mediating effect. This analysis can be executed using the Model Constraint function in Mplus.

Test of Research Question 2:

Luo and Azen (2012) forwarded a way to conduct dominance analysis within the multilevel framework. In this methodological paper, they articulate all the various ways predictors of interest can be assessed in terms of their relative contribution to the overall explained variance in the outcome. Of interest to this study is the relative contribution of level-two variables, mainly group diversity, managerial diversity, and diversity climate in predicting (1) the mean for the attitudinal outcomes in each unit, as well as (2) predicting individual scores for each attitudinal outcome. These two questions will be tested using Snijder and Bosker (1994) representation of *pseudo-R*², which captures the effect size of a proposed multilevel model. To test the first question, the *Pseudo-R*₂² equation for level-two will be used because we are interested in predicting the *attitudinal mean score for each unit*. The *Pseudo-R*₂² equation for predicting the mean scores in level-2 is,

$$pseudo-R_2^2 = 1 - \frac{\left(\frac{\sigma^2}{n} + \tau^2 \right)}{\left(\frac{\sigma_{null}^2}{n} + \tau_{null}^2 \right)}.$$

where σ^2 is the level-1 variance component, τ^2 is the level-2 variance component, and n is the unit size, and in our case because we have unequal unit sizes, we will use the harmonic mean instead, which is computed as $\frac{J}{\sum_{j=1}^J \left(\frac{1}{n_j} \right)}$, where n_j is the sample size of j th unit and j is

$$\sum_{j=1}^J \left(\frac{1}{n_j} \right)$$

the number of units. The denominator in the equation pertains to the *null* model where there are no predictors. As such, with this equation, we can assess the change in the *Pseudo- R^2* as a function of adding predictors. Any change in *Pseudo- R^2* would suggest additional explanation in the unit-level mean scores in the attitudinal outcomes (Lau & Azen, 2012). Moving forward, in order to test our second question, the *Pseudo- R^2* equation for level-one will be used because we are interesting in *predicting individual attitudinal scores*. The equation is as follows,

$$pseudo-R_1^2 = 1 - \frac{(\sigma^2 + \tau^2)}{(\sigma_{null}^2 + \tau_{null}^2)}.$$

where the only difference in this equation is that we are not taking into account the average unit size because we are not interested in predicting unit-level attitudinal means. In this case, the *Pseudo- R_1^2* will capture any change that is produced by adding an additional predictor, and thus will be informative in that we will know how much additional variance in individual scores are explained by adding that specific predictor. Therefore, in both of these analyses, given that we have three predictors, we have a total of six different dominance analysis combinations (i.e., 3!). After modeling all the different combinations, the overall average of the contributions for each predictor will be calculated, thus giving us an idea of the general dominance of the three variables in predicting unit-level and individual scores of attitudinal outcomes (Lau & Azen, 2012).

Results

See Table 2 for means, standard deviations, and correlations for sample 1 variables. Of

note, Table 2 shows that women employees reported higher organizational commitment ($r = .07, p < .01$) and lower turnover intentions ($r = -.04, p < .01$) than men. Minority employees reported lower diversity climate ($r = -.16, p < .01$), lower job satisfaction ($r = -.06, p < .01$), and higher turnover intentions ($r = .07, p < .01$). Groups that were more gender diverse reported higher job satisfaction ($r = .04, p < .01$) and organizational commitment ($r = .07, p < .01$), whereas groups that were more racially diverse reported lower diversity climate ($r = -.04, p < .01$) but higher organizational commitment ($r = .03, p < .01$). Finally, diversity climate was positively related to job satisfaction ($r = .65, p < .01$) and organizational commitment ($r = .64, p < .01$) and negatively related to turnover intentions ($r = -.32, p < .01$).

Test of Hypotheses

Before testing the hypotheses, we began with an intercept-only model for all three outcomes: job satisfaction, organizational commitment, and turnover intentions. The ICC coefficients were .02, .03, .01 for job satisfaction, organizational commitment, and turnover intentions, respectively. This suggests that the majority of the variance in the attitudinal outcomes is occurring at the within-unit level.

Hypothesis 1 stated that men and White employees would be more committed, report higher job satisfaction, and lower turnover intentions in demographically similar group contexts than women and racial minority group members. For gender, there was no significant interaction between gender and gender diversity on job satisfaction ($B = .15, n.s.$), organizational commitment ($B = .09, n.s.$), or turnover intentions ($B = -.21, n.s.$). For race/ethnicity, there was also no significant interaction between race/ethnicity and racial diversity on job satisfaction ($B = -.05, n.s.$), organizational commitment ($B = .06, n.s.$), or turnover intentions ($B = .07, n.s.$). Therefore, Hypothesis 1 was not supported (see Table 3, 4, 5, for additional information when

the outcomes are job satisfaction, organizational commitment, and turnover intentions, respectively).

Hypothesis 2b proposed a three-way interaction between nominal characteristics (gender and race/ethnicity), gender and racial diversity, and managerial gender and racial diversity (for this sample, there was no supervisor demographic information therefore we did not test Hypothesis 2a). For gender, the three-way interaction between gender, gender diversity, and managerial gender diversity was not significant for job satisfaction ($B = -.16, n.s.$), organizational commitment ($B = -.00, n.s.$), or turnover intentions ($B = -.26, n.s.$). For race/ethnicity, the three-way interaction between race/ethnicity, racial diversity, and managerial racial diversity was not significant for job satisfaction ($B = -.34, n.s.$), organizational commitment ($B = -.28, n.s.$), or turnover intentions ($B = -.63, n.s.$). The only significant two-way interaction was between racial diversity and managerial racial diversity in predicting turnover intentions ($B = 1.36, p < .05$). As shown in Figure 3, there was a positive relationship between racial diversity and turnover when managerial diversity was high and a negative relationship when managerial diversity was low. Further, simple slopes analyses indicated that when managerial racial diversity was high, racial diversity was marginally related to turnover intentions ($B = .38, p = .07$) but when managerial racial diversity was low, racial diversity was not related to turnover intentions ($B = -.16, n.s.$). Therefore, Hypotheses 2b was not supported (see Table 3, 4, 5 for additional information).

Hypothesis 3 proposed a three-way interaction between nominal characteristics (gender and race/ethnicity), gender and racial diversity, and diversity climate. For gender, the three-way interaction between gender, gender diversity, and diversity climate was not significant for job satisfaction ($B = -.05, n.s.$), organizational commitment ($B = -.05, n.s.$), or turnover intentions ($B = .19, n.s.$). For race/ethnicity, the three-way interaction between race/ethnicity, racial

diversity, and diversity climate was significant for job satisfaction ($B = .27, p < .05$). Figure 4 illustrates the nature of the interaction. Majority employees reported lower job satisfaction when they are in units where diversity climate is low, and higher job satisfaction in units where there is a positive diversity climate and racial diversity is low. Similar to the Majority group, minority employees reported lower job satisfaction in units where there is a less positive diversity climate and higher job satisfaction in units where there is a positive diversity climate and racial composition is low. Because of the binary nature of the independent variable, we did not test for simple slopes.

However, the three-way interaction between race/ethnicity, racial diversity, and diversity climate was not significant for organizational commitment ($B = .07, n.s.$) or turnover intentions ($B = .14, n.s.$). We did find, however, significant two-way interactions. First, there was a significant interaction between diversity climate and racial diversity on job satisfaction ($B = -.48, p < .05$). As shown in Figure 5, high (vs low) racial diversity matters for job satisfaction when individuals perceive low diversity climate, but the opposite is true when individuals perceive a positive diversity climate. Simple slopes analysis indicated that the positive relationship between diversity climate and job satisfaction is significant at both high ($B = .75, p < .01$) and low ($B = .87, p < .01$) levels of racial diversity. Second, there was a significant interaction between race/ethnicity and diversity climate on organizational commitment ($B = -.06, p < .01$). As shown in Figure 6, across both minority and majority employees, organizational commitment was higher when individuals perceived higher (vs. lower) diversity climate. However, inconsistent with prediction, majority employees reported lower organizational commitment than minority employees when individuals perceived lower diversity climate. Because of the binary nature of the independent variable, we did not test for

simple slopes. Therefore, Hypotheses 3 was partially supported (see Table 3, 4, 5 for additional information).

Test of Research Questions

Research question one focused on testing whether managerial diversity with respect to gender and race/ethnicity has indirect effects on the attitudinal outcomes via its effect on diversity climate. Initially, this was conceptualized as a 2-2-1 model whereby the managerial diversity and diversity climate were at the unit level and the outcomes were at the individual level. However, because there was not sufficient evidence that diversity climate was a group level variable, we changed the model to a 2-1-1 model. Essentially the model works the same as the previous 2-2-1 model in the sense that what the mediation effect represents is a between-unit effect. This is because at least one of our variables is at the between-unit level, in this case, managerial diversity. Therefore, any mediation effect that is going to occur is going to happen at the between-unit level irrespective of whether the mediating and outcome variables are at the within-unit level (see Preacher et al. 2010 for a conceptual and mathematical explanation). Similar to the testing of our hypotheses, we controlled for education diversity for both when diversity climate was the outcome and when attitudinal variables were the outcomes. The relationship between managerial diversity and diversity climate was not significant (for gender: $[B = -.03, n.s.]$; for race/ethnicity: $[B = .06, n.s.]$, therefore failing to establish the link necessary to test for indirect effects. For thoroughness, we report the indirect effects for all three outcomes in Table 6.

Research question two focused on testing a multilevel dominance analysis in order to establish the relative importance of the three unit-level variables, group diversity, managerial diversity, and diversity climate on the attitudinal outcomes. Because managerial and group

diversity did not predict the attitudinal outcomes (see Table 3, 4, 5 for outcomes job satisfaction, organizational commitment, and turnover intentions, respectively) and diversity climate was not analyzed at the unit level, this research question was not examined in this sample.

In sum, most of the hypotheses in our model were not supported (see Table 12 for an overview). Next, we replicate the examination of our model using a private sector sample.

SAMPLE 2: REGIONAL BANK

Method

Participants and Procedure

The sample consisted of 592 customer service units of a bank that operates in Midwestern and Eastern US states. There were a total of 6,254 participants who responded to the 2012 engagement survey. The majority of participants were White (83.4%) and female (72.5%). Participants varied according to their organizational tenure: less than a year (17.5%); 1-2 years or less (28%); 3-5 years (15.5%); 6-10 years (15.2%); 11-15 years (11.1%); and 16 years or more (12.8%). The average unit size was 10.56 ($SD = 48$; the standard deviation is skewed because of a few large units²).

Measures

Diversity Climate. Five items that captured diversity climate/inclusion were used by the organization (see Appendix A). Similar to sample 1, we calculated r_{wg} , ICC (1) and ICC (2) in order to justify aggregating diversity climate to the group level. The r_{wg} was .81 and the ICC (1) was .04 and ICC (2) was .31. These indices suggests that there is strong agreement between groups members in their ratings of diversity climate; however, a small portion of the variance in diversity climate is at the group level and further, the groups cannot be reliably differentiated in terms of average diversity climate. Based on these findings, there was not enough justification to aggregate to the group level. Therefore, diversity climate was analyzed at the individual level.

² We tested the extent to which the results would change as a function of deleting units with large group members, defined here as units where there are more than 15 employees; there were 31 such units. The rest of the units, 561, accounted for 95 percent of the units and 47 percent of the total sample size. There were no differences from the current findings, except when the outcome was turnover intentions. In this particular case, the significant three-way interaction between race/ethnicity, racial diversity, and supervisor-subordinate race similarity was not significant.

Internal consistency for this measure was .78.

Composition Measures. The procedure for creating group diversity and managerial diversity was the same as for sample 1. For *gender diversity*, women comprised 73 percent (range = .00 to 1; variance = .03) of work group members. For *managerial gender diversity*, women managers comprised 44 percent (range = .00 to 1; variance = .08) of management positions. For *racial diversity*, minorities comprised 16 percent (range = .00 to 1; variance = .03) of work group members. For *managerial racial diversity*, minority managers comprised 7 percent (range = .00 to 1; variance = .02) of management positions. In addition, because this dataset had supervisory information, we created a supervisor-subordinate similarity variable. Specifically, we created two binary variables, one for gender and one for race/ethnicity. Demographic similarity with supervisor was coded as 1, and dissimilarity was coded as 0. The majority of the sample was similar to their supervisor in both gender (65 percent; SD = .47) and race/ethnicity (77 percent; SD = .42).

Outcome Measures. For *job satisfaction*, three items were used ($\alpha = .83$). For *organizational commitment*, three items were used ($\alpha = .77$), and for *turnover intentions*, a single item was used (see Appendix A).

Controls. Similar to Sample 1, age and tenure, were controlled at both levels and unit size was controlled at the unit-level. Having these controls in the model did not change the observed pattern of relation; therefore, we present findings without them.

Results

See Table 7 for means, standard deviations, and correlations for sample 2 variables. Of note, Table 7 shows that women employees reported lower diversity climate ($r = -.06, p < .01$), higher job satisfaction ($r = .03, p < .01$) and lower turnover intentions ($r = -.05, p < .01$). Minority

employees reported lower diversity climate ($r = -.10, p < .01$), lower job satisfaction ($r = -.04, p < .01$), lower organizational commitment ($r = -.04, p < .01$), and higher turnover intentions ($r = .06, p < .01$). Women employees who were similar to their supervisor in terms of gender reported lower organizational commitment ($r = -.03, p < .01$), whereas employees who were similar to their supervisor in terms of race/ethnicity reported higher diversity climate ($r = .08, p < .01$), job satisfaction ($r = .05, p < .01$), organizational commitment ($r = .05, p < .01$), and lower turnover intentions ($r = -.07, p < .01$); what is important to note here is that these relationships are mainly driven by similarity between employees who are White as they represent a large portion of the supervisor-subordinate linkage. Groups that were more gender diverse reported higher job satisfaction ($r = .03, p < .01$) and lower turnover intentions ($r = -.04, p < .01$), whereas groups that were more racially diverse reported less diversity climate ($r = -.06, p < .01$), less job satisfaction ($r = -.04, p < .01$) but lower turnover intentions ($r = -.03, p < .01$). Finally, diversity climate was positively related to job satisfaction ($r = .58, p < .01$) and organizational commitment ($r = .65, p < .01$) and negatively related to turnover intentions ($r = -.36, p < .01$).

Test of Hypotheses

Before testing the hypotheses, we began with an intercept-only model for all three outcomes: job satisfaction, organizational commitment, and turnover intentions. The ICC coefficients were .03, .05, .03 for job satisfaction, organizational commitment, and turnover intentions, respectively. This suggests that the majority of the variance in the attitudinal outcomes is occurring at the within-unit level.

Hypothesis 1 stated that men and White employees would be more committed, report higher job satisfaction, and lower turnover intentions in demographically similar group contexts than women and racial minority group members. For gender, there was no significant interaction

between gender and gender diversity on job satisfaction ($B = -.39, n.s.$), organizational commitment ($B = -.32, n.s.$), or turnover intentions ($B = .71, n.s.$). For race/ethnicity, there was also no significant interaction between race/ethnicity and racial diversity on job satisfaction ($B = -.33, n.s.$), organizational commitment ($B = .03, n.s.$), or turnover intentions ($B = .19, n.s.$). Therefore, Hypothesis 1 was not supported (see Table 8, 9, 10, for additional information when the outcomes are job satisfaction, organizational commitment, and turnover intentions, respectively).

Hypothesis 2a proposed a three-way interaction between nominal characteristics (gender and race/ethnicity), gender and racial diversity, and supervisor-subordinate gender and race/ethnic similarity. For gender, the three-way interaction between gender, gender diversity, and supervisor-subordinate gender similarity was not significant for job satisfaction ($B = -.00, n.s.$), organizational commitment ($B = .23, n.s.$), or turnover intentions ($B = -.58, n.s.$). For race/ethnicity, the three-way interaction between race/ethnicity, racial diversity, and supervisor-subordinate race/ethnic similarity was not significant for job satisfaction ($B = .66, n.s.$) or organizational commitment ($B = .49, n.s.$). However, it was significant for turnover intentions ($B = -1.57, p < .05$); Figure 7 illustrates the nature of the three-way interaction. For Majority employees, it appears their turnover intentions are in part influenced by whether they are similar to their supervisor in race/ethnicity, irrespective of the nature of the racial composition within their unit. However, for minority employees, they report their highest level of turnover intentions in units where they are similar to their supervisor in minority status and there is higher racial diversity. Further, they report lowest levels of turnover intentions when they are dissimilar to their supervisor, irrespective of group racial diversity.

There were also significant two-way interactions. In particular, there was a significant interaction between race/ethnicity and supervisor-subordinate race/ethnic similarity on job satisfaction ($B = -.18, p < .05$) and organizational commitment ($B = -.26, p < .01$). For job satisfaction, Figure 8 illustrates the nature of the interaction. Majority employees report higher job satisfaction when they are similar to their supervisor in race/ethnicity whereas minority employees report higher job satisfaction when they are dissimilar to their supervisor in minority status. As can be seen in Figure 9, the interaction effect for organizational commitment follows the same pattern as for job satisfaction: majority employees report higher commitment when they are similar in race with their supervisor, whereas the opposite is true for minority employees. We did not test for simple slope effects because the variables included in this interaction were binary. Therefore, hypothesis 2a was partially supported, that is, only for the case for race/ethnicity and not for gender. Further, the pattern of interaction for what is supported seems to be more in line with the predictions forwarded for majority employees and not minority employees (see Table 8, 9, 10 for additional information).

Hypothesis 2b stated that there would be a three-way interaction between nominal characteristics (gender and race/ethnicity), gender and racial diversity, and managerial gender and racial diversity. For gender, the three-way interaction between gender, gender diversity, and managerial gender diversity was not significant for job satisfaction ($B = .14, n.s.$), organizational commitment ($B = .12, n.s.$), or turnover intentions ($B = .70, n.s.$). For race/ethnicity, the three-way interaction between race/ethnicity, racial diversity, and managerial racial diversity was not significant for job satisfaction ($B = .88, n.s.$), organizational commitment ($B = -.34, n.s.$), or turnover intentions ($B = .30, n.s.$). However, there was a significant two-way interaction between gender and managerial gender diversity in predicting job satisfaction ($B = .16, p < .05$).

As shown in Figure 10, men reported lower levels of job satisfaction in units where there was higher managerial gender diversity than women. We did not test for simple slope effects because the independent variable was binary. Thus, Hypothesis 2b was not supported (see Table 8, 9, 10, for additional information).

Hypothesis 3 proposed a three-way interaction between nominal characteristics (gender and race/ethnicity), gender and racial diversity, and diversity climate. For gender, the three-way interaction between gender, gender diversity, and diversity climate was significant for job satisfaction ($B = .70, p < .05$), organizational commitment ($B = .62, p < .05$), and turnover intentions ($B = -.91, p < .05$). Figure 11 illustrates the nature of the relationship for job satisfaction. Men reported lower job satisfaction when they are in units where diversity climate and gender diversity are low, and higher job satisfaction in units where there is a positive diversity climate, regardless of gender composition. Women, however, reported lower job satisfaction in units where there is a less positive diversity climate and higher job satisfaction in units where there is a positive diversity climate regardless of gender composition. Figure 12 illustrates the nature of the relationship for organizational commitment. Men reported lower organizational commitment in units where diversity climate and gender diversity are low, and higher organizational commitment in units where there was a positive diversity climate and low gender diversity. Women reported lower organizational commitment in units where diversity climate is low and gender diversity is high, and higher organizational commitment in units where there is a positive diversity climate and low gender diversity. Figure 13 illustrates the nature of the relationship for turnover intentions. Men reported higher turnover intentions when they are in units where diversity climate and gender diversity are low, and lower turnover intentions in units where there is a more positive diversity climate, regardless of gender composition. Women,

however, reported higher turnover intentions in units where there is a less positive diversity climate and lower turnover intentions in units where there is a positive diversity climate, regardless of gender composition. In all of these three-way interactions, we did not test for simple slope effects because the independent variable was binary.

Further, there were also significant two-way interactions. Specifically, diversity climate and gender diversity interacted with each other to predict job satisfaction ($B = -.71, p < .01$), organizational commitment ($B = -.68, p < .01$), and turnover intentions ($B = .98, p < .05$). Figure 14 illustrates the nature of the interaction for job satisfaction. High (vs low) gender diversity matters for job satisfaction when individuals perceive low diversity climate, but the effect of gender diversity on job satisfaction disappears when individuals perceive a positive diversity climate. Simple slopes analysis indicated that the positive relationship between diversity climate and job satisfaction is significant at both high ($B = .53, p < .01$) and low ($B = .75, p < .01$) levels of gender diversity. As can be seen in Figure 15, the interaction effect for organizational commitment is similar in form to that of job satisfaction. Simple slopes analysis indicated that the positive relationship between diversity climate and organizational commitment is significant at both high ($B = .59, p < .01$) and low ($B = .79, p < .01$) levels of gender diversity. Figure 16 illustrates the nature of the interaction for turnover intentions. Turnover intentions are at their highest when diversity climate is low and gender diversity is low, whereas turnover intentions are at their lowest when diversity climate is positive, regardless of the group gender diversity. Simple slopes analysis indicated that the negative relationship between diversity climate and turnover intentions is significant at both high ($B = -.38, p < .01$) and low ($B = -.69, p < .01$) levels of gender diversity.

For race/ethnicity, the three-way interaction between race/ethnicity, racial diversity, and diversity climate was not significant for job satisfaction ($B = -.06, n.s.$), organizational commitment ($B = -.13, n.s.$), or turnover intentions ($B = .33, n.s.$). However, there was a significant two-way interaction between racial diversity and diversity climate on turnover intentions ($B = -.51, p < .05$). As can be seen in Figure 17, turnover intentions are at their highest when there is low diversity climate and high racial diversity, whereas turnover intentions are at their lowest when there is high racial diversity and a positive diversity climate. Simple slopes analysis indicated that the negative relationship between diversity climate and turnover intentions is significant at both high ($B = -.61, p < .01$) and low ($B = -.46, p < .01$) levels of racial diversity. Therefore, Hypotheses 3 was partially supported, specifically in the case of gender and not race/ethnicity (see Table 8, 9, 10 for additional information).

Test of Research Questions

Research question one focused on testing whether managerial diversity with respect to gender and race/ethnicity has indirect effects on the attitudinal outcomes via its effect on diversity climate. Similar to Sample 1, we were not able to justify the aggregation of diversity climate to the group level, therefore we used a 2-1-1 model. The relationship between managerial diversity and diversity climate was not significant (for gender: [$B = .00, n.s.$]; for race/ethnicity: [$B = .07, n.s.$], therefore failing to establish the link necessary to test for indirect effects. For thoroughness, we report the indirect effects for all three outcomes in Table 11.

Research question two focused on testing a multilevel dominance analysis in order to establish the relative importance of the three unit-level variables of group diversity, managerial diversity, and diversity climate on the attitudinal outcomes. Because managerial and group diversity did not predict the attitudinal outcomes (see Table 8, 9, 10 for outcomes job

satisfaction, organizational commitment, and turnover intentions, respectively) and diversity climate was not analyzed at the unit level, this research question was not examined.

Finally, refer to Table 12 for a summary of the results across both samples.

DISCUSSION

In this study, we aimed to reconcile the asymmetrical effects often found in the relational demography literature. Specifically, we utilized a disparity lens and proposed that relational demography cannot be fully understood without appreciating the influence of status and power dynamics within groups. Further, we pitted the status and power perspective against the diversity climate perspective and theorized the latter orientation would be more fruitful in accounting for the asymmetrical effects. Below, we discuss key findings, theoretical and practical contributions, as well as directions for future research

The Effects of Asymmetry on Attitudinal Outcomes

Lateral comparisons. We tested a baseline hypothesis that is found, albeit not consistently, in the relational demography literature which states dissimilarity within workgroups matters more for men and White employees than for women and minority employees. Across both samples, this hypothesis was not supported. There are several possible interpretations for this finding. In the case of gender, most of the asymmetrical effects found in the literature utilize the Euclidean distance (D-score) approach to capture group dissimilarity. Tonidandel et al. (2008) have shown such an effect could be a statistical artifact caused by range restriction in the dissimilarity variable and may not exist in cases where the full range of distribution exists. Further, they noted taking a multilevel approach takes into account the nesting structure of groups, which is ignored using the D-score approach. In this study, both of these issues were taken into consideration: our gender diversity measure displayed a normal distribution ranging from groups that are predominately male to groups that are predominately female and we utilized a multilevel approach. Given that we addressed the methodological concern, it is possible that the failure to find asymmetrical effects in both of our samples may actually represent the notion

that men and women may not necessarily consider the gender composition of their unit as a factor that shapes their attitudinal outcomes.

In the case of race/ethnicity, the reason for not finding asymmetrical effects is not as clear. This is primarily due to several reasons: one, the distribution of racial diversity across units is positively skewed. Therefore, failure to detect asymmetrical effects could have been because of the lack of variance in our measure as similar to previous studies. Second, the grouping of all ethnic groups into an overall minority status group is not ideal when testing for asymmetrical effects. Such collapsing assumes any difference between groups is negligible, which is a very strong assumption. Therefore, there is ambiguity in terms of the nature of the racial diversity measure in that it is not a clear signal regarding one's own ethnic group but rather a signal about minority status employees in general. A final reason could be because of the stronger effect of diversity climate, which is not often assessed in studies examining lateral comparisons. Therefore, such effects might disappear when other variables such as diversity climate are assessed within the same model (we return to this issue below when discussing the findings for diversity climate).

Vertical comparisons. Hypothesis 2a stated that women and minority employees would report higher attitudinal outcomes in cases where they are similar to their supervisor and there is lower group diversity. In the case of gender, this hypothesis was not supported. We did find partial support for this hypothesis, however, when examining race/ethnicity on turnover intentions. As predicted, White employees reported lower intentions to leave the organizations in contexts where they had a White supervisor. What is also important to note here is that racial diversity did not have an effect here, that is, it did not matter whether the group composition was more or less racially diverse, intentions to turnover were lower in all cases where White

employees had a White supervisor.

However, in the case of minority employees, it appears that having a supervisor who is similar in terms of minority status actually increases intentions to leave the company. Further, group racial diversity seems to play a role only in the case when minority employees are similar to their supervisor in terms of minority status. Specifically, minority employee's intentions to leave the company are exacerbated when there is low racial diversity. This goes against upward mobility predictions that state turnover intentions would be lower in cases where there is a strong signal for upward movement (i.e., supervisor-subordinate similarity) and lower within-group competition (i.e., lower group racial diversity; McGinn & Milkman, 2013). We offer a few explanations for this finding. First, although we found evidence that is to the contrary of upward mobility predictions, up to this point, such predictions have largely been theoretical and not based on empirical evidence. By simultaneously considering the effects of both signals, our findings seem to suggest racial minorities prefer units where there is less racial diversity and their superior is White. However, this finding has to also be interpreted in light of several limitations, which leads us to our second explanation. As noted in the results section, this data set included units that deviated greatly from normal range. Specifically, when we analyzed the data excluding the 31 units that were considered outliers, this three-way interaction was no longer significant. One possible explanation for this could be the lateral signal in this case may not reflect a workgroup signal thus creating ambiguities as to what the nature of the racial composition actually means (i.e., does it reflect within group, within department). Moreover, with regards to supervisor-subordinate similarity, the upward mobility signal may exist only in cases where the subordinate is similar to the supervisor in terms of race/ethnicity. Since the similarity we examined was minority status broadly, it is possible that it may not activate

identification processes connected when considering the individuals' own ethnic group. Finally, it could be that a minority supervisor indicates to minority employees that their function/area is not high status, and that to achieve further status they would be better to be in a different unit. Future research could tease apart the effect of occupying a supervisory role versus the actual status associated with that role. On this latter point, researchers can survey incumbents regarding their view of different supervisory positions to assess position status and power or use supervisor salary as a proxy.

The other vertical signal we took into consideration was managerial gender and racial diversity. The three-way hypotheses that stated nominal characteristics (gender and race/ethnicity) would interact with group and managerial diversity were not significant. However, there were significant effects for some of the two-way interactions. First, average-level turnover intentions across units were in part shaped by racial group and managerial diversity. Specifically, we found that there was a positive relationship between racial group diversity and group-level turnover intentions in units that had higher racially diverse managers. This needs to be interpreted in light of what the high end-points for racial group and managerial diversity mean in each unit. These are units where managers and racial minority employees represent around 40 percent of the composition, respectively. There are two potential explanations for the emergence of this effect at the unit level. One, in the case of majority group employees, their intentions to leave the company would be higher in units that are diverse laterally and vertically. This particular situation represents a case where there is a reduction in power as well as a reduction in affiliative needs fulfillment because of the greater dissimilarity with group members. Two, in the case of minority group members, higher representation at both levels might signal more competition for upward mobility given that there are more minorities within each unit.

Therefore, it makes it difficult for differentiation, which could then increase intentions for turnover (McGinn & Milkman, 2013).

Second, we found that gender interacted with managerial gender diversity to relate to job satisfaction. As we would expect from social psychological theories, men reported lower job satisfaction in units where there were more women in managerial positions. However, the prediction set forth by sociological theories of power and status were not supported for women; their level of job satisfaction was unaffected by the proportion of women managers. As theorized by Chattopadhyay et al (2004), we would expect that more female representation at higher levels within the organization would signal the possibility of upward progress and therefore, in turn, affect the extent to which women are satisfied with their jobs. These asymmetrical effects are found typically when considering lateral comparisons, that is, when examining the effects of group dissimilarity. Accordingly, it is interesting to find when the comparison is vertical and has implication for power distribution, we do not see the expected symmetry for men and women. There may be two potential explanations. One, men may have higher expectations to be well represented in managerial positions; therefore, in cases where this is not true, the larger deviation from expectations may have an impact. In contrast, women may not have high expectations that they will occupy a larger representation in managerial positions, thus their job satisfaction is unaffected by the variability in managerial gender diversity. Second, it is possible that there is a difference between men and women in the extent to which their current job satisfaction is affected by upward mobility, that is, males could be looking upward when they evaluate satisfaction with their current job (i.e., my satisfaction with what I am doing today depends on where I think it will take me) while women are answering more based on current job (i.e., my satisfaction ratings are based on the work I am doing right now). The idea that women's level of

job satisfaction may not be as affected by upward evaluation is in part supported by work focused on women's managerial aspirations. A popular conception—'Lean-In'—states women tend not to see themselves as ready for promotion and make fewer attempts for professional advancement and in so doing, 'opt-out' of pursuing leadership positions (Belkin, 2003). However, this explanation being the principle reason for the shortages of women in leadership positions has been challenged by a recent finding suggesting an alternative explanation that revolves around women not receiving developmental opportunities that would position them to be well-suited for those executive positions (Hoobler, Lemmon, Wayne, 2014). In understanding whether this has implications for relational demography, future research should examine to what extent asymmetrical effects such as those found here for job satisfaction are found when the outcome is perception of promotability. We would posit that in such cases, the power signal associated with managerial gender diversity would be stronger in affecting how women perceive their own perceptions of upward mobility.

The Effects of Diversity Climate on Attitudinal Outcomes

Across both samples, we found that individuals with more positive perceptions of diversity climate reported higher job satisfaction and organizational commitment and lower turnover intentions. Furthermore, individual's perceptions of to what extent their organization values diversity trumps effects of group composition. For instance, we found that group composition, in both gender and race/ethnicity mattered in situations where individuals had lower diversity climate perceptions. In these particular situations, more women and racial minorities in the group helped, in terms of higher job satisfaction, organizational commitment, and lower turnover intentions. However, as perceptions of diversity climate increased, the effects of gender and racial diversity diminished.

Beyond the main effect of diversity climate and its interaction with group composition, the three-way interactions with nominal characteristics were supported. The pattern of relations seemed similar across outcomes and across gender and race/ethnicity. The findings converged on the idea that higher diversity climate is beneficial for both in-groups and out-groups. For instance, we found that both men and women and majority and minority employees reported higher job satisfaction, organizational commitment, and lower turnover intentions when they perceived higher diversity climate, regardless of group composition. However, it is important to note that across nominal characteristics, there was a slight trend for members to have higher outcomes when in units that are less diverse; this can be especially seen for organizational commitment, for example.

Theoretical and Practical Implications

This study made use of two different theoretical paradigms to help explain the asymmetrical effects found in relational demography research. The first was the sociological perspectives that emphasized the role of power and status associated with different group members. To this end, we focused on diffuse status in the form of gender and race/ethnicity and conceptualized power as the proportion of women and minorities in managerial positions and supervisory roles. We theorized that the structural aspects of the environment would be critical in providing information regarding the distribution of status and power within workgroups, and this would in turn affect the extent to which out-group members react to similarity. Interestingly, as evidenced from our findings, similar asymmetries that are typically found when considering lateral comparisons were also found for vertical comparisons. These findings are inconsistent with organizational demography research that finds when out-group members occupy upper organizational levels, lower-level out-group members tend to benefit (e.g., Cohen & Broschak,

2013; McGinn & Milkman, 2013). However, these studies are different in that they take a temporal aspect, therefore examining the dynamic relations between the focal variables. Our static representation of the relationships in the current study may be obscuring the true relationship between power distribution within groups and its effect on similarity and attitudinal outcomes. Further, another difference between this study and those within the organizational demography literature has to do with the criteria examined. Organizational demographers typically examine outcomes such as promotion and voluntary turnover patterns, whereas the focus here was on attitudinal outcomes. Thus, it is reasonable to posit that identification processes that are targeted toward the group as well as the individual may be more important in shaping how attitudes about job and workgroups are formed whereas the general composition of group members may be less informative. This perspective is partially supported by the lack of direct effect found for the composition variables on job satisfaction, organizational commitment, and turnover intentions.

The second lens we used focused on diversity climate. Our research adds to the body of literature in this area that highlights the benefits having a positive diversity climate (see Hebl & Avery, 2012 for a review). While the sociological lens states that status and power differential within groups facilitates in-group and out-group differentiation, the diversity climate perspective is focused on the nurturing of an environment that dampens the activation of status differences that propel individuals to engage in competition and in-group biases (Platow, Foddy, & Anderson, 2003). Our findings lend more support to this perspective such that individuals endorse higher levels of job satisfaction, organizational commitment, and lower levels of turnover intentions when diversity climate is high. Furthermore, our findings suggest that group composition does not play a large role in shaping attitudinal outcomes when diversity climate is

high, findings that are consistent with past literature on the importance of diversity climate (e.g., Gonzales & DeNisi, 2009). What is clear from our findings and in line with previous research is when diversity climate is low, it exacerbates social categorization processes that presumably are one possible mechanism for tension and competition within groups whereas when diversity climate is high, it counteracts social categorization. It is apparent from the extant literature that there are benefits of diversity climate on individual and organizational outcomes (e.g., Gonzales & DeNisi, 2009; McKay et al., 2009; 2011; Niishi, 2013).

Finally, Niishi (2008) noted that diversity climate “facilitate[s] the engagement of whole selves...and increasing the probability that cross-cutting ties emerge within groups” (p. 1767). This perspective may be fruitful for team research when considering the effects of faultlines. Such breakdowns of teams into subgroups (e.g., women versus men) are typically a function of social categorizations processes (Lau & Murnighan, 1998). Thus, it follows that diversity climate may play an important role in reducing the extent to which faultlines emerge among teams because of its effects on inhibiting social categorization processes. Future research could examine to what extent diversity climate plays a boundary condition on the emergence of faultlines.

In light of our findings, there are several practical recommendations for organizations. First, organizations should consider and assess the diversity climate within workgroups. The work by Niishi (2013) suggests that diversity climate is a formative construct composed of three dimensions: equitable employment practices, integration of differences, and inclusion in decision making. Therefore, organizations could examine their human resource practices and ask questions such as: how are we selecting employees/is it based on standardized metrics? Are there biases embedded in the way we assess performance, individuals or groups? Such careful

consideration of human resource practices could reduce biases and increase diversity climate perceptions. Second, continuous involvement of employees in decision-making processes could also facilitate the development of diversity climate. Third, leadership can have an important role in fostering a positive diversity climate. A clear pattern of relations from our findings suggests that gender and racial diversity of managers does not necessarily affect perceptions of inclusion, and that composition does not necessarily lead to a positive diversity climate (see Hebl & Avery for a summary). Therefore, organizations need to think beyond not only the demographic representation of leaders, but also what the leaders are actually doing in fostering an inclusive atmosphere. For instance, leaders should use their social influence to support inclusion initiatives, anticipate actions that may lead to individuals not feeling included (e.g., LMX differentiation), and facilitate a learning environment, which is crucial for the development of a positive diversity climate (Ely & Thomas, 2001).

Moreover, another question is how can organizations facilitate a positive diversity climate? One possibility is to better align espoused values (e.g., value in diversity) with what is actually in practice. Organizational members can identify whether their organization truly cares for and values diversity versus just paying lip service to the matter. For example, Groggins and Ryan (2013) conducted a qualitative study where they interviewed employees who worked for an exceptionally diverse organization. A key theme that emerged from their qualitative analysis was how deep diversity was rooted within the foundations of the organization, and because of this, the dimensions mentioned by Niishi (2013) were easily enacted and maintained, thus becoming an organizational reality (i.e., values in action). Therefore, organizations need to consider to what extent diversity is central to the organizations foundation rather than being something that is considered because of its instrumental value (i.e., increasing market share) or legal ramifications.

A second possibility is diversity training. A recent meta-analysis on diversity training highlighted that diversity training has small to moderate size effects for cognitive, skill, and affective-based outcomes (Kalinowski, Steele-Johnson, Payton, Leas, Steinke, & Bowling, 2013). Several of their findings are critical to the current discussion. First, they found that opportunity for social interaction during training greatly enhances affective-based outcomes. This directly connects with the contact-hypothesis as a possible mechanism for learning and acceptance. Second, trainee motivation played a critical role in shaping affective-based outcomes such that trainees were very motivated about diversity training when the trainer was a direct manager/supervisor versus other staff members, for example, diversity/inclusion manager. This is important because it connects with the idea of legitimacy in that subordinates are more motivated to learn and be more open to diversity issues when there is managerial support. Therefore, diversity training could be one avenue toward making diversity a central attribute of an organization's identity.

Strengths, Limitations, and Future Research

Our study has several strengths that should be noted. First, we tested our model using two samples with different settings (government versus bank) and large sample sizes at both the within-unit as well as the between-unit level. Second, we tested and integrated theoretical frameworks that span across levels of analyses, therefore addressing calls by Joshi et al. (2006) to bridge micro processes (relational-demography) with macro-level influences (organizational-demography) in order to understand asymmetrical effects. We further integrated the inclusion literature by examining the moderating role of diversity climate. A final strength is we used a multilevel approach to understanding the effects of asymmetry within groups and provided a

conservative test of our findings by simultaneously modeling our hypotheses in order to ensure our findings were not due to chance.

Our study, however, has several limitations. In the following section, we will focus on key limitations and ways to address them in future research.

First, the failure to find justification to aggregate the diversity climate measure might have been a function of our items focusing on the respondent and the company and not solely at the unit level. According to Chan (1998) this model is called the referent-shift consensus model. The focus here is to shift the referent in the diversity climate perception from the individual to the unit. The measurement we used across both studies did not provide a clear referent in assessing diversity climate. For instance, some questions focused on the company (e.g., [This company] values diversity in the workplace) whereas some questions focused on employees in general (e.g., Employees at [This company] are able to contribute to their fullest potential (without regard to such characteristics as age, race, ethnicity, disability, etc). Because we were interested in unit-level diversity climate, all of the items should have had a referent to the unit (e.g., [This unit] has a climate in which diverse perspectives are encouraged and valued). Research that has utilized the referent-shift consensus model when examining unit-level diversity climate has found satisfactory agreement and reliability as indexed by r_{wg} ICC (1) and ICC (2) (e.g., McKay et al., 2009; 2011; Niishi, 2013).

Second, work in relational demography literature has noted issues relating to the collapsing of racial groups into a minority status category (e.g., Sacco et al., 2003; Tonidandel et al., 2008; Vecchio & Bullis, 2001). As noted earlier, this makes a strong assumption that different ethnic group members have a generalized ethnic identity that could be summarized using a minority status category; essentially this suggest any difference between racially ethnic

minorities is insignificant and that most of the variability lies between minority and majority status. Such generality of using White versus non-White is often, however, used for practical purposes, as it was in our case (i.e., data files contained only such categorization) and to ease statistical estimations. Further, in speaking to the latter issue, Tonidandel et al. (2008) noted including additional racial categories also complicates the interpretation of findings. Finally, another consideration and often a challenge when including multiple racial categories pertains to having enough individuals within each group; this is important because not finding dissimilarity effects could be due to lack of power. Further, when including additional group categories, researchers have to ensure the unit-level group diversity variables are normally distributed, with some units exhibiting homogeneity whereas others are more heterogeneous. This ensures that a lack of support for asymmetry in the data cannot be attributed to a lack of variance on the focal group composition variables (Tonidandel et al., 2008).

Third, this study is limited to the scope of the moderators examined. For instance, we focused on illustrating the importance of vertical composition signals in helping to explain the asymmetrical effect found in the relational demography literature. However, as evidenced across our findings, these moderators did not help us shed light on the problem. This might be because an implicit assumption within our framework is that ascribed status (gender, race/ethnicity) may be informative in terms of group identification. The group identity literature, for instance, may shed light on the complexity of group identification. Future research could examine to what extent the asymmetrical effects could be explained by, for example, racial and gender identity. For instance, researchers can use the multidimensional racial identity construct by Sellers, Smith, Shelton, Rowley, and Chavous (1998), which includes racial centrality, private regard, and public regard. The various dimensions tap into (a) locality of the race/ethnicity to one's self-

concept, (b) extent to which the individuals feel good about their group, and (c) to what extent others, that is, society holds a positive or negative view of their group. We posit that integrating research on racial as well as gender identity with relational demography would be fruitful in terms of illuminating under what conditions group members would be drawn toward or get away from similar others.

Fourth, beyond moderators, our research did not propose potential explanations for the relationship between nominal characteristics and group composition on attitudinal outcomes. As alluded to in the previous paragraph, being similar to or different from workgroup members may affect various identification processes that would in turn shape attitudinal outcomes. Indeed, according to Cox's (1994) IMCD model of diversity, organizational identification is a key mechanism linking antecedents to individual-level outcomes. When considering relational demography research, one might consider to what extent dissimilarity from workgroup affects workgroup identification, which in turn affects individual outcomes such as organizational commitment and turnover intentions. Similarly, at the unit-level, researchers can examine the underlying processes by which group composition variables such as gender and racial diversity affect unit-level outcomes. For instance, Niishi (2013) proposed and found support for the importance of relationship and task conflict as primary mechanisms by which gender diversity affects unit satisfaction and unit turnover. Finally, as noted by Hebl and Avery (2012), "it is important to recognize that the most insightful contributions to understanding diversity's effects are those integrating moderation and mediation into a single model" (p. 691). Going back to Niishi (2013) as an example, she further found climate for inclusion as an important moderator in the process. Thus, future research should integrate both the *how* and the *when* to better guide research on relational demography.

Fifth, given the cross-sectional nature of our study, it is possible that our findings could be influenced by same-source bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, as noted by Siemson, Roth, and Oliveira (2010), common method variance is less of a concern when interactions are present in the data. Also, our use of a single-item measure for turnover intentions instead of a multiple-item measure (e.g., Cammann, Fichman, Jenkins, and Klesh's (1979) may have raised issues of low reliability. However, as noted by Sackett and Larson (1990), short measures can be used when they are unambiguous in terms of what is being asked, as is the case when asking respondents, "I intend to stay with [This company] for at least another 12 months." On a related note, future researchers may consider using actual voluntary turnover (e.g., Niishi, 2013) instead of intentions to quit, as the direct link between the two is contingent on several factors (Allen, Weeks, & Moffitt, 2005).

A final limitation is the ways in which we operationalized our core variables. First, failure to find support for our theoretical predictions regarding status and power could be a function of the way we operationalized status and power (i.e., compositional). Had we operationalized status in terms of perceived status, perhaps we would have found that such perceptions are more important than the societal ascription of status. One thing to address in future research is to what extent perceived status correlates with workgroup composition—that is, will we find an inverse relationship between the proportion of women in the group and the overall perceived status of the group? Second, our study did not differentiate between different types of managerial or supervisory positions. This may be important in that different positions provide different strength signals in terms of status and power. Therefore, future research can code for position type and examine to what extent it influences perceptions of status and power. Beyond the way we operationalized status and power, we were also limited in our other, more

perceptual-based variables (e.g., diversity climate, attitudinal outcomes), in that our findings could be reflective of positive affectivity. Employees who are higher on positive affect may be more likely to view their organizational environment in a positive light, therefore influencing our core variables. However, to the extent that our findings could be explained by such an effect is minimal because our attitudinal variables interacted with our compositional variables to affect attitudinal outcomes. Despite this, however, future research should include positive affectivity in order to ensure that the findings are not a general “good place to work” effect.

Conclusion

This study answered a call made by Joshi and colleagues (2011) to integrate sociological perspectives of status and power in order to shed light on asymmetrical effects found in relational demography literature. Further, beyond composition, we also proposed an additional environmental feature—diversity climate—to address our core questions. We utilized a multi-level framework and examined our hypotheses with two distinct samples. Our findings converge on the idea that the effects of dissimilarity within workgroups across nominal characteristics are minimized when individuals hold positive diversity climate perceptions. Thus, the diversity climate perspective seems to better account for the asymmetrical effects than the status and power perspective (as operationalized as composition), when considering its relations with job satisfaction, organizational commitment, and turnover intentions.

APPENDICES

Appendix A: Tables and Figures

Table 1. A review of relevant articles focusing on workgroup compositions and diversity climate.

Authors	Study Focal Variables		Study Outcome Variables		Moderating (MO)/Mediating (ME) Variables				Sample Size
	<i>Individual Level</i>	<i>Organizational Level</i>	<i>Individual Level</i>	<i>Organizational Level</i>	<i>Individual Level</i>	<i>Organizational Level</i>	<i>Individual Level</i>	<i>Organizational Level</i>	
Acquavita et al. (2009)	1. Minority status 2. Workplace racial composition 3. Organizational diversity efforts 4. Social support 5. Inclusion/exclusion	None	1. Job satisfaction		None	None	86	None	
Buttner et al. (2012)	1. Diversity promise fulfillment	None	2. Turnover intentions	None	1. Diversity climate (MO) 2. Organizational Commitment (ME)	None	154	None	
Chen et al. (2012)	1. Individual motivational cultural intelligence	None	1. Individual cultural sales	None	None	1. Firm motivational cultural intelligence (MO) 2. Firm diversity climate (MO)	305	26	
Choi (2013)	None	1. Racial/ethnic managerial diversity 2. Gender managerial diversity	1. Job satisfaction	None	1. Diversity climate (MO) 2. Supervisory support (MO) 3. Gender (MO) 4. Minority (MO)	None	175,657	191	
Gonzalez et al. (2009)	1. Proportion of gender different others 2. Proportion of racially/ethnically different others 3. Gender 4. Race/Ethnicity	1. Gender heterogeneity 2. Race/Ethnic Heterogeneity	1. Affective organizational commitment 2. Organizational identification	1. Return on profit 2. Return on income 3. Productivity	None	1. Diversity climate (MO)	271	26	

Table 1 (cont'd).

Authors	Study Focal Variables		Study Outcome Variables		Moderating (MO)/Mediating (ME) Variables				Sample Size
	<i>Individual Level</i>	<i>Organizational Level</i>	<i>Individual Level</i>	<i>Organizational Level</i>	<i>Individual Level</i>	<i>Organizational Level</i>	<i>Individual Level</i>	<i>Organizational Level</i>	
Herdman et al. (2010)	None	1. Diversity programs	None	1. Diversity climate	None	1. Managerial diversity (MO) 2. Managerial relational values (MO)	3, 578	163	
Hofhuis et al. (2012)	1. Diversity climate	None	1. Job satisfaction 2. Perceived job recognition 3. Diversity-related conflict	None	1. Cultural identity (ME) 2. Organizational identity (ME) 3. Dual identity (ME) 4. Cultural background (MO)	None	1,810	None	
Kossek et al. (1993)	1. Racioethnicity 2. Gender 3. Level	1. Racioethnic heterogeneity 2. Gender heterogeneity 3. Resources for women 4. Resources for racioethnic minorities	1. Value efforts to promote diversity 2. Attitudes toward qualification of racioethnic minorities 3. Attitudes toward qualification of women 4. Equality of department support of racioethnic minorities 5. Equality of department support of women	None	None	None	775	None	

Table 1 (cont'd).

Authors	Study Focal Variables		Study Outcome Variables		Moderating (MO)/Mediating (ME) Variables			Sample Size
	<i>Individual Level</i>	<i>Organizational Level</i>	<i>Individual Level</i>	<i>Organizational Level</i>	<i>Individual Level</i>	<i>Organizational Level</i>	<i>Individual Level</i>	<i>Organizational Level</i>
McKay et al. (2007)	1. Race/Ethnicity 2. Gender 3. Tenure 4. Managerial Level 5. Diversity Climate	None	None	1. Turnover intentions	1. Organizational commitment (ME)	None	6,823	None
McKay et al. (2008)	1. Race/Ethnicity 2. Gender	1. Percentage of minority 2. Percentage of females 3. Age diversity	1. Sales performance	None	None	1. Diversity climate (MO)	6, 130	743
McKay et al. (2009)	None	1. Subordinate diversity climate 2. Manager diversity climate 3. Percent minority subordinates 4. Percent female subordinates	None	1. Sales percentage change (i.e., unit performance)-	None	1. Interactive effects between subordinate and manager diversity climate	56,337 subordinates 3,449 managers	654
McKay et al. (2011)	None	1. Diversity climate	None	1. Customer satisfaction	None	1. Service climate (MO) 2. Minority representation (MO) 3. Female representation (MO)	59,592	769

Table 1 (cont'd).

Authors	Study Focal Variables		Study Outcome Variables		Moderating (MO)/Mediating (ME) Variables			Sample Size
	<i>Individual Level</i>	<i>Organizational Level</i>	<i>Individual Level</i>	<i>Organizational Level</i>	<i>Individual Level</i>	<i>Organizational Level</i>	<i>Individual Level</i>	<i>Organizational Level</i>
Madera et al. (2013)	1. Diversity climate	None	1. Job satisfaction	None	1. Role ambiguity 2. Role conflict	None	130	None
Mor Barak et al. (1998)	1. Race/Ethnicity 2. Gender	None	3. Diversity climate	None	None	None	2,686	None
Pugh et al. (2008)	None	1. Workforce racial composition	None	1. Diversity climate	None	1. Community racial composition (MO)	2,369	142
Wolfson et al. (2011)	1. Race/Ethnicity	None	1. Organizational Commitment 2. Individual empowerment 3. Job satisfaction	None	1. Diversity climate (ME)	None	1090	None

Table 2. Means, Standard Deviations, and Correlations for Sample 1.

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1. Gender	.58	.49	--								
2. Race/Ethnicity	.21	.40	.10**	--							
3. Gender Diversity	.58	.22	.45**	.16**	--						
4. Racial Diversity	.20	.12	.24**	.30**	.53**	--					
5. Managerial Gender Diversity	.47	.25	.34**	.17**	.75**	.55**	--				
6. Managerial Racial Diversity	.22	.17	.20**	.20**	.45**	.66**	.44	--			
7. Diversity Climate	3.62	.81	-.01	-.16**	.00	-.04**	-.01	-.00	--		
8. Job Satisfaction	3.39	.99	.02	-.06**	.04**	-.00	.01	.03**	.65**	--	
9. Organizational Commitment	3.70	.84	.07**	-.02	.07**	.03**	.04**	.05**	.64**	.70**	--
10. Turnover Intentions	1.56	.83	-.04**	.07**	-.01	.01	.02	.01	-.32**	-.38**	-.47**

Note. Racial diversity = the proportion of minority (i.e., non-White) employees in each unit; gender diversity = the proportion of women employees in each unit; managerial racial diversity = (the proportion of minority (i.e., non-White) managers in each unit); managerial gender diversity = the proportion of women managers in each unit); race/Ethnicity is coded 1= minority employees, 0 = majority employees; gender is coded 1= female employees, 0 = male employees. * $p < .05$; ** $p < .01$. Scale ranged from 1–5 for diversity climate, job satisfaction, organizational commitment, and turnover intentions.

Table 3. Hierarchical Linear Modeling Results for Job Satisfaction as the Outcome, Sample 1.

Independent Variable	Job Satisfaction			
	Model 1		Model 2	
	β	SE	β	SE
Intercept	2.96**	.14	2.91**	.19
<i>Within-units Effects (Level 1)</i>				
Gender	.03	.07	.04	.18
Race/Ethnicity	.11**	.03	.11**	.04
Diversity Climate	.81**	.02	.81**	.03
Gender X Gender Diversity	--	--	.15	.58
Gender X Managerial Gender Diversity	--	--	-.01	.23
Gender X Diversity Climate	--	--	.01	.04
Race/Ethnicity X Racial Diversity	--	--	-.05	.37
Race/Ethnicity X Managerial Racial Diversity	--	--	.12	.23
Race/Ethnicity X Diversity Climate	--	--	-.05	.04
Diversity Climate X Gender Diversity	--	--	.17	.11
Diversity Climate X Racial Diversity	--	--	-.48*	.20
Gender X Gender Diversity X Managerial Gender Diversity	--	--	-.16	1.52
Race/Ethnicity X Racial Diversity X Managerial Racial Diversity	--	--	-.34	.76
Gender X Gender Diversity X Diversity Climate	--	--	-.05	.18
Race/Ethnicity X Racial Diversity X Diversity Climate	--	--	.27**	.04
<i>Between-Units Effects (Level 2)</i>				
Gender Diversity	.05	.15	.03	.24
Racial Diversity	-.19	.27	-.05	.41
Managerial Gender Diversity	-.11	.11	-.12	.14
Managerial Racial Diversity	.16	.15	.11	.31
Gender Diversity X Managerial Gender Diversity	--	--	.60	1.17
Racial Diversity X Managerial Racial Diversity	--	--	.31	.69
Education Diversity	.77**	.25	.80**	.27
-2 log-likelihood	13073.49		13052.21	
Pseudo-R-squared	.41		.41	

Note. * $p < .05$. ** $p < .01$.

Table 4. Hierarchical Linear Modeling Results for Organizational Commitment as the Outcome, Sample 1.

Independent Variable	Organizational Commitment			
	Model 1		Model 2	
	β	SE	β	SE
Intercept	3.37**	.10	3.35**	.11
<i>Within-units Effects (Level 1)</i>				
Gender	.09**	.02	.09**	.03
Race/Ethnicity	.12**	.03	.11**	.04
Diversity Climate	.68**	.01	.70**	.02
Gender X Gender Diversity	--	--	.09	.17
Gender X Managerial Gender Diversity	--	--	-.07	.10
Gender X Diversity Climate	--	--	-.01	.03
Race/Ethnicity X Racial Diversity	--	--	.06	.25
Race/Ethnicity X Managerial Racial Diversity	--	--	.04	.17
Race/Ethnicity X Diversity Climate	--	--	-.06**	.02
Diversity Climate X Gender Diversity	--	--	.01	.10
Diversity Climate X Racial Diversity	--	--	-.10	.15
Gender X Gender Diversity X Managerial Gender Diversity	--	--	-.00	.45
Race/Ethnicity X Racial Diversity X Managerial Racial Diversity	--	--	-.28	.58
Gender X Gender Diversity X Diversity Climate	--	--	-.05	.14
Race/Ethnicity X Racial Diversity X Diversity Climate	--	--	.07	.17
<i>Between-Units Effects (Level 2)</i>				
Gender Diversity	.10	.24	.08	.20
Racial Diversity	-.26	.13	-.27	.27
Managerial Gender Diversity	-.11	.09	-.08	.13
Managerial Racial Diversity	.08	.11	.07	.13
Gender Diversity X Managerial Gender Diversity	--	--	.22	.51
Racial Diversity X Managerial Racial Diversity	--	--	.19	.57
Education Diversity	.56*	.22	.52*	.21
-2 log-likelihood	11194.10		11184.02	
Pseudo-R-squared	.40		.40	

Note. * $p < .05$. ** $p < .01$.

Table 5. Hierarchical Linear Modeling Results for Turnover Intentions as the Outcome, Sample 1.

Independent Variable	Turnover Intentions			
	Model 1		Model 2	
	β	SE	β	SE
Intercept	1.56**	.07	1.56**	.08
<i>Within-units Effects (Level 1)</i>				
Gender	-.09**	.02	-.08**	.03
Race/Ethnicity	.06	.05	.07	.05
Diversity Climate	-.34**	.02	-.36**	.03
Gender X Gender Diversity	--	--	-.21	.18
Gender X Managerial Gender Diversity	--	--	.00	.13
Gender X Diversity Climate	--	--	.01	.03
Race/Ethnicity X Racial Diversity	--	--	.07	.25
Race/Ethnicity X Managerial Racial Diversity	--	--	-.26	.21
Race/Ethnicity X Diversity Climate	--	--	-.00	.04
Diversity Climate X Gender Diversity	--	--	.01	.13
Diversity Climate X Racial Diversity	--	--	-.10	.16
Gender X Gender Diversity X Managerial Gender Diversity	--	--	-.16	.55
Race/Ethnicity X Racial Diversity X Managerial Racial Diversity	--	--	-.63	.70
Gender X Gender Diversity X Diversity Climate	--	--	.19	.14
Race/Ethnicity X Racial Diversity X Diversity Climate	--	--	.14	.25
<i>Between-Units Effects (Level 2)</i>				
Gender Diversity	-.17	.09	.01	.13
Racial Diversity	.21	.16	.10	.19
Managerial Gender Diversity	.19*	.08	.18	.12
Managerial Racial Diversity	-.03	.10	-.03	.10
Gender Diversity X Managerial Gender Diversity	--	--	.15	.47
Racial Diversity X Managerial Racial Diversity	--	--	1.36*	.67
Education Diversity	.06	.14	.05	.14
-2 log-likelihood	13569.20		13552.86	
Pseudo-R-squared	.12		.12	

Note. * $p < .05$. ** $p < .01$.

Table 6. Tests of Indirect Effects, Sample 1.

Variable	Indirect Effect	95% Confidence Interval	
		Lower Bound	Upper Bound
Between-Person Effects			
GMA → DC → Job Satisfaction	-.02	-.11	.06
GMA → DC → Organizational Commitment	-.02	-.09	.05
GMA → DC → Turnover Intentions	.01	-.03	.04
RMA → DC → Job Satisfaction	.04	-.11	.20
RMA → DC → Organizational Commitment	.03	-.10	.16
RMA → DC → Turnover Intentions	-.02	-.08	.05

Note. GMA = Gender Managerial Diversity; DC = Diversity Climate; RMA = Racial Managerial Diversity.

Table 7. Means, Standard Deviations, and Correlations for Sample 2.

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Gender	.72	.44	--										
2. Race/Ethnicity	.17	.37	.03**	--									
3. Supervisor-Subordinate Gender Similarity	.65	.47	.19**	-.02	--								
4. Supervisor-Subordinate Race Similarity	.77	.42	-.01	-.68**	.03**	--							
5. Gender Diversity	.73	.16	.36**	-.09**	.14**	.08**	--						
6. Racial Diversity	.16	.15	-.07**	.42**	-.08**	-.33**	-.21**	--					
7. Managerial Gender Diversity	.44	.27	.05**	-.03*	.04**	.02	.15**	-.09**	--				
8. Managerial Racial Diversity	.07	.13	-.04**	.11**	-.04*	-.17**	-.14**	.28**	-.05**	--			
9. Diversity Climate	3.95	.67	-.06**	-.10**	-.02	.08**	-.01	-.06**	.01	-.00	--		
10. Job Satisfaction	4.05	.73	.03*	-.04**	-.00	.05**	.03*	-.04**	.01	-.02	.58**	--	
11. Organizational Commitment	4.11	.69	-.02	-.04**	-.03*	.05**	-.02	-.02	.00	-.00	.65**	.80**	--
12. Turnover Intentions	1.58	.89	-.05**	.06**	-.02	-.07**	-.04**	-.03**	-.00	.03*	-.36**	-.64**	-.61**

Note. Racial diversity = the proportion of minority (i.e., non-White) employees in each unit; gender diversity = the proportion of women employees in each unit; managerial racial diversity = (the proportion of minority (i.e., non-White) managers in each unit); managerial gender diversity = the proportion of women managers in each unit); race/Ethnicity is coded 1= minority employees, 0 = majority employees; gender is coded 1= female employees, 0 = male employees. * $p < .05$; ** $p < .01$. Scale ranged from 1–5 for diversity climate, job satisfaction, organizational commitment, and turnover intentions.

Table 8. Hierarchical Linear Modeling Results for Job Satisfaction as the Outcome, Sample 2.

Independent Variable	Job Satisfaction			
	Model 1		Model 2	
	β	SE	β	SE
Intercept	3.97**	.06	3.99**	.05
<i>Within-units Effects (Level 1)</i>				
Gender	.10**	.01	.11**	.03
Race/Ethnicity	.05	.06	.10	.07
Diversity Climate	.64**	.02	.64**	.02
Supervisor-Subordinate Gender Similarity (SSGS)	.00	.02	.02	.04
Supervisor-Subordinate Race Similarity (SSRS)	.03	.04	.05	.04
Gender X Gender Diversity	--	--	-.39	.35
Gender X Managerial Gender Diversity	--	--	.16*	.08
Gender X Diversity Climate	--	--	-.01	.03
Gender X SSGS	--	--	-.04	.05
Race/Ethnicity X Racial Diversity	--	--	-.33	.43
Race/Ethnicity X Managerial Racial Diversity	--	--	-.24	.18
Race/Ethnicity X Diversity Climate	--	--	-.04	.06
Race/Ethnicity X SSRS	--	--	-.18*	.09
Diversity Climate X Gender Diversity	--	--	-.71**	.26
Diversity Climate X Racial Diversity	--	--	.19	.11
SSGS X Gender Diversity	--	--	-.16	.48
SSRS X Racial Diversity	--	--	-.16	.39
Gender X Gender Diversity X Managerial Gender Diversity	--	--	.14	.55
Race/Ethnicity X Racial Diversity X Managerial Racial Diversity	--	--	.88	.68
Gender X Gender Diversity X Diversity Climate	--	--	.70*	.30
Race/Ethnicity X Racial Diversity X Diversity Climate	--	--	-.06	.29
Gender X Gender Diversity X SSGS	--	--	-.00	.56
Race/Ethnicity X Racial Diversity X SSRS	--	--	.66	.54

Note. * $p < .05$. ** $p < .01$.

Table 8 (cont'd).

Independent Variable	Job Satisfaction			
	Model 1		Model 2	
	β	SE	β	SE
<i>Between-Units Effects (Level 2)</i>				
Gender Diversity	-.07	.12	.29	.31
Racial Diversity	-.16	.12	-.05	.38
Managerial Gender Diversity	-.03	.05	-.13	.09
Managerial Racial Diversity	-.05	.09	-.07	.09
Gender Diversity X Managerial Gender Diversity	--	--	.02	.54
Racial Diversity X Managerial Racial Diversity	--	--	-.04	.46
-2 log-likelihood	8718.96		8673.60	
<i>Pseudo-R-squared</i>	.26		.27	

Note. * $p < .05$. ** $p < .01$.

Table 9. Hierarchical Linear Modeling Results for Organizational Commitment as the Outcome, Sample 2.

Independent Variable	Organizational Commitment			
	Model 1		Model 2	
	β	SE	β	SE
Intercept	4.11**	.04	4.08**	.04
<i>Within-units Effects (Level 1)</i>				
Gender	.05*	.02	.06*	.03
Race/Ethnicity	.04	.03	.10*	.04
Diversity Climate	.69**	.03	.69**	.03
Supervisor-Subordinate Gender Similarity (SSGS)	-.01	.03	-.00	.04
Supervisor-Subordinate Race Similarity (SSRS)	.02	.03	.06	.04
Gender X Gender Diversity	--	--	-.32	.29
Gender X Managerial Gender Diversity	--	--	.07	.08
Gender X Diversity Climate	--	--	-.01	.04
Gender X SSGS	--	--	-.03	.05
Race/Ethnicity X Racial Diversity	--	--	.03	.33
Race/Ethnicity X Managerial Racial Diversity	--	--	-.07	.14
Race/Ethnicity X Diversity Climate	--	--	-.01	.06
Race/Ethnicity X SSRS	--	--	-.26**	.07
Diversity Climate X Gender Diversity	--	--	-.68**	.26
Diversity Climate X Racial Diversity	--	--	.15	.11
SSGS X Gender Diversity	--	--	-.25	.34
SSRS X Racial Diversity	--	--	.24	.30
Gender X Gender Diversity X Managerial Gender Diversity	--	--	.12	.48
Race/Ethnicity X Racial Diversity X Managerial Racial Diversity	--	--	-.34	.58
Gender X Gender Diversity X Diversity Climate	--	--	.62*	.31
Race/Ethnicity X Racial Diversity X Diversity Climate	--	--	-.13	.28
Gender X Gender Diversity X SSGS	--	--	.23	.42
Race/Ethnicity X Racial Diversity X SSRS	--	--	.49	.50

Note. * $p < .05$. ** $p < .01$.

Table 9 (cont'd).

Independent Variable	Organizational Commitment			
	Model 1		Model 2	
	β	SE	β	SE
<i>Between-Units Effects (Level 2)</i>				
Gender Diversity	-.28*	.11	-.02	.23
Racial Diversity	-.12	.11	-.32	.29
Managerial Gender Diversity	-.01	.05	-.05	.08
Managerial Racial Diversity	-.01	.08	.00	.08
Gender Diversity X Managerial Gender Diversity	--	--	.06	.46
Racial Diversity X Managerial Racial Diversity	--	--	.56	.39
-2 log-likelihood	7634.48		7592.52	
<i>Pseudo-R-squared</i>	.35		.35	

Note. * $p < .05$. ** $p < .01$.

Table 10. Hierarchical Linear Modeling Results for Turnover Intentions as the Outcome, Sample 2.

Independent Variable	Turnover Intentions			
	Model 1		Model 2	
	β	SE	β	SE
Intercept	1.81**	.05	1.87**	.07
<i>Within-units Effects (Level 1)</i>				
Gender	-.13**	.04	-.17**	.06
Race/Ethnicity	-.01	.05	-.11	.08
Diversity Climate	-.54**	.03	-.54**	.05
Supervisor-Subordinate Gender Similarity (SSGS)	-.04	.03	-.07	.07
Supervisor-Subordinate Race Similarity (SSRS)	-.12**	.03	-.18**	.05
Gender X Gender Diversity	--	--	.71	.46
Gender X Managerial Gender Diversity	--	--	-.02	.12
Gender X Diversity Climate	--	--	-.01	.05
Gender X SSGS	--	--	.07	.08
Race/Ethnicity X Racial Diversity	--	--	.19	.49
Race/Ethnicity X Managerial Racial Diversity	--	--	.29	.27
Race/Ethnicity X Diversity Climate	--	--	-.02	.06
Race/Ethnicity X SSRS	--	--	.54	.35
Diversity Climate X Gender Diversity	--	--	.98*	.40
Diversity Climate X Racial Diversity	--	--	-.51*	.25
SSGS X Gender Diversity	--	--	.64	.54
SSRS X Racial Diversity	--	--	.20	.39
Gender X Gender Diversity X Managerial Gender Diversity	--	--	.70	.69
Race/Ethnicity X Racial Diversity X Managerial Racial Diversity	--	--	.30	1.25
Gender X Gender Diversity X Diversity Climate	--	--	-.91*	.44
Race/Ethnicity X Racial Diversity X Diversity Climate	--	--	.33	.45
Gender X Gender Diversity X SSGS	--	--	-.58	.64
Race/Ethnicity X Racial Diversity X SSRS	--	--	-1.57*	.72

Note. * $p < .05$. ** $p < .01$.

Table 10 (cont'd).

Independent Variable	Turnover Intentions			
	Model 1		Model 2	
	β	SE	β	SE
<i>Between-Units Effects (Level 2)</i>				
Gender Diversity	.00	.13	-.62	.37
Racial Diversity	.04	.14	-.04	.40
Managerial Gender Diversity	-.02	.06	-.07	.11
Managerial Racial Diversity	.16	.14	.13	.16
Gender Diversity X Managerial Gender Diversity	--	--	-.21	.64
Racial Diversity X Managerial Racial Diversity	--	--	-.76	.92
-2 log-likelihood	11621.32		11565.32	
<i>Pseudo-R-squared</i>	.13		.14	

Note. * $p < .05$. ** $p < .01$.

Table 11. Tests of Indirect Effects, Sample 2.

Variable	Indirect Effect	95% Confidence Interval	
		Lower Bound	Upper Bound
Between-Person Effects			
GMA → DC → Job Satisfaction	.00	-.05	.06
GMA → DC → Organizational Commitment	.00	-.06	.06
GMA → DC → Turnover Intentions	-.00	-.04	.04
RMA → DC → Job Satisfaction	.04	-.04	.12
RMA → DC → Organizational Commitment	.04	-.04	.12
RMA → DC → Turnover Intentions	-.03	-.09	.03

Note. GMA = Gender Managerial Diversity; DC = Diversity Climate; RMA = Racial Managerial Diversity.

Table 12. Summary of Hypothesis Tests Across both Samples.

Hypotheses	Results		Notes	
	Sample 1: Government	Sample 2: Bank	Sample 1: Government	Sample 2: Bank
<i>H1</i> : Nominal characteristics (gender and race) will interact with workgroup composition—that is, the proportion of women and racial minorities—to predict attitudinal outcomes (job satisfaction, organizational commitment, turnover intentions). Men and White members will more committed, report higher job satisfaction, and lower turnover intentions in demographically similar group context than women and racial minority group members.	Not Supported	Not Supported		
<i>H2</i> : There will be a three-way interaction between workgroup composition—that is, the proportion of women and racial minorities—nominal characteristics (gender and race), and (a) supervisor-subordinate similarity and (b) managerial composition—that is, the proportion of women and racial minorities in managerial positions within each unit to predict attitudinal outcomes (job satisfaction, organizational commitment, turnover intentions).	Not Supported	Partial support		Only in the case of supervisor-subordinate similarity and only when the nominal characteristic is race/ethnicity
<i>H3</i> : There will be a three-way interaction between workgroup composition—that is, proportion of women and racial minorities—nominal characteristics (gender and race), and diversity/inclusion in predicting attitudinal outcomes (job satisfaction, organizational commitment, turnover intentions).	Partial Support	Partial support	Only in the case of race/ethnicity	Only in the case of gender
Research question 1	Null findings	Null findings		
Research question 2	Not tested	Not tested		

Figure 1: A pictorial representation of conceptual model.

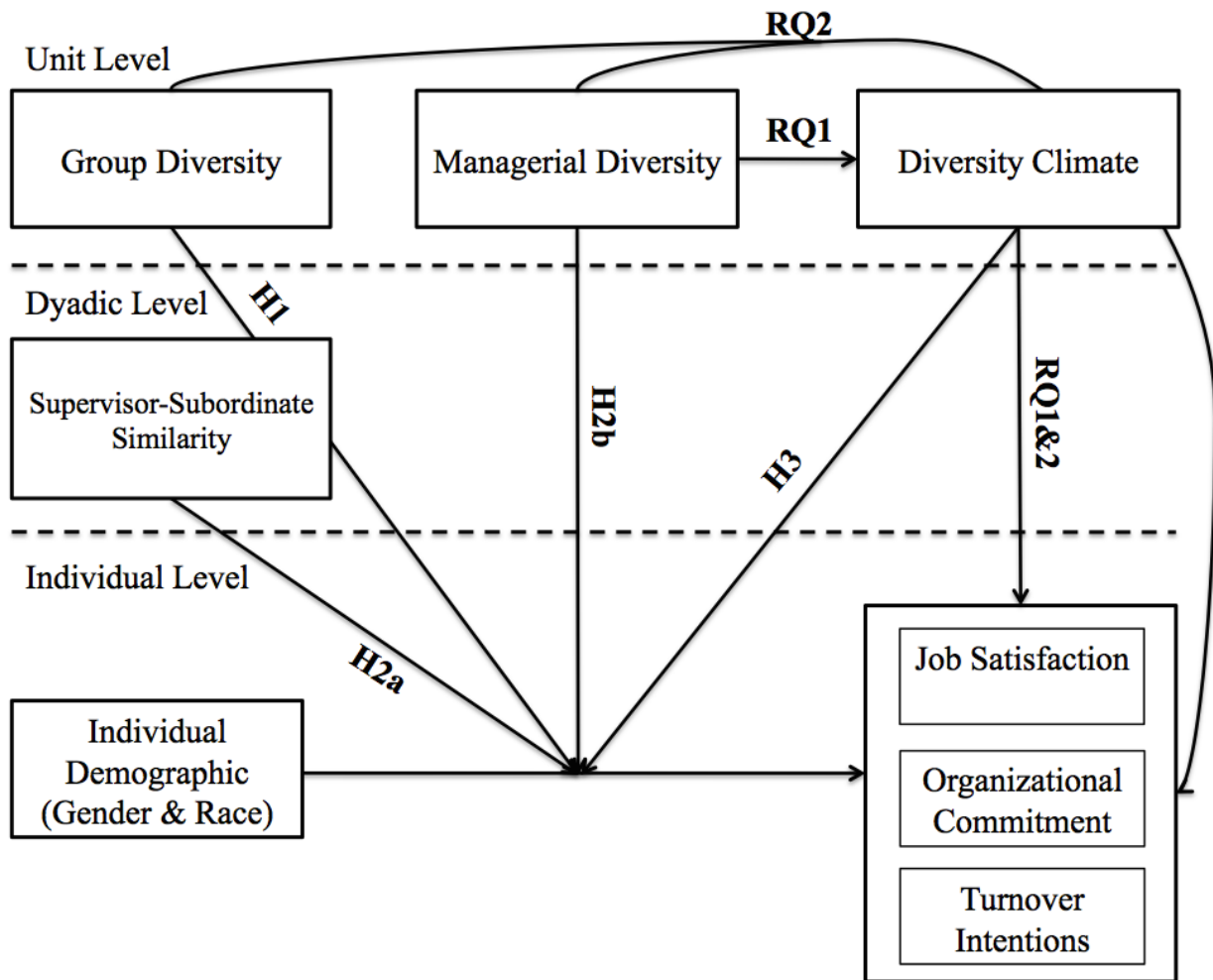


Figure 2: Lateral versus vertical comparisons as an assessment of power and status dynamics within groups.

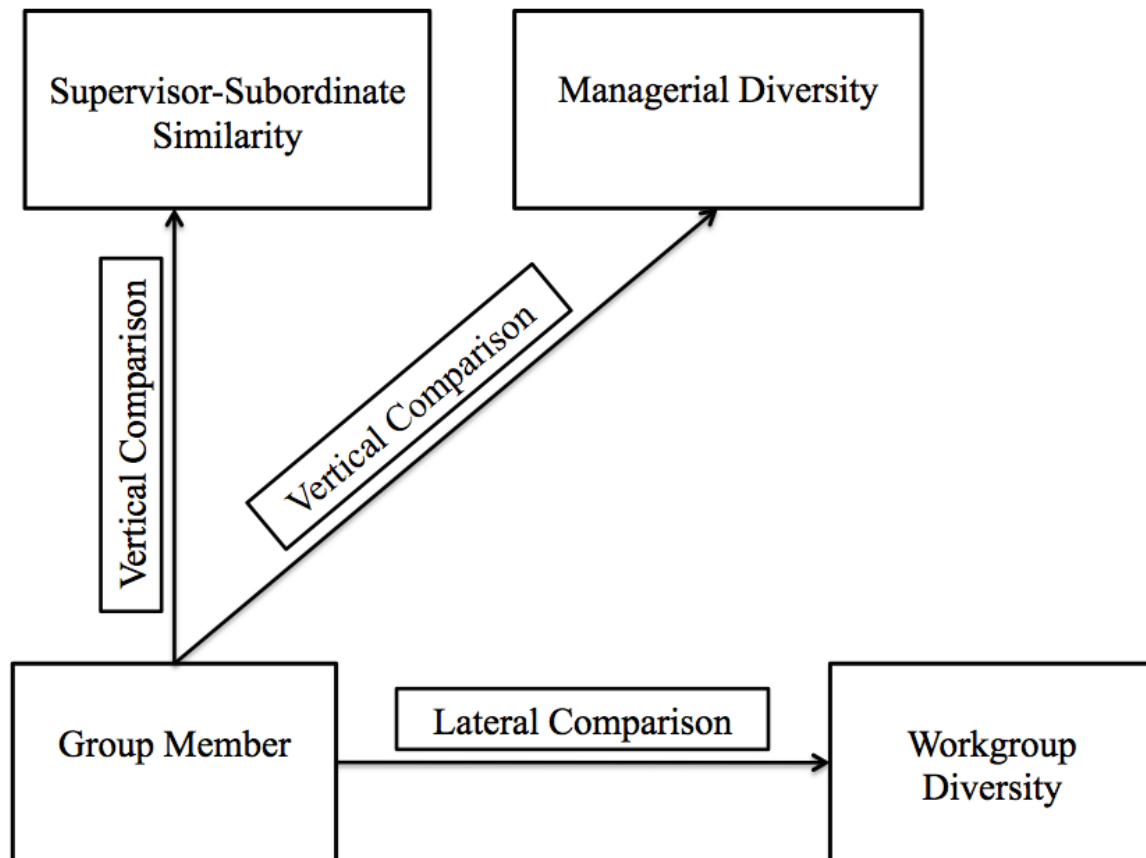


Figure 3: Racial diversity interacting with managerial racial diversity to predict turnover intentions.

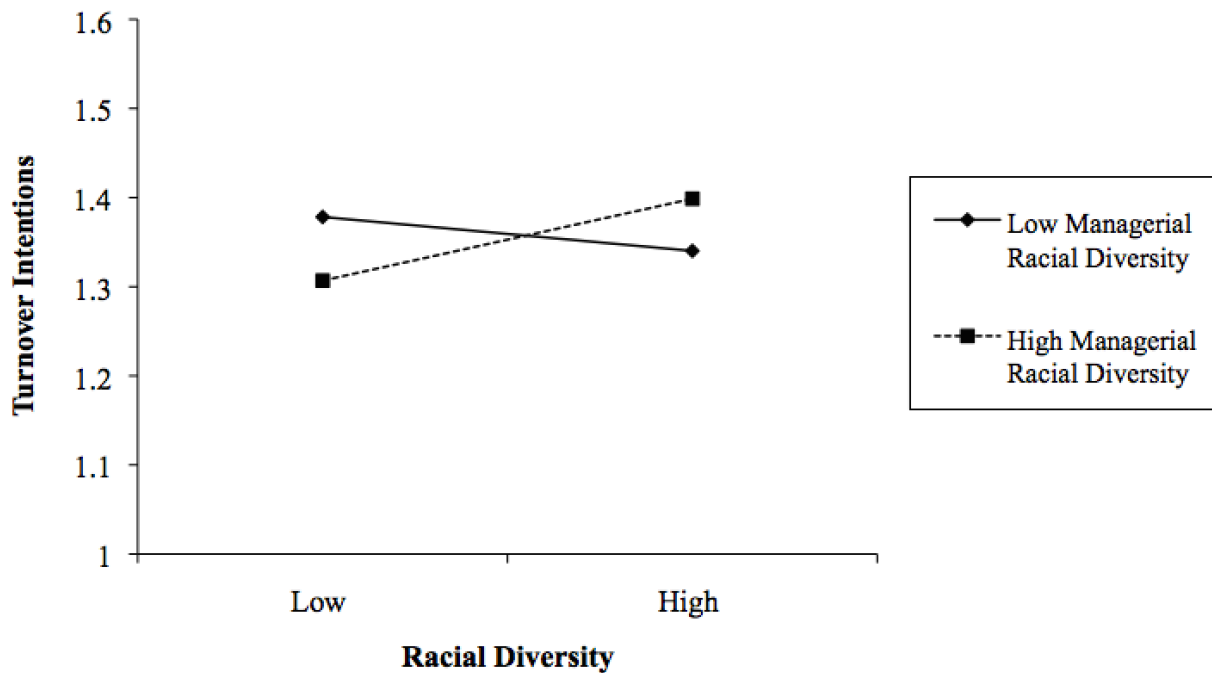


Figure 4: A three-way interaction between race/ethnicity, diversity climate, and racial diversity to predict job satisfaction.

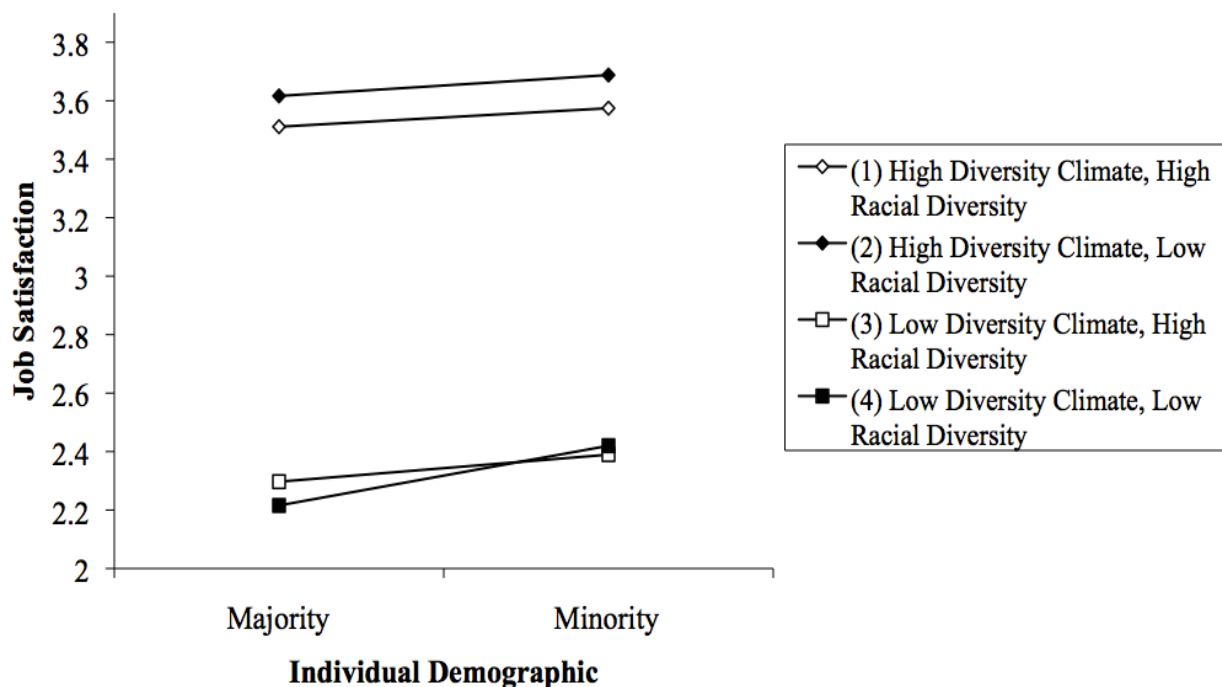


Figure 5: Diversity climate interacting with racial diversity to predict job satisfaction.

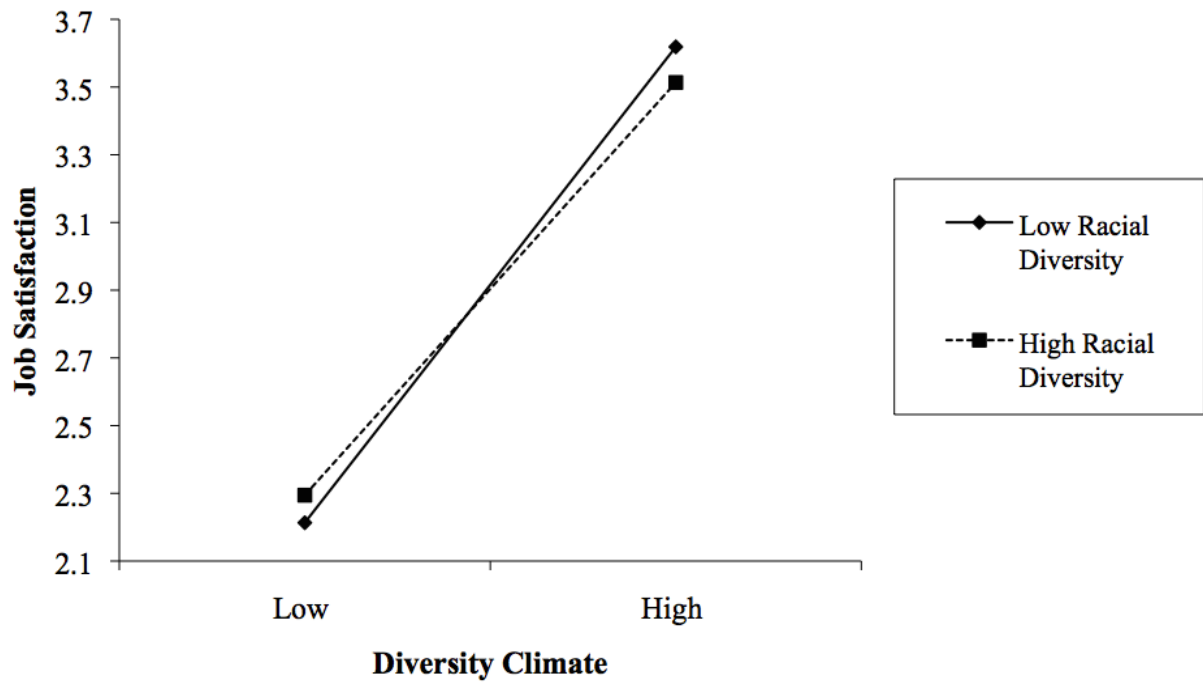


Figure 6: Race/Ethnicity interacting with diversity climate to predict organizational commitment.

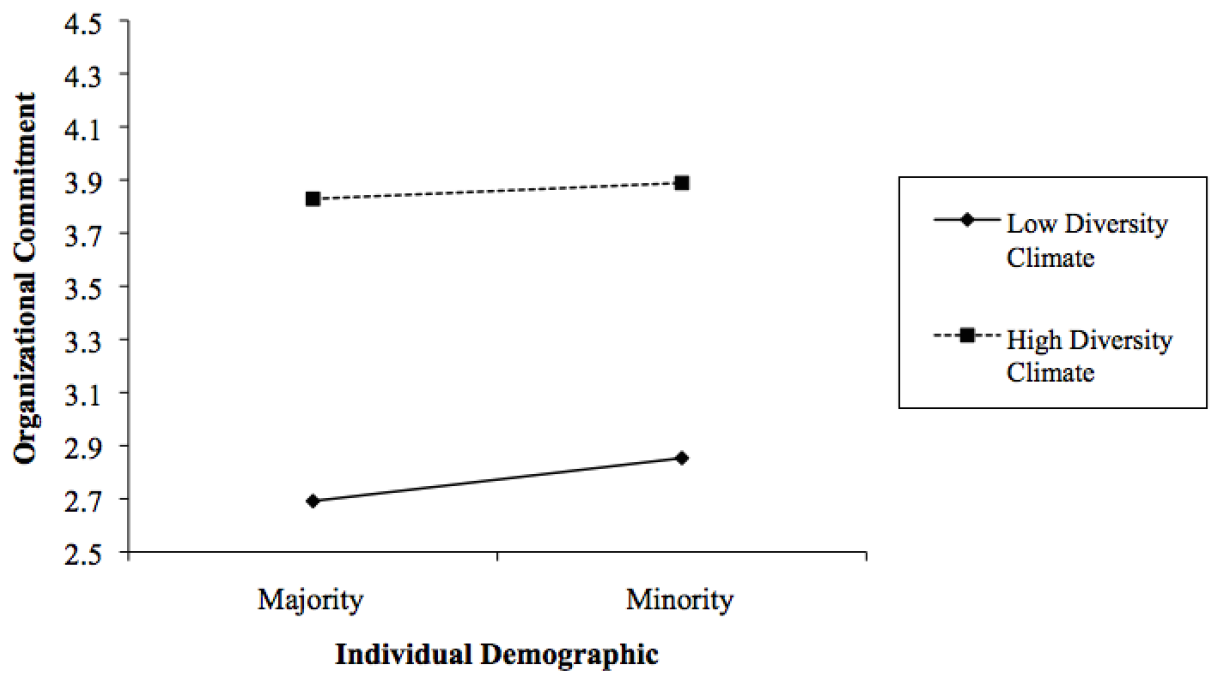


Figure 7: A three-way interaction between race/ethnicity, racial diversity, and supervisor-subordinate race/ethnic similarity to predict turnover intentions.

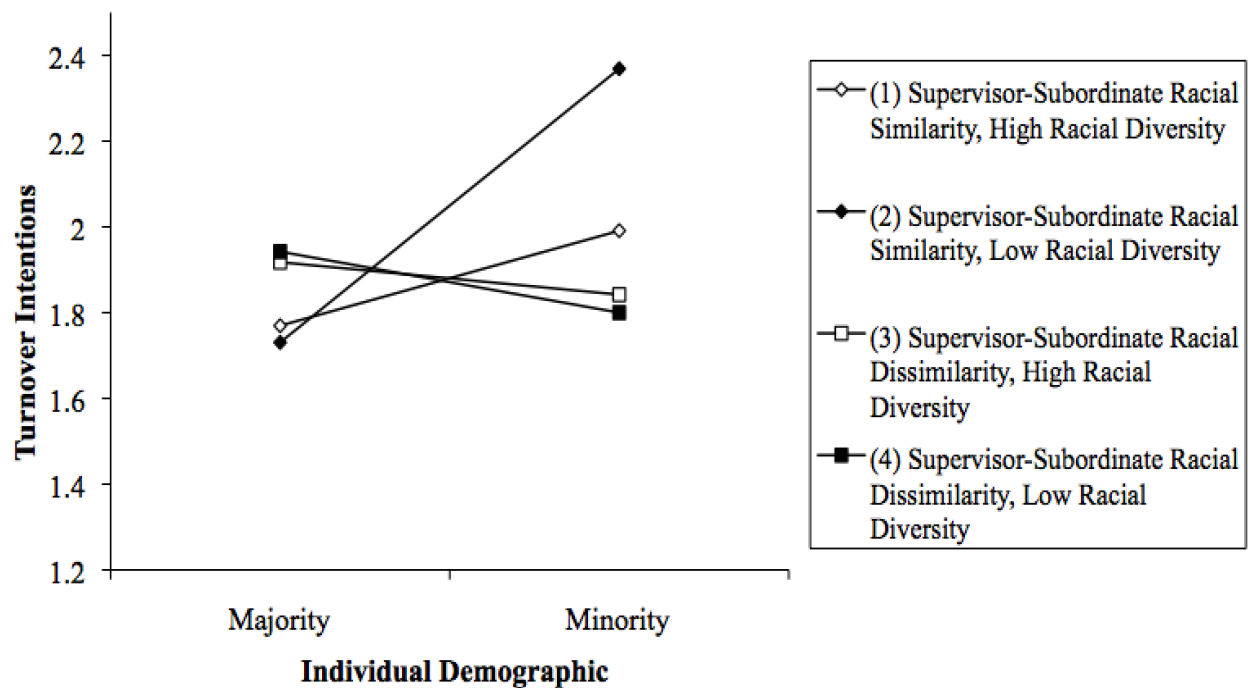


Figure 8: Race/Ethnicity and supervisor-subordinate race/ethnic similarity interacting to predict job satisfaction.

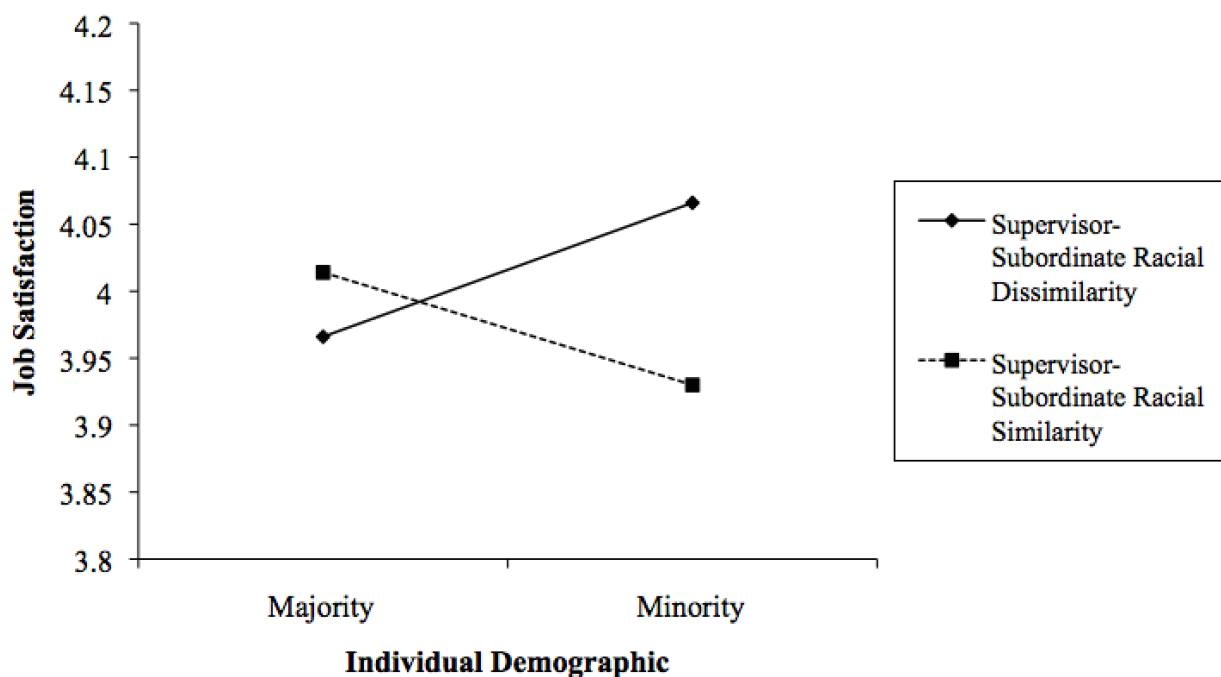


Figure 9: Race/Ethnicity and supervisor-subordinate race/ethnic similarity interacting to predict organizational commitment.

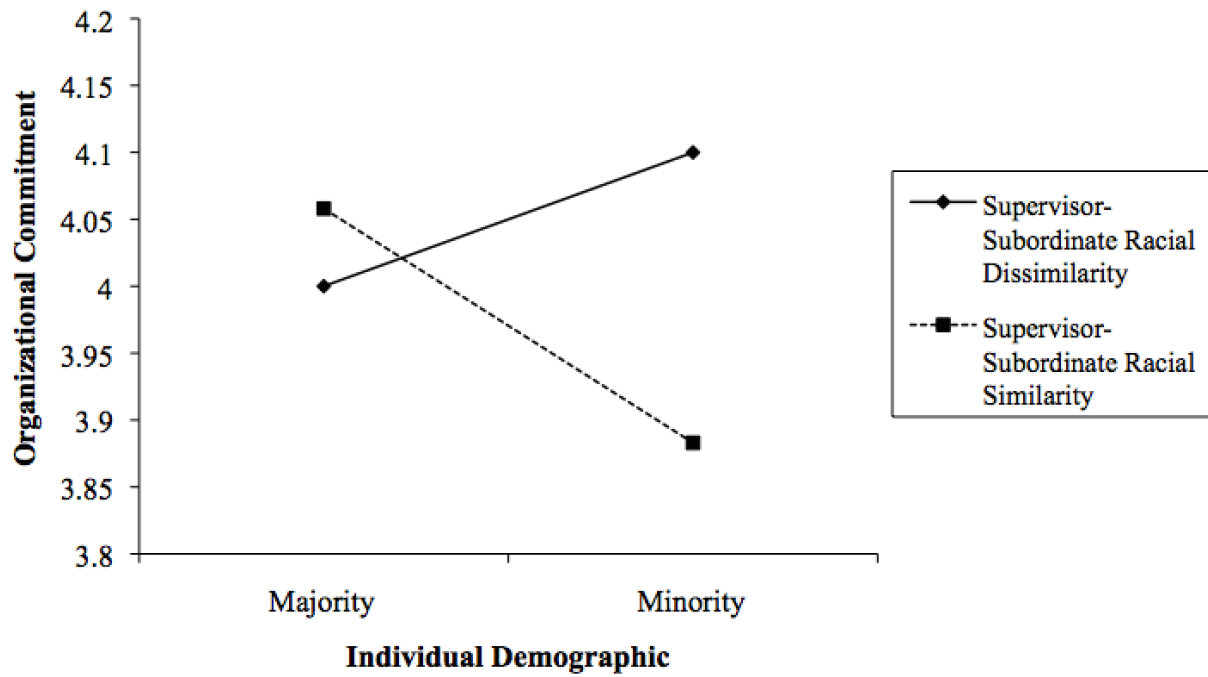


Figure 10: Gender interacting with managerial gender diversity to predict job satisfaction.

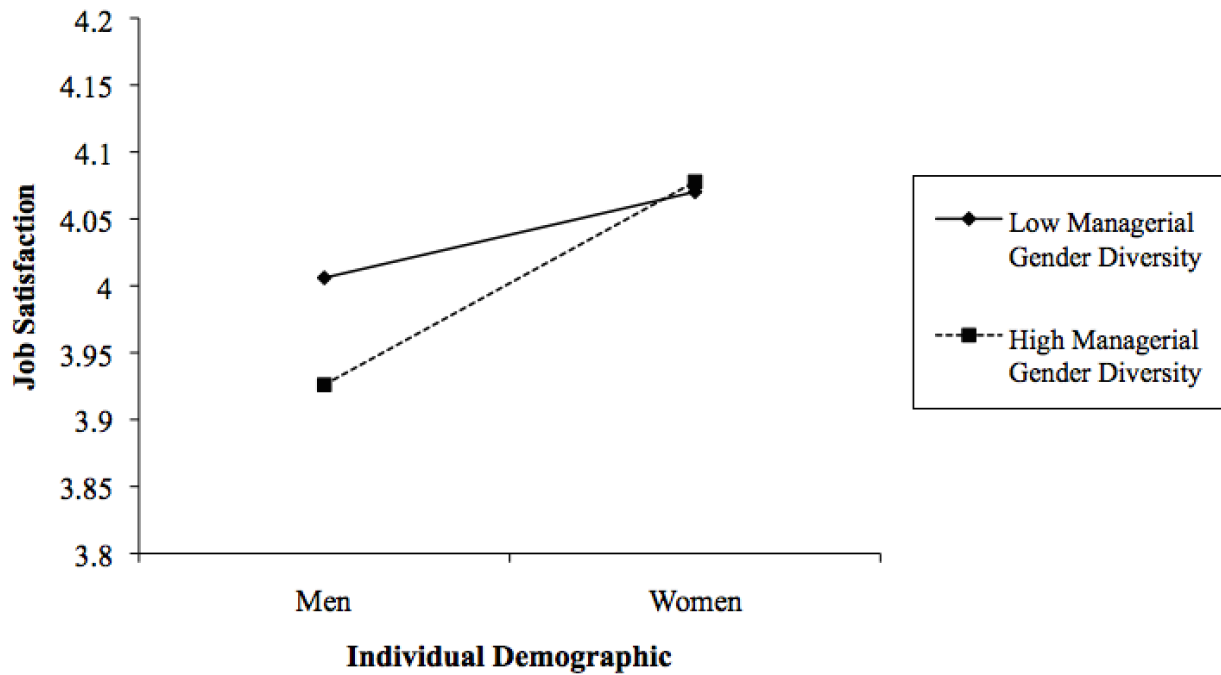


Figure 11: A three-way interaction between gender, gender diversity, and diversity climate to predict job satisfaction.

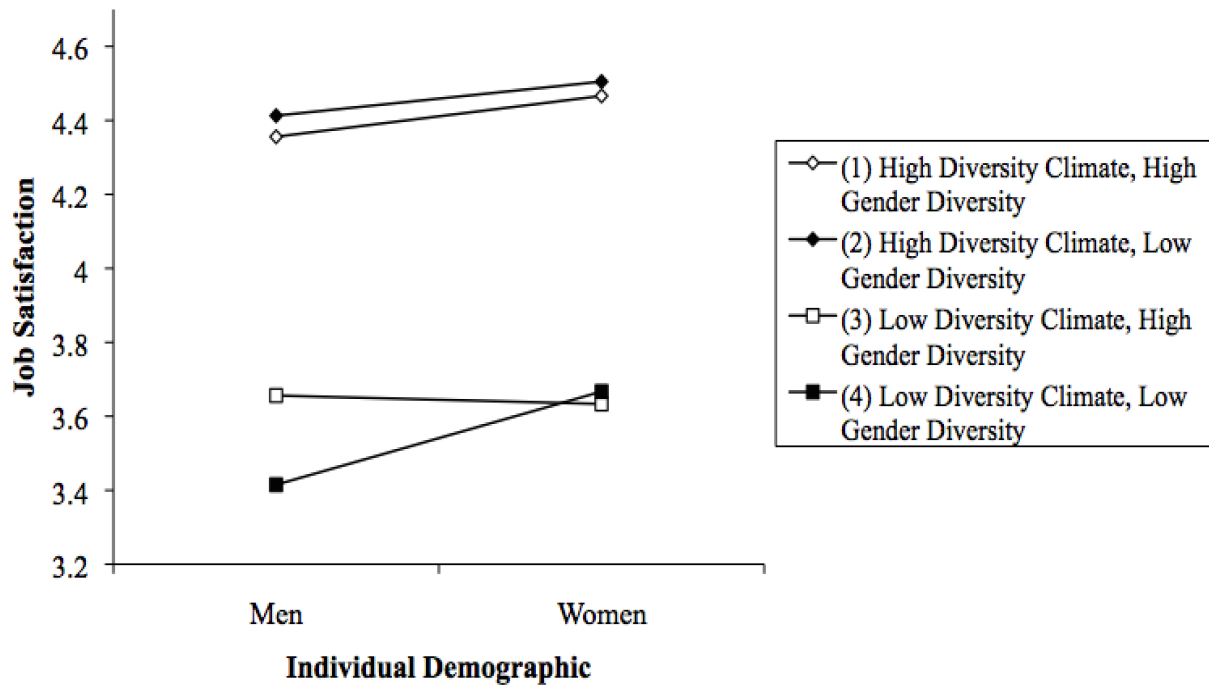


Figure 12: A three-way interaction between gender, gender diversity, and diversity climate to predict organizational commitment.

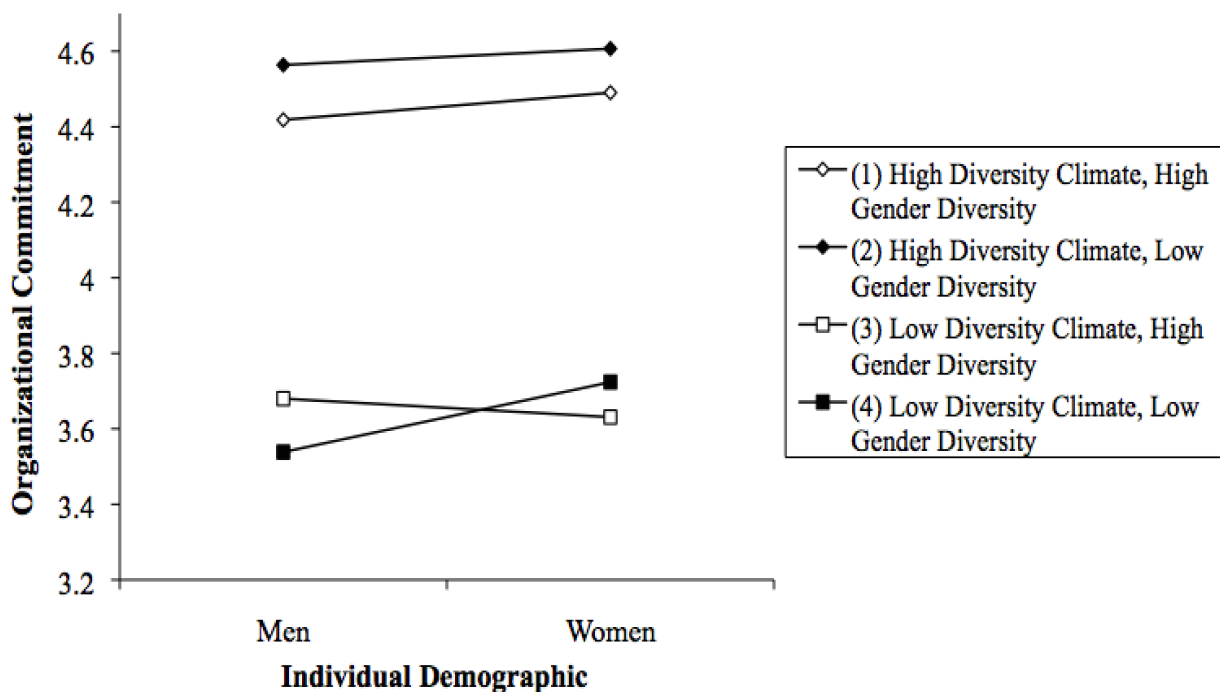


Figure 13: A three-way interaction between gender, gender diversity, and diversity climate to predict turnover intentions.

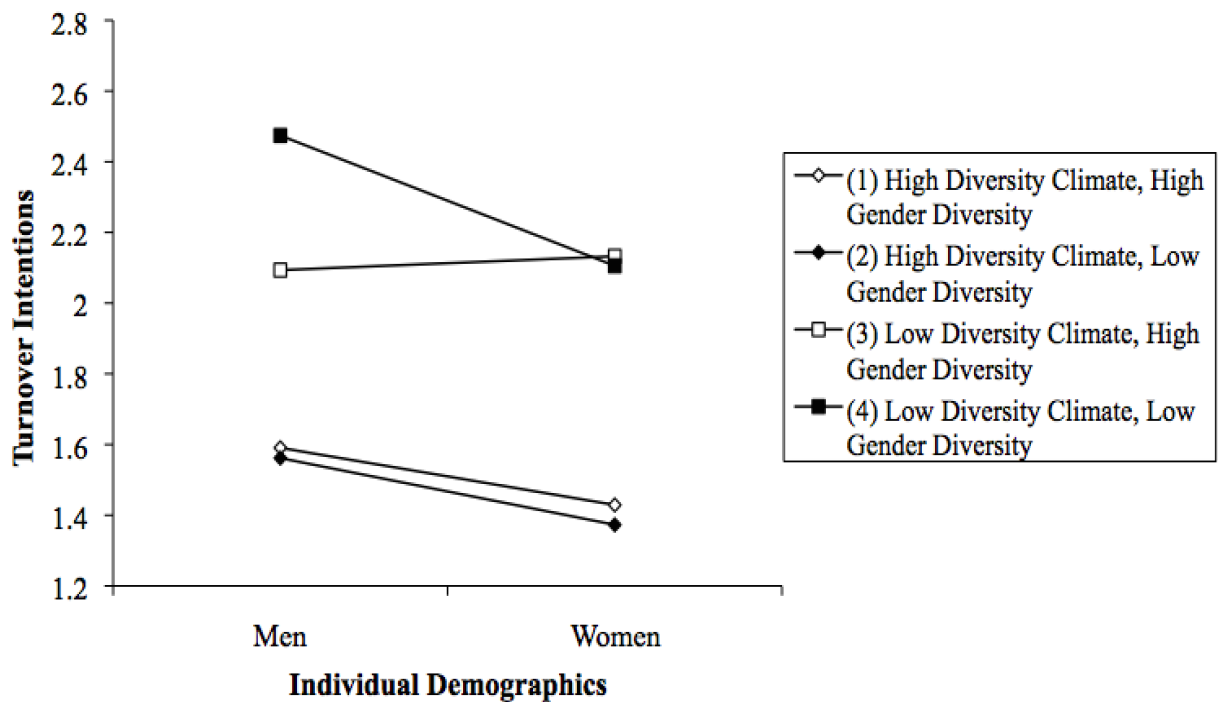


Figure 14: Diversity climate and gender diversity interacting to predict job satisfaction.

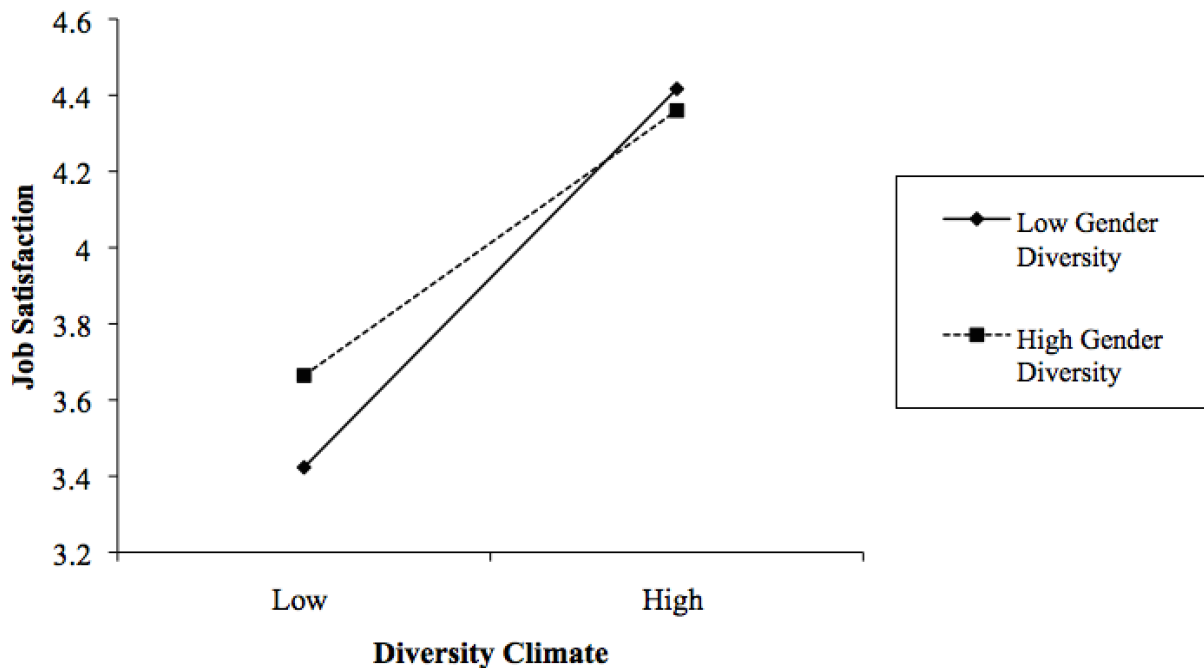


Figure 15: Diversity climate and gender diversity interacting to predict organizational commitment.

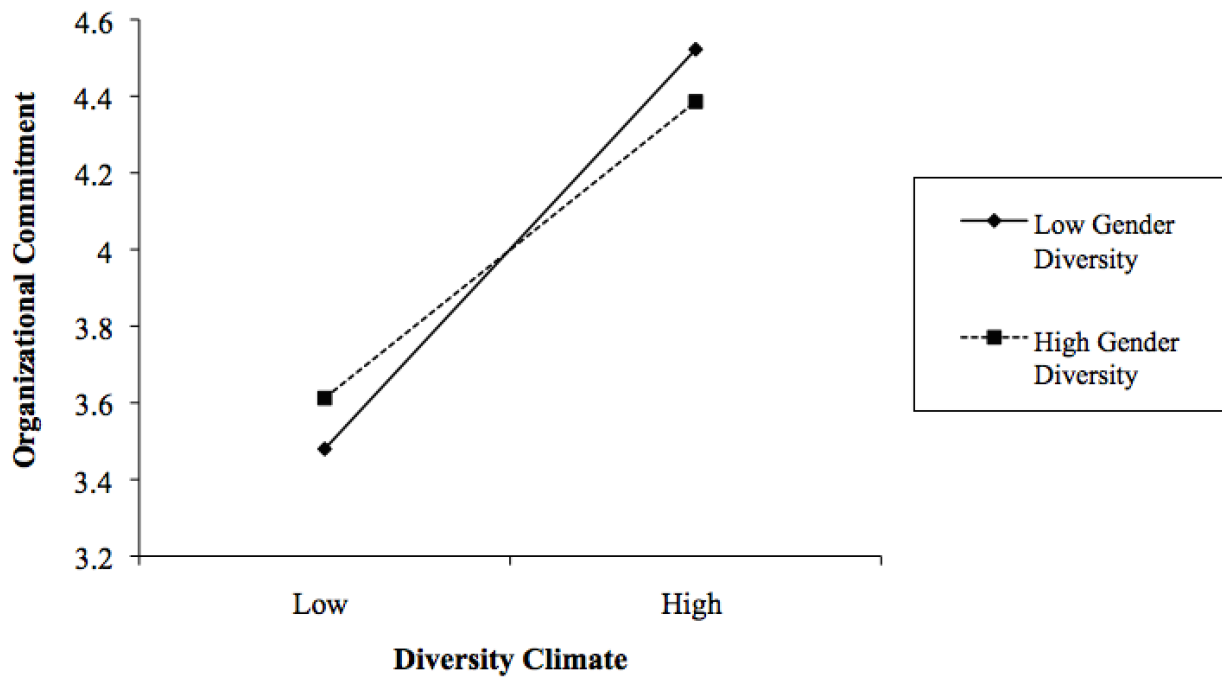


Figure 16: Diversity climate and gender diversity interacting to predict turnover intentions.

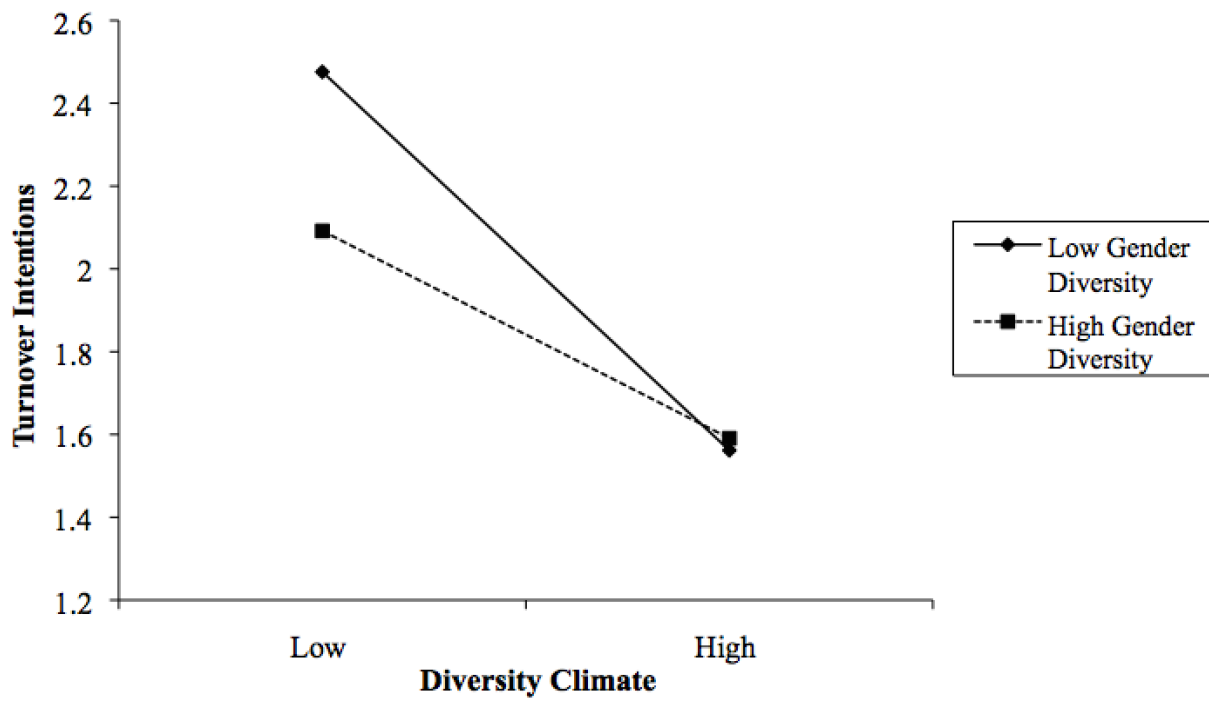
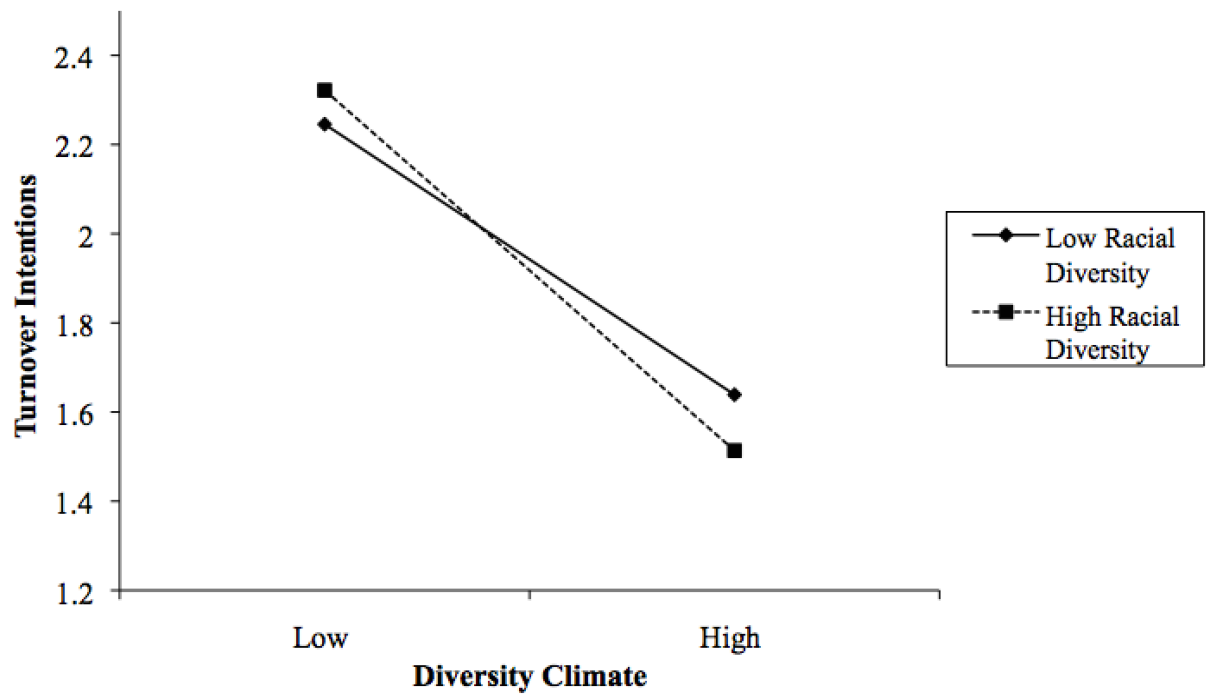


Figure 17: Diversity climate and racial diversity interacting to predict turnover intentions.



Appendix B: Measures

Government Data Measures

Diversity Climate

1. [This company] values diversity in the workplace.
2. [This company] has an inclusive work environment where individual differences are respected.
3. My workgroup has a climate in which diverse perspectives are encouraged and valued.
4. Employees at [This company] are able to contribute to their fullest potential (without regard to such characteristics as age, race, ethnicity, disability, etc.).
5. My colleagues treat co-workers with dignity and respect.

Job Satisfaction

1. My job gives me a feeling of personal accomplishment.
2. I believe I have the opportunity for growth in my current job.
3. I am paid fairly for the work I do.

Organizational Commitment

1. I would recommend [This company] to friends and family as a great place to work.
2. I am proud to work for the [This company].
3. My career goals can be met at [This company].

Turnover Intentions

1. I intend to stay with [This company] for at least another 12 months.

Regional Bank Data Measures

Diversity Climate

1. Everyone has a fair chance to have a successful career at [This company], regardless of his or her differences or background.
2. At [This company], colleagues treat one another with trust and mutual respect.
3. [This company] is on the right track in creating a culture of inclusion.
4. Senior management actively supports diversity programs and events.
5. My manager works effectively with people of different kinds of backgrounds.

Job Satisfaction

1. The work I do makes me feel good about myself.
2. Considering everything, how satisfied are you with your job?
3. Considering everything, how would you rate your overall satisfaction with [This company] at the present time?

Organizational Commitment

1. I would recommend [This company] to a friend as a place to work.
2. I feel personally committed to [This company's] success.
3. I feel like I really belong at [This company].

Turnover Intentions

1. If you have your own way, will you still be working for [This company] 12 months from now?

REFERENCES

REFERENCES

- Allen, D. G., Weeks, K. P., & Moffitt, K. R. (2005). Turnover intentions and voluntary turnover: The moderating roles of self-monitoring, locus of control, proactive personality, and risk aversion. *Journal of Applied Psychology*, 90, 980-990.
- Avery, D., & McKay, P. (2010). Doing diversity right: An empirically based approach to effective diversity management. In G. Hodgkinson & J. K. Ford (Eds.), *International Review of Industrial and Organizational Psychology*, (Vol. 25, pp. 227-252). West Sussex, England: Wiley.
- Avery, D. R., McKay, P. F., Wilson, D. C., & Tonidandel, S. (2007). Unequal attendance: The relationships between race, organizational diversity cues, and absenteeism. *Personnel Psychology*, 60, 875-902.
- Avey, J. B., West, B. J. & Crossley, C. D. (2008). The association between ethnic congruence in the supervisor–subordinate dyad and subordinate organizational position and salary. *Journal of Occupational and Organizational Psychology* 81, 551-566.
- Acquavita, S. P., Pittman, J., Gibbons, M., & Castellanos-Brown, K. (2009). Personal and organizational diversity factors' impact on social workers' job satisfaction: Results from a national Internet-based survey. *Administration in Social Work*, 33, 151-166.
- Baldi, S. & McBrier, D. B., (1997). Do the determinants of promotion differ for blacks and whites? Evidence from the U.S. labor market. *Work and Occupations* 24, 478-97.
- Barnett, W., Baron, J., & Stuart, T. (2000). Avenues of attainment: Occupational demography and organizational careers in the California civil service. *American Journal of Sociology*, 106, 88-144.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99-120.
- Belkin, L. 2003. The opt-out revolution. *New York Times Magazine*, October 26, 42-49.
- Bauer, T. N., & Green, S. G. (1996). The development of leader-member exchange: A longitudinal test. *Academy of Management Journal*, 39, 1538-1567.
- Bell, S. T., Villado, A. J., Lukasik, M., Belau, L., & Briggs, A. (2011). Getting specific: A meta-analysis of the team demographic diversity and performance relationships. *Journal of Management*, 37, 709-743.
- Bliese, P (2000). Within-group agreement, non-independence, and reliability. In K. Klein & S. Kozlowski (Eds.) *Multi-level theory, research, and methods in organizations*. San Francisco: CA: Jossey-Bass (pp.349-381).

- Buttner, E. H., Lowe, K. B., & Billing-Harris, L. (2012). An empirical test of diversity climate dimensionality and relative effects on employee of color outcomes. *Journal of Business Ethics*, 110, 247-258.
- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, 17, 475-482.
- Brewer, M. B. & Miller, N. (1984). Beyond the contact hypothesis: Theoretical perspectives on desegregation. In N. Miller & M. B. Brewer (Eds), *Groups in contact: The psychology of desegregation*, (pp. 281-302). Orlando, FL: Academic Press.
- Byrne, D. (1971). *The attraction paradigm*. New York: Academic Press.
- Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). The Michigan Organizational Assessment Questionnaire. Unpublished manuscript, University of Michigan, Ann Arbor.
- Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology*, 83, 234-246.
- Chatman, J. A., & O'Reilly, C. A. (2004). Asymmetric reactions to work group sex diversity among men and women. *Academy of management Journal*, 47, 193-208.
- Chattopadhyay, P., Tluchowska, M., & George, M. (2004). Identifying the ingroup: A closer look at the influence of demographic dissimilarity on employee social identity. *Academy of Management Review*, 29, 180-202.
- Chen, X., Liu, D., & Portnoy, R. (2012). A multilevel investigation of motivational cultural intelligence, organizational diversity climate, and cultural sales: evidence from U.S. real estate firms. *Journal of Applied Psychology*, 97, 93-106.
- Choi, S. (2013). Demographic diversity of managers and employee job satisfaction: Empirical analysis of the federal case. *Review of Public Personnel Administration*, 33, 275-298.
- Cohen, L. E., & Broschak, J. P. (2013). Whose jobs are these? The impact of the proportion of female managers on the number of new management jobs filled by women versus men. *Administrative Science Quarterly*, 58, 509-541.
- Cohen, L. E., Broschak, J. P., & Haveman, H. A. (1998). And then there were more? The effects of organizational sex composition on hiring and promotion. *American Sociological Review* 63, 711-727.
- Cox, T. H. Jr. (1994). *Cultural diversity in organizations: Theory, research, and practice*. San Francisco: Berrett-Koehler.

- Daley, D. (1996). Paths of glory and the glass ceiling: Differing patterns of career advancement among women and minority federal employees. *Public Administration Quarterly*, 20, 143-162.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109, 573-598.
- Elliott, J. R., & Smith, R. A. (2004). Race, gender, and workplace power. *American Sociological Review*, 69, 365-386.
- Elsass, P. M., & Graves, L. M. (1997). Demographic diversity in decision-making groups: The experience of women and people of color. *Academy of Management Review*, 22, 946-973.
- Elvira, M. M., & Cohen, L. E. (2001). Location matters: A cross-level analysis of the effects of organizational sex composition on turnover. *Academy of Management Journal*, 44, 591-605.
- Ely, R. J., & Thomas, D. A. (2001). Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly*, 46, 229-273.
- Ely, R. J. (1994). The effects of organizational demographics and social identity on relationships among professional women. *Administrative Science Quarterly* 39, 203-238.
- Friday, S. S., Moss, S. E., & Friday, E. (2004). Socioethnic explanations for racioethnic differences in job satisfaction. *Journal of Management Development*, 23, 152-168.
- Foley, S., Linnehan, F., Greenhaus, J. H., & Weer, C. H. (2006). The impact of gender similarity, racial similarity, and work culture on family-supportive supervision. *Group and Organization Management*, 31, 420-441.
- Green, S. G., Anderson, S. E., & Shivers, S. L. (1996). Demographic and organizational influence on leader-member exchange and related work attitudes. *Organizational Behavior and Human Decision Processes*, 66, 203-214.
- Gonzalez, J. A., & DeNisi, A. S. (2009). Cross-level effects of demography and diversity climate on organizational attachment and firm effectiveness. *Journal of Organizational Behavior*, 30, 21-40.
- Groggins, A., & Ryan, A. M. (2013). Embracing uniqueness: The underpinnings of a positive climate for diversity. *Journal of Occupational and Organizational Psychology*, 86, 264-282.
- Harrison D. A., & Klein, K. J. (2007). What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review*, 32, 1199-1228.

- Hebl, M., & Avery, D. R. (2012). *Diversity in organizations*. In Weiner, I.B., Schmitt, N.W. & Highhouse, S., *Handbook of Psychology, Vol 12: Industrial and Organizational Psychology*, (pp. 677-697). Hoboken, NJ: John Wiley & Sons.
- Hewstone, M., Martin, R., Hammer-Hewstone, C., Crisp, R. J., & Voci, A. (2001). *Minority-majority relations in organizations: challenges and opportunities*. In *Social Identity Processes in Organizational Contexts*, ed. MA Hogg, DJ Terry, (pp. 67-86). Philadelphia, PA: Psychological Press.
- Herdman, A. O., & McMillan-Capehart, A. (2010). Establishing a diversity program is not enough: Exploring the determinants of diversity climate. *Journal of Business and Psychology*, 25, 39-53.
- Hofhuis, J., van der Zee, K. I., & Otten, S. (2012). Social identity patterns in culturally diverse organizations: The role of diversity climate. *Journal of Applied Social Psychology*, 42, 964-989.
- Hoppe, A., Fujishiro, K., & Heaney, C. (2013). Workplace racial/ethnic similarity, job satisfaction, and lumbar back health among warehouse workers: Asymmetric reactions across racial/ethnic groups. *Journal of Organizational Behavior*, 35, 172-193.
- Hoobler, J. M., Lemmon, G., & Wayne, S. J. (2014). Women's Managerial Aspirations An Organizational Development Perspective. *Journal of Management*, 40, 703-730.
- Huffman, M. L. (2013). Organizations, managers, and wage inequality. *Sex Roles*, 68, 216-222.
- Huffman, M. L., Cohen, P. N. & Pearlman, J. (2010). Engendering change: organizational dynamics and workplace gender desegregation, 1975-2005. *Administrative Science Quarterly* 55, 255-277.
- Ibarra, H. (1992). Homophily and differential returns: Sex differences in network structure and access in an advertising firm. *Administrative Science Quarterly*, 37, 422-447.
- Jackson, E. S., Brett, J. F., Sessa, V. I., Cooper, D. M., Julin, J. A., & Peyronnin, K. (1991). Some differences make a difference: individual dissimilarity and group heterogeneity as correlates of recruitment, promotions, and turnover. *Journal of Applied Psychology*, 76, 675-689.
- Jeanquart-Barone, S. (1996). Implications of racial diversity in the supervisor-subordinate relationship. *Journal of Applied Social Psychology*, 26, 935-944.
- Joshi A., Liao H., Jackson, S. E. (2006). Cross-level effects of workplace diversity on sales performance and pay. *Academy of Management Journal*, 49, 459-481.
- Joshi, A., Liao, H., & Roh, H. (2011). Bridging domains in workplace demography research: A review and reconceptualization. *Journal of Management*, 37, 521-552.

- Kalinoski, Z. T., Steele-Johnson, D., Peyton, E. J., Leas, K. A., Steinke, J., & Bowling, N. A. (2013). A meta-analytic evaluation of diversity training outcomes. *Journal of Organizational Behavior*, 34, 1076-1104.
- Kaplan, D. M., Wiley, J. W., & Maertz, C. P. (2011). The role of calculative attachment in the relationship between diversity climate and retention. *Human Resource Management*, 50, 271-287.
- Kanter, R. M. (1977a). *Men and Women of the Corporation*. New York: Basic Books.
- Kanter, R. M. (1977b). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, 82, 965-990.
- King, E. B., Hebl, M. R., George, J. M., & Matusik, S. F. (2010). Understanding tokenism: Antecedents and consequences of psychological climate for gender inequity. *Journal of Management*, 36, 537-554.
- Konrad, A., & Gutek, B. A. (1987). Theory and research on group composition: Applications to the status of women and minorities. In S. Oskamps and S. Spacapan (Eds.), *Interpersonal processes*, (pp. 85-113).
- Konrad, A. M., Winter, S., & Gutek, B. A. (1992). Diversity in work group sex composition: Implications for majority and minority members. In Tolbert, P. & Bachrach, S. B. (Eds), *Research in the Sociology of Organizations*, 10. Greenwich, CT: JAI Press, 115-140.
- Kossek, E. E., & Zonia, S. C. (1993). Assessing diversity climate: A field study of reactions to employer efforts to promote diversity. *Journal of Organizational Behavior*, 14, 61-61.
- Kraiger, K., & Ford, J. K. (1985). A meta analysis of ratee race effects in performance evaluations. *Journal of Applied Psychology*, 70, 56-65.
- Lau, D. C., & Murnighan, J. K. (1998). Demographic diversity and faultlines: The compositional dynamics of organizational groups. *Academy of Management Review*, 23, 325-340.
- Lawrence, B. S. (1997). The black box of organizational demography. *Organization Science*, 8, 1-22.
- Liao, H., Joshi, A., & Chuang, A. (2004). Sticking out like a sore thumb: Employee dissimilarity and deviance at work. *Personnel Psychology*, 57, 969-1000.
- Luo, W. & Azen, R. (2012). Determining predictor importance in hierarchical linear models using dominance analysis. *Journal of Educational and Behavioral Statistics*, 38, 3-31.
- Madera, J. M., Dawson, M., & Neal, J. A. (2013). Hotel managers' perceived diversity climate and job satisfaction: The mediating effects of role ambiguity and conflict. *International Journal of Hospitality Management*, 35, 28-34.

- Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. *Academy of Management Annals*, 2, 351-398.
- McGinn, K. L., & Milkman, K. L. (2013). Looking up and looking out. Career mobility effects of demographic similarity among professionals. *Organizational Science*, 24, 1041-1060.
- McKay, P. F., Avery, D. R., Liao, H., & Morris, M. A. (2011). Does diversity climate lead to customer satisfaction? It depends on the service climate and business unit demography. *Organization Science*, 22, 788-804.
- McKay, P. F., Avery, D. R., & Morris, M. A. (2009). A tale of two climates: Diversity climate from subordinates' and managers' perspectives and their role in store unit sales performance. *Personnel Psychology*, 62, 767-791.
- McKay, P. F., Avery, D. R., & Morris, M. A. (2008). Mean racial-ethnic differences in employee sales performance: the moderating role of diversity climate. *Personnel Psychology*, 61, 349-374.
- McKay, P. F., Avery, D. R., Tonidandel, S., Morris, M. A., Hernandez, M., & Hebl, M. R. (2007). Racial differences in employee retention: Are diversity climate perceptions the key? *Personnel Psychology*, 60, 35-62.
- McPherson, J. M., Smith-Lovin, L., Cook, J. M. (2001). Birds of a feather: homophily in social networks. *Annual Review of Sociology*, 27, 415-44.
- Mehra, A., Kilduff, M., & Brass, D. J. (1998). At the margins: A distinctiveness approach to the social identity and social networks of underrepresented groups. *Academy Management Journal*, 41, 441-452.
- Moch, M. K. (1980). Racial differences in job-satisfaction: Testing 4 common explanations," *Journal of Applied Psychology*, 65, 1980, 299-306.
- Mor Barak, M. E., Cherin, D. A., & Berkman, S. (1998). Organizational and personal dimensions in diversity climate: Ethnic and gender differences in employee diversity perceptions. *Journal of Applied Behavioral Sciences*, 34, 82-104.
- Muthén, L. K., & Muthén, B. O. (1998–2010). *Mplus User's Guide. Sixth Edition*. Los Angeles, CA: Muthén & Muthén.
- Nishii, L. (2013). The benefits of climate for inclusion for gender diverse groups. *Academy of Management Journal*, 56, 1754-1774.
- Oldmeadow, J. A., Platow, M. J., Foddy, M., & Anderson, D. (2003). Self-categorization, status and social influence. *Social Psychology Quarterly*, 66, 138-152.

- Ostroff, C., Kinicki, A.J. & Muhammad, R.S. (2012) Organizational culture and climate. In Weiner, I.B., Schmitt, N.W. & Highhouse, S., *Handbook of Psychology, Vol 12: Industrial and Organizational Psychology*, 643-676. Hoboken, NJ: John Wiley & Sons.
- Pfeffer J. (1991). Organization theory and structural perspectives on management. *Journal of Management*, 17, 789-803.
- Pfeffer, J. (1983). *Organizational demography*. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior*: 299-357, Greenwich, CT: JAI.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.
- Pugh, S. D., Dietz, J., Brief, A. P., & Wiley, J. W. (2008). Looking inside and out: The impact of employee and community demographic composition on organizational diversity climate. *Journal of Applied Psychology*, 93, 1422-14428.
- Richard, O. C. (2000). Racial diversity, business strategy, and firm performance: A resource-based view. *Academy of Management Journal*, 43, 164-177.
- Richard, O. C., McMillan, A., Chadwick, K., & Dwyer, S. (2003). Employing an innovation strategy in racially diverse workforces: Effects on firm performance. *Group & Organization Management*, 28, 107-126.
- Ragins, B. R. (1997). Diversified mentoring relationships in organizations: A power perspective. *Academy of Management Review*, 22, 482-521.
- Reskin, B. F. & McBrier, D. B., (2000). Why not ascription? Organizations, employment of male and female managers. *American Sociological Review* 65, 210-33.
- Reskin, B. F., McBrier, D. B., & Kmec, J. (1999). The determinants and consequences of workplace sex and race composition. *Annual Review of Sociology*, 25, 355-361.
- Ridgeway, C. L. (2014). Why status matters for inequality. *American Sociological Review*, 79, 1-16.
- Ridgeway, C. L. (2001a). *Social Status and Group Structure*. In Blackwell Handbook of Social Psychology: Group Processes, edited by Michael A. Hogg and Scott Tindale, 352–75. Malden, Mass.: Blackwell.
- Ridgeway, C. L. (2001b). Gender, status, and leadership. *Journal of Social Issues*, 57, 637-656.
- Riordan, C. M., & Shore, L. M. (1997) Demographic diversity and employee attitudes: An empirical examination of relational demography within work units. *Journal of Applied Psychology*, 82, 342-358.

- Sacco, J. M., Scheu, C. R., Ryan, A. M., Schmitt, N. (2003). An investigation of race and sex similarity effects in interviews: A multilevel approach to relational demography. *Journal of Applied Psychology*, 88, 852-865.
- Sackett, P. R., & Larson, J. R., Jr. (1990). Research strategies and tactics in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., Vol. 1, pp. 419- 489). Palo Alto, CA: Consulting Psychologists Press.
- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture. *Annual Review of Psychology*, 64, 361-388.
- Schneider, B., Macey, W. H., Lee, W., & Young, S. A. (2009). Organizational service climate drivers of the American Customer Satisfaction Index (ACSI) and financial and market performance. *Journal of Service Research*, 12, 3-14.
- Sellers, R. M., Smith, M. A., Shelton, J. N., Rowley, S. A. J., & Chavous, T. M. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality and Social Psychology Review*, 2, 18-39.
- Skaggs, S., & DiTomaso, N. (2004). Understanding the effects of workforce diversity on employment outcomes: A multidisciplinary and comprehensive framework. *Research in the Sociology of Work*, 14, 279-306.
- Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Ehrhart, K. H. & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. *Journal of Management*, 37, 1262-1289.
- Siemsen, E., Roth, A. & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects, *Organizational Research Methods*, 13, 456-476.
- Smith, P. L., Smits, S. J., & Hoy, F. (1998). Employee work attitudes: The subtle influence of gender. *Human Relations*, 51, 649-666.
- Snijders, T., & Bosker, R. J. (1994). Modeled variance in two-level models. *Sociological Methods & Research*, 22, 342-363.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, 13, 290-312.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33, 1-39.
- Thye, S. R. (2000). A status value theory of power in exchange relations. *American Sociological Review*, 65, 407-432.
- Tsui, A. S., Egan, T. D., & O'Reilly, C. A. (1992). Being different: Relational demography and

- organizational attachment. *Administrative Science Quarterly*, 37, 549-579.
- Tsui, A. S., & Gutek, B. A. (1999). *Demographic Differences in Organizations*. Oxford: Lexington Books.
- Tsui, A., & O'Reilly, C. (1989). Beyond simple demographic effects: The importance of relational demography in superior-subordinate dyads. *Academy of Management Journal*, 32, 402-423.
- Tajfel, H., & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relation*, 7-24. Chicago: Nelson-Hall.
- Tonidandel, S., Avery, D., Bucholtz, B., & McKay, P. (2008). An alternative explanation for the asymmetrical effects in relational demography research. *Personnel Psychology*, 61, 617-633.
- Van Dijk, H., van Engen, M. L., & van Knippenberg, D. (2012). Defying conventional wisdom: A meta-analytical examination of the differences between demographic and job-related diversity relationships with performance. *Organizational Behavior and Human Decision Processes*, 119, 38-53.
- Vecchio, R. P., & Bullis, R. C. (2001). Moderators of the influence of supervisor-subordinate similarity on subordinate outcomes. *Journal of Applied Psychology*, 86, 884-896.
- Williams, K. Y. & O'Reilly, C. A., III. (1998). Demography and diversity in organizations: A review of 40 years of research. *Research in Organizational Behavior*, 20. Greenwich, CT: JAI Press, 77-140.
- Winfield, I., & Rushing, B. (2005). Bridging the border between work and family: The effects of supervisor-employee similarity. *Sociological Inquiry*, 75, 55-80.
- Wharton, A. S., & Baron, J. N. (1991). Satisfaction? The psychological impact of gender segregation on women at work. *The Sociological Quarterly*, 32, 365-387.
- Wolfson, N., Kraiger, K., Finkelstein, L. (2011). The relationship between diversity climate perceptions and workplace attitudes. *The Psychologist-Manager Journal*, 14, 161-176.
- Zhang, Z., Zyphur, M. J., & Preacher, K. J. (2009). Testing multilevel mediation using hierarchical linear models: Problems and solutions. *Organizational Research Methods* 12, 695-719.
- Zatzick, C. D., Elvira, M. M., & Cohen, L. E. (2003) When is more better? The effects of racial composition on voluntary turnover. *Organizational Science*, 14, 483-496.