

Singapore Management University

## Institutional Knowledge at Singapore Management University

---

Research Collection Lee Kong Chian School Of  
Business

Lee Kong Chian School of Business

---

9-2013

### Emotion Regulation in Workgroups: The Roles of Demographic Diversity and Relational Work Context

Eugene KIM

*Georgia Institute of Technology - Main Campus*

Devasheesh P. BHAVE

*Singapore Management University, dbhave@smu.edu.sg*

Theresa M. GLOMB

*University of Minnesota*

Follow this and additional works at: [https://ink.library.smu.edu.sg/lkcsb\\_research](https://ink.library.smu.edu.sg/lkcsb_research)



Part of the [Industrial and Organizational Psychology Commons](#), [Multicultural Psychology Commons](#),  
and the [Organizational Behavior and Theory Commons](#)

---

#### Citation

KIM, Eugene; BHAVE, Devasheesh P.; and GLOMB, Theresa M.. Emotion Regulation in Workgroups: The Roles of Demographic Diversity and Relational Work Context. (2013). *Personnel Psychology*. 66, (3), 613-644. Research Collection Lee Kong Chian School Of Business.

Available at: [https://ink.library.smu.edu.sg/lkcsb\\_research/3636](https://ink.library.smu.edu.sg/lkcsb_research/3636)

This Journal Article is brought to you for free and open access by the Lee Kong Chian School of Business at Institutional Knowledge at Singapore Management University. It has been accepted for inclusion in Research Collection Lee Kong Chian School Of Business by an authorized administrator of Institutional Knowledge at Singapore Management University. For more information, please email [liblR@smu.edu.sg](mailto:liblR@smu.edu.sg).

# Emotion Regulation in Workgroups: The Roles of Demographic Diversity and Relational Work Context

By Eugene Kim, Devasheesh P. Bhave, Theresa M. Glomb

Published in *Personnel Psychology*, Volume 66, Issue 3, Autumn 2013, Pages 613–644

<http://doi.org/10.1111/peps.12028>

We are grateful to Bradford Bell, two anonymous reviewers, Joyce Bono, Michelle Duffy, Lisa Leslie, Hyuntak Roh, and the Well-Being at Work Collaboratory for comments on earlier versions of this article. An earlier version of this manuscript was presented at the 2010 Annual Meeting of the Academy of Management in Montreal, Canada. Devasheesh Bhave is now at Singapore Management University.

Correspondence and requests for reprints should be addressed to Yui Jin (Eugene) Kim, Scheller College of Business, Georgia Institute of Technology, 800 West Peachtree Street, NW, Atlanta, GA; [eugene.kim@scheller.gatech.edu](mailto:eugene.kim@scheller.gatech.edu).

## Abstract

Drawing on the social identity perspective, we investigate the cross-level relationship between demographic diversity in workgroups and emotion regulation. We propose that age, racial, and gender diversity in workgroups relate positively to emotion regulation because of demography-related in-group/out-group dynamics. We also examine the moderating role of the relational work context, specifically task interdependence and social interaction, on the relationship between demographic diversity and emotion regulation. Results from a sample of 2,072 employees in 274 workgroups indicate that working in a group with greater age diversity is positively related to an employee's emotion regulation. Results suggest the operation of the age diversity effect can be attributed primarily to younger employees when they are in workgroups with older coworkers. Results reveal asymmetric effects for racial diversity such that racial out-group members engage in higher levels of emotion regulation than racial in-group members when racial diversity is low, whereas racial in-group members engage in higher levels of emotion regulation than racial out-group members when racial diversity is high. Race effects also suggest a moderating effect of social interaction; specifically, social interaction weakens the relationship between racial diversity and emotion regulation. Gender effects are not significant.

People must regulate their emotions in everyday life (Morris & Reilly, 1987), including at the workplace (Kanfer & Kantrowitz, 2002). Accordingly, scholars have investigated workplace emotion regulation, frequently in customer service settings (e.g., convenience store clerks, Rafaeli, 1989; hospital and bank workers, Wharton, 1993). Research has suggested that emotion regulation affects employees' health, strain, job satisfaction, and customer service performance (e.g., Brotheridge & Grandey, 2002; Grandey, Diefendorff, & Rupp, 2012; Hülshager & Schewe, 2011; Kim & Yoon, 2012; Schaubroeck & Jones, 2000; Wharton, 2009).

Although understanding emotion regulation in employee-customer interactions is critical in our growing service oriented economy (Grandey, 2003; Rupp & Spencer, 2006) and for enhancing our knowledge of the broader process of emotion regulation, the focus on customer interactions has been at the expense of research on emotion regulation in employee-employee interactions in workgroup settings. In many organizations, employees spend much of their time interacting with other workgroup members (see Kozlowski & Bell, 2003). These workgroup interactions are inherently affect-laden experiences that may induce emotion regulation (George, 2002). Several empirical studies suggest the prevalence of emotion regulation in workgroup interactions. For instance, Mann (1999) found that approximately two-thirds of

customer communications involved emotion regulation—the same proportion reported during coworker communications. Glomb et al. observed that emotion regulation exists not only in customer service jobs, but it pervades workplace interactions across many occupations (Bhave & Glomb, 2009; Glomb, Kammeyer-Muller, & Rotundo, 2004). This research underscores the presence of emotion regulation outside customer service contexts. Given the well-established adverse effects of response-focused emotion regulation (hereafter, “emotion regulation”) on employee well-being and job attitudes (see Bono & Vey, 2005; Hülshager & Schewe, 2011), identifying the array of predictors of emotion regulation in workgroup settings is important in potentially mitigating its effects.

Drawing on the social identity perspective, which focuses on interactions and communications among people in different groups, we consider demographic diversity as a situational antecedent of emotion regulation in workgroups. Demographic diversity—group-level characteristics describing demographic differences between group members—is a key consideration for organizations as workforces become increasingly diverse (Brief, 2008; Roberson, 2007; Tsui & Gutek, 1999) and because people inherently use demographic information to shape their social identities (Tajfel & Turner, 1979). Importantly, when employees have negative attitudes toward dissimilar group members, working in diverse workgroups evokes negative emotions such as hostility or emotional conflict (Jehn, Northcraft, & Neale, 1999). Thus, demographic diversity may be a source of emotion regulation in workgroups because employees strive to avoid or conceal their negative biases against dissimilar group members. Ashkanasy and colleagues suggested such a proposition and observed that “dealing with diversity often involves some amount of emotional labor” (i.e., emotion regulation; Ashkanasy, Hartel, & Daus, 2002, p. 328).

To date, diversity research has provided minimal insight into this speculated cross-level linkage between workgroup demographic diversity and emotion regulation (see Jackson & Joshi, 2010 for a review of diversity). Given the increasingly important role of diversity in workgroups as well as the generally detrimental outcomes of emotion regulation for employees, we take an important first step in investigating the link between these important constructs. Specifically, based on social identity theory, we theorize that working in a demographically diverse workgroup (in terms of age, race, and gender) increases emotion regulation because of demography-related in-group favoritism and out-group discrimination dynamics. In doing so, this study answers calls in the broader diversity literature for more cross-level studies examining individual-level outcomes of workgroup diversity (see Jackson, Joshi, & Erhardt, 2003; Shin, Kim, Lee, & Bian, 2012).

Furthermore, we incorporate the relational work context as an important boundary condition that shapes the relationship between demographic diversity and emotion regulation. In outlining the relational job design perspective, Grant and Parker (2009, p. 9) emphasized the significance of “the interpersonal interactions and relationships that are embedded in and influenced by the job, roles, and tasks that employees perform and enact.” Grandey and Diamond (2010) echoed the notion that emotion regulation research must consider this social aspect of jobs (see also Grant, 2007; Humphrey, Nahrgang, & Morgeson 2007; Oldham & Hackman, 2010). Investigating contextual factors influencing interpersonal interactions is critical in diversity research, as these factors help explain the complex nature of workgroup diversity (see Joshi, Liao, & Jackson, 2006; Joshi & Roh, 2007). Accordingly, we focus on *structural* and *social* properties of workgroups—task interdependence and social interaction—as situational boundary conditions of the relationship between demographic diversity and emotion regulation. Including these two relational contextual factors remedies problems highlighted by Kiggundu’s (1981, p. 506) observation: “Often, the distinction between *social interaction* and *required task interdependence* has not been made” [emphasis added]. This distinction is critical because task interdependence reflects structurally embedded required interaction, whereas social interaction reflects socially embedded voluntary interaction (see Kiggundu, 1981).

We contribute to extant research on diversity, emotion regulation, and relational work context in two primary ways. First, we extend theory on social categorization and social identity to examine demographic diversity at the workgroup level as it relates to emotion regulation at the individual level.

Second, we investigate two relational context factors, task interdependence and social interaction at the workgroup level, as cross-level moderators of the relationship between demographic diversity and emotion regulation. We test our hypotheses in a sample of 2,072 employees in 274 workgroups.

### **Emotion Regulation**

Many organizations have formal rules or norms regarding the expected emotional display of their employees, known as display rules or norms (Ekman & Friesen, 1982; Rafaeli & Sutton, 1987; Wharton & Erickson, 1995). Adherence to display rules or norms is important; for example, positive emotional expressions such as showing friendliness or courtesy to coworkers plays an important role in achieving desired outcomes (see Kanfer & Kantrowitz, 2002) and fostering a positive work culture and climate (see Dutton & Ragins, 2007). Thus, in workgroups, employees are under pressure to regulate their emotions when their inner emotions are not consistent with emotional display norms.

Emotion regulation can be categorized into response-focused emotion regulation (i.e., surface acting, which involves modifying *external expressions*) and antecedent-focused emotion regulation (i.e., deep acting, which involves modifying *internal feelings*; Grandey, 2000; Gross, 1998). A recent meta-analysis by Hülsheger and Schewe (2011) found that response-focused emotion regulation generally has negative effects on employee outcomes, but antecedent-focused emotion regulation can have beneficial effects. We focus on response-focused emotion regulation as an outcome of demographic diversity because the regulation of expressions—but not regulation of feelings—is a way to avoid or conceal negative reactions in workgroup settings when faced with demographic diversity (see Grandey, Fisk, & Steiner, 2005; Rupp & Spencer, 2006 for a similar approach). Although antecedent-focused emotion regulation is possible, it is a less likely way to mitigate out-group discrimination given this would involve trying to feel differently about the outgroup, ultimately, eliminating such discrimination and regulatory attempts. Excluding antecedent-focused emotion regulation also aligns with social identity theory, which posits that perceptions related to the outgroup are inherent and very resistant to change (see Tajfel & Turner, 1979).

### **Diversity Conceptualization Considerations**

Harrison and Klein (2007) call for explicit conceptualization of the type of differences one intends to capture in diversity assessment as *separation*, *variety*, or *disparity*. They state that demographic diversity can be conceptualized as any of these three and must be considered with reference to the type of differences that are presumed to be operating. In our case, we focus primarily on *separation*. The separation conceptualizations are most in line with our theoretical rationale; Harrison and Klein (2007, p. 1201) indicate separation indices are consistent with social categorization theories such as those underlying our propositions. Specifically, conceptualizing diversity as separation suggests the presence of in-group/out-group dynamics, which influence the emotion regulation of group members. Harrison and Klein (2007) advocated such a conceptualization because diversity of age, race, and gender reflect laterally “opposing beliefs” and are negatively related to “cohesion and identification within a unit” (p. 1209), which are related to emotion regulation between different demographic groups. Such “opposing beliefs” may be signaled by observable demographic characteristics because “social targets initially activate primary or primitive generic categories such as race, gender, age” (Messick & Mackie, 1989, p. 54), and these visible attributes reflect different cultures (cf. Cox, 1994). This conceptualization suggests that men and women, older and younger workers, and racial (or ethnic) minorities and White workers would interact differently with one another.

### **The Relationship Between Demographic Diversity and Emotion Regulation**

Why would demographic diversity influence group members’ emotion regulation? The social identity perspective, which encompasses social identity and social categorization theory, provides a framework for addressing this question (Hogg & Terry, 2000; Reynolds, Turner, & Haslam, 2003; Tajfel & Turner, 1979). The key tenet of the social identity perspective is that demographic characteristics contribute to shaping employees’ social identity and, in turn, their affective, cognitive, and behavioral

responses to similar and dissimilar others. Thus, a workgroup's demographic composition would influence group members' psychological states and behaviors. Demographic attributes are important because they are easily accessible and people inherently classify themselves as belonging to specific demographic groups. Once classification as ingroup/outgroup occurs, employees favor members of their ingroup and discriminate against members from their outgroups. These in-group/out-group dynamics are salient in mixed demographic composition groups because of social categorization processes that result in intergroup bias and negative emotions and attitudes toward out-group employees (see Fiske, 1998; Jackson & Joshi, 2010; Jehn et al., 1999).

Social identity theory outlines how in-group and out-group members are established and regarded. Communication accommodation theory (Giles & Coupland, 1991) picks up this theme and outlines how in-group and out-group membership changes communication patterns. Communication accommodation theory suggests people adjust their speech, vocal patterns, and gestures to accommodate others during interactions (West & Turner, 2010). More specifically, communication accommodation theory suggests that an intergroup element (i.e., an in-group and out-group distinction based on demographic characteristics) is one critical component that influences the processes and outcomes of communication patterns. People are most comfortable communicating with members of their ingroups and more likely to regulate communications with members of their outgroups through a strategy of "convergence" in which they attempt to modify their responses to match their interaction partners.

Taken together, the social identity perspective and communication accommodation theory would suggest three potential theoretical pathways for a positive relationship between demographic diversity and emotion regulation. First, communication accommodation theory would suggest that in a situation of more demographic diversity, group members feel less comfortable and more cautious about emotional communication with others (see Gallois, 1994). Regulation of emotional expression to reach convergence would be one way to accommodate these group differences when interacting. For example, in a workgroup that comprises both women and men, out-group female senders are more likely to regulate their expression of emotions to converge with in-group male receivers.

Second, related to the above reasoning, in a demographically diverse workgroup, out-group members are likely to engage in emotion regulation because they worry that they may be socially rejected (see Chatman, 2010; Shelton, 2003) if they express inappropriate or negative emotions not accepted by in-group members. Demographic diversity places additional pressure on out-group members to align with expected and accepted patterns of emotional expression by compensating for one's demographic dissimilarity with other group members (compensatory conformity, e.g., Bhawe, Kramer, & Glomb, 2010; Tafari, Kang, & Milne, 2002). As earlier, in a workgroup that comprises both women and men, out-group female members may be particularly cautious in expressing emotions that are not aligned with those of in-group male members. In attempting to compensate for their dissimilarity, out-group female members would experience greater pressure to conform resulting in greater emotion regulation.

Third, out-group discrimination dynamics would provoke negative emotions in the workgroup and lead group members to react to such emotions by expending effort to regulate their emotions. Specifically, when demographic diversity is high, in-group members are more likely to engage in emotion regulation because they worry that they may appear prejudiced (see Chatman, 2010; Crandall & Eshleman, 2003). In a demographically diverse workgroup, in-group members may be concerned that out-group members could attribute their negative emotional display as discrimination against the demographically different out-group members. Thus, in-group members may be more likely to regulate emotional displays if their emotions are negative (e.g., anger, Geddes & Callister, 2007) to avoid appearing prejudiced or socially inept toward out-group members (see Hewlin, 2003). For example, in a workgroup that comprises both women and men, in-group male senders are more likely to regulate their expression of negative emotions to avoid out-group female receivers interpreting their negative expression as discriminatory.

In summary, we argue that greater demographic diversity may induce workgroup members to engage in greater emotion regulation to accommodate demographic group differences, to prevent being socially rejected, and to avoid appearing prejudiced.

### **Hypothesis 1:**

Demographic diversity (i.e., age, race, and gender) will be positively related to group members' emotion regulation.

### **Task Interdependence and Social Interaction as Relational Work Context**

In a qualitative review of the diversity literature, Jackson and colleagues observed mixed findings for the effects of diversity on work outcomes (Jackson et al., 2003). In explaining these mixed or null results, Joshi and Roh (2007, p. 2) underscored the role of context: "Focusing only on the outcomes of workgroup-level diversity without accounting for the environment in which these workgroups are nested does not allow us to fully appreciate the complexity of diversity in organizations." Specifically, a key recommendation is to consider relationship-oriented contextual factors as situational enhancers or minimizers of demography-related in-group/out-group dynamics (Joshi et al., 2006). To illuminate the demographic diversity–emotion regulation relationship, we propose differential moderating roles of two relationship-oriented contextual factors: task interdependence and social interaction.

We focus on these two relational characteristics because they reflect structurally and socially embedded interpersonal interactions relevant for demographic diversity and emotion regulation. Consistent with previous research, we consider *task interdependence* to be structurally embedded required interaction without the bonds of caring, but *social interaction* to be socially embedded voluntary interaction with the bonds of caring (see Baumeister & Leary, 1995; Dutton & Ragsin, 2007; Kiggundu, 1981). Interpersonal interactions that are a function of task interdependence have an obligatory and unsupportive character; interpersonal interactions that are a function of social interaction have an autonomous and supportive character. Incorporating both interactions is important; to date, the diversity literature has paid scant research attention to social interaction, unlike its incorporation of task interdependence (see Jackson & Joshi, 2010; Joshi & Roh, 2007, for reviews). The omission of social interaction is noteworthy because scholars have implicitly or explicitly posited that social interaction prevents social categorization processes based on in-group favoritism and out-group discrimination (e.g., Dutton & Ragsin, 2007; Schneider & Reichers, 1983; Walsh & Ungson, 1991; Weick, 1979). Researchers have not, however, extensively empirically tested such a proposition in the context of demographic diversity and its relationship with organizational outcomes.

### **Task Interdependence**

Task interdependence refers to group members' needs to rely on each other to complete their work (Shea & Guzzo, 1987; Van de Ven, Delbecq, & Koenig, 1976). When tasks are highly interdependent, workgroup members are more likely to interact. Based on intergroup contact theory (Allport, 1954), a vast body of research has suggested that task interdependence plays an important role in shaping intergroup bias (e.g., Dovidio, Gaertner, & Kawakami, 2003; Gaertner, Rust, Dovidio, Bachman, & Anastasio, 1994; Miller & Hamblin, 1963; Van der Vejt & Van de Vliert, 2005). Research evidence on the interactive effects of demographic diversity and task interdependence with different work outcomes is complex. For instance, some studies predicted that demographic diversity would be negatively associated with job attitudes (e.g., job satisfaction and commitment) when task interdependence was high (i.e., exacerbating effects) but instead found that demographic diversity was positively associated with job attitudes when task interdependence was high (i.e., buffering effects, Jehn et al., 1999). In their meta-analysis of the literature, Joshi and Roh (2009) predicted a buffering effect of task interdependence on the demographic diversity–workgroup performance relationship but instead found a curvilinear relationship (e.g.,  $r = .08$ ,  $r = -.12$ ,  $r = -.04$  with low, moderate, and high task interdependence, respectively; Joshi & Roh, 2009). At first glance, these findings seem inconsistent with intergroup contact theory, but a closer

examination may resolve this inconsistency; intergroup contact theory suggests positive contact effects occur only when situations are high in equal group status, common goals, intergroup cooperation, and support of authority (see Allport, 1954; Pettigrew, 1998). Because task interdependence is considered structurally embedded, required interaction without the bonds of caring (see Baumeister & Leary, 1995; Kiggundu, 1981), it may not promote the positive effects of intergroup contact but intensify the negative effects of intergroup contact in demographically diverse workgroups (see Pettigrew, 1998 for a review). For example, the integration of Black workers into a workforce of White workers resulted in hostility (Brooks, 1975) when workplace interactions were mandatory.

In demographically diverse workgroups where interdependent tasks are mandatory, group members are more likely to regulate their emotions because high task interdependence requires them to frequently communicate and interact with out-group members. When interacting with out-group members, communication accommodation theory suggests that group members are likely to be less comfortable in their emotional communication (Gallois, 1994). Thus, in a demographically diverse workgroup where task interdependence is high, group members are more likely to regulate their emotions to avoid the risk associated with revealing negative or inappropriate emotions toward out-group members. In sum, task interdependence may burden categorization-based processes among diverse group members, and this may result in higher emotion regulation.

### **Hypothesis 2:**

Task interdependence moderates the positive relationship between workgroup demographic diversity and emotion regulation; the relationship will be stronger in workgroups with higher compared to lower levels of task interdependence.

### **Social Interaction**

Social interaction refers to the extent to which workgroup members interact with each other as friends (see Klein, Conn, Smith, & Sorra, 2001) and emphasizes the frequency and quality of harmonious and cooperative relations among workgroup members (Dutton & Ragins, 2007). Social interactions at work are autonomous, instrumental, and associated with desirable outcomes for employees (Heaphy & Dutton, 2008). Unlike task interdependence, social interaction can be considered voluntary, with the bonds of caring (see Baumeister & Leary, 1995; Dutton & Ragins, 2007; Kiggundu, 1981), which promotes the situational conditions of positive intergroup contact such as intergroup cooperation (see Allport, 1954; Pettigrew, 1998). Such positive interaction helps to build harmonious and comfortable interpersonal relationships (Barrera & Ainley, 1983), which can overrule demography-based categorization processes between in- and out-group members and facilitate emotional communication. In particular, the common intergroup identity model (Gaertner & Dovidio, 2000) suggests intergroup cooperation reduces negative bias against dissimilar group members by altering members' cognitive representation of the collective from two demography-related subgroups (e.g., male in-group and female out-group) to one overall workgroup (see also Gaertner, Mann, Dovidio, Murrell, & Pomare, 1990). Consistent with the common intergroup identity model, the need to belong theory (Baumeister & Leary, 1995) suggests that, in positive interpersonal relationships, the self merges with other group members in the form of collective identification, and this merger results in the increased use of overall group-serving attributions that reduce demography-based categorization.

Furthermore, social interaction is particularly salient for emotion regulation because people express both positive and negative emotions in communal relationships (Fischer & Manstead, 2008). The degree of emotion expression (e.g., shame, sadness, happiness, embarrassment) is positively related to the closeness of the interpersonal relationships (Barrett, Robin, Pietromonaco, & Eysell, 1998). Communication accommodation theory underscores that a positive interaction context facilitates emotional communication between out- and in-group members (Gallois, 1994). Thus, the degree of social interaction embedded in workgroups should affect how extensively demographic diversity is associated with emotion regulation. In summary, social interaction shifts the members' social identity from

demography-related subgroups (e.g., White vs. racial minority) to the overall workgroup, which results in less emotion regulation when faced with demographic diversity.

### **Hypothesis 3:**

Social interaction moderates the positive relationship between workgroup demographic diversity and emotion regulation; the relationship will be weaker in workgroups with higher compared to lower levels of social interaction.

## **Method**

### **Participants and Procedures**

Staff employees at a large midwestern U.S. university participated in our study. We e-mailed 12,901 survey invitations and received 4,018 completed surveys for a response rate of 31%. This response rate compares favorably with the wider organizational literature (Roth & BeVier, 1998) and to other studies in the diversity literature using similar sample sizes (e.g., Tsui, Egan, & O'Reilly, 1992). We linked this data with organizational administrative records that identified each participant's workgroup (e.g., finance department in the business school, neurology department in the medical school, or organizational units such as university relations and office of information technology) and demographic information (e.g., age, gender, and race) using a unique identifier. Our sample included employees across a range of job categories such as administrative occupations (e.g., administrative specialists, library managers, fiscal officers, departmental directors, and secretaries), engineering and production occupations (e.g., operating engineers, information technology professionals, farm equipment operators, automotive mechanics), and services-oriented occupations (e.g., food service workers, police lieutenants, and cooks). We asked survey participants to respond to questions in reference to their home unit or department and the group of people they worked with regularly. Listwise deletion of study variables with incomplete information yielded a sample 2,763 employees. We eliminated data from workgroups with fewer than three and more than 30 employees based on the number of people who responded in the workgroup (see Bhave et al., 2010; Glomb & Liao, 2003, for a similar approach; workgroups exceeding 30 employees were 0.3% of total workgroups). The final sample included 2,072 staff employees in 274 workgroups. Groups ranged from 3 to 30 members (average = 7.56), 92% of participants were Caucasian, 68% were women, average organizational tenure was 12 years, and average age was 45 years.

## **Measures**

### **Emotion regulation**

We assessed emotion regulation using Grandey et al.'s (2005) seven-item, response-focused emotion regulation scale. Participants responded to the item stem "when interacting with people at work, either face to face or via electronic communication such as e-mail, how often do you do the following during a typical work day?" on a five-point scale from 1 = *never* to 5 = *always*. Sample items included "I fake a good mood," "I resist expressing my true feelings," and "I put on a 'mask' to display the emotions needed for my job." The reliability of the emotion regulation scale was .90.

### **Workgroup demographic diversity**

Our conceptualization of workgroup demographic diversity focuses on *separation* (Harrison & Klein, 2007) because of our outcome variable of interest and the underlying theoretical framework. Our operationalization of workgroup demographic diversity follows Harrison and Klein's (2007) recommendations. For operationalizing workgroup demographic diversity as separation, we used the mean Euclidean distance measures of age, race (White and racial minority), and gender (male and female). Larger values of these demographic diversity measures reflect greater diversity in a workgroup.

### **Task interdependence**



Task interdependence was measured with three items adapted from Klein et al.'s (2001) six-item scale, which we shortened because of survey length, content redundancy, and sample appropriateness. The three items asked "How much is the work of members of your workgroup affected by the work of other workgroup members?" "How much do members of your workgroup depend on other workgroup members for help or assistance to do their work?" and "How much must members of your workgroup coordinate their work activities with other workgroup members to get their job done?" Participants used a five-point scale from 1 = *not at all* to 5 = *very much*. The reliability of this three-item scale was .87, which was comparable to the reliability for the original scale of .80. Aggregation of this scale was justified by  $rwg(j) = .76$ , the reliability of individual assessment of group mean ( $ICC(1) = .22$ ) and group mean ( $ICC(2) = .68$ ).  $F$ -test results also supported aggregation ( $F_{273,1798} = 1.60, p < .01$ ).

### **Social interaction**

Social interaction was measured with four items adapted from Klein et al.'s (2001) nine-item scale, which we shortened also for reasons of survey length, content redundancy, and sample appropriateness. The four items asked "How often do members of your workgroup spend breaks or lunch socializing with each other?" "How often do members of your workgroup get together with one another outside of work?" "How much do members of your workgroup take a personal interest in one another?" and "Are the members of your workgroup good friends with one another?" Participants used a five-point scale from 1 = *never* to 5 = *always* for the first two items and 1 = *not at all* to 5 = *very much* for the last two items. The reliability for this four-item measure was .81 and comparable to the alpha value for the original scale of .85. Aggregation was justified by  $rwg(j) = .85$ , the reliability of individual assessment of group mean ( $ICC(1) = .25$ ), and group mean ( $ICC(2) = .72$ ).  $F$ -test results also supported aggregation ( $F_{273,1798} = 1.89, p < .01$ ).

### **Control variables**

Based on previous reviews of emotion regulation (e.g., Bono & Vey, 2005; Grandey, 2000, 2003; Morris & Feldman, 1996) and diversity literatures (e.g., Harrison & Klein, 2007; Joshi & Roh, 2007), we controlled for several variables that may influence the relationship between demographic diversity and emotion regulation. We controlled for employee demographics (age, gender, and race) to capture the influence of workgroup demographic diversity over and above employee demographics. Further, research on the relationship between employee demographics and emotion regulation shows mixed findings (e.g., Bono & Vey, 2007; Dahling & Perez, 2010; Grandey, 2000; Morris & Feldman, 1996). We controlled for emotional labor demands in the occupation to capture the extent of workplace interactions that potentially affect emotion regulation among group members. The emotional labor demands scale was based on Occupational Information Network (O\*NET) data for Standard Occupational Classification (SOC) codes for the occupation of each respondent as reported in the organization's administrative data (see Côté & Miners, 2006; Glomb et al., 2004, for more detailed explanation of the emotional labor demands scale based on the O\*NET). Examples of emotional labor demands data available from O\*NET are ratings on whether the job requires such activities as "Dealing with external customers," "Dealing with unpleasant or angry people," and "Establishing and maintaining interpersonal relationships." The reliability of this scale was .87. We controlled for job stress using a four-item subjective stress scale (Motowidlo, Packard, & Manning, 1986) because job stress is positively related to emotion regulation (Bono & Vey, 2005). The reliability of this scale was .87. Because diversity climate shapes the function of diversity in a workgroup (Ely & Thomas, 2001), we also controlled for employees' perceptions of diversity climate. We developed a three-item measure of diversity climate based on the three demographic characteristics that were the focus of our research questions. We asked respondents to indicate "how favorable is the university environment for members of the following groups: (a) people of color, (b) older workers, and (c) women" on a five-point scale from 1 = *very unfavorable* to 5 = *very favorable*. The reliability of this scale was .77. Finally, consistent with the diversity literature, we controlled for group mean of age, gender, and race to account for within-unit mean effects, and included a control variable of group size (Harrison & Klein, 2007).

## Results

The descriptive statistics including means, standard deviations, and correlations are reported in Table 1. Random coefficient modeling (RCM) results are reported in Table 2. RCM (also known as hierarchical linear modeling) is appropriate for estimating the effects of both group- and individual-level predictors on individual-level outcomes while accounting for the nested data structure (cf. Snijders & Bosker, 1999). In our model, the individual-level (Level 1) variables include the controls and emotion regulation, and the group-level (Level 2) variables include the controls, relational work context (task interdependence and social interaction), and demographic diversity. Following the recommendation of Hofmann and Gavin (1998), we grand-mean centered predictors except for the dichotomized gender and race variables to mitigate multicollinearity.

TABLE 1  
Descriptive Statistics and Correlations

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
<b>Individual-level measures</b>											
1. Age	44.71	10.88									
2. Race	.08	.27	-.11								
3. Gender	.68	.47	-.04	-.04							
4. Emotional labor demands	.53	.58	.06	-.02	.07						
5. Job stress	3.45	1.04	.08	.00	.03	.15					
6. Diversity climate	3.78	.36	-.01	.01	-.05	-.01	-.04				
7. Age dissimilarity	13.23	4.70	-.11	-.02	.07	-.02	-.06	.02			
8. Race dissimilarity	.23	.27	-.07	.72	-.01	-.03	.02	.01	.02		
9. Gender dissimilarity	.52	.26	-.01	-.04	-.46	.02	-.04	.10	.05	-.05	
10. Emotion regulation	2.33	.69	-.08	.02	.04	.01	.26	-.07	.06	.02	.00
<b>Group-level measures</b>											
1. Group size	7.56	5.51									
2. Group mean age	44.84	5.43	-.03								
3. Group mean race	.09	.13	-.10	-.10							
4. Group mean gender	.67	.26	.04	-.07	-.08						
5. Task interdependence	3.36	.46	.12	.08	-.08	-.03					
6. Social interaction	2.97	.43	.07	-.13	-.01	.09	.22				
7. Age diversity	12.50	4.16	.24	-.16	.05	.12	-.01	-.03	.10		
8. Racial diversity	.21	.26	.07	-.10	.91	-.01	-.03	.03	.09	-.03	
9. Gender diversity	.47	.26	.24	.00	-.09	-.48	.03	-.03	.09	-.03	

Note. For Level 1,  $N = 2072$ . For Level 2,  $N = 274$ . At the individual-level, correlations greater than  $|\text{.04}|$  are significant at  $p < .05$ ; those greater than  $|\text{.06}|$  are significant at  $p < .01$ . At the group-level, correlations greater than  $|\text{.12}|$  are significant at  $p < .05$ ; those greater than  $|\text{.15}|$  are significant at  $p < .01$ . Gender: 1 = female, 0 = male; Race: 1 = minority, 0 = white.

**Table 2.** Random Coefficient Modeling Results

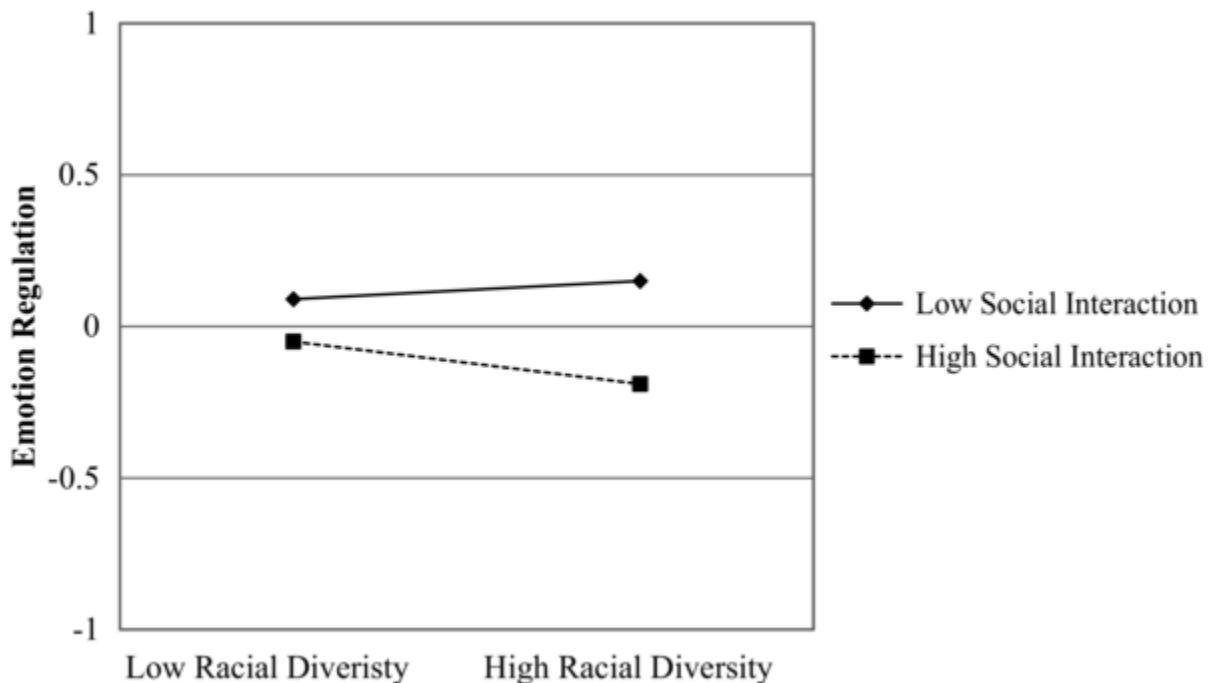
	Emotion regulation				
	Step 1	Step 2	Step 3	Step 4	Step5
<u>Individual-level controls</u>					
Age	-.10**	-.10**	-.10**	-.10**	-.10**
Race	.01	.01	.01	.01	.01
Gender	.07	.07	.07	.07	.07
Emotional labor demands	-.03	-.03	-.02	-.02	-.02
Job stress	.27**	.27**	.26**	.26**	.27**
Diversity climate	-.06**	-.06**	-.05*	-.05*	-.05*
<u>Group-level controls</u>					
Group size	.00	-.01	.00	.00	-.01
Group mean age	.01	.02	.00	.00	.00
Group mean race	.02	.06	.05	.04	.03
Group mean gender	.00	.00	.01	.01	.01
<u>Main effects</u>					
Age diversity (AD)		.05*	.05*	.05*	.05*
Racial diversity (RD)		-.05	-.03	-.02	-.02
Gender diversity (GD)		.02	.01	.01	.01
<u>Interaction effects</u>					
Task interdependence (TI)			.02	.02	.02
Social interaction (SI)			-.13**	-.13**	-.12**
AD×TI				-.02	
RD×TI				.00	
GD×TI				.00	
AD×SI					.01
RD×SI					-.05**
GD×SI					.03
Total pseudo $R^2$	.08	.10	.17	.18	.21
$\Delta$ pseudo $R^2$	.08	.02	.07	.01	.03
Model deviance	5697.88	5691.50	5661.90	5661.18	5651.96

*Note.* For Level 1,  $N = 2072$ . For Level 2,  $N = 274$ . Gender: 1 = female, 0 = male; Race: 1 = minority, 0 = white. Values are standardized coefficients except race and gender. Model deviance ( $-2 \times \log$ -likelihood of the full maximum-likelihood estimate) is an indicator of model fit; the smaller the deviance, the better the model fit. Pseudo  $R^2$  values were calculated on the basis of the formula  $1 - ((\text{level-1 restricted error} / n) + \text{level-2 restricted error}) / ((\text{level-1 unrestricted error} / n) + \text{level-2 unrestricted error})$  from Snijders & Bosker (1999).  $n$  is the average number of employees in each level-2 unit. Note that the pseudo  $R^2$  tends to be much lower than traditional ordinary least squares-based  $R^2$  (Hox, 2010). \* $p < .05$ , two-tailed. \*\* $p < .01$ , two-tailed.

Hypothesis 1 examined the relationship between demographic diversity (age, race, and gender) and emotion regulation. Age diversity in the workgroup was significantly related to individual-level emotion regulation ( $\gamma = .05, p < .05$ ). Main effects for racial and gender diversity were not statistically significant. Hypothesis 1 was partially supported for age diversity. Hypothesis 2 examined the moderating role of task interdependence for the relationship between demographic diversity and emotion regulation. The interaction terms of age, racial, and gender diversity and task interdependence were statistically nonsignificant; Hypothesis 2 was not supported. Hypothesis 3 examined the moderating role of social interaction on the relationship between demographic diversity and emotion regulation. The interaction term of racial diversity and social interaction was statistically significant ( $\gamma = -.05, p < .05$ ). The moderating effects of social interaction were not significant for age and gender diversity. These results for racial diversity partially supported Hypothesis 3.

Following Cohen, Cohen, West, and Aiken (2003), we used one standard deviation above and below the mean of social interaction to illustrate the significant moderating effect. The simple slope differed significantly from zero at high levels of social interaction ( $\gamma = -.07, p < .01$ ) but did not differ significantly from zero at low levels of social interaction ( $\gamma = .03, ns$ ). As Figure 1 shows, for groups with higher racial diversity, emotion regulation was lower when social interaction was high compared with groups with low social interaction—an overall pattern consistent with the emotionally buffering role of social interaction in predicting the relationship of racial diversity and emotion regulation.<sup>1</sup>

**Figure 1. The Moderating Effect of Social Interaction on the Relationship Between Racial Diversity and Emotion Regulation.**

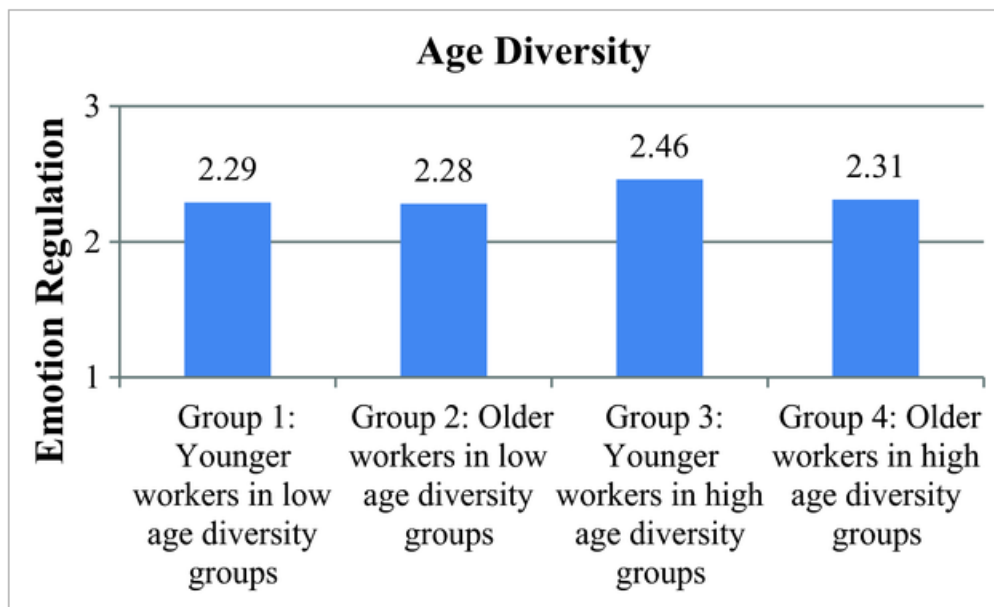


## Supplemental Analyses

Our results showed somewhat mixed support for the role of demographic diversity as a predictor of emotion regulation with a main effect for age diversity, an interaction effect for racial diversity, and no effect for gender diversity. However, these results were based on analyses that treat emotion regulation for both in- and out-group members in the same way. There is reason to believe that this may not be the case; in-group members may regulate their emotions to avoid appearing prejudiced or discriminatory, whereas out-group members regulate their emotions to prevent being socially rejected. Investigating such asymmetric effects of in- and out-group members could reveal a more nuanced picture of the demographic diversity–emotion regulation relationship. In order to do so, we examined whether the role of demographic diversity on emotion regulation is differentiated between in- and out-group members using two approaches: (a) focusing on distinct employee demographic categories (e.g., age, gender, and race) to conduct subgroup analyses and (b) focusing on an individual’s demographic dissimilarity in relation to the workgroup’s demographic composition (e.g., a single out-group member in an otherwise homogenous workgroup).<sup>2</sup> For instance, racial diversity may have a stronger effect on emotion regulation for out-group members who show high levels of racial dissimilarity from the group’s race composition (e.g., a single Black employee in an all-White workgroup).

To examine asymmetric effects, we conducted subgroup analyses by performing a median split to create four subgroups in each demographic diversity category (e.g., low age diversity and younger workers; high racial diversity and White workers; low gender diversity and male workers; see Tsui, Pearce, Porter, & Tripoli, 1997 for a similar approach). Figure 2 presents results comparing mean levels of emotion regulation in four subgroups of age diversity. The results showed that younger workers in high age diversity workgroups engaged in higher levels of emotion regulation ( $M = 2.46$ , ANOVA  $F = 7.09$ ,  $p < .01$ ); thus, there is evidence of asymmetric effects such that younger workers drive the positive link between age diversity and emotion regulation. However, there were no statistically significant mean differences of emotion regulation across race (ANOVA  $F = 1.25$ ,  $ns$ ) and gender categories (ANOVA  $F = 0.62$ ,  $ns$ ).

**Figure 2. Levels of Emotion Regulation in Four Subgroups of Age Diversity.**



Another reason for potential asymmetric effects is that demographic dissimilarity influences emotion regulation differently based on employee demographic characteristics in relation to their workgroup (i.e., a focal employee's demographic dissimilarity from the group demographic composition). Following Tsui et al. (1992), we assessed an employee's demographic dissimilarity from workgroup demographic composition using the Euclidean distance of age, race (White and racial minority), and gender (male and female). Larger values represent greater dissimilarity from a workgroup's demographic composition. Results showed the interaction term of workgroup racial diversity and an employee's racial dissimilarity from the group's race composition was statistically significant ( $\gamma = -.13, p < .05$ ; see Table 3). The simple slope differed significantly from zero at high levels of an individual's racial dissimilarity ( $\gamma = -.23, p < .01$ ) but did not differ significantly from zero at low levels of racial dissimilarity ( $\gamma = -.05, ns$ ). As Figure 3 shows, when workgroup racial diversity was low (e.g., a workgroup with one employee from a racial minority with other White members), employees who showed high levels of racial dissimilarity from the group's race composition (e.g., out-group racial minority members) were more likely to engage in emotion regulation than employees who showed low levels of racial dissimilarity from the group's race composition (e.g., in-group White members). On the other hand, when racial diversity was high, employees who showed low levels of racial dissimilarity from the group's race composition (e.g., in-group White members) were more likely to engage in emotion regulation than employees who showed high levels of racial dissimilarity from the group's race composition (e.g., out-group racial minority members). Thus, employees who are racially dissimilar from their workgroup were more likely to regulate their emotions in a low diversity group as compared to those in a high diversity group. Results for age and gender interactions were not statistically significant.

**Table 3.** Supplementary Random Coefficient Modeling Results

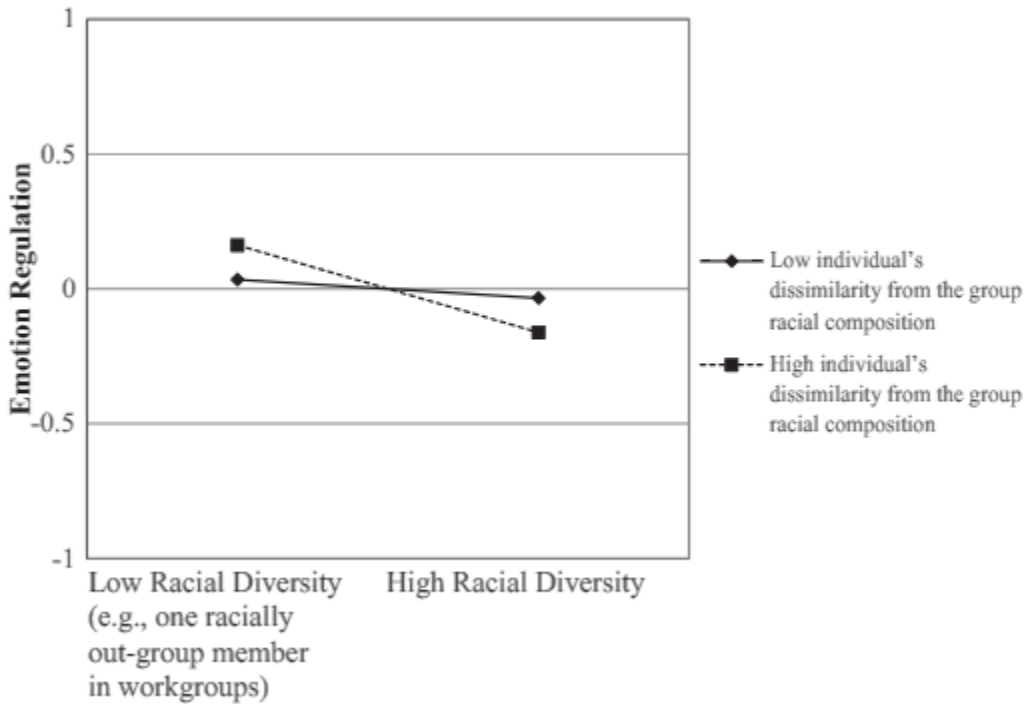
	Emotion regulation	
	Step 1	Step 2
<u>Individual-level controls</u>		
Age	-.09**	-.09**
Race	.06	.24
Gender	.12*	.12*
Emotional labor demands	-.03	-.03
Job stress	.27**	.27**
Diversity climate	-.06**	-.06**
<u>Group-level controls</u>		
Group size	-.01	-.04
Group mean age	.01	.01
Group mean race	.06	.18*
Group mean gender	-.01	.00
<u>Main effects</u>		
Age diversity (AD)	.01	-.01
Racial diversity (RD)	-.03	-.14
Gender diversity (GD)	-.05	-.02
<u>Dissimilarity effects</u>		
Employee's age dissimilarity	.06*	.07*
Employee's racial dissimilarity	-.02	.00
Employee's gender dissimilarity	.08	.08
AD × Employee's age dissimilarity		-.03
RD × Employee's racial dissimilarity		-.13*
GD × Employee's gender dissimilarity		.02
Total pseudo $R^2$	.10	.12
$\Delta$ pseudo $R^2$	.00	.02
Model deviance	5684.80	5677.44

## Note

For Level 1,  $N = 2072$ . For Level 2,  $N = 274$ . Gender: 1 = female, 0 = male; Race: 1 = minority, 0 = white. Values are standardized coefficients except race and gender. Model deviance ( $-2 \times \log$ -likelihood of the full maximum-likelihood estimate) is an indicator of model fit; the smaller the deviance, the better the model fit. Pseudo  $R^2$  values were calculated on the basis of the formula  $1 - ((\text{level-1 restricted error} / n) + \text{level-2 restricted error}) / ((\text{level-1 unrestricted error} / n) + \text{level-2 unrestricted error})$  from Snijders & Bosker (1999).  $n$  is the average number of employees in each level-2 unit. Note that the pseudo  $R^2$  tends to be much lower than traditional ordinary least squares-based  $R^2$  (Hox, 2010). In a robustness check using a subsample of demographically heterogeneous workgroups  $N = 959$  in 94 workgroups, the interaction term of racial diversity and an employee's racial dissimilarity remained statistically significant. \* $p < .05$ , two-tailed test. \*\* $p < .01$ , two-tailed test.



**Figure 3. The Moderating Effect of Individual’s Racial Dissimilarity From the Group Racial Composition on the Relationship Between Workgroup Racial Diversity and Emotion Regulation.**



### Discussion

“Tact is the discrimination of differences. It consists in conscious deviations” (Adorno, 1974, p. 37). Adorno’s thoughtful reflection underlies our study’s key results: Certain forms of demographic diversity in workgroups are related to higher emotion regulation, but social interaction may be constructive and minimize emotion regulation. Specifically, we observe that in workgroups where there is greater age diversity, employees report slightly higher emotion regulation. We also observe asymmetric effects for racial diversity—racial out-group members engage in higher emotion regulation than racial in-group members when racial diversity is low, whereas racial in-group members engage in higher emotion regulation than racial out-group members when racial diversity is high. Further, we find an interaction effect such that social interaction buffers the effects of racial diversity on emotion regulation. These findings build on previous research on the roles of demographic diversity in organizations (see Jackson & Joshi, 2010; Joshi & Roh, 2007; Williams & O’Reilly, 1998) and reveal nuanced associations between demographic diversity and emotion regulation. In order to enhance our understanding of workgroup processes, we discuss specific reasons underlying the empirical results for each demographic characteristic.

### Age Diversity

Our age diversity results supported the social identity perspective by showing the positive relationship between age diversity and emotion regulation in workgroups. Employees in workgroups with greater age diversity are exposed to in- and out-group effects that are associated with higher emotion regulation. More specifically, the subgroup analyses reveal that younger employees are more likely to engage in emotion regulation in age-diverse workgroups. These results attest to asymmetrical effects associated with age diversity and suggest that younger workers face greater compensatory pressures to align with the emotion regulation patterns in their workgroups. Recent theoretical advances on the role of organizational context in age diversity provide additional insight. Drawing on age demography and collective memory-based research, Joshi, Dencker, Franz, and Martocchio (2010) posited that age-based social categorization

processes are more likely to occur under mechanistic structures (vs. organic) and weak (vs. strong) normative contexts such as government agencies and university administrations (as opposed to organizations such as Google® or Apple®). For instance, public universities, the setting for our study, are mechanistic structures governed by hierarchical and formalized systems such as job ladders and job descriptions with weak normative contexts in that they lack strong organization-wide programs such as training and socialization that enhance shared perceptions of organizational goals, values, and practices. This suggests our public university context may make the effects of age diversity on emotion regulation especially observable. In such a mechanistic organizational setting, younger employees could be categorized as minority members. This out-group status in terms of age—and the concomitant social rejection from in-group older employees—may underlie why younger workers engage in greater emotion regulation.

Results of the task interdependence and social interaction moderators were not significant. It may be that emotion regulation associated with age diversity is hard to influence through social or task interaction, perhaps because people prefer to associate interpersonally with close contemporaries and perhaps because age is a proxy for a multitude of personal characteristics associated with age such as parental status, generational attitudes, and socioeconomic variables.

### **Racial Diversity**

Although we found no support for a main effect of racial diversity on emotion regulation in workgroups, our results revealed the moderating role of social interaction. Social interaction (e.g., informal interactions such as lunch and coffee breaks, affiliating outside of work) diminishes emotion regulation in diverse workgroups by overruling simple demography-related in-group favoritism and out-group discrimination (see Tse & Dasborough, 2008). The moderating role of social interaction provides reason for optimism in diverse settings: Frequent positive social interactions can mitigate emotion regulation from race-based social categorization. This is consistent with Joshi and colleagues' (2006) suggestion that interpersonal interactions between workgroup members can overrule demography-related in-group/out-group dynamics, as well as Grant and Parker's (2009) contention that relational work characteristics are key contextual factors. Our results underscore the critical role of relationship-oriented contextual factors for the racial diversity and emotion regulation relationship, and thus provide empirical support to the propositions of Joshi and colleagues (2006) and Grant and Parker (2009).

Supplemental empirical evidence also reduced concerns related to the lack of significance for the main effect of racial diversity on emotion regulation. Consistent with the relational demography perspective (Riordan, 2000; Riordan & Wayne, 2008; Tsui et al., 1992), we found that racial out-group members engaged in higher levels of emotion regulation than racial in-group members when racial diversity was low (i.e., high relational demography diversity). Put simply, being an out-group member in an otherwise racially homogenous workgroup may lead to emotion regulation to compensate for the racial dissimilarity and avoid “standing out.”

Of note, we previously conceptualized diversity as a group characteristic; such a group-based conceptualization is distinct from a relational demography conceptualization, which envisions diversity as an individual-level construct. For example, a single Black employee in an otherwise all-White workgroup represents the highest level of *relational demography diversity*; conversely, it can also represent a very low level of *workgroup racial diversity*.

Nevertheless, our findings can be reconciled with workgroup racial diversity conceptualizations: We found that racial in-group members showed higher levels of emotion regulation than racial out-group members when racial diversity was high. Put simply, as racial diversity increases, being an in-group member in a racially diverse group may lead to emotion regulation to avoid appearing prejudiced or discriminatory.

Collectively these results suggest that in racially homogenous workgroups out-group members show higher levels of emotion regulation than in-group members, whereas in racially heterogeneous workgroups, in-group members show higher levels of emotion regulation than out-group members. Overall, the findings are consistent with Alderfer and Sims' (2002) argument that racial diversity has unique and complex features in the United States.

### **Gender Diversity**

Contrary to expectations, we found no significant direct or moderating relationships for gender diversity. However, our findings are consistent with diversity literature that has suggested weak evidence of the social categorization perspective in the link between gender diversity and group process outcomes (see Williams & O'Reilly, 1998). Based on an extensive review, Williams and O'Reilly (1998, p. 106) suggested, "the absence of effects for sex composition may reflect the nature of the sample, with the salience of gender as a social category diminished in predominantly female samples." They go on to suggest that "female-dominated groups appear less likely to socially isolate males who are in the minority." In our sample, most workgroup members are female (group mean gender = 67%), and this gender composition may reduce the gender-oriented social categorization processes associated with emotion regulation in workgroups. Contexts such as male-dominated job settings with few female coworkers might demonstrate the hypothesized effects.

### **Organizational Implications**

Our findings of the influence of age and racial diversity on emotion regulation in workgroups are highly relevant for today's increasingly diverse organizations. In terms of age, employees 45-years-old or older comprised almost half of the U.S. workforce in 2011 (Bureau of Labor Statistics, 2012). Employers face other age-based trends including the impending retirement of baby boomers (Lee & Skinner, 1999, Wang, 2007), although the current economic crisis has prompted many to postpone retirement (Childs & Keene, 2010), as well as reports from older workers who have found it harder to find jobs and remained unemployed for longer durations (Luo, 2009). Coupled with the workforce's assimilation of younger employees (often called Generations X and Y) who may have differing work values, organizations will be faced with greater age heterogeneity (Lyons, Duxbury, & Higgins, 2005; Smola & Sutton, 2002). Therefore, managers must be alert and responsive to age-related trends that influence the work environment. Specifically, managers must consider the nature of interpersonal relationships between older and younger workers, especially in age-heterogeneous workgroups, an important awareness given that emotion regulation affects employees' psychological and physical health (Brotheridge & Grandey, 2002; Grandey, 2000, 2003; Schaubroeck & Jones, 2000). Moreover, when group members block their expression of inner emotions, more challenging and negative situations may result (see Geddes & Callister, 2007). Unfortunately, our results suggest that increased social interaction is unlikely to mitigate these age diversity effects.

In contrast, our results for racial diversity in the workplace show both promise and challenge for organizations looking to reduce emotion regulation in diverse workgroups. In racially diverse workgroups, social interaction relates to lower emotion regulation. Managers must acknowledge and be sensitive to these effects and focus on promoting social interactions. Facilitating social interactions (e.g., happy hour, group lunches, sports activities, and socialization events) may be useful for overcoming out-group discrimination between White and racial minority employees. Social interaction also enhances the overall workgroup relational quality by building harmonious interpersonal relationships and friendships among workgroup members (see Dutton & Ragins, 2007; Tse & Dasborough, 2008). In addition, in racially homogenous workgroups, out-group members show higher levels of emotion regulation than in-group members, whereas in diverse workgroups, in-group members show higher levels of emotion regulation than out-group members. These asymmetric effects suggest that to counter the negative effects of racial diversity on emotion regulation managers will require unique and nuanced approaches for in-group and out-group members rather than adopting a singular approach to workplace diversity programs.

## Limitations and Future Directions

This study has its limitations. First, our findings have limited external validity. Most members of this nonprofit organization are White and female, so the results may have limited generalizability to for-profit companies or organizations that have more balanced race or gender compositions. The relatively homogenous gender and race composition in the workgroups in our sample may have also limited our ability to observe statistically significant effects. In addition, our study is based on a relatively stable sample of employees with an average organizational tenure of 12 years, so the findings may not apply to more dynamic workgroup settings such as project teams where demographic compositions change frequently; we acknowledge that there can be varying levels of “groupiness” in grouped data such as these. Concerns about external validity may be reduced, however, because of the large sample (2,072 employees in 274 workgroups) and the wide variety of job categories across four geographically different campuses in a single university. Furthermore, one might argue these results are more compelling because they are found in a sample with reduced variability in demographic features and stability of employees. Nonetheless, examining this relationship in other business contexts, especially male-dominated cultures with greater racial diversity, is a necessary future research direction.

Second, our emotion regulation assessment asked about “people at work,” which certainly includes workgroup members but may also include clients and customers, such as students, for some employees. To reduce this concern about a broad target measure, we controlled for emotional labor job demands, which assess the extent of workplace interactions. However, another promising direction for future research is examining diversity in specific target groups (e.g., internal workgroup members vs. external customers/clients) and examining distinct emotion regulation strategies (i.e., response-focused and antecedent-focused). Future research might also examine emotion regulation in dyadic interactions among diverse employees and isolate the conditions needed for dyadic emotion regulation to surface (see Lively, 2000; Pugh, 2002).

Third, Kelly and Barsade (2001, p. 100) suggested that workgroups may exhibit an affective phenomena based on “the combinations of individual level affective factors that group members possess.” Several empirical studies have demonstrated evidence of affective phenomena manifested in workgroups (e.g., Barsade, 2002; Bartel & Saavedra, 2000; Smith, Seger, & Mackie, 2007; Sy, Côté, & Saavedra, 2005; Totterdell, 2000). In accordance, Elfenbein (2007) posited that workgroups can develop their own patterns or styles for managing members’ emotion expression. A related research question, therefore, is to directly examine emotion regulation at the group level—that is, workgroup members’ overall behavioral tendency to modify their display or expression of emotions (see Cole, Walter, & Bruch, 2008).

Fourth, our conceptualization of diversity, although appropriate for our research question and sample, is one of many ways to operationalize diversity. Future work should explore additional conceptualizations of diversity such as *disparity* (Harrison & Klein, 2007) in examining effects on emotion regulation, for example, by examining workgroup members with differential status in organizations. This research could adopt Leslie’s (2007) conceptualization and operationalization of ethnicity as a status-based demographic characteristic and examine its association with emotion regulation. Also, following our theoretical reasoning and prior research, we conceptualized and operationalized task interdependence and social interaction at the workgroup-level (e.g., Klein et al., 2001). However, other work has also operationalized these constructs at the individual-level (e.g., Morgeson & Humphrey, 2006). It could be instructive to examine whether such levels of analysis issues as well as asymmetrical effects of these contextual factors influence the diversity–emotion regulation relationship.

In conclusion, this study contributes fundamentally to the investigation of relationships between demographic diversity and emotion regulation in workgroups and moderating roles of the relational work context. We find that age diversity relates to heightened emotion regulation in workgroups, whereas for racial diversity there were asymmetric effects between in- and out-group in how they influenced emotion

regulation. Social interaction moderates racial diversity effects on emotion regulation; under high racial diversity, high social interaction elicits the lowest levels of emotion regulation.

1. We replicated these analyses by operationalizing workgroup demographic diversity as *variety* in the Harrison and Klein (2007) framework. For operationalizing workgroup demographic diversity as *variety*, we used the Blau index for age (five age groups: below 30, 30–39, 40–49, 50–59, above 60 years old), race (six ethnic groups: White, Black, Asian, Hispanic, Native American, Other), and gender (male vs. female). The results showed that the cross-level relationship between age diversity and emotion regulation was not significant ( $\gamma = .04$ , *ns*), but the moderator results were consistent with the primary analyses; social interaction weakened the relationship between racial diversity and emotion regulation ( $\gamma = -.04$ ,  $p < .05$ ). The insignificant finding of age diversity may be because of the artificial categories that necessarily need to be constructed for the diversity as *variety* analyses. Perhaps the cutoffs for the age variable are other than we have proposed; however, there is no guidance as to the correct cutoffs in this case. Further, turning the continuous variable into a categorical one restricts range, which might be responsible for the nonsignificant effect. Finally, considering diversity as *disparity* is not relevant in our study because there are no clear hierarchical or status orderings in our diversity categories (see Leslie, 2007 for details about a status-based perspective). For example, it is not clear that being relatively younger versus relatively older holds a higher status; rather, it is the presence of dissimilar others that matters.
2. We thank anonymous reviewers for these suggestions.

## References

- Adorno TW. (1974). *Minima moralia: Reflections from damaged life*. London, UK: New Left Books.
- Alderfer C, Sims A. (2002). Diversity in organizations. In Borman WC, Ilgen D, Klimoski R (Eds.), *Handbook of psychology* (Vol. 12, pp. 595–614). New York, NY: Wiley.
- Allport G. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley.
- Web of Science® Times Cited: 30
- Ashkanasy NM, Hartel CEJ, Daus CS. (2002). Diversity and emotion: The new frontiers in organizational behavior research. *Journal of Management*, 28, 307–338.
- Barrera M, Ainley SL. (1983). The structure of social support: A conceptual and empirical analysis. *Journal of Community Psychology*, 11, 133–143.
- Wiley Online Library | PubMed | Web of Science® Times Cited: 250
- Barrett LF, Robin L, Pietromonaco PR, Eyssell KM. (1998). Are women the “more emotional” sex? Evidence from emotional experience in social context. *Cognition & Emotion*, 12, 555–578.
- Barsade SG. (2002). The ripple effect: Emotional contagion and its influence on group behavior. *Administrative Science Quarterly*, 47, 644–675.
- Bartel CA, Saavedra R. (2000). The collective construction of workgroup moods. *Administrative Science Quarterly*, 45, 197–231.
- Baumeister RF, Leary MR. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.
- Bhave DP, Glomb TM. (2009). Emotional labor demands, wages, and gender: A within-person between-jobs study. *Journal of Occupational and Organizational Psychology*, 82, 683–707.
- Bhave DP, Kramer A, Glomb TM. (2010). Work family conflict in workgroups: Social information processing, support, and demographic dissimilarity. *Journal of Applied Psychology*, 95, 145–158.

- Bono JE, Vey MA. (2005). Toward understanding emotional management at work: A quantitative review of emotional labor research. In Hartel CE, Ashkanasy NM, Zerbe WJ (Eds.), *Emotions in organizational behavior* (pp. 213–233). Mahwah, NJ: Erlbaum.
- Bono JE, Vey MA. (2007). Personality and emotional performance: Extraversion, neuroticism, and self-monitoring. *Journal of Occupational Health Psychology*, 12, 177–192.
- Brief AP. (Ed.). (2008). *Diversity at work*. Cambridge, UK: Cambridge Univ. Press.
- Brooks D. (1975). *Race and labour in London transport*. London, UK: Oxford Univ. Press.
- Brotheridge C, Grandey A. (2002). Emotional labor and burnout: Comparing two perspectives of “people work.” *Journal of Vocational Behavior*, 60, 17–39.
- Bureau of Labor Statistics. (2012). Current Population Survey. [Table 3]. Retrieved from <http://www.bls.gov/cps/tables.htm#charemp>.
- Chatman JA. (2010). Norms in mixed sex and mixed race work groups. *Academy of Management Annals*, 4, 447–484.
- Childs M, Keene, T. (2010, April 28). Boomers must work longer after financial crisis. Bloomberg. Retrieved from <http://www.bloomberg.com/news/2010-04-28/boomers-must-work-longer-after-financial-crisis.html>.
- Cohen J, Cohen P, West SG, Aiken LS. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Erlbaum.
- Cole MS, Walter F, Bruch H. (2008). Affective mechanisms linking dysfunctional behavior to performance in work teams: A moderated mediation study. *Journal of Applied Psychology*, 93, 945–958.
- Côté S, Miners CTH. (2006). Emotional intelligence, cognitive intelligence, and job performance. *Administrative Science Quarterly*, 51, 1–28.
- Cox T. (1994). *Cultural diversity in organizations: Theory, research, and practice*. San Francisco, CA: Berrett-Koehler.
- Crandall CS, Eshleman A. (2003). A justification-suppression model of the expression and experience of prejudice. *Psychological Bulletin*, 129, 414–446.
- Dahling JJ, Perez LA. (2010). Older worker, different actor? Linking age and emotional labor strategies. *Personality and Individual Differences*, 48, 574–578.
- Dovidio JF, Gaertner SL, Kawakami K. (2003). Intergroup contact: The past, present, and the future. *Group Processes and Intergroup Relations*, 6, 5–21.
- Dutton JE, Ragins BR. (Eds.). (2007). *Exploring positive relationships at work: Building a theoretical and research foundation*. Mahwah, NJ: Erlbaum.
- Ekman P, Friesen WV. (1982). Felt, false and miserable smiles. *Journal of Nonverbal Behavior*, 6, 238–252.
- Elfenbein HA. (2007). Emotion in organizations: A review in stages. In Brief A, Walsh J (Eds.), *Annals of the Academy of Management* (Vol. 1, pp. 315–386). Amsterdam: Elsevier.
- Ely RJ, Thomas DA. (2001). Cultural diversity at work: The effects of diversity perspectives on workgroup processes and outcomes. *Administrative Science Quarterly*, 46, 229–273.
- Fischer AH, Manstead ASR. (2008). The social function of emotions. In Lewis M., Haviland-Jones J, Barrett LF (Eds.), *Handbook of emotions* (3rd ed., pp. 456–468). New York, NY: Guilford.

- Fiske ST. (1998). Stereotyping, prejudice, and discrimination. In Gilbert DT, Fiske ST, Lindzey G (Eds.), *Handbook of social psychology* (pp. 357–411). Boston, MA: McGraw-Hill.
- Gaertner SL, Dovidio JF. (2000). *Reducing intergroup bias: The common ingroup identity model*. Philadelphia, PA: Psychology Press.
- Gaertner SL, Mann JA, Dovidio JF, Murrell AJ, Pomare M. (1990). How does cooperation reduce intergroup bias? *Journal of Personality and Social Psychology*, 59, 692–704.
- Gaertner SL, Rust MC, Dovidio JF, Bachman BA, Anastasio PA. (1994). The contact hypothesis: The role of a common identity on reducing intergroup bias. *Small Group Research*, 25, 224–249.
- Gallois C. (1994). Group membership, social rules, and power: A social-psychological perspective on emotional communication. *Journal of Pragmatics*, 22, 301–324.
- Geddes D, Callister RR. (2007). Crossing the line(s): A dual threshold model of anger in organizations. *Academy of Management Review*, 32, 721–746.
- George JM. (2002). Affect regulation in groups and teams. In Lord RG, Klimoski R, Kanfer R (Eds.), *Emotions in the workplace: Understanding the structure and role of emotions in organizational behavior* (pp. 183–218). San Francisco, CA: Jossey-Bass.
- Giles H, Coupland N. (1991). *Language: Contexts and consequences*. Pacific Grove, CA: Brooks/Cole.
- Glomb TM, Kammeyer-Mueller JD, Rotundo M. (2004). Emotional labor demands and compensating wage differentials. *Journal of Applied Psychology*, 89, 700–714.
- Glomb TM, Liao H. (2003). Interpersonal aggression in workgroups: Social influence, reciprocal, and individual effects. *Academy of Management Journal*, 46, 486–496.
- Grandey AA. (2000). Emotion regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology*, 5, 95–110.
- Grandey AA. (2003). When “the show must go on”: Surface and deep acting as predictors of emotional exhaustion and service delivery. *Academy of Management Journal*, 46, 86–96.
- Grandey AA, Diamond JA. (2010). Interactions with the public: Bridging job design and emotional labor perspectives. *Journal of Organizational Behavior*, 31, 338–350.
- Grandey A, Dieffendorf J, Rupp DE. (2012). *Emotional labor in the 21st century: Diverse perspectives on emotion regulation at work*. (Eds.), New York, NY: Psychology Press/Routledge.
- Grandey A, Fisk G, Steiner D. (2005). Must “service with a smile” be stressful? The moderating role of personal control for U.S. and French employees. *Journal of Applied Psychology*, 90, 893–904.
- Grant AM. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, 32, 393–417.
- Grant AM, Parker SK. (2009). Redesigning work design theories: The rise of relational and proactive perspectives. *Academy of Management Annals*, 3, 317–375.
- Gross J. (1998). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology*, 74, 224–237.
- Harrison DA, Klein KJ. (2007). What’s the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review*, 32, 1199–1228.
- Heaphy ED, Dutton JE. (2008). Positive social interactions and the human body at work: Linking organizations and physiology. *Academy of Management Review*, 33, 137–162.

- Hewlin PF. (2003). And the award for best actor goes to ...: Facades of conformity in organizational settings. *Academy of Management Review*, 28, 633–642.
- Hofmann DA, Gavin MB. (1998). Centering decisions in hierarchical linear models: Theoretical and methodological implications for organizational science. *Journal of Management*, 23, 623–641.
- Hogg MA, Terry DJ. (2000). Social identity and self-categorization processes in organizational contexts. *Academy of Management Review*, 25, 121–140.
- Hox J. (2010). *Multilevel analysis: Techniques and application*. (2nd ed.). New York, NY: Routledge.
- Hülsheger UR, Schewe AF. (2011). On the costs and benefits of emotional labor: A meta-analysis of three decades of research. *Journal of Occupational Health Psychology*, 15, 505–521.
- Humphrey SE, Nahrgang JD, Morgeson FP. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92, 1332–1356.
- Jackson SE, Joshi A. (2010). Work team diversity. In Zedeck S (Ed.), *APA handbook of industrial and organizational psychology* (Vol. 1, pp. 651–686). Washington, DC: APA.
- Jackson SE, Joshi A, Erhardt NL. (2003). Recent research on team and organizational diversity: SWOT analysis and implications. *Journal of Management*, 29, 801–830.
- Jehn KA, Northcraft GB, Neale MA. (1999). Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly*, 44, 741–763.
- Joshi A, Dencker JC, Franz G, Martocchio JJ. (2010). Unpacking generational identities in organizations. *Academy of Management Review*, 35, 392–415.
- Joshi A, Liao H, Jackson SE. (2006). Cross-level effects of workplace diversity on sales performance and pay. *Academy of Management Journal*, 49, 459–481.
- Joshi A, Roh H. (2007). Context matters: A multilevel framework for work team diversity research. In Martocchio JJ (Ed.), *Research in personnel and human resources management* (Vol. 26, pp. 1–48). Greenwich, CT: JAI.
- Joshi A, Roh H. (2009). The role of context in work team diversity research: A meta-analytic review. *Academy of Management Journal*, 52, 599–627.
- Kanfer R, Kantrowitz TM. (2002). Emotion regulation: Command and control of emotion in work life. In Lord RG, Klimoski R, Kanfer R (Eds.), *Emotions in the workplace: Understanding the structure and role of emotions in organizational behavior* (pp. 433–472). San Francisco, CA: Jossey-Bass.
- Kelly JR, Barsade SG. (2001). Mood and emotions in small groups and work teams. *Organizational Behavior and Human Decision Processes*, 86, 99–130.
- Kiggundu MN. (1981). Task interdependence and the theory of job design. *Academy of Management Review*, 6, 499–508.
- Kim E, Yoon D. (2012). Why does service with a smile make employees happy? A social interaction model. *Journal of Applied Psychology*, 97, 1059–1067.
- Klein KJ, Conn AB, Smith DB, Sorra JS. (2001). Is everyone in agreement? An exploration of within-group agreement in employee perceptions of the work environment. *Journal of Applied Psychology*, 86, 3–16.
- Kozlowski SWJ, Bell BS. (2003). Workgroups and teams in organizations. In Borman WC, Ilgen DR (Eds.), *Handbook of psychology: Industrial and organizational psychology* (Vol. 12, pp. 333–375). New York, NY: Wiley.



- Lee R, Skinner J. (1999). Will aging baby boomers bust the federal budget? *Journal of Economic Perspectives*, 13, 117–140.
- Leslie LM. (2007). Putting differences in context: incorporating the role of status and cooperation into work unit ethnic composition research. Phd dissertation. University of Maryland.
- Lively KJ. (2000). Reciprocal emotion management: Working together to maintain stratification in private law firms. *Work and Occupations*, 27, 32–63.
- Luo M. (2009, April, 12). Longer unemployment for those 45 and older. *New York Times.com*. Retrieved from [http://www.nytimes.com/2009/04/13/us/13age.html?\\_r=1&pagewanted=all](http://www.nytimes.com/2009/04/13/us/13age.html?_r=1&pagewanted=all)
- Lyons S, Duxbury L, Higgins C. (2005). Are gender differences in basic human values a generational phenomenon? *Sex Roles*, 53, 763–778.
- Mann S. (1999). Emotion at work: To what extent are we expressing, suppressing, or faking it? *European Journal of Work and Organizational Psychology*, 8, 347–369.
- Messick DM, Mackie D. (1989). Intergroup relations. *Annual Review of Psychology*, 40, 45–81.
- Miller LK, Hamblin RL. (1963). Interdependence, differential rewarding and productivity. *American Sociological Review*, 38, 768–778.
- Morgeson FP, Humphrey SE. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91, 1321–1339.
- Morris JA, Feldman DC. (1996). The dimensions, antecedents, and consequences of emotional labor. *Academy of Management Review*, 21, 986–1010.
- Morris WN, Reilly NP. (1987). Toward the self-regulation of mood: Theory and research. *Motivation and Emotion*, 2, 215–249.
- Motowidlo SJ, Packard JS, Manning MR. (1986). Occupational stress: Its causes and consequences for job performance. *Journal of Applied Psychology*, 71, 618–629.
- Oldham GR, Hackman JR. (2010). Not what it was and not what it will be: The future of job design research. *Journal of Organizational Behavior*, 31, 463–479.
- Pettigrew TF. (1998). Intergroup contact theory. In Spence JT, Darley JM, Foss DJ (Eds.), *Annual review of psychology* (Vol. 49, pp. 65–85). Palo Alto, CA: Annual Reviews.
- Pugh DS. (2002). Emotional regulation in individuals and dyads: Causes, costs, and consequences. In Lord RG, Klimoski RJ, Kanfer R (Eds.), *Emotions in the workplace: Understanding the structure and role of emotions in organizational behavior* (pp. 147–182). San Francisco, CA: Jossey-Bass.
- Rafaeli A. (1989). When clerks meet customers: A test of variables related to emotional expressions on the job. *Journal of Applied Psychology*, 74, 385–393.
- Rafaeli A, Sutton RI. (1987). The expression of emotion as part of the work role. *Academy of Management Review*, 12, 23–37.
- Reynolds RJ, Turner JC, Haslam SA. (2003). Social identity and self-categorization theories: Contribution to understanding identification, salience, and diversity in teams and organizations. In Polzer JT (Ed.), *Research in managing groups and teams* (Vol. 5, pp. 279–304). Greenwich, CT: JAI Press.
- Riordan CM. (2000). Relational demography within groups: Past developments, contradictions, and new directions. *Research in Personnel and Human Resources Management*, 19, 131–173.
- Riordan CM, Wayne JH. (2008). A review and examination of demographic similarity measures used to assess relational demography within groups. *Organizational Research Methods*, 11, 562–592.

- Roberson QM. (2007). Diversity in the workplace. In Rogelberg SG (Ed.), *Encyclopedia of industrial and organizational psychology* (pp. 158–161). Thousand Oaks, CA: Sage.
- Roth PL, BeVier CA. (1998). Response rates in HRM/OB survey research: Norms and correlates, 1990–1994. *Journal of Management*, 24, 97–117.
- Rupp DE, Spencer S. (2006). When customers lash out: The effects of perceived customer interactional injustice on emotional labor and the mediating role of discrete emotions. *Journal of Applied Psychology*, 91, 971–978.
- Schaubroeck J, Jones JR. (2000). Antecedents of workplace emotional labor dimensions and moderators of their effects on physical symptoms. *Journal of Organizational Behavior*, 21, 163–183.
- Schneider B, Reichers, AE. (1983). On the etiology of climates. *Personnel Psychology*, 36, 19–39.
- Shea GP, Guzzo RA. (1987). Groups as human resources. In Rowland KM, Ferris GR (Eds.), *Research in personnel and human resource management* (Vol. 5, pp. 323–356). Greenwich, CT: JAI.
- Shelton JN. (2003). Interpersonal concerns in social encounters between majority and minority group members. *Group Processes & Intergroup Relations*, 6, 171–185.
- Shin SJ, Kim T, Lee J, Bian L. (2012). Cognitive team diversity and individual team member creativity: A cross-level interaction. *Academy of Management Journal*, 55, 197–212.
- Smith ER, Seger CR, Mackie DM. (2007). Can emotions be truly group level? Evidence for four conceptual criteria. *Journal of Personality and Social Psychology*, 93, 431–446.
- Smola KW, Sutton CD. (2002). Generational differences: Revisiting generational work values for the new millennium. *Journal of Organizational Behavior*, 23, 363–383.
- Snijders TAB, Bosker R. (1999). *Introduction to multilevel analysis*. London, UK: Sage.
- Sy T, Côté S, Saavedra R. (2005). The contagious leader: Impact of the leader's mood on the mood of group members, group affective tone, and group processes. *Journal of Applied Psychology*, 90, 295–305
- Tafarodi RW, Kang SJ, Milne AB. (2002). When different becomes similar: Compensatory conformity in bicultural visible minorities. *Personality and Social Psychology Bulletin*, 28, 1131–1142.
- Tajfel H, Turner JC. (1979). An integrative theory of intergroup conflict. In Worchel S, Austin W (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Totterdell P. (2000). Catching moods and hitting runs: Mood linkage and subjective performance in professional sport teams. *Journal of Applied Psychology*, 85, 848–859.
- Tse HHM, Dasborough MT. (2008). A study of exchange and emotions in team member relationships. *Group and Organization Management*, 33, 194–215.
- Tsui AS, Egan TD, O'Reilly CA, III. (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, 37, 549–579.
- Tsui AS, Gutek BA. (1999). *Demographic differences in organizations: Current research and future directions*. Lanham, MD: Lexington.
- Tsui AS, Pearce JL, Porter LW, Tripoli AM. (1997). Alternative approaches to the employee-organization relationship: Does investment in employees pay off? *Academy of Management Journal*, 40, 1089–1121.
- Van de Ven AH, Delbecq AL, Koenig R. (1976). Determinants of coordination modes within organizations. *American Sociological Review*, 41, 322–338.
- Van der Vegt GS, Van de Vliert E. (2005). Effects of perceived skill dissimilarity and task interdependence on helping in work teams. *Journal of Management*, 31, 73–89.

- Walsh JP, Ungson GR. (1991). Organizational memory. *Academy of Management Review*, 16, 57–91.
- Wang M. (2007). Profiling retirees in the retirement transition and adjustment process: Examining the longitudinal change patterns of retirees' psychological well-being. *Journal of Applied Psychology*, 92, 455–474.
- Weick KE. (1979). *The social psychology of organizing*. Reading, MA: Addison-Wesley.
- West R, Turner LH. (2010). *Introduction to communication theory: Analysis and application*. 4th Ed. New York, NY: McGraw-Hill.
- Wharton AS. (1993). The affective consequences of service work. *Work and Occupations*, 20, 205–232.
- Wharton AS. (2009). The sociology of emotional labor. *Annual Review of Sociology*, 35, 147–165.
- Wharton AS, Erickson RJ. (1995). The consequences of caring: Exploring the links between women's job and family emotion work. *The Sociological Quarterly*, 36, 273–296.
- Williams KY, O'Reilly CA. (1998). The complexity of diversity: A review of forty years of research. In Staw B, Sutton R (Eds.), *Research in organizational behavior* (Vol. 21, pp. 77–140). Greenwich, CT: JAI.