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A Meta-Analysis of Diversity Climate and Organizational Commitment and Job Satisfaction

Oscar Holmes IV

The University of Alabama

Tuscaloosa, AL

Michael A. McDaniel

Virginia Commonwealth University

Richmond, VA

C. Justice Tillman

The University of Alabama

Tuscaloosa, AL

Keywords: diversity climate, organizational commitment, job satisfaction, meta-analysis

Abstract

This article provides a meta-analytic review of the relationship between diversity climate (DC) and organizational commitment (OC) and job satisfaction (JS). Results based on 9 independent samples ($N = 16,999$) indicate a strong, positive relationship (.49) between diversity climate and organizational commitment. Additionally, results based on 6 independent samples ($N = 1,572$) also indicate a strong, positive relationship (.47) between diversity climate and job satisfaction. For both organizational commitment and job satisfaction, the results also show that the relationship is larger as the percentage of minorities in the sample increases. Practical implications of these results are provided and an agenda for future research in this area is highlighted.

A Meta-Analysis of Diversity Climate and Organizational Commitment and Job Satisfaction

Increasing demographic shifts in the American workforce have had major implications on how organizational leaders manage their employees. Specifically, the increase in ethnic minorities and women into the workforce has evoked greater concerns with managing diversity within organizations. These concerns are borne out of the fact that increased ethnic and gender diversity within organizations have brought many opportunities and challenges. For example, some scholars (Cox, 1991, 1993; Cox & Blake, 1991; Richard, 2000; Richard, Barnett, Dwyer, & Chadwick, 2004) have linked workforce diversity with positive aspects such as firm performance, though others (Brazzel, 2003; Mannix & Neale, 2005; Sacco & Schmitt, 2005) linked it with negative aspects such as lower retention, and yet others (Webber & Donahue, 2001) have found no relationship with diversity on outcomes such as group cohesion or performance. In an effort to explain some of these mixed outcomes, organizational scholars have begun to look at the effect that diversity climate has on organizational outcomes such as organizational commitment, job satisfaction, and performance.

Organizations can have any number of climates (e.g. safety, learning, justice, etc.). These climates are largely based on organizational directives and employees' perceptions (Schneider & Reichers, 1983). Important to this study, diversity climate is "the degree to which a firm advocates fair human resource policies and socially integrates underrepresented employees" (McKay, Avery, & Morris, 2008, p. 352) and the "general perception toward the importance of employer efforts to promote diversity, and a specific component which refers to attitudes toward the probable beneficiaries of these efforts in one's unit" (Kossek & Zonia, 1993, p. 63). Several studies suggest that employees of stigmatized groups (e.g. racial minorities, women, lesbian, gay, bisexual, and transgender individuals) experience discrimination and more negative interpersonal relationships

within the workplace which might thwart their desire to engage in and contribute to organizational goals (Bacharach, Bamberger, & Vashdi, 2005; Blank & Slipp, 1994; Ely & D. A. Thomas, 2001; Goldman, Gutek, Stein, & Lewis, 2006; McKay, Avery, & Morris, 2009; Ragins & Cornwell, 2001; L. Roberson & Block, 2001; Q. M. Roberson & Stevens, 2006). Organizational scholars posit that managerial efforts to foster a positive diversity climate might mitigate the negative effects experienced by stigmatized employees and improve important organizational outcomes (Cox, 1993, 2001; McKay et al., 2008; Parks, Crepeau, Knouse, & McDonald, 2008; Robinson & Dechant, 1997).

Diversity climate is a particularly important and growing area of research because, unlike demographic shifts in the workforce, managers have more control in creating, influencing, and managing the diversity climate within their organizations. A recent study (Nishii & Mayer, 2009) highlights the influence that managers can have on their employees' experiences within organizations. Nishii and Mayer found that inclusive leaders greatly attenuated the turnover intentions of their demographically diverse employees. They examined diversity in regard to race, gender, and age. Further research on how community and contextual factors influence organizational outcomes also augment the need for managers to concentrate on fostering a positive diversity climate. Research confirms that managers and employees can be trained on how to develop higher quality interpersonal relationships with their colleagues (Chrobot-Mason, 2004; Graen, Novak, & Sommerkamp, 1982).

Most research on diversity climate has only examined how employees respond to the organizational environment. In recent studies, however, scholars have begun to examine how the external environment can also influence employees' perceptions of the diversity climate within

their organizations. In one study, researchers examined how the ethnic composition of communities in which employees lived affected their diversity climate perceptions (Brief et al., 2005). Brief and colleagues found that White employees who lived near Blacks and who perceived greater interethnic conflict within their communities viewed diverse workplaces negatively. These results were supported in a field study (White vs. Black) and a lab experiment (White vs. Hispanic). A subsequent study found that diversity climate perceptions were more negative in organizations that were located in communities where few racial minorities resided and attenuated when organizations were situated in more diverse communities (Pugh, Dietz, Brief, & Wiley, 2008). This study suggests that managing the diversity climate of organizations embedded in more racially homogenous communities is especially pertinent because employees' perceptions of the workplace are partly influenced by their workplace surroundings. Together, these studies highlight how external societal issues impact employees' perceptions of their workplace and their workplace relationships.

Scholars are increasingly investigating how workplace diversity impacts organizational outcomes (Holmes, 2010). As such, the goal of this study is to summarize and evaluate meta-analytically a burgeoning area of diversity research, the relationship between diversity climate and organizational commitment and job satisfaction. As the first meta-analysis examining these relationships, this study is particularly helpful in advancing the literature in this area owing to the resulting effect sizes being more accurate because statistical artifacts are accounted for and corrected (Hunter & Schmidt, 2004). Second, the observed variability of the relationships between diversity climate and organizational commitment and job satisfaction from primary studies is large. For example, Gonzalez and Denisi (2009) found a rather small correlation between diversity

climate and organizational commitment ($r = .09$) whereas Parks, Crepeau, Knouse, and McDonald (2008) reported a strong relationship ($r = .60$). In regard to diversity climate and job satisfaction, Lingard and Lin (2004) found a modest relationship ($r = .17$) whereas Parks et al. (2008) found a very strong relationship ($r = .67$). This meta-analysis provides a more accurate indication of the true population effect size. Finally, this meta-analysis contributes to the literature by examining the moderating effects that ethnic diversity has on diversity climate and the two organizational outcomes.

Theory Development and Study Hypotheses

Although the present study is not an investigation of leader/team-member exchange, the preceding discussion has implications for how diversity climate can affect organizational commitment and job satisfaction. When one considers a normal workday, employees engage in a number of interpersonal exchanges in the workplace (Blau, 1964). These exchanges take place among supervisors and fellow colleagues. Based on the quality of exchanges, the relationships formed vary between leaders and subordinates and subordinates and their peers (Dansereau, Graen, & Haga, 1975; Seers, 1989; Sin, Nahrgang, & Morgeson, 2009). The quality of relationships of individuals within the in-group is characterized positively resulting in positive organizational outcomes such as higher job satisfaction, performance, organizational commitment, and citizenship behaviors (Gerstner & Day, 1997). In contrast, the quality of relationships of individuals within the out-group is characterized negatively resulting in low levels of the aforementioned organizational outcomes (Graen & Uhl-Bien, 1995; Seers, Petty, & Cashman, 1995).

High quality relationships are more likely and more easily formed between employees who perceive themselves as similar to one another (Byrne, 1971; Waismel-Manor, Tziner, Berger, &

Dikstein, 2010). Employees compare their own social identities with those of others in their organizations (Chattopadhyay, Tluchowska, & George, 2004). Inevitably, salient characteristics, such as race/ethnicity, are used, at least initially, in employees' assessments of their similarity with their colleagues (Goldberg, 2005; Harrison, Price, & Bell, 1998; Osbeck, Moghaddam, & Perreault, 1997). Toward this end, scholars have found that negative exchanges among those of dissimilar social identities can affect organizational outcomes such as organizational attachment, intent to stay, and absenteeism (Tsui, Egan, & O'Reilly, 1992).

Social identity theory states that people realize that they are members of a social group and they derive from that group emotional and value significance attached to their group membership (Tajfel, 1974). Whenever possible, people will seek out places where their social identity is most likely to be viewed as positive and nourished and leave places where their social identity is stigmatized and derogated (Tajfel & Turner, 1979). One's social identity and social group membership only has meaning vis-à-vis other social groups. As such, one can have a stigmatized social identity when he or she belongs to a social category that others hold negative attitudes, stereotypes, and beliefs (Crocker & Major, 1989). An extension of social identity theory, social categorization theory posits that people view their own social group positively from others in order to maintain a positive social identity (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). In doing so, people tend to favor their in-group members over out-group members (Oakes & Turner, 1980).

Salient identities, such as race and gender, are frequently used to classify people in groups that can serve as the basis for forming and engaging in hostile attitudes about and behaviors toward out-group members (Fiske, 2000; Pelled, Eisenhardt, & Xin, 1999; Tsui & Gutek, 1999). Accordingly, racial minorities and women are more likely to suffer from stereotyping and

discrimination than white heterosexual males (Brief, Dietz, Cohen, Pugh, & Vaslow, 2000; Dovidio, Brigham, Johnson, & Gaertner, 1996; Talaska, Fiske, & Chaiken, 2008). This increased stereotyping and discrimination leads to lower job satisfaction and organizational commitment in addition to other outcomes such as greater stress, lower morale, and distrust among colleagues to name a few (Crocker & Major, 1989; Ensher, Grant-Vallone, & Donaldson, 2001; Murrell, Olson, & Frieze, 1995; Riordan, Lankau, & Wayne, 2008). Specific negative acts that racial minorities and women encounter in the workplace include being more likely to fall victim to hate crimes, be the recipient of derogatory comments, racial slurs, or unwanted sexual advances, and be denied positive organizational outcomes such as being hired, promoted, or given favorable work assignments (Baron, 1990; Chugh & Brief, 2008; Fiske & Lee, 2008; Pettigrew & Martin, 1987; Probst, Estrada, & Brown, 2008).

Experiencing stereotyping and discrimination in the workplace increases one's perception of a hostile work environment and negative diversity climate and which lead to their having decreased job satisfaction and organizational commitment (Lingard & Lin, 2004; Mor Barak, Cherin, & Berkman, 1998; Riordan et al., 2008; Tenglund, 2000). Conversely, individuals who work in organizations with more positive diversity climates are less likely to experience these negative acts and therefore have greater job satisfaction and organizational commitment. Parks and colleagues found that a positive diversity climate was positively related to the Latinas' organizational commitment and job satisfaction. Gonzalez and Denisi (2009) also found that diversity climate was positively related to organizational commitment. Even when African-Americans and Hispanics worked in environments with few other co-workers of the same race, their organizational commitment increased when the diversity climate was perceived to be positive

(Gonzalez & Denisi, 2009). Similarly, McKay et al. (2007) addressed whether an organization's diversity climate had an effect on the turnover intentions of its employees. McKay and colleagues predicted that racial minorities (e.g. Blacks, Hispanics) will have greater intentions to exit their organization when they had negative perceptions of the diversity climate. The authors found that diversity climate perceptions accounted for 15% of the variance in turnover intentions in Blacks, 7% in White men and women, and 4% in Hispanics. Interestingly, their results suggest that a positive diversity climate also increases organizational commitment among ethnic majority employees (McKay et al., 2007). Finally, research has consistently shown that racial minorities and women place much more emphasis on promoting positive diversity climates than white males (Kossek & Zonia, 1993) and that white males perceive organizations to be more fair and inclusive than racial minorities and women (Mor Barak et al., 1998). Based on the above rationale, it is hypothesized that diversity climate is positively related to organizational commitment and job satisfaction. Additionally, race/ethnicity will moderate the relationship between diversity climate and organizational commitment such that the relationship will be stronger in studies with a larger proportion of minorities.

Method

Literature Search

An extensive literature search was conducted electronically and manually to identify both published and unpublished manuscripts that examined the relationship between diversity climate and organizational commitment and job satisfaction. Relevant articles were identified in the PsychINFO and ABI/Inform electronic databases using various combinations of keywords (e.g. diversity climate, organizational commitment, diversity climate/organizational commitment, diversity climate/commitment, diversity climate/attachment, diversity/commitment,

diversity/attachment, diversity/satisfaction, diversity climate, job satisfaction). Articles, theses, and dissertations that appeared to test a relationship between diversity climate and organizational commitment or job satisfaction were obtained and their reference sections were checked to see if any additional articles were likely to meet our inclusion criteria that were not already obtained. In addition, the programs from the annual conferences for the Academy of Management and the Society for Industrial and Organizational Psychology were searched both manually and electronically from 2004-2010 (for SIOP) and 2009 (for AOM). A manual search was also conducted on the table of contents and the in-press articles of the following journals (2005-present): *Personnel Psychology*, *Journal of Applied Psychology*, *Journal of Organizational Behavior*, and the *Academy of Management Journal*. Finally, we put out a call for unpublished papers on the HR, OB, and GDO list-serves. This method led to the retrieval of one additional article that met inclusion criteria for this meta-analysis (Buttner, Lowe, & Billings-Harris, 2010a). These search methods resulted in 80 articles that appeared relevant.

Inclusion Criteria

The next step was to determine which of the 80 articles contained the relevant data appropriate for this study. To do this, the abstracts of all of the articles were reviewed and studies without data and that did not examine the relationship between diversity climate and organizational commitment and job satisfaction were excluded. From this review, 40 studies were selected for further consideration. We read each of these studies to determine which to include in the meta-analysis. Decision rules used to determine which studies to include in the meta-analysis were whether the manuscript reported a correlation between diversity climate and organizational commitment or diversity climate and job satisfaction, reported the total number of study

participants and racial breakdown of participants, and used employed respondents. Ten studies, which provided a total of 15 correlations between diversity climate and organizational commitment and job satisfaction met the inclusion criteria.

Coding

We coded data from the primary studies including the correlation between diversity climate and organizational commitment and job satisfaction, the reliability of measures, publication status (published or unpublished), and number of samples included in the study. For the overall analysis, we included a unique estimate from each of the 15 samples, with a combined sample size of 16,999 for the diversity climate and organizational commitment relationship and 1,572 for the diversity climate and job satisfaction relationship. All variables were measured at the individual level of measurement. Thus, our diversity climate measure is operationalized as the individual employee's perception of diversity climate.

Only studies that actually measured diversity climate and organizational commitment or job satisfaction were included. Some studies purported to measure diversity climate to the outcomes relevant for this meta-analysis (Buttner, Lowe, & Billings-Harris, 2010b; Hicks-Clarke & Iles, 2000), but instead, they employed organizational justice measures or affirmative action/diversity acceptance policy measures so they were excluded. Additionally, one dissertation (Paez, 2007) was excluded because the author correlated diversity climate with a combined organizational commitment and job satisfaction measure and another dissertation (Lynch, 2002) was excluded because it reanalyzed a portion of the data from a previous dissertation that is already included in this meta-analysis (Tenglund, 2000). When articles were published based on dissertations (Gonzalez, 2002; Gonzalez & Denisi, 2009), we excluded the dissertation and only

included the correlations of the published article. Two dissertations were included (Hankins, 2005; Tenglund, 2000).

Because it is unlikely that statistical artifacts (e.g. sampling error, measurement error, etc.) would explain all of the variability in correlations across studies, for the moderator analyses, we also examined whether the proportion of racial minorities present in a study's sample had an effect on the correlation between diversity climate and organizational commitment and job satisfaction. Past research has found that racial minorities are more likely to experience racism than their White counterparts (Crocker & Major, 1989; Ridgeway, 1991), so racial minorities tend to value diversity more than their White counterparts (Kossek & Zonia, 1993; McKay & Avery, 2006; Mor Barak et al., 1998). According to the U.S. Census, in 2008, racial minorities made up a third of the population in the United States. Therefore, for this meta-analysis, we calculated the percentages of racial minorities in each of the studies. Racial minorities that made up the aggregation racial minority percentage variable were Blacks, Hispanics, Asians, and Native Americans. Unless otherwise provided in the primary studies, we calculated the percentage that each racial group represented in each authors' primary studies.

Similar to all meta-analyses, we tried to make our coding criteria as objective as possible. Using the inclusion criteria as a guide, the first and third authors coded the studies and calculated the percentages for the moderator analyses. The coders agreed on 14 of the 15 studies, which resulted in an interrater agreement percentage of 93 percent. The disagreements were resolved through discussion among the authors.

Meta-Analysis Procedures

We used psychometric meta-analytic procedures (Hunter & Schmidt, 2004) to conduct a meta-analytic review that cumulated across studies the reported correlations between diversity climate and organizational commitment and job satisfaction. All of the included studies provided internal consistency reliability measures. Results were individually corrected for measurement error but not range restriction/range enhancement. No range corrections were made because no estimate exists of the population variance for any of the measures. The lack of correction for the range of the measures likely results in the overestimation of the population distribution variance and we have insufficient information to judge the effect on the mean population parameter.

The psychometric meta-analysis was conducted in SAS with a program shown to closely match the results of the Schmidt and Le software (2004). Publication bias analyses on the observed correlations were conducted with Comprehensive Meta-Analysis software (Borenstein, Hedges, Higgins, & Rothstein, 2008).

Results

Insert Tables 1 and 2 About Here

Table 1 summarizes the data used in the meta-analysis. Table 2 presents the meta-analysis results for the overall relationship between diversity climate and organizational commitment and job satisfaction. Column 1 presents the correlates of diversity climate being examined. Columns 2 through 5 summarize the distribution of observed validity coefficients. Column 2 (k) is the number of studies in the analysis and column 3 (N) is the total sample size across studies. Columns 4 and 5 present the sample-size weighted-mean observed correlation and the standard

deviation of the observed correlations. Columns 6 through 10 summarize the estimated population distribution. Column 6 is the mean estimated population correlation and column 7 is the standard deviation of the estimated population correlation distribution. Column 8 is the percent of the observed variance that can be attributed to random sampling error and differences across studies in measurement error. A small percent of variance accounted for by these artifacts, as is found in this study (13% and 9%), suggests that the population distribution is affected by one or more moderators or by uncorrected for statistical artifacts (e.g., differences across studies in range variation). Column 9 is the confidence interval of the estimated mean population correlation. The confidence interval of the population correlation is a function of the standard error of ρ . When the confidence interval does not include a value (e.g. zero) one can conclude that the estimate ρ is statistically significantly different from the value. Column 10 is the 80% credibility interval and is a function of the standard deviation of the estimated population correlations. Wider credibility intervals suggest that moderators or uncorrected for statistical artifacts are likely present.

The last column is a vector correlation. Vector correlations describe the covariance between two vectors. In the last column, labeled ρ with % of minorities in the sample, and the row labeled organizational commitment, one vector is the correlation between diversity climate and organizational commitment and the second vector is the percent of minorities in the sample. The value (.46) is the correlation between the two vectors. The vector correlation for job satisfaction is .95. Vector correlations are discussed in Jensen (1998) in the context of intelligence research. Hunter and Schmidt (2004, pages 294-295) address the topic as “study characteristic correlations.” Vector correlation analysis is conceptually similar to the use of a single predictor in a meta-regression (Thompson & Higgins, 2002).

As expected, the overall analysis revealed that diversity climate was related to organizational commitment ($\rho = .49$) and job satisfaction ($\rho = .47$). The confidence interval of the population parameter indicates that the population parameter estimates are statistically significant. We interpret the magnitude of the population parameters as indicating strong relationships with diversity climate. The percent of variance accounted for by artifacts (sampling error and differences across studies in measurement error) and the 80% credibility interval suggest that substantial unexplained variance in the population distribution remains. This suggests that our estimates of the populations parameters (.49 and .47), although good summaries of the mean of the population distributions, are likely affected by one or moderators which make the population correlation dependent on the value of the moderator(s).

We used a vector analysis to evaluate percent of minorities in the sample as a potential moderator. The two vector correlations are positive suggesting the relationship between diversity and both organizational commitment and job satisfaction are a function of the percent of minorities in the sample. Specifically, the relationships with diversity climate are generally stronger in samples with more minorities. We note that the unit of analysis in the vector analyses is the study such that the vector correlations are based on only nine studies for organizational commitment and six studies for job satisfaction. Thus, although we are confident in our conclusion that the vector correlations are likely positive, we discourage strong statements concerning the magnitude of the vector correlations given the small sample sizes (9 and 6) for the vector correlations. We encourage additional research on this moderator and replication of the vector analysis results as more data become available.

Sensitivity analyses are important in meta-analysis to determine the robustness of results with respect to small changes in the data set and with respect to potential publication bias. These analyses included re-analyses with and without large sample studies and various publication bias analyses. These are summarized here.

The meta-analysis examining diversity climate and organizational commitment had a particularly large sample size (16,999) that was mainly due to two studies (McKay et al., 2007; Virick, Goswami, & Czekajewski, 2004). Therefore, we re-ran the analysis removing each study individually and then removing them both from the analyses. Removing both studies or one of either did not notably alter the estimated population mean. The population mean was .50 and .46 respectively when the McKay et al. (2007) and the Virick et al. (2004) studies were removed one at a time. When both studies were removed, the population mean was .47. These results add more confidence to the overall meta-analytic results that the magnitude of the relationship is not overly dependent on any of these two studies.

The meta-analysis examining the relationship between diversity climate and job satisfaction did not have any studies with sample sizes substantially greater than any others. Nonetheless, we re-ran the analyses removing the largest study (Peyton, Ehrhart, Boulanger, Sawitzky, & Rettenmaier, 2008) from the analyses ($N = 354$). The population mean (.43) did not change appreciably when this study was removed. These results add more confidence to the overall meta-analytic results that the magnitude of the relationship is not overly dependent on the study with the largest sample size.

Additionally, we ran publication bias analyses (McDaniel, Rothstein, & Whetzel, 2006; Rothstein, Sutton, & Borenstein, 2005) for both meta-analyses. These analyses included trim and

fill (Duval, 2005), the Begg and Mazumdar test (Begg & Mazumdar, 1994), the Egger test of the intercept (Egger, Smith, & Phillips, 1997) and cumulative meta-analysis by precision (Borenstein, Hedges, Higgins, & Rothstein, 2009; McDaniel, 2009). There was little evidence for publication bias in neither the organizational commitment meta-analysis nor the job satisfaction meta-analysis. As with all of our analyses, we recommend a replication of the publication bias analyses as more data accumulate.

Discussion

This meta-analysis is the first to examine the magnitude of the relationship with diversity climate and organizational commitment and job satisfaction. Overall, we found that diversity climate had a strong, positive relationship with organizational commitment ($r_c = .49$) and job satisfaction ($r_c = .47$). The magnitude of this relationship is higher than or in line with previous relationships examining organizational commitment and satisfaction. That is, Liao, Hu, and Chung (2009) reported a correlation of .45 with leader-member relations and organizational commitment and Li, Liang, and Crant (2010) found a correlation of .22 with proactive personality and job satisfaction. Maier and Brunstein (2001) reported a correlation of .57 with supervisor support and job satisfaction and of .37 with co-worker support and job satisfaction. The correlations between organizational commitment and supervisor support and co-worker support were .27 and .16 respectively (Maier & Brunstein, 2001). Thus, these results suggest that contributing to a positive diversity climate is as good as or better than previously suggested practical implications to increase organizational commitment and job satisfaction.

The results from this meta-analysis confirms diversity climate as an important boundary condition for social identity theory. Social identity theory posits that people in the out-group will

experience negative outcomes that threaten their self-identity at the hands of those in the in-group. However, when an organization has a positive diversity climate, negative effects for those in the out-group are mitigated. As other researchers have called for, this moves the SIT framework from mere in-group/out-group functioning and adds climate as an important boundary condition.

Considering that all of the studies in this meta-analysis had positive correlations, we feel that the important implication of this study is determining the amount of variance that diversity climate accounts for in these two organizational outcomes. Our moderator analysis helped to clarify some of the unexplained variance between the three variables. The fact that the percent of minorities in the sample explained some of the variance between diversity climate and organizational commitment and job satisfaction further supports past research that has found that diversity concerns are more salient and important to minorities than White male employees (Kossek & Zonia, 1993; Mor Barak et al., 1998). This is important because many studies in organizational research assess employees' attitudes and performance. Considering research that has shown how low job satisfaction and organizational commitment can impact an employee's effort and performance (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Judge, Thoresen, Bono, & Patton, 2001; Kopelman, Brief, & Guzzo, 1990; McKay et al., 2009), it seems prudent for researchers to also assess or control for diversity climate when correlating variables such as cognitive ability to job performance and other organizational outcomes in field research. This suggestion might be more important in medium and high complexity jobs where cognitive ability of the employees who hold these jobs might not vary much but their job performance might. We believe this is a particularly important contribution. Additionally, we implore researchers to put more effort in increasing the sample size of racial minorities in their primary studies so that more

comprehensive analyses can be performed on these subgroups and more accurate generalizations can be made from a more representative sample of racial minorities.

More generally, the practical implications of our results suggest that managers might be able to more effectively manage a diverse workforce if they provide a more positive diversity climate. Managers can foster a positive diversity climate by creating inclusive and supportive work environments (Nishii & Mayer, 2009), practicing multiculturalism instead of color blindness ideologies (Plaut, K. M. Thomas, & Goren, 2009), ensuring fair and equitable work environments and work practices (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Colquitt, LePine, & Wesson, 2009) and implementing effective human resources diversity practices and policies (Arredondo, 1996; Kulik & L. Roberson, 2008). Our results concerning the incremental variance explained by the percentage of minorities in studies might lead some readers to believe that diversity climate only increases organizational outcomes for minority employees. We caution such a belief. Considering that increased diversity can also have a negative impact on firm performance through intergroup conflict and lower job satisfaction and organizational commitment among employees (Jackson et al., 1991; Jehn, Bezrukova, & Thatcher, 2008; Tsui et al., 1992), managers that effectively manage their diversity climate could avoid these pitfalls which would benefit the entire organization. Finally, in their study, McKay et al. (2007) found that positive diversity climates also increased the organizational commitment among White employees in their study.

The results of the present meta-analysis suggest several additional avenues for future research on diversity climate. First, the authors only found two studies (McKay et al., 2008, 2009) that examined the relationship with diversity climate and performance. Considering that job performance is perhaps the most researched variable in organizational research, it would greatly

increase our knowledge if more studies focused on these relationships and other relationships such as organizational citizenship behaviors and counterproductive work behaviors. Second, research that examines the outcomes of positive and negative diversity climate using behavioral and physical outcomes would particularly advance this literature. For example, how does diversity climate affect the stress levels of employees as well as other psychosomatic outcomes such as increased blood pressure, headaches, and other illnesses? Additionally, the emotional labor literature (Ashforth & Humphrey, 1993; Hochschild, 1983) posits that organizations have display rules that employees are expected to follow. However, there are different organizational outcomes depending on the method employees use to conform to the display rules (surface acting, deep acting, or natural emotion). For instance, when an employee surface acts, the employee attempts to feel the emotion the organization requires even though he or she does not really feel that emotion. This is particularly important because surface acting can come across as condescending at times and is associated with lower job satisfaction, more strain, increased burnout and emotional exhaustion, and negative health symptoms (Brotheridge & Grandey, 2002; Grandey, 2000, 2003; Schaubroeck & Jones, 2000). In relation to acting, it would also be interesting to examine the impression management tactics that employees use in organizations based on their different diversity climates. Finally, future research should uncover important moderators that influence the relationship of diversity climate with organizational outcomes.

As with all studies, this research also has some limitations. First, our diversity climate measure was assessed at the level of the individual. A replication with a work-unit level or organizational level measure of diversity climate is warranted. Second, although this meta-analysis provides the best estimate of the relationship between diversity climate and both organizational

commitment and job satisfaction, more data are always desirable. Although the results of our sensitivity analyses support the robustness of our findings, nonetheless, we encourage additional primary research and replications and extensions of these meta-analyses as more data become available.

In sum, this meta-analysis provides strong support for the relationship between a positive diversity climate and organizational commitment and job satisfaction. This study also suggested that the percentage of minorities and women in studies accounted for additional variance. In doing so, we contribute to the diversity literature by providing the first population estimate for the relationship between diversity climate and organizational commitment and job satisfaction. Further, our results support the notion that managers and fellow employees can impact important organizational outcomes, whether positively or negatively, based on their interactions with each other and the environments that they create. Finally, we hope that our findings and suggestions for future research stimulate more research endeavors surrounding diversity climate.

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Table 1. Summary of the data contributing to the meta-analysis

<u>Correlate of</u> Diversity Climate	Study	Year	<i>N</i>	<i>r</i>	α for IV	α for DV
Organizational Commitment						
	McKay, Avery, Tonidandel, Morris, Hernandez, & Hebl	2007	5,370	.40	.91	.82
	Gonzalez & Denisi	2009	291	.09	.80	.82
	Lingard & Lin	2004	109	.49	.90	.90
	Parks, Crepeau, Knouse, & McDonald	2008	233	.53	.87	.90
	Parks, Crepeau, Knouse, & McDonald	2008	196	.60	.87	.90
	Tenglund	2000	288	.37	.89	.77
	Tenglund	2000	268	.31	.86	.86
	Buttner, Lowe, & Billings-Harris	2010	182	.60	.92	.92
	Virick, Goswami, & Czekajewski	2004	10,062	.43	.90	.82
Job Satisfaction						
	Lingard & Lin	2004	109	.17	.90	.80
	Parks, Crepeau, Knouse, & McDonald	2008	233	.67	.87	.80
	Hankins	2005	320	.39	.93	.94
	Tenglund	2000	288	.37	.89	.77
	Tenglund	2000	268	.19	.86	.94
	Peyton, Ehrhart, Boulanger, Sawitzky,					

& Rettenmaier

2009

354

.51

.79

.79

Table 2. Psychometric Meta-analysis Results and Vector Correlations

Correlate of Diversity	Observed Distribution				Estimated Population Distribution					
	k	N	Mean r	σ_r	ρ	σ_ρ	% of variance	Confidence Interval	Credibility Interval	ρ with % of minorities in the sample
Organizational Commitment	9	16,999	.43	.06	.49	.05	13%	.45 to .53	.41 to .56	.46
Job Satisfaction	6	1,572	.39	.02	.47	.19	9%	.31 to .63	.23 to .71	.95

Notes: k is the number of correlations summarized. N is the total sample size across samples. σ_r the standard deviation of the distribution of observed correlations. ρ is the mean of estimated population distribution and σ_ρ is the standard deviation of the estimated population distribution. % of variance is the percent of variance that can be attributed to sampling error and differences across studies in measurement error. The confidence interval is the confidence interval of the mean of the estimated population correlations. The column labeled “ ρ with % of minorities in the sample” is a vector correlation (consult the text for a detailed explanation).