

# EXPANDING INSIGHTS ON THE DIVERSITY CLIMATE- PERFORMANCE LINK: THE ROLE OF WORKGROUP DISCRIMINATION AND GROUP SIZE

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*The present study extends knowledge of the performance consequences of workgroup diversity climate. Building upon Kopelman, Brief, and Guzzo's (1990) climate model of productivity, we introduce workgroup discrimination as a behavioral mediator that explains the positive effects of diversity climate on workgroup performance. In addition, we investigate group size as a moderator upon which this mediated relationship depends. We test these moderated-mediated propositions using a split-sample design and data from 248 military workgroups comprising 8,707 respondents. Findings from structural equation modeling reveal that diversity climate is consistently positively related to workgroup performance and that this relationship is mediated by discrimination. Results yield a pattern of moderated mediation, in that the indirect relationship between workgroup diversity climate (through perceptions of workgroup discrimination) and group performance was more pronounced in larger than in smaller workgroups. These results illustrate that discrimination and group size represent key factors in determining how a diversity climate is associated with group performance and, thus, have significant implications for research and practice. © 2014 Wiley Periodicals, Inc.*

*Keywords:* diversity climate, discrimination, workgroup performance, group size, structural equation modeling

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## Introduction

**T**rends like increasing globalization and migration, growing individual mobility, and aging populations have created diverse work settings in which employees of different genders, age groups, races, ethnicities, nationalities, sexual orientations, and disability status work together (Doverspike, Taylor, Shultz, & McKay, 2000; Fullerton & Toossi, 2001; Gonzalez & DeNisi, 2009). As a result of this development, scholars and practitioners are focusing on research and practical activities to amplify the potential positive outcomes of

diversity (e.g., innovation and creativity) while preventing its negative effects (e.g., increasing group conflicts and discrimination) (Kunze, Boehm, & Bruch, 2013; Van Knippenberg, De Dreu, & Homan, 2004).

One concept that has gained considerable attention in this regard is diversity climate, which describes members' shared perceptions of an organization's diversity-related policies, practices, and procedures (Gelfand, Nishii, Raver, & Schneider, 2005; Kaplan, Wiley, & Maertz, 2011; Mor Barak, Cherin, & Berkman, 1998). At the individual level of analysis, perceptions of a positive diversity climate within organizations have been linked to various desirable outcomes such as increased job satisfaction, increased career and organiza-

tional commitment, increased cross-cultural sales, reduced turnover intentions, and lowered absenteeism (Avery, McKay, Wilson, & Tonidandel, 2007; Buttner, Lowe, & Billings-Harris, 2010; Chen, Liu, & Portnoy, 2012; McKay, Avery, Tonidandel, Morris, Hernandez, & Hebl, 2007). At the business unit or collective level of analysis, diversity climate has been shown to relate positively to key performance indicators such as store sales (McKay, Avery, & Morris, 2009), return on profit (Gonzalez & DeNisi, 2009), and/or customer satisfaction (McKay, Avery, Liao, & Morris, 2011).

While we seem to know that a pro-diversity climate has a positive impact on performance, we know surprisingly little about *how* such effects occur and which intervening processes and mechanisms are important to explore (McKay et al., 2009; Shore et al., 2011). Indeed, diversity climate research has to date largely neglected which processes might function as a linkage between diversity climate and collective performance (Avery & McKay, 2010; McKay et al., 2009).

Our study addresses this "black box" of diversity climate effects by building on the theoretical work of Schneider and Reichers (1983), who have proposed that climate might impact outcomes primarily through its effects on various forms of organizational behavior. In other words, climate as a normative environment first has to change relevant behaviors in order to take effect. Building upon this notion, Kopelman, Brief, and Guzzo (1990) developed a model of climate, culture, and productivity. They proposed organizational climate to influence productivity through its positive effects on cognitive and affective states (such as work motivation and job satisfaction) as well as on salient organizational behaviors (such as employee attachment, performance, and citizenship). We theoretically anchor our study in Kopelman et al.'s (1990) model and extend it by introducing discrimination as a behavioral mediator and group size as a structural moderator of the diversity climate-workgroup performance link. By doing so, we contribute to the diversity climate literature in several important ways.

First, from an empirical perspective, our study contributes to the diversity climate literature, as it is one of the very few pieces actually testing important elements of Kopelman et al.'s (1990) model, such as the translation of climate into behavior, which, in turn, affects performance. Up to now, research on such transfer processes has been scarce (Schneider, Ehrhart, & Macey, 2011).

Second, by focusing on discrimination<sup>1</sup> as a potential mediator, we propose and empirically test a behavioral mechanism that has not yet attracted the attention it deserves in the diversity climate-performance link. Complementing and extending the behaviors

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proposed by Kopelman and colleagues (1990), which all constitute desirable, individual-level behaviors (such as citizenship behavior), we concentrate on the mitigation of a harmful, group-level behavior taking place between organizational members. Ample research dating back to the work of Tajfel and Turner (1986) has demonstrated that discrimination within groups is one of the primary threats to group functioning, with detrimental effects for both employees (e.g., increase in work tension and stress, reduced satisfaction and health) and entire organizations (e.g., costly lawsuits, decrease in employee commitment and morale, flawed public images) (see Goldman, Gutek, Stein, & Lewis, 2006, for a review of this literature). Therefore, it is imperative to shed more light on the ways in which discrimination can be avoided in the workplace and the role of a pro-diverse work climate in this regard.

Third, by investigating the role of discrimination, we also integrate the surprisingly unconnected literatures on diversity climate and discrimination. Only recently, Smith, Brief, and Colella (2010) have noted that the interest in diversity management and pro-diverse work climates has taken attention away from the construct of discrimination. Particularly, no study known to us has examined the theoretical and empirical relationship between diversity climate and discrimination (Smith et al., 2010; Triana, García, & Colella, 2010).

Fourth, in order to further sharpen our understanding of the role of discrimination in the diversity climate-performance link, we investigate group size as a structural boundary condition. As Wegge, Roth, Neubach, Schmidt, and Kanfer (2008) have proposed, larger groups are more likely to show communication deficiencies, conflict, stereotyping, and mutual discrimination than smaller groups. Consequently, a pronounced diversity climate might be more important for larger than for smaller groups in order to reduce the level of discrimination and to spur group performance.

In sum, with the current article we advance theoretical knowledge on the effects of diversity climate on performance by introducing

discrimination as an intervening mechanism, and by researching group size as a boundary condition of the diversity climate-discrimination link. In addition, we contribute to practice, since the study outlines how lower levels of discrimination and improved work-group performance can be achieved through fostering diversity-friendly work climates. The resulting moderated-mediation model is depicted in Figure 1.

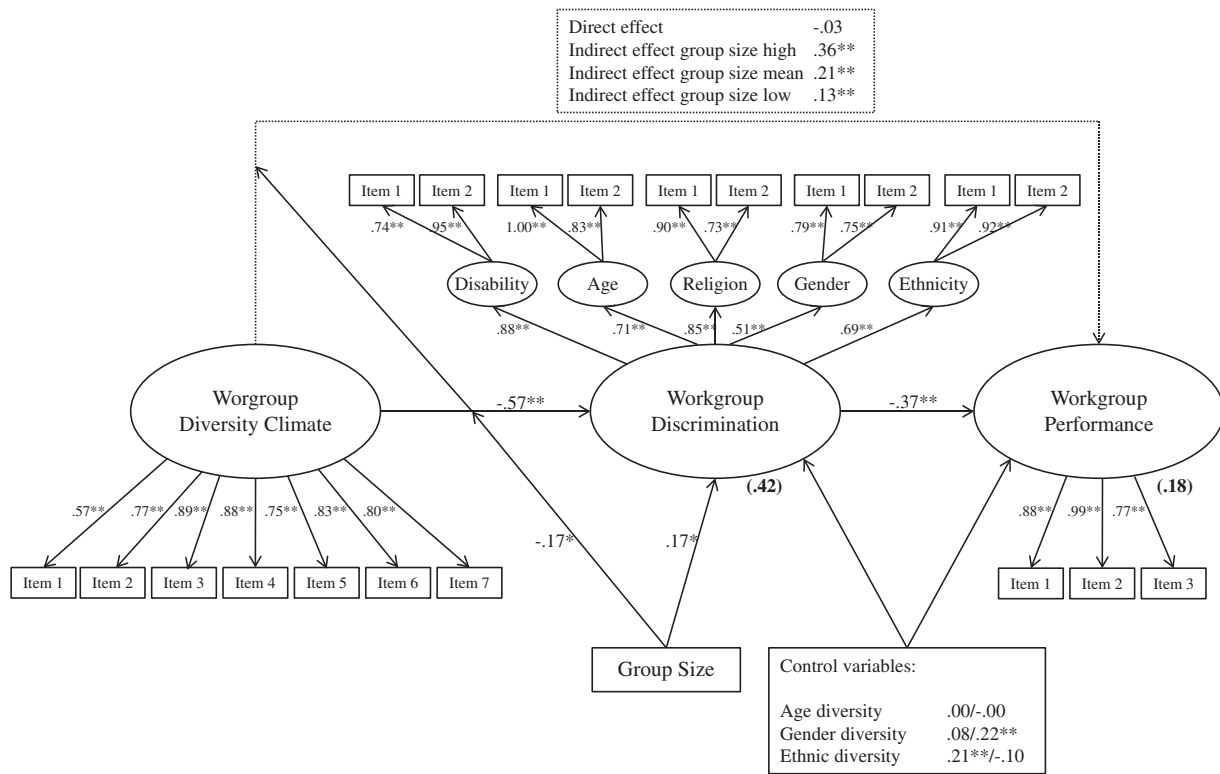
## Theory

### *Diversity Climate Defined*

Organizational climate research has its roots

in the late 1930s (Schneider et al., 2011) when Lewin, Lippitt, and White (1939) studied aggressive behavior in groups under various social climate conditions. More recently, Reichers and Schneider (1990, p. 22) developed a theoretical concept of organizational climate, which they defined as “shared perceptions of the way things are around here.” Climate perceptions evolve as part of a sense-making process, in which individual employees retrieve and interpret certain information from their work environment (Schneider, 1975; Schneider & Reichers, 1983). If colleagues sufficiently share this information on relevant organizational events and characteristics, a perception of a collective climate may emerge. In the past 20 years, many forms of climate have been proposed and empirically tested, such as cooperation climate (Collins & Smith, 2006), service climate (Towler, Lezotte, & Burke, 2011), or employee relations climate (Ngo, Lau, & Foley, 2008). Therefore, it is necessary to specify the focus of the climate to which one refers. This study examines diversity climate, formally defined as “aggregate member perceptions about the organization’s diversity-related formal structure characteristics and

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*N* = 211 workgroups, squared multiple correlations in parentheses. For calculating the indirect effects, 5,000 bootstrap samples were used. Squared multiple correlations are in parentheses.  
 \**p* < .05.  
 \*\**p* < .01.

**FIGURE 1.** Diagram of Paths in the Proposed Moderated-Mediation Model

informal values” (Gonzalez & DeNisi, 2009, p. 24).

**Main Effect of Workgroup Diversity Climate on Workgroup Performance**

To argue for a positive effect of diversity climate on workgroup performance we theoretically build upon Kopelman et al.’s (1990) climate model of productivity. A pronounced diversity climate provides important normative information about the diversity-related attitudes and behaviors that are expected, supported, and rewarded. It signals to employees that the group or organization values the contributions of all members and relies on their full inclusion in order to be successful (Kossek & Zonia, 1993; Mor Barak et al., 1998; Nishii, 2013). Adding to these general assumptions and Kopelman et al.’s (1990) overall framework, potential effects of

diversity climate on group performance might be traced back to two main sources: (1) the fostering of positive, performance-relevant group processes and behaviors (such as communication) and (2) the attenuation of negative, performance-relevant group processes and behaviors (such as discrimination or conflict).

With regard to the first perspective, Shore and colleagues (2011), as well as Cox (1994), mention performance-relevant processes and states such as workgroup cohesiveness and communication, creativity, and innovation, as well as problem solving that should profit from a pronounced diversity climate within workgroups. In line with this notion, research has proposed that diverse employees within groups tend to possess valuable, non-redundant information, which might help them to achieve better performance outcomes (Van Knippenberg, De Dreu, & Homan, 2004). In



order to leverage these performance potentials, however, an effective communication and information elaboration within workgroups must take place (Earley & Mosakowski, 2000; Hinsz, Tindale, & Vollrath, 1997). A pronounced diversity climate within workgroups makes it more likely that such effective communication occurs. More specifically, a strong and shared commitment to diversity within workgroups should motivate employees to closely pay attention to ideas, thoughts, and proposals from all group members—enabling especially minority and potential low-status group members to bring in their diverse and potentially challenging opinions and viewpoints. In this way, a climate for diversity might also remove former demography-based status differences (J. H. Turner, Stets, Cook, & Massey, 2006) between group members and “level the playing field with respect to perceptions of competence among group members” (Shore et al., 2011, p. 1279). Consequently, unfounded conforming behaviors of low-status-group members should decrease with positive effects for the workgroup’s overall potential for creativity, problem solving and, ultimately, performance. This should also enhance members’ long-term motivation to contribute to group goals and organizational functioning (Roberson & Block, 2001) as nobody feels marginalized or excluded—again especially important for employees from underrepresented groups (Goldman et al., 2006; McKay et al., 2009).

With regard to the second perspective, a distinct diversity climate might also attenuate negative group processes that hinder performance. Such negative processes typically include stereotyping, subgroup formation, relationship conflict, and discrimination stemming from similarity/attraction, categorization, and social identity-based processes (Byrne, 1971; Tajfel & Turner, 1986; J. C. Turner, 1987). Especially demographically diverse groups have been repeatedly shown to bear the potential for subgroup formation with negative effects for overall group identity (Earley & Mosakowski, 2000), willingness to cooperate (Chatman & Flynn, 2001), and performance (Pelled, 1996). Members of potential out-groups typically suffer from less

communication, and more discrimination and conflict compared to members of the respective in-group (Tajfel & Turner, 1986). As Gonzalez and DeNisi (2009, p. 27) proposed, a supportive diversity climate within groups might “weaken in-group bias and social categorization processes, leading to lower adverse impact on intergroup conflict and social integration.” Consequently, in groups with a pronounced diversity climate, especially negative forms of conflict such as relationship conflict (Jehn, Northcraft, & Neale, 1999; Mohammed & Angell, 2004; Pelled, Eisenhardt, & Xin, 1999) might decrease while performance increases.

From an empirical perspective, only a few studies have investigated the diversity climate–performance relationship at the collective level of analysis. Previous research has found a positive association between higher levels of a pro-diverse work climate and unit and firm productivity (Boehm, Kunze, & Bruch, in press; Gonzalez & DeNisi, 2009; McKay et al., 2009). In addition, McKay and colleagues (2011) demonstrated a positive relationship between diversity climate and customer satisfaction, moderated by service climate and business-unit demography. In sum, based on the theoretical and empirical evidence presented, we propose the following:

*Hypothesis 1: Workgroup diversity climate will be positively related to workgroup performance.*

### ***Effect of Workgroup Diversity Climate on Workgroup Discrimination***

As Hypothesis 1 on the diversity climate–performance link indicates, scholars typically rely on mediators to explain the performance implications of diversity climate. Unfortunately, only a few of the potential intervening

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processes were actually tested (McKay et al., 2009; Schneider et al., 2011). Therefore, in order to better understand the diversity climate–performance link, we build on Kopelman et al.’s (1990) model and focus on the aforementioned second perspective (i.e., the mitigation of potentially harmful processes and behaviors within workgroups). Specifically, we propose that a positive diversity climate is negatively related to discrimination within workgroups.

Since the work of Allport (1954), discrimination has been defined as unjustified negative actions that undermine the equal treatment of all individuals or groups (see also Dovidio & Hebl, 2005). In contrast to diversity climate, which reflects a normative environment within groups or organizations (Gelfand et al., 2005; Gonzalez & DeNisi, 2009), discrimination is a behavioral construct that is based on actual or perceived incidents that are considered to be unfair toward certain groups of individuals (Fiske, 1998). In this regard, our understanding of the diversity climate–discrimination link (as a normative cause and a behavioral effect) is congruent to a recent review of the climate literature by Schneider and colleagues (2011, p. 388), who summarized that “climate is thought to yield behavior consistent with the climate employees experience, and it is the behavior that yields the outcome.”

As described earlier, a strong diversity climate is usually associated with a distinct organizational mind-set, fostering the social integration of employees from underrepresented groups (Gonzalez & DeNisi, 2009; McKay et al., 2007, 2009). If shared within workgroups, a pronounced diversity climate can function as a clear point of orientation and as a strong behavioral guideline for both employees and supervisors. Group members develop a common interpretation regarding behaviors that are expected and rewarded (Bowen & Ostroff, 2004; Mischel, 1973, 1977).

Consequently, one can expect that group members and supervisors who jointly

perceive a pronounced diversity climate would act in accordance with it. Because discriminatory behavior can be regarded as a clear violation of a pro-diversity professional policy, a negative effect of diversity climate on discrimination within workgroups is to be expected (Gelfand et al., 2005). Similarly, Nelson and Probst (2010) proposed in a theoretical model of workplace discrimination and harassment that diversity climate should function as the main driver of discrimination, as it tells people how the organization will react toward discrimination. While units with a strong diversity climate will be intolerant of discrimination, low levels of diversity climate will indicate that discrimination is tolerated—and employees and supervisors might act accordingly.

From an empirical point of view, research on the relationship between diversity climate and discrimination is scarce. While we are unaware of any published study on the diversity climate–discrimination relationship, Hofhuis, Van der Zee, and Otten (2012) have recently shown that diversity climate is negatively associated with diversity-related conflict, a construct similar to discrimination.

Based on the outlined reasoning, we hypothesize that:

*Hypothesis 2: Workgroup diversity climate will be negatively related to workgroup discrimination.*

### ***Effect of Workgroup Discrimination on Workgroup Performance***

Following the logic developed in Hypothesis 1, discrimination might negatively affect performance-relevant processes and behaviors at the group level based on several theoretical arguments. First, employees’ attitudes toward their employers and workgroups depend on their perceptions of whether or not their own opportunities and treatment are the same as those extended to members of other groups (Guttek, Cohen, & Tsui, 1996). If some employees believe that they have suffered from unfair, discriminatory treatment, they are likely to develop a feeling of not being valued as much as other members (Snape & Redman, 2003). Guttek and colleagues (1996) used these

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processes to explain why entire groups of employees may emotionally withdraw when they believe that members of their own in-group (e.g., a gender group) are treated unfairly or in a discriminatory way. Consequently, collective processes might emerge in workgroups in which clusters of employees (e.g., women, aging workers, or employees with disabilities) perceive certain forms of discrimination. Such a perception could lead to a drop in their collective performance.

Second, as described earlier, group performance is also dependent upon both positive and negative processes taking place within workgroups such as knowledge exchange, communication, or conflict (Hackman & Morris, 1975; Jehn et al., 1999; Pelled et al., 1999). Discrimination within workgroups is likely to weaken social integration and to increase negative interpersonal processes such as relationship conflict, while it should reduce positive behaviors and states such as communication, cooperation, or cohesion—both with negative overall effects for workgroup performance.

On the basis of these arguments, we suggest:

*Hypothesis 3a: Workgroup discrimination will be negatively related to workgroup performance.*

### **Mediation Effect of Workgroup Discrimination**

In Hypothesis 1, we predict a positive influence of diversity climate on workgroup performance. According to Hypothesis 2, diversity climate is expected to be negatively associated with workgroup discrimination. Finally, in Hypothesis 3a, we propose a negative influence of workgroup discrimination on workgroup performance. Taken together, these three hypotheses indicate both a direct and an indirect effect of workgroup diversity climate on workgroup performance. Based upon Kopelman et al.'s (1990) climate model of productivity and on the notion by Schneider and colleagues (2011) who argue that a normative guideline such as a climate has to relate to a certain behavior in order to affect performance, we propose a mediation model. In contrast to prior theoretical and

empirical work (e.g., Collins & Smith, 2006; Patterson, Warr, & West, 2004), we do not rely on the mediating effects of positive employee attitudes but propose workgroup discrimination—a negative, interpersonal behavioral pattern—as a mediator in the diversity climate–performance link.

Based on this rationale, we suggest the following:

*Hypothesis 3b: The relationship between workgroup diversity climate and workgroup performance is mediated through workgroup discrimination.*

### **Workgroup Size as a Moderator of the Workgroup Diversity Climate–Discrimination Relationship**

With this study, we not only extend Kopelman et al.'s (1990) climate model of productivity by integrating discrimination as a negative mediator of the diversity climate–performance link, but also by introducing group size as a structural boundary condition. We argue that group size affects how and when climates (in our case, a diversity climate) actually translate into related behavior (in our case, discrimination within workgroups). More specifically, we propose that in larger groups the mitigating effect of a diversity climate on discrimination should be more pronounced, as larger groups are generally more prone to perceptions of discriminatory behavior than smaller groups. In line with this assumption, Wegge and colleagues (2008) suggested that the probability of communication deficiencies and mutual conflict should be higher in larger than in smaller teams. This can be explained by various processes.

First, as workgroups become larger, self-categorization and subsequent subgroup formation in terms of race, age, gender, religion,

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and ethnic background should be more easily possible, as the sheer presence of two (or more) demographic groups is often enough to turn in-group defining characteristics salient (Abrams, Thomas, & Hogg, 1990; J. C. Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Moreover, in large groups, minority members might be more easily identified, again fostering processes of in-group/out-group formation as well as related discrimination. Consequently, for larger workgroups that might suffer from increased levels of discrimination, the attenuating influence of a pronounced diversity climate might be more important than for smaller workgroups.

*We argue that a strong diversity climate may exhibit less influence on discrimination in small workgroups because the level of discrimination in these units is already lower.*

Second, in smaller workgroups, members and supervisors should have more opportunities for personalized interactions with others, thereby establishing more cross-cutting ties that make demographic boundaries less salient. This assumption is in line with Wegge and colleagues' (2008) conclusion about dyadic communications in larger versus smaller units. Large groups have a higher chance for homogenous dyadic communications (e.g., between members of a similar age or the same sex), reducing the number of heterogeneous dyadic interactions. In other words, in

large groups people can better choose with whom they want to interact and may choose demographically similar peers (Byrne, 1971). In small groups, however, supervisors and employees have only a limited pool of colleagues, making it necessary to communicate across demographic boundaries, which should turn prejudices less salient and reduce the danger of discrimination. In addition, in smaller groups, members should be more reliant on each other to accomplish joint goals. This stronger outcome dependency should make it more likely that workgroup members also cooperate more intensively in small groups, thereby increasing the chances for positive intergroup contact (Allport, 1954; Brown & Hewstone, 2005; Pettigrew, 1998),

which, in turn, should reduce the level of prejudices and discrimination.

Therefore, we argue that a strong diversity climate may exhibit less influence on discrimination in small workgroups because the level of discrimination in these units is already lower. In contrast, in larger workgroups, where discrimination plays a more dominant role due to the previously described processes, a strong diversity climate as a normative guideline should unfold to its full extent, yielding lower levels of discrimination. Members of larger workgroups, therefore, should benefit from a strong diversity climate more than members of smaller workgroups. This leads to the following:

*Hypothesis 4a: Workgroup size is a moderator of the diversity climate–discrimination relationship. Specifically, the negative relationship between workgroup diversity climate and workgroup discrimination will be more pronounced in larger than in smaller workgroups.*

#### ***Workgroup Size as a Moderator of the Mediated Diversity Climate–Workgroup Performance Relationship***

Based on the argumentation provided in the prior hypotheses, we assume that workgroup size moderates not only the relationship between diversity climate and discrimination, but also the mediated relationship between workgroup diversity climate and workgroup performance. More specifically, if in smaller groups the relationship between diversity climate and discrimination is less pronounced, the mediated effect of diversity climate on performance through discrimination also should be weaker. The other way around, a larger workgroup size might not only favor the diversity climate–discrimination relationship, but also the mediated effect of diversity climate on workgroup performance through discrimination. In sum, we propose the following moderated-mediation hypothesis:

*Hypothesis 4b: Workgroup size moderates the mediated relationship between diversity climate and workgroup performance through discrimination.*



*Specifically, the mediated relationship should be more pronounced in larger than in smaller workgroups.*

## Methods

### Sample

Data used to test the relationships were collected by the Defense Equal Opportunity Management Institute (DEOMI) from US military personnel in the spring of 2008. A total of 8,707 military personnel from 248 workgroups took part in the survey. We allocated each group a code to match respondents with groups. The average response rate was 50 percent, which is in line with general findings concerning the response rate at the individual level (Baruch & Holtom, 2008). The survey consisted of an online version of the DEOMI Organizational Climate Survey (DEOCS) developed by the Defense Equal Opportunity Management Institute (Dansby & Landis, 1991).

All analyses testing the proposed hypotheses were conducted at the workgroup level. Following Klein, Conn, Smith, and Sorra (2001), we deleted groups with less than three members. This resulted in the exclusion of 35 groups. In addition, the two largest workgroups containing 600 and 348 members were deleted as well due to outlier analyses. Thus, the final data set consisted of 7,689 employees from 211 workgroups. On average, there were 36.44 employees per workgroup ( $SD = 44.63$ , median = 20.00), and group sizes ranged from 4 to 268 (range = 264).

The respondents' demographics were 81.4 percent male, and the majority of the respondents were between 22 and 40 years old (68.5 percent). The ethnic composition of the sample was very heterogeneous (59.1 percent Caucasian, 15.2 percent African American, 5.4 percent Asian, 4 percent Hispanic, 1.5 percent Native American, 1.3 percent Native Hawaiian or Pacific Islander; 5.8 percent with multiple answers, and 7.6 percent missing answers). In addition, the sample comprised a wide variety of military branches (e.g., Air Force, Army, Coast Guard, Marine Corps, and Navy).

To handle the potential problems arising from common method bias (e.g., Campbell

& Fiske, 1959; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), we conducted a split sample design. Half of the respondents in each group provided the rating for diversity climate and discrimination; the other half provided the group performance ratings. By doing so, we controlled for "(...) one of the major causes of common method variance (...) obtaining the measures of both predictor and criterion variables from the same rater or source (...)" (Podsakoff et al., 2003, p. 887). Avoiding this cause prevents the results from being biased by the effects of consistency motifs, implicit theories, social desirability tendencies, dispositional and transient mood states, and any tendencies on the part of the rater to acquiesce or respond in a lenient manner (for a detailed description, see Podsakoff et al., 2003).

### Procedure

Typically, the DEOCS is administered annually at the request of a military unit commander and operates similarly to an annual employee survey. The DEOCS is administered and received by DEOMI personnel and is available in both paper-and-pencil and web-based versions. All personnel are provided with either a confidential unique online code to complete the survey online, or a paper copy of the survey and a response sheet. All responses to the survey are completely confidential, and although the DEOCS is deployed at the request of a military unit commander, the commander does not receive specific details about individual respondents in terms of participation or outcomes on the survey.

### Measures

Perceptions of diversity climate, workgroup discrimination, and workgroup performance were measured with the DEOCS. The DEOCS evolved from the Military Equal Opportunity Climate Survey (MEOCS; Dansby & Landis, 1991), and both surveys are suitable for military and civilian organizations of varying sizes. In total, the DEOCS contains 66 self-report items, which are traditionally combined into 13 distinct scales, seven of which address equal employment opportunity and six of which address factors in organizational

effectiveness. Tests of the internal consistency and factor structure of the DEOCS and its predecessor, the MEOCS, were previously conducted and showed sufficient results. For further details, see Estrada, Stetz, and Harbke (2007); Landis, Fisher, and Dansby (1988); and Truhon (2003). Items for all constructs were measured with a five-point Likert scale ranging from 1 ("totally agree with the statement") to 5 ("totally disagree with the statement"). A summary of measures used in the study is discussed next.

*Diversity climate* was assessed with a seven-item measure developed by Parks, Knouse, Crepeau, and McDonald (2008). The items closely overlap with items from Mor Barak and colleagues (1998); McKay, Avery, and Morris (2008); and Hopkins, Hopkins, and Mallette (2001). A sample item was "My work unit is valued for the different perspectives that we bring to the organization." Items were coded such that a high value indicated a positive diversity climate. A Cronbach's alpha of .91 indicated a sufficient consistency of the scale.

*Discrimination* was measured with 10 items focusing on different forms of discrimination (disability, age, religion, gender, and ethnicity). Each dimension was captured with two items. All items were developed by Dansby and Landis (1991). A sample item was "Offensive racial/ethnic names were frequently heard." Items were coded such that higher values equal a higher level of discrimination. A Cronbach's alpha of .89 indicated a high internal consistency. In order to capture several forms of discrimination (i.e., disability, age, religion, gender, ethnicity), we measured each separately; however, we computed one discrimination score for the analyses.<sup>2</sup>

*Workgroup performance* was assessed with three items developed by Dansby and Landis (1991). A sample item was "When high priority work arises, such as short deadlines, crash programs, and schedule changes, the people in my workgroup do an outstanding job in handling these situations." High values indicate a good performance. The Cronbach's alpha was .91, indicating sufficient internal consistency.

*Workgroup size* was assessed by the number of respondents per workgroup.

Due to previous studies demonstrating that actual diversity (e.g., Jayne & Dipboye, 2004) may impact group performance, we included three variables as *controls*. To control for age, gender, and ethnic diversity in the workgroups, we computed Blau's (1977) index of homogeneity for each facet separately based on the answers provided by the respondents.

### Group-Level Data Analysis

All hypothesis tests were conducted at the workgroup level. Therefore, individual values were aggregated to the next higher level. The appropriateness of this procedure was tested using different aggregation statistics ( $r_{wg}$ , ICC(1), ICC(2)) (Bliese, 2000). The  $r_{wg}$  evaluates if members' ratings within a group are interchangeable. The ICC(1) assesses the existence of group effects on the measure of interest, while the ICC(2) displays the reliability of group means (Bliese, 2000). Whereas there are no absolute standards for these indices, ICC(1) values based on significant  $F$  statistics from a one way ANOVA, ICC(2) values above .50, and a median  $rwg$  of more than .70 are usually considered as acceptable (Bliese, 2000; Kenny & La Voie, 1985; Klein & Kozlowski, 2000).

For *diversity climate* all three statistics showed sufficient results (ICC(1) = .10,  $F = 2.91$ ,  $p < 0.001$ ; ICC(2) = .66; *median*  $r_{wg} = .68$ ). Only the  $r_{wg}$  was slightly below the .70 cutoff value. Similar results were obtained for the discrimination scale, with all three values justifying an aggregation to the group level (ICC(1) = .07;  $F = 2.38$ ,  $p < 0.001$ , ICC(2) = .58, *median*  $r_{wg} = .80$ ). Finally, we received sufficient aggregation statistics for the workgroup performance measure (ICC(1) = .08,  $F = 2.48$ ,  $p < 0.001$ ; ICC(2) = .58; *median*  $r_{wg} = .71$ ).

### Data Analysis

Structural equation modeling (SEM) using maximum likelihood estimation was used to test the proposed moderated-mediation model. This was done because SEM has three important advantages compared to classical regression analysis as proposed by Baron and

Kenny (1986) and refined by Frazier, Tix, and Barron (2004). First, SEM models can account for measurement errors, thus preventing results from being biased by unreliability (Busemeyer & Jones, 1983). Second, instead of applying a hierarchical step-by-step regression procedure, the use of SEM allows for the simultaneous testing of several relationships, and this reduces type II errors. Finally, SEM enables testing for the overall model fit and, hence, empowers us to do model comparisons to investigate the assumed mediation relationship (Bagozzi & Yi, 1988).

In order not to confound the meaning of the study variables by simultaneously estimating the measurement and structural model (Burt, 1976), we followed the recommendations for a two-step approach by Anderson and Gerbing (1988). We first tested for the appropriateness of our measurement model. In a second step, we considered the structural model including the proposed relationships according to our hypotheses. Thereby, we tested different models against the proposed moderated mediation model effect.

The proposed moderation effect was tested by adding the orthogonal-centered product term of the moderator variable *workgroup size* and the predictor variable *diversity climate* to the model (Lance, 1988; Little, Bovaird, & Widaman, 2006). To further inspect the moderation effect, we plotted the results and performed a simple slopes analysis (Aiken & West, 1991).

To investigate the mediation effect of discrimination further, we directly assessed the

significance of the indirect effect of diversity climate on performance via discrimination using bootstrap analysis (Cheung & Lau, 2008; L. R. James, Mulaik, & Brett, 2006). According to Preacher and Hayes (2004, p. 722), "The bootstrapping is accomplished by taking a large number of samples of size  $n$  (where  $n$  is the original sample size) from the data, *sampling with replacement*, and computing the indirect effect,  $ab$ , in each sample" ( $ab$  equals the paths that constitute the indirect effect). The major advantages of bootstrapping are that it makes no assumptions about the shape of the distribution of the variables or the sampling distribution of the statistic (Efron & Tibshirani, 1986, 1993) and also allows the computation of confidence intervals for the mediation effect.

Following the procedure described by Preacher, Rucker, and Hayes (2007) for regression analyses, we specified two additional SEM models to test the conditional indirect effects in the moderated-mediation model with bootstrapping procedures. One contained high values of the proposed moderator workgroup size (+1 standard deviation), the other model low ones (-1 standard deviation).

## Results

### Descriptive Statistics

Table I displays the descriptive statistics and intercorrelations among the study variables. The Cronbach's alpha reliability values for the measures are provided in parentheses in the diagonal entries. It can be seen that all

**TABLE I** Descriptive Statistics and Correlations Among the Variables Used in This Study

	Mean	SD	1	2	3	4	5	6	7
1. Age diversity	0.60	0.11							
2. Gender diversity	0.25	0.17	.25**						
3. Ethnic diversity	0.52	0.19	.07	.12					
4. Workgroup size	36.44	44.63	.11	-.01	.28**				
5. Diversity climate	3.75	0.43	.01	.07	-.18*	-.04	(.91)		
6. Discrimination	1.54	0.28	.10	.12	.27**	.20**	-.48**	(.89)	
7. Workgroup performance	4.11	0.46	.04	.09	.18*	-.08	.21**	-.27**	(.91)

All correlations were tested two-tailed. The diagonal entries in parentheses reflect Cronbach's alpha internal consistency reliability estimates.

\* $p < .05$ .

\*\* $p < .01$ .

TABLE II Measurement Model Comparison

Measurement Model	$\chi^2$	$\Delta\chi^2$	df	CFI	RMSEA	SRMR
Hypothesized model: Three-factor model	405.6		162	.917	.085	.085
Alternative model 1: Two-factor model (diversity climate and discrimination as a common factor)	1,280.7	875.1**	169	.623	.177	.141
Alternative model 2: Two-factor model (performance and discrimination as a common factor)	1,236.8	831.2**	169	.637	.173	.120
Alternative model 3: Two-factor model (performance and diversity climate as a common factor)	1,285.6	880.0**	169	.621	.177	.138
Alternative model 4: One-factor model	1,720.1	1,314.5**	170	.474	.208	.157

RMSEA = root-mean-square error of approximation, CFI = comparative fit index, SRMR = standardized root mean squared residual.

$\Delta\chi^2$  is referring to the difference of the respective model to the hypothesized three factor model.

\* $p < .05$ .

\*\* $p < .01$ .

constructs except of the control variables are significantly related to each other. All correlations are in the proposed directions. Diversity climate is negatively related to discrimination ( $r = -.48, p < .01$ ) and positively correlated with workgroup performance ( $r = .21, p < .01$ ). Discrimination relates negatively to workgroup performance ( $r = -.27, p < .01$ ). Since the proposed mediation cannot be examined by correlation tables, we used SEM to test our assumptions.

### Measurement Model

To examine the proposed hypotheses we first established the measurement model. The model consisted of the three latent study variables—diversity climate, discrimination, and workgroup performance—with 20 indicators. The discrimination measure was modeled as a second-order construct, with five discrimination subdimensions (each with two items) that together loaded on the overall discrimination construct.

Following propositions from an extensive simulation study by Beauducél and Wittmann (2005), we decided to refer to the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR) as descriptive fit indices to assess the model fit. Based on propositions in the literature, we set the cut-off value for the CFI to .90 (Meyers, Gamst, & Guarino 2006), for the RMSEA < .10 (Browne & Cudeck, 1993; Loehlin, 2004),

and for the SRMR < .08 (Hu & Bentler, 1999). Based on the defined criteria, the hypothesized measurement model showed a sufficient overall model fit ( $\chi^2 = 405.6, df = 162, CFI = .917, RMSEA = .085, SRMR = .085$ ).

In addition, we tested several additional models (see Table II). Because it could be argued that diversity climate and discrimination are strongly related, we tested for an alternative two-factor model in which we formed one common factor instead of two distinct ones with all diversity climate and discrimination items and one performance factor (alternative model 1). The model fit decreased significantly ( $\chi^2 = 1,280.7, df = 169, CFI = .623, RMSEA = .177, SRMR = .141$ ). Next we specified a two-factor model in which all discrimination and performance items loaded on one common factor and the diversity climate items formed the second factor (alternative model 2). The model showed an insufficient fit ( $\chi^2 = 1,236.8, df = 169, CFI = .637, RMSEA = .173, SRMR = .120$ ). The third two-factor model consisted of one factor in which all diversity climate and performance items loaded on a common factor and the discrimination items formed a second factor (alternative model 3). Again, the model did not indicate a sufficient result ( $\chi^2 = 1,285.6, df = 169, CFI = .621, RMSEA = .177, SRMR = .138$ ). Finally, we also tested a one-factor model in which all items loaded on one common factor (alternative model 4). The model showed a significantly worse fit than the proposed model ( $\chi^2 = 1,720.1,$



TABLE III Structural Model Comparison

Structural Model	$\chi^2$	df	$\chi^2/\text{df}$	$\Delta\chi^2$	CFI	RMSEA	SRMR
Hypothesized model: Moderated-mediation model	556.04	250	2.22		.903	.076	.079
Alternative model 1: Direct-effects-only model	621.97	253	2.49	65.92**	.883	.083	.157
Alternative model 2: Indirect-effects-only model	561.60	252	2.23	5.55*	.901	.076	.080
Alternative model 3: No-controls model	580.36	256	2.27	24.32**	.879	.078	.084

RMSEA = root-mean-square error of approximation, CFI = comparative fit index, SRMR = standardized root mean squared residual. All models are compared to the hypothesized model.

\* $p < .05$ .

\*\* $p < .01$ .

df = 170, CFI = .474, RMSEA = .208, SRMR = .157). Since all the alternative models yielded an insufficient model fit, we decided to retain our specified three-factor model.

### Structural Model

After testing for the appropriateness of the measurement model, we examined the structural part of the specified model (Anderson & Gerbing, 1988). Results of this analysis are depicted in Figure 1. Following the suggestions by Richardson and Vandenberg (2005), we specified a path from the control variables to each dependent construct: discrimination and workgroup performance. Significant relationships were found between gender diversity and performance ( $b = .22, p < .01$ ) as well as between ethnic diversity and discrimination ( $b = .21, p < .01$ ).

First, we compared our proposed moderated-mediation model to various other models (see Table III). Specifically, following the classical proceeding for testing mediation in regression analysis by Baron and Kenny (1986), we specified an additional direct-effects-only model, an indirect-effects-only model, and a model without the control variables to test the robustness of the results. In a first step, we examined the hypothesized moderated-mediation model that allowed direct as well as indirect effects between diversity climate and workgroup performance. This model gained a good fit ( $\chi^2 = 556.04, \text{df} = 250, \text{CFI} = .903, \text{RMSEA} = .076, \text{SRMR} = .079$ ). Second, we assessed the appropriateness of a direct-effects-only model in which

we constrained the indirect path from diversity climate to performance to zero (alternative model 1). The model indicated a worse fit than the originally proposed model ( $\Delta\chi^2 = 65.92, p < .01$ ). Third, the specified indirect-effects-only model was tested. Here, the direct effect from diversity climate to performance was set to zero (alternative model 2). The model performed worse than the hypothesized moderated mediation model ( $\Delta\chi^2 = 5.55, p < .05$ ). Finally, we tested a model that equaled the initially proposed model but excluded the control variables (alternative model 3). The model showed a poorer fit to the data than the originally hypothesized model ( $\Delta\chi^2 = 24.32, p < .01$ ). In addition, results for the hypothesized effects did not significantly differ from the original model, indicating that the control variables do not bias the overall model results.

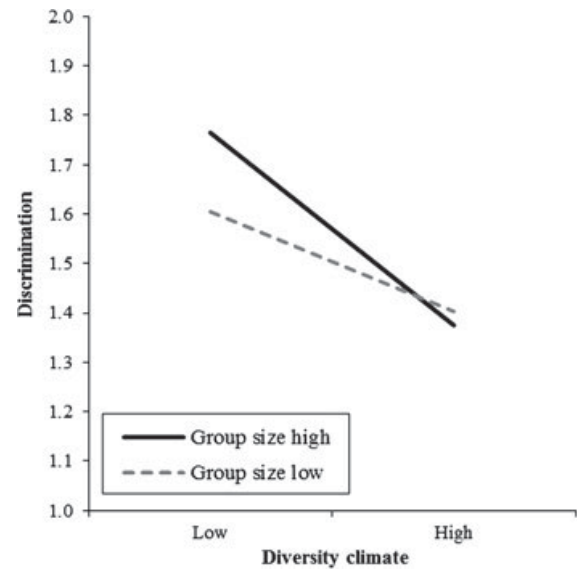
According to Hypothesis 1, workgroups with a high or positive diversity climate should perform better than workgroups with a low or negative diversity climate. This relationship, which we found in the correlations of Table I, was significant in the direct-effects-only model ( $b = .17, p < .05$ ). However, in the moderated mediation model, it turned out to be nonsignificant anymore ( $b = -.03, p > .05$ ), which already indicates a mediation effect.

Hypotheses 2 and 3a predicted that diversity climate would be negatively related to discrimination, which, in turn, would be negatively related to performance. As can be seen in Figure 1, both hypotheses were supported by our results ( $b = -.57, p < .01; b = -.37, p < .01$ ).

According to Hypothesis 3b, the relationship between diversity climate and workgroup performance was expected to be mediated by discrimination. As shown earlier, the significant direct effect between diversity climate and performance got insignificant after allowing for an indirect effect via discrimination. This result indicates a full mediation. However, to further test for this relationship, we applied bootstrap analysis (Cheung & Lau, 2008; Shrout & Bolger, 2002). This direct analysis revealed a significant indirect effect of diversity climate on performance ( $b = .21$ ,  $p < .01$ , CI: .086–.362). Thus, Hypothesis 3b gained further support.

Hypothesis 4a predicted a moderation effect of group size on the relationship between diversity climate and discrimination. More specifically, we expected that the negative relationship between diversity climate and discrimination would be more pronounced in larger workgroups due to less personal contact. In line with our hypothesis, the interaction effect of diversity climate and group size was significantly related to discrimination ( $b = -.17$ ,  $p < .05$ ). To further inspect this relation, we plotted the simple slopes (Aiken & West, 1991) for large workgroups (one standard deviation above the mean) and small workgroups (one standard deviation below the mean). Results can be seen in Figure 2. As predicted, the relationship is stronger for large workgroups than for small ones. However, simple slope analysis revealed that the effect is significant for both, large workgroups ( $b = -.25$ ,  $p < .05$ ) as well as small workgroups ( $b = -.15$ ,  $p < .05$ ).

Finally, we investigated the moderated-mediation effect (i.e., whether the indirect effect of diversity climate on performance via discrimination was conditional upon the characteristic of workgroup size), which we proposed in Hypothesis 4b. Similar to our prior testing of the mediation, we specified two SEM models, one containing high levels of group size (one standard deviation above the mean) and one containing low levels of group size (one standard deviation below the mean). In line with our prediction, under conditions of high group size, the indirect effect, tested again with bootstrapping



Results are plotted one standard deviation above (high) the mean and one standard deviation below (low) the mean.

**FIGURE 2.** The Moderation Effect of Group Size on the Relationship Between Workgroup Diversity Climate and Workgroup Discrimination

procedures, of diversity climate on performance via discrimination was stronger ( $b = -.55$ ,  $p < .01$ ) than under conditions of low group size ( $b = -.19$ ,  $p < .05$ ). These results support Hypothesis 4b.

Overall, the hypothesized moderated mediation model accounted for 41.5 percent of variance in discrimination and 17.6 percent of variance in workgroup performance.

## Discussion

With this study we strived to build upon, empirically test, and theoretically extend Kopelman and colleagues' (1990) climate model of productivity. More specifically, we explored the link between workgroup diversity climate and workgroup performance by shedding light on the role of workgroup discrimination as a behavioral transfer mechanism and group size as a structural boundary condition.

In a first step, diversity climate at the workgroup level was tested for its direct effect on workgroup performance. In a second step, diversity climate was tested for a negative effect on discrimination within

workgroups. Next, workgroup discrimination was examined for its potentially negative relation to group performance. Then, in step four, we investigated the mediating role of workgroup discrimination in the diversity climate–group performance link. In the fifth step, we tested the moderating effect of group size on the relationship between diversity climate and discrimination. Finally, we investigated the resulting moderated mediation. All hypothesized relationships in our moderated mediation model were found to be significant, including the full mediation of the diversity climate–group performance link via workgroup discrimination, and a moderating effect of this relationship by group size. We believe that these results contribute to the diversity climate literature by substantiating and extending prior findings in several ways.

First, our research contributes to the empirical investigation of the effects of diversity climate, a study direction that seems promising but is not yet very well developed (Avery & McKay, 2010; McKay et al., 2009; Van Knippenberg & Schippers, 2007). While other studies focused on the antecedents of diversity climate (e.g., Pugh, Dietz, Brief, & Wiley, 2008), we empirically investigated its outcomes, and specifically its collective performance effects. By showing that diversity climate at the group level of analysis relates to workgroup performance, we contributed to the ongoing discussion on the business case for diversity climate (Avery & McKay, 2010) and provided an empirical test of Kopelman et al.'s (1990) theoretical model.

Second, our study followed recent calls (Avery & McKay, 2010; McKay et al., 2009) to shed more light on the question of *how* such performance effects actually occur. Therefore, we built upon and extended work by Kopelman and colleagues (1990), who proposed that certain climate-triggered behaviors might function as intervening mechanisms between specific climates and desired outcomes. While most scholars rely on such behavioral processes to explain climate effects, actual research on this “behavioral piece” is scarce (Schneider et al., 2011, p. 388). In addition to the positive, individual behaviors proposed by Kopelman

et al. (1990), we introduced discrimination as a negative, interpersonal behavior within workgroups that is likely to be mitigated by diversity climate. In doing so, we added to theory by showing that climates can not only increase desirable behaviors that individual employees show toward their employer, but that they can also reduce harmful behaviors that employees show toward their colleagues and direct reports. This finding is also highly relevant from a practical point of view, given the detrimental effects of discrimination for employees and organizations (Goldman et al., 2006).

Third, with our focus on discrimination as a potentially mediating behavior between diversity climate and performance, we also better integrated the rather unconnected literature streams of diversity climate and discrimination. While scholars such as Gelfand and colleagues (2005) or Nelson and Probst (2010) have theoretically proposed a negative relationship between both constructs, virtually no study has examined it. Indeed, a structured literature review carried out for this study (investigating the three databases Business Source Premier, PsycINFO, and PsycARTICLES) resulted in 22 scholarly, empirical articles on diversity climate, with only one very recent study (Hofhuis et al., 2012) indicating a negative relationship between diversity climate and diversity-related conflict (a construct that seems related to discrimination). We hope to have addressed this serious gap in the literature by theoretically and empirically arguing for the mitigating effect of diversity climate as a normative environment on workgroup discrimination as a related behavior within groups.

Finally, by investigating workgroup size as a moderator of the diversity climate–discrimination link, we further extended both our theoretical understanding of climate effects as well as Kopelman et al.'s (1990) climate model

*All hypothesized relationships in our moderated mediation model were found to be significant, including the full mediation of the diversity climate–group performance link via workgroup discrimination, and a moderating effect of this relationship by group size.*

of productivity. In line with our hypothesis, our data indicated that the mitigating effect of diversity climate on discrimination is more pronounced in large workgroups. In other words, the bigger the group, the more important it is that a pronounced diversity climate acts as a clear point of orientation that shows all members that discriminatory behavior is not tolerated within the group. This finding is pointing both scholars and practitioners to the need of taking structural boundary conditions into consideration when hypothesizing climate effects.

### *Managerial Implications*

There are several important implications of our research for company managers. On the one hand, our study results are consistent with and extend prior empirical work suggesting a clear “business case” for diversity climate (Robinson & Dechant, 1997). In fact, our results indicate that group perceptions of diversity climate positively relate to work-

*For companies, perceptions of discrimination continue to be both practically relevant and dangerous, as they often lead to costly lawsuits, ruined public images, and severe drops in morale.*

group performance. Thus, for both line and HR managers, the fostering of a pro-diversity work climate should be a clear business objective.

On the other hand, our study highlights the role of discrimination and workgroup size in the link between diversity climate and workgroup performance. For managers, this finding is important because it sheds additional light on the question of how to prevent discrimination in the workplace. For companies, perceptions of discrimination continue to be both practically relevant and dangerous, as they often lead to costly lawsuits, ruined public images, and severe drops in morale (Hicks-Clarke & Iles, 2000; E. H. James & Wooten, 2006; Pruitt & Nethercutt, 2002; Robinson & Dechant, 1997). Case in point: in 2012, 99,412 charges of discrimination were filed with the US Equal Employment Opportunity Commission (EEOC, 2013). Again, the active fostering of a strong and shared

diversity climate can be recommended as a key preventive measure. As our data indicate, this seems to be especially relevant for larger workgroups, which tend to be affected by more intense perceptions of discrimination behavior due to a weaker social integration of employees. Hence, a clear normative guideline on how to deal with diversity is especially fruitful for such large groups in order to mitigate discrimination and to spur performance.

What is the best way of achieving this in practice? Organizations might follow several strategies, such as introducing and applying transparent HR policies, practices, and procedures with regard to recruiting, career development, remuneration, or dismissal (Boehm et al., in press; McKay & Avery, 2005). Especially for organizations with highly diverse personnel (e.g., different races, employees with disabilities, or older workers), it seems decisive that employees hold positive diversity beliefs and trust the organization’s overall efforts to support and value diversity (Homan, van Knippenberg, van Kleef, & De Dreu, 2007). Moreover, diversity perceptions of employees should be carefully monitored. To achieve this, managers can take advantage of assessment tools such as employee opinion surveys, focus groups, exit interviews, and analyses of patterns of employees’ grievances (Ensher, Grant-Vallone, & Donaldson, 2001). Again, such measures might be especially relevant for larger workgroups, which seem prone to higher levels of discrimination. Additionally, companies should think about the organization-wide implementation of specially designed diversity workshops and trainings, educating both leaders and employees about the positive effects of a pro-diversity attitude and work behavior (McKay & Avery, 2005). In fact, such programs already exist in the military (Offstein & Dufresne, 2007). A clear commitment to diversity from top management might improve the credibility of such programs and trainings. Finally, organizations should take potential complaints regarding discrimination seriously and reprimand employees and supervisors who behave in ways that violate diversity policies. Such behavior would directly and negatively affect



both performance and well-being within the group and organization.

In sum, companies that succeed in creating a positive diversity climate have the potential to improve group and organizational performance while avoiding negative outcomes such as discrimination and its related costs.

### *Limitations and Directions for Future Research*

Although our article has various methodological strengths, like independent data sources and a large sample size, there are several limitations that should be considered when interpreting the study's findings.

First, due to the cross-sectional design of our data, no final conclusion about causality can be drawn. This is especially relevant for Hypothesis 1, for which a reversed direction of influence is also imaginable. Even though we believe we have provided convincing theoretical arguments for the direction described in Hypothesis 1, future studies should replicate our results by applying longitudinal methods in experimental or quasi-experimental research designs (Shadish, Cook, & Campbell, 2002). Such proceedings through which participants are randomly or post-hoc assigned to treatments, and/or independent and outcome variables are separated over time, should allow future studies to establish a causal linkage for the observed relationships in our analyses.

Second, although we were able to analyze a large data set, the generalizability of our findings is limited by the properties of our sample. Specifically, our participants came solely from one cultural sphere: the Anglo-Saxon cultural cluster (Hofstede, 2001). However, results by Chiu, Chan, Snape, and Redman (2001) indicate some evidence for varying discriminatory attitudes in different cultural backgrounds. Cooke and Saini (2010) also argue for varying effects of diversity management practices with the potential to change diversity climate perceptions in Western versus Eastern countries. Thus, future studies should replicate our findings in different cultural settings, possibly with

samples from Europe and Asia. Furthermore, our sample consisted exclusively of military employees. Therefore, the special hierarchal system and organizational culture of military entities might have influenced the study's findings. Specifically, military units might possess a more collective-oriented culture, with positive effects for a workgroup's climate for diversity. In contrast, a certain form of gender segregation in the military might impact especially discrimination perceptions of women. Consequently, in future studies, scholars should try to replicate our results with civilian samples to increase the results' external validity. However, there is evidence demonstrating no major differences between civilian and military contexts (Dvir, Eden, Avolio, & Shamir, 2002; Shamir, Zakay, Breinin, & Popper, 1998); therefore, we do not believe that this is a substantial threat to the validity of our study.

Third, we applied a group performance measure that is based on the aggregated perceptions of workgroup members. Other sources of performance ratings may be desirable for future studies, such as group supervisors' ratings, or objective information, such as the number of tasks accomplished per group. Doing so would provide even more reliable and robust results for the diversity climate–performance relationship.

Beyond these limitations, our study results offer several interesting pathways for further research. For example, future studies might conceptually and empirically integrate our results in multilevel models (e.g., Hox, 2002). It would be interesting to consider group diversity climate as a cross-level moderator for individual relationships, such as the discrimination–individual performance relationship (e.g., Goldman et al., 2006). Furthermore, our model might be extended by integrating individual outcome variables influenced by group diversity climate and discrimination, such as individual turnover intention (Tett & Meyer,

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1993) or job satisfaction (Wanous, Reichers, & Hudy, 1997).

*A transformational leader who aligns group members to a shared vision and common goals should be a positive factor for the dispersion of a diversity climate throughout the group, leading to positive effects on group performance via the mediation of decreased discrimination.*

In addition, future studies should examine additional boundary conditions that can prevent discrimination and translate diversity climate into group performance. An interesting factor in this regard might be a transformational leadership climate, which has been proven to be beneficial in diverse team settings (Kearney & Gebert, 2009; Kunze & Bruch, 2010; Shin & Zhou, 2007). A transformational leader who aligns group members to a shared vision and common goals should be a positive factor for the dispersion of a diversity climate throughout the group, leading to positive effects on group performance via the mediation of decreased discrimination. Other interesting moderators might be positive leader-member-exchange relationships within workgroups, group cohesion (Knouse & Dansby, 1999), or group identification (Van der Vegt & Bunderson, 2005). We expect all to be positive boundary conditions for the diversity

climate–group performance association, since groups that are either closely connected or that have a strong sense of a common identity should have better capabilities to transfer a higher-diversity climate, thus influencing decreased levels of discrimination and, ultimately, better group performance.

In sum, we hope that our study's findings make a valuable contribution to the diversity climate and discrimination literature and that they provide a solid base on which many future studies targeting this theoretically and practically relevant issue may emerge.

## NOTES

1. The most precise label for our discrimination construct would be perceptions of discrimination behavior. For reasons of readability we refer to "discrimination" and "workgroup discrimination," respectively, throughout the study.
2. To test the appropriateness of our model, we computed confirmatory factor analyses. We tested two models, one in which we formed the proposed second-order discrimination factor ( $\chi^2 = 62.9$ ,  $df = 30$ ,  $CFI = .97$ ,  $RMSEA = .072$ ,  $SRMR = .047$ ) and one model in which we kept all discrimination forms separately ( $\Delta\chi^2 = 358.9$ ,  $\Delta df = 10$ , chi-square difference test  $p < .001$ ,  $CFI = .69$ ,  $RMSEA = .213$ ,  $SRMR = .336$ ). The results clearly supported the proposed second-order model.

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