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DIVERSITY AND HOMOPHILY AT WORK: SUPPORTIVE RELATIONS AMONG WHITE AND AFRICAN-AMERICAN PEERS

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Dividends from employee diversity may require intergroup knowledge and information sharing, which in turn may depend on supportive peer relations. Yet little is known about the antecedents of such supportive relations among the racially dissimilar. We posited that the relative prevalence of supportive relations among dissimilar peers will be higher in work units with high task interdependence and a strong peer support climate but will decline as the proportion of racially different others increases (a "homophily" effect). An inverse relationship between the proportion of racially different others and supportive relations among whites and blacks was found; it was curvilinear and moderated by support climate.

Although often downplayed by managers as irrelevant, distracting, or unproductive (Bramel & Friend, 1987), supportive relationships among coworkers may, according to recent research regarding friendship and helping networks, have important and positive performance-related consequences for organizations (Podsakoff, MacKenzie, Paine, & Bachrach, 2000; Shah & Jehn, 1993). Intimate relations among peers may generate positive outcomes because individuals having such ties may have greater motivation to be of assistance to (Granovetter, 1982: 113) and cooperate with (Jehn & Shah, 1997) one another than those lacking emotional bonds. Moreover, as Reagans and McEvily noted, "Individuals who have a strong emotional attachment [to one another] are more likely to share knowledge than those who are not emotionally attached" (2003: 244).

Such intimate and supportive peer relations may serve as a source of competitive advantage for organizations in general, yet they may be particularly beneficial for organizations with demographically diverse workforces. Organizations seeking employee diversity often do so in order to enhance their pools of human and social capital and to broaden the range of perspectives considered in decision making (Cox, Lobel, & McLeod, 1991). But such benefits appear to be contingent on the ability of diverse employee groups to cooperate and to share and synthesize the knowledge each group brings to the workplace (Gersick, Bartunick, & Dutton, 2000). And, as noted above, even under ideal conditions such patterns of cooperation and knowledge sharing may be difficult to generate among mere casual acquaintances, often requiring the prior emergence and continued maintenance of more intimate and supportive peer relations. While the facilitation of such relations in general may appear challenging for managers, given individuals' desire to maintain positive social identities through social categorization (Tajfel & Turner, 1986) and their tendency to prefer to associate with those to whom they feel most similar (Byrne, 1971), the facilitation of such relations among *demographically dissimilar* peers may be considered daunting at best.

In spite of the obvious managerial interest in learning more about the conditions under which supportive relations among dissimilar peers emerge in demographically heterogeneous work populations (Brickson, 2000), little is known about the factors that may enhance or inhibit these relationships (Gersick et al., 2000). Consequently, the aim of the current study was to provide some insight into the strategies that organizations might adopt (and avoid) when seeking to build the rela-

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tional foundation upon which diversity dividends may be highly contingent. More specifically, using racial diversity as a case in point, we drew from a variety of literatures to generate and then test a model explaining the variance in the degree to which white and African-American coworkers have supportive relationships with one another. We limited our analysis to relations between whites and African Americans because, as Shipler noted, "Of all the racial and ethnic walls built in America, the black-white divide is particularly poignant. More than three decades after the civil rights movements' victories over forced segregation, few white people can understand why so many African-Americans appear to want voluntary segregation . . . [with] black clustering feeding into white aversion and [the combination] rendering the goal of the color-blind society as elusive as ever" (1997: 26).

Supportive Peer Relations in the Workplace

Supportive peer relations refer to relationships among coworkers that are more than simply casual and involve more than task sharing or the simple exchange of work-related information. Rather, these relations are expressive and self-revealing (Blau, 1977), and hence, they are grounded on a sense of intimacy and trust, the sharing of thoughts and feelings, and the sense that one is able to seek help from the other (Crary, 1987). Marks (1994) found that half of all non-kin confiding relationships reported in the General Social Survey were workplace based. Depending upon the amount of time people spend with one another and the intensity of their collaboration, such peer relationships can become among the most central in workers' lives, in some cases taking on a significance equal to or even greater than family-based relations (Baum, 1991).

The benefits of such relationships for both employees and employers have been noted extensively (Bacharach, Bamberger, McKinney, 2000). Recent findings about benefits for employees suggest that supportive peer relationships enhance the likelihood of career success (Ibarra, 1997), enhance self-esteem and professional identity (Thomas, 1993), and may reduce occupational stress and promote employee health (Fried & Tiegs, 1993). Most recently, Gersick and her colleagues (2000: 1039) concluded that for many workers, supportive work-based relationships are "valued ends in themselves" rather than simply a means of career advancement. Recent findings about benefits for employers suggest that the interpersonal facilitation and helping at the root of supportive peer relations affect both individual job performance (Schaubroek & Fink, 1998) and group and organizational performance (see Podsakoff et al. [2000] for a review). For example, studying a sample of "nonexempt" employees, Podsakoff and MacKenzie (1997: 266) found peer helping (e.g., "encouraging each other when someone is down") to have a significant, positive impact on organizational performance outcomes, explaining (along with two other organizational citizenship behaviors) up to 26 percent of the variance in such outcomes. Similarly, using a sample of limited-menu restaurants, Walz and Niehoff (1996) found that peer helping explained 39, 15, and 20 percent of the variance in customer satisfaction, operating efficiency, and performance quality, respectively. Moreover, a survey of 400 companies conducted by the Gallup organization found workers' ability to form supportive relationships at work to be among the most powerful of 12 indicators of a highly productive workplace (*Wall Street Journal,* 2000).

Just what underlies this link between supportive peer relations and organizational effectiveness is unclear. Drawing from the organizational citizenship behavior literature, we suggest that one possibility is that supportive peer relations and, in particular, the helping and interpersonal facilitation processes underlying them, generate performance-related outcomes by "enhancing team spirit, morale and cohesiveness" (Podsakoff et al., 2002: 543–546). Intergroup conflict and the need for group members (or managers) to spend energy and time on group maintenance functions are thus reduced, and the ability of the group or organization to attract and retain good employees is thus increased. Drawing from the social and friendship networks literatures, we suggest a second possibility: as noted above, the intimate or embedded ties underlying supportive peer relations encourage trust, empathy, and a norm of reciprocity, thus facilitating information and knowledge exchange (Uzzi, 1996). Information and knowledge exchange in turn may allow an organization to more rapidly and appropriately respond to changes in its operating environment (Ingram & Roberts, 1996). This same literature suggests a third possibility, namely, that supportive relations allow for the emergence of cohesive networks among peers. Because such networks facilitate norm enforcement (Krackhardt, 1994), supportive relations may indirectly reduce the risk of social loafing (Karau & Hart, 1998) and allow the replacement of traditional and costly mechanisms of organizational control with more efficient, norm-based modes of organizational control (Bamberger & Meshulam, 2000; Ingram & Roberts, 1996).

Supportive Peer Relations and Workforce Diversity

The performance-related outcomes of supportive peer relationships noted above, as well as the social dynamics underlying them, may be particularly relevant for organizations employing demographically diverse workforces. Indeed, underlying much of the recent diversity literature is the notion that it may be difficult to capitalize on the potential benefits of diversity without first taking action to ensure the emergence of such supportive relationships among demographically dissimilar coworkers (Brewer & Brown, 1998). As Miller noted, such personalized relationships "reduce the anxiety and discomfort" often dominating exchanges between demographically dissimilar others, and provide opportunities to "disconfirm negative stereotypes of disliked out-groups, and thereby break down the monolithic perception of the out-group as a homogeneous unit" (2002: 397). Similarly, Brickson claimed that by influencing their members to adopt a "relational orientation," in which individuals are primarily motivated to secure the welfare of others, organizations would be better positioned to "maximize the upside and minimize the downside of diversity" (2000: 96). Brickson viewed this organizational gain as occurring because the relational orientation "enables a more complex form of social cognition whereby demographic identities are attended to without becoming a focus" (2000: 96) and whereby "meaningful interpersonal relationships that cross group boundaries" (2000: 93) may be established.

Such supportive relations, by potentially reducing the perceived social costs inherent in help seeking and information exchange (Nadler, 1991; Uzzi, 1996), may be particularly useful when they encourage demographically dissimilar peers to consider one another's perspectives and to seek assistance from, and transfer knowledge to, one another. By lowering such perceived risks as loss of face and altering dependence relations, supportive relations may increase peers' willingness to turn to one another for work-related assistance and may also enhance the quality of intergroup information exchange. And, as Hopkins and Hopkins noted (2002: 544), higher-quality exchanges among demographically dissimilar coworkers—by facilitating the harnessing and integration of new knowledge and alternative perspectives—are likely to have a direct impact on organizational performance, ultimately creating value in diversity.

Moreover, as dissimilar coworkers begin to view each other as important sources not only of resources, but also of affective support, depersonalization of the other becomes more difficult, and the recognition of the value of the other becomes more stable and sustainable (Amir, 1969). Indeed, over time, it is likely that positive attitudes based on the particular relationship will be extended to others in the minority or majority group (Brickson, 2000: 97), further facilitating group interaction and information sharing in the organization and reducing the potential for intolerance and conflict (Milliken, Bartel, & Kurtzberg, 2003). As noted above, the performance-related consequences of intolerance and conflict can be substantial, as employees and their managers are forced to allocate resources away from value-generating activities and toward group maintenance, and because intolerance and conflict can demotivate employees and encourage withdrawal and ultimately, turnover (Hopkins & Hopkins, 2002).

These relationships have not gone unrecognized by the practitioner community. Indeed, for well over a decade, much of the prescriptive literature in diversity management has been based on interventions designed to encourage the emergence of supportive relationships among demographically dissimilar coworkers (cf. Cox, Lobel, & McLeod, 1991) as a means by which to reduce bias and foster intergroup communication and perspective sharing (Hopkins & Hopkins, 2002).

Unfortunately, however, although there is extensive research on the consequences of supportive peer relations in general, and supportive relations among dissimilar peers in particular, as Gersick and coauthors noted, relatively few studies have examined "what creates and what sustains collegial ties at work and how [demographic] differences ease or hamper the creation of relationships with this quality" (2000: 1042). Practitioners attempting to develop supportive relationships among demographically dissimilar coworkers may often be working on the basis of intuition and untested theory. Consequently, our focus in the current analysis is on the *antecedents* of supportive relations among demographically dissimilar peers.

THE ANTECEDENTS OF SUPPORTIVE RELATIONS AMONG DISSIMILAR PEERS

Interracial supportive relationships are relatively rare in society at large (McPherson, Smith-Lovin, & Cook, 2001). Using a national probability sample, Marsden (1987) found that only 8 percent of adults with networks of two or more others mentioned having a person of another race with whom they "discussed important matters." This percentage represents less than one seventh of the heterogeneity that one would observe were people to chose randomly

from the population as a whole (McPherson et al., 2001: 420). However, as far as we are able to ascertain, researchers have yet to examine the prevalence of such interracial relations in the American workplace. Moreover, as noted above, little is known about the conditions governing such supportive relationships among demographically dissimilar coworkers.

A number of researchers have suggested that, regardless of the degree of racial or ethnic heterogeneity of a work unit's members, *characteristics of the unit's task and normative context* are likely to play an important, direct role in determining the prevalence of supportive relationships among dissimilar peers (Dovidio, Gaertner, & Kawakami, 2003). Others have suggested that intergroup ratios or *contact opportunities* are likely to explain much of the variance in supportive relations among dissimilar peers (for reviews, see Amir [1969] and Dovidio et al. [2003]). On the other hand, if, as the "homophily" perspective suggests, contacts between similar people occur at a higher rate than contacts among dissimilar people (McPherson et al., 2001: 416), it may be that an inverse association between intergroup ratios and the prevalence of supportive relations with dissimilar peers exists. Finally, it may be that the precise nature of the association between intergroup ratios (i.e., contact opportunity) and the prevalence of supportive intergroup relations is contingent upon the presence or absence of certain prerequisite task and normative conditions (Pettigrew & Tropp, 2000).

In the sections that follow, we explore each of these perspectives in greater detail. In each case, like others taking a homophily perspective (e.g., Ruef, Aldrich, & Carter, 2003: 211), we were interested in explaining the *relative* (as opposed to the absolute) prevalence of supportive relationships (expressive and self-revealing relationships grounded on a sense of intimacy and trust) among racially dissimilar peers. As we discuss in greater detail in the Methods section, by *relative* prevalence, we mean occurrence above and beyond what might be expected given the simple proportion of work unit members that are of one race or another. As McPherson and colleagues noted in their review of the homophily literature, there is a relatively long tradition of research (e.g., Coleman, 1958) focusing on "the tendency of similar people to associate more often than they would be expected to given their relative numbers in the opportunity pool" (2001: 419).

Task Interdependence

A number of theories suggest that the structure of organizational or unit-level tasks is likely to influence the relative prevalence of supportive relations with dissimilar peers. First, focusing on identification processes, Brickson noted that "since the prototypical relational identity emerges among dyads, structuring tasks so that dyadic partners have different and interlocking roles is likely to elicit a relational orientation" (2000: 92). Underlying this argument is the functional relations notion developed by Sherif, Harvey, White, Hood, and Sherif (1961), which suggests that by manipulating tasks, organizations may be able to generate meaningful interpersonal relationships that cross group boundaries. Indeed, in their classic "jigsaw studies" of cooperative interdependence, Aronson and associates demonstrated that when students in heterogeneous learning groups each received only one of several complementary segments relating to a subject that the group as whole had to learn, the students had no choice but to cooperate in order to see the big picture, and this cooperation decreased intergroup bias (e.g., Aronson & Patnoe, 1997). This study suggests that a research focus on task interdependence as a unit-level phenomenon is more useful than a focus on task interdependence at the individual job level, because multiple task-related interdependencies in a unit as a whole are most likely to breed the level of cooperation required for supportive relations among dissimilar peers.

A second theory suggests that when tasks are structured so as to require cooperative interdependence, the members of a given group may come to associate the rewarding aspects of achieving success with members of other groups. Such an association increases intergroup attraction and provides a basis for the emergence of supportive intergroup relationships (Dovidio et al., 2003). Finally, in keeping with social identity theory (Taijfel, 1969), task structures creating job-based interdependencies may reduce the salience of demography-based collective identities and increase the salience of other superordinate organizational or occupational identities (Chatman, Polzer, Barsade, & Neale, 1998). For example, Gaertner, Mann, Dovidio, Murrell, and Pomare (1990) found that intergroup cooperation reduced bias by transforming members' cognitive representations of the aggregate from two groups to one group. Regardless of a group's level of racial heterogeneity, such a superordinate identity is likely to facilitate the emergence of instrumental support relationships that, over time, may deepen and become more personal and intimate. This logic serves as the basis of Gaertner and Dovidio's (2000) common intergroup identity model. Taken together, these three perspectives all suggest the following hypothesis:

Hypothesis 1. The greater the degree of unit-level task interdependence, the greater the relative prevalence of supportive relationships with racially dissimilar peers.

Unit Support Climate

A second factor potentially influencing the relative prevalence of supportive relations with dissimilar peers is the unit support climate. Drawing from the shared perceptions (Reichers & Schneider, 1990), facet-specific (Rousseau, 1988), and proximate work group (Anderson & West, 1998) approaches to organizational climate analysis, we define the support climate as the shared perception that coworkers in a given work unit can be expected to provide both emotional and instrumental support, or in other words, that help seeking and giving is the norm—an acceptable and legitimate way of doing things in the particular work unit (Reichers & Schneider, 1990: 22).

Previous research on helping suggests that in the absence of shared beliefs regarding the legitimacy of help seeking, individuals are likely to be less willing to turn to one another for assistance, and hesitancy will, in turn, reduce the likelihood of supportive peer relations. Specifically, Nadler (1990) noted that help seeking entails a certain degree of risk in that it may cause embarrassment and open a person to the negative effects of others perceiving him or her as weak and incompetent. Because racial categories are often "charged" with assumptions regarding status differences (Fossett & Kielcolt, 1989) and stereotype threats (Steele & Aronson, 1995), such risks may be particularly salient when individuals seek help from racially dissimilar peers. Lacking a normative basis of support, individuals may also lack a sense of the secure base potentially required before they are willing to take the risk of turning to a dissimilar peer for help. Thus, they may be less likely to initiate the kind of help-seeking behaviors that we would expect to underlie the establishment and maintenance of supportive peer relationships (Nadler, 1991).

While Gersick and coauthors' (2000) analysis suggests that for many workers, this lack of a normative basis for establishing supportive peer relations may be the rule rather than the exception, individuals employed in units characterized by a strong support climate (units in which giving and seeking help are essentially taken-for-granted) may sense less of a risk in developing such cross-group supportive peer relationships. As Schwartz and Howard (1981) noted, shared expectations about helping are likely to be an important motivator of help giving among peers. Drawing from a social information processing perspective (Salancik & Pfeffer, 1978), we speculate that just as task perceptions and attitudes may be socially constructed on the basis of informational cues received in the workplace, so might be support-related perceptions and attitudes (Pierce, Baldwin, & Lydon, 1997). Consequently, individuals working in social environments providing cues as to the legitimacy and acceptability of supportive peer relations are likely to feel more secure in initiating what might otherwise be perceived as high-risk supportive relationships—namely, supportive relationships with *dissimilar* others. Given that shared perceptions of the tendency of coworkers to provide emotional and instrumental assistance to one another may provide one such cue, we posit:

Hypothesis 2. The greater the level of shared perceptions of peer support among unit members—that is, the stronger the support climate of an individual's work unit—the greater the relative prevalence of supportive relations with racially dissimilar peers.

Intergroup Ratios and the Contact Hypothesis: Opportunity versus Homophily

According to the "contact hypothesis" (Allport, 1954), shifts in intergroup ratios, such as the number of whites relative to the number of blacks, can change intergroup attitudes and reduce intergroup conflict and thus increase the opportunities that dissimilar others have to interact with one another. With increased intergroup contact, individuals' stereotypes of dissimilar others are exposed to increasing levels of disconfirmation, leading the individuals to focus more on work-based commonalities (Gaertner et al., 1994) and facilitating the emergence of the dense and integrated social networks that Brickson (2000) associated with the emergence of supportive, cross-ethnic peer relations. Blau expressed this same notion in structuralist terms, noting that "the probability of intergroup relations declines with the proportionate increase in (its) group size" (1994: 300). Kanter (1977) similarly posited, in her "tokenism hypothesis," that as the proportion of a social minority approaches numerical parity with a social majority, the social isolation of the former will decrease.

Still, a number of reviewers have noted that empirical support for the contact hypothesis is actually quite equivocal (e.g., Nesdale & Todd, 1998). On the one hand, there is extensive empirical support for contact theory. For example, in a meta-analysis of 203 studies, Pettigrew and Tropp (2000) found that increased opportunity for intergroup in-

teraction was associated with decreased intergroup bias. Similarly, Kraiger and Ford (1985) found that race effects declined as the percentage of blacks in a unit increased, while Flynn, Chatman, and Spataro (2001) found that increasing the frequency of interaction among diverse coworkers could yield significant, positive benefits.

On the other hand, as Tsui and Gutek noted, "Social psychological research has shown convincingly that contact alone is not sufficient and that it can in fact enhance or deepen inter-group hostility" (1999: 167). For example, South, Bonjean, Corder, and Markham (1982) found that the higher the proportion of women in work groups, the *less* the communication the women had with male group members and the greater the communication the women had with each other. Hoffman (1985) found that while unit-level racial heterogeneity was associated with increased frequency of formal communication, it was also associated with a *decline* in interpersonal contact. Finally, Ibarra (1993) found that men and women tended to form support ties with others of the same sex in an organization. As Chatman and her coauthors (1998: 752) concluded, workers may be reluctant to interact with others who are demographically different, and even when demographically different people do interact, they are likely to experience difficulties in communicating different perspectives, a potential barrier to the development of supportive peer relations.

How might these discrepant findings be explained? One possibility is that although increased intergroup heterogeneity may be associated with increased *casual* cross-group interaction and decreased stereotyping, it may have an inverse association with the prevalence of more *intimate* relationships among dissimilar peers. Indeed, Blau and Schwartz (1997: 29) suggested that although the contact hypothesis is rather self-evident as long as the focus is on the association between increased demographic heterogeneity (i.e., opportunity for contact) and superficial or casual cross-group interaction, it becomes far less self-evident when the dependent variable is not simply casual contact, but rather *supportive* (or, in Blau's words, "congenial") relations with dissimilar others. This shift occurs because pressures toward homophily may tend to intensify as the proportionate size of a particular demographic group in a work unit decreases (and, in turn, in-group salience increases). Indeed, Blau and Schwartz (1997: 31) claimed that, particularly for those in the numerical minority in a unit, in-group salience may increase as their minority status intensifies, thus resulting in "lower than predicted out-group rates." Supporting this theory, Mehra, Kilduff, and Brass (1998) found that the marginalization of racial minorities in friendship networks resulted largely from minority individuals' own preferences for same-race friends. Alderfer and Smith (1982: 54) suggested that such homophilic tendencies among minorities may be associated with the tendency of minorities to evaluate one-on-one black-white relations significantly more negatively than whites. However, the in-group salience argument may not be limited strictly to those in the numerical minority. A parallel case may be made for those in the numerical majority. As the threat to their numerical majority status (and the power associated with such status) increases, homophily pressures may intensify (Blalock, 1957, 1967), and less social integration and more communication problems may result (Zenger & Lawrence, 1989). For example, in a community-level study, Fossett and Kiecolt (1989) found that white perceptions of status threat increased with the relative size of the African-American population, with this status threat associated with increased racial bias and discrimination. Furthermore, Konrad noted that while low-status groups may avoid high-status groups to minimize their experiences of social and professional rejection, "High-status groups may avoid low-status groups due to stereotypes that lead them to expect few benefits from interacting with the out-group" (2003: 12). In this context, it is possible that increased unit-level racial heterogeneity, rather than increasing supportive relations with dissimilar others, may in fact have the opposite effect, pushing both numerical minority and majority members to turn even more to those demographically similar to themselves for supportive relations. Consequently, we hypothesize:

Hypothesis 3. The proportion of racially different others in an employee's work unit will be inversely associated with the relative prevalence of his/her supportive relationships with racially different others.

Moderating Effects

A second possible explanation for the discrepant findings about supportive relationships among demographically different others is that the positive association between intergroup heterogeneity and intergroup relations is contingent on certain prerequisites, such as equal status of the groups involved, cooperative interdependence between the groups, and shared norms supportive of the emergence and maintenance of such relationships (Allport, 1954; Pettigrew, 1998). Although equal status of racioethnic groups in the workplace is guaranteed by law, and consequently largely invariant

across employers and work units in the United States, the remaining two conditions are indeed likely to vary both across and within firms.

Moderating role of task interdependence. A number of reviews and empirical studies (e.g., Dovidio et al., 2003; Gaertner et al., 1994) have suggested that interdependence may be one of the critical conditions for a contact effect on intergroup bias. Indeed, the notion of interdependence has been at the core of the contact hypotheses since its initial formulation (e.g., Allport, 1954). For example, Sherif noted that "without some interdependence among the parties in contact, face to face situations produce lowered thresholds for the verdict of what else would you expect from such a —? [sic]. Contact is an effective medium for change when groups are directed toward superordinate goals overriding their separate concerns" (1966: 146–147).

Underlying this proposition is the idea that interdependence enhances intergroup relations by inducing a common in-group identity. The emergence of a common in-group identity does not require each subgroup to forsake its racial identity, yet Turner, Oakes, Haslam, and McGarty's (1994) notion of functional antagonism suggests that the increased saliency of membership in a superordinate group (that is, a work unit) comes at the expense of the saliency of membership in some demography-based subgroup. In theory, this increased saliency should therefore reduce the tendency of work unit members to disproportionately turn to those racially similar to themselves as the proportion of racially dissimilar others in their unit increases, particularly since members of different racial groups are likely to eventually realize that they will be unable to realize their mutual goals by relying strictly on similar others. Cooperative interdependence may also moderate the impact of intergroup contact on the relative prevalence of supportive relations in that such interdependence may increase the likelihood of intergroup helping, and thus generate intimate, as opposed to strictly casual, intergroup contact (Anderson & Williams, 1996; Pearce & Gregersen, 1991). Thus, we posit:

Hypothesis 4a. Unit-level task interdependence will moderate the association between the proportion of racially different others in an employee's work unit and the relative prevalence of supportive relationships with dissimilar peers. As the level of task interdependence increases, the inverse association between the proportion of racially different others in the work unit and the relative prevalence of supportive relationships with dissimilar peers will weaken.

Moderating role of support climate. The degree to which a support climate characterizes a group context may, for two reasons, also moderate the link between the racial composition of a work group and the relative prevalence of supportive relations among dissimilar peers (Dovidio et al., 2003). First, as Amir (1969) suggested, norms encouraging supportive peer relationships in general may increase the perceived social acceptability of developing such relationships with dissimilar others in particular. Early studies of housing desegregation (e.g., Deutsch & Collins, 1951) pointed out that while white residents had no objection to mixing with African-Americans, they were reluctant to do so publicly because it violated what they perceived to be institutional norms (e.g., "It just isn't done"). In an organizational context in which peer support is more taken-for-granted, such perceptions are less likely to bar the emergence of intergroup supportive relations, reducing the likelihood that individuals will disproportionately turn to those racially similar to themselves for support.

Second, a number of researchers have noted that the shared attitudes and beliefs characterizing an organization or its units can influence the saliency of demographic differences in attitudes and behaviors (e.g., Chatman et al., 1998). Indeed, Turner and colleagues' (1994) notion of functional antagonism suggests that as one social category becomes more salient, others (e.g., race) become less salient. Consequently, as Chatman and coauthors' findings suggest, it is possible that while an increase in the proportion of racially different others may generate status threats enhancing individuals' homophilic tendencies, where strong cues providing a normative basis for peer-based social support exist, individuals may overlook demographic differences and apply a broader social classification of "peer." Consequently, we posit:

Hypothesis 4b. Unit support climate will moderate the association between the proportion of racially different others in an employee's work unit and the relative prevalence of supportive relationships with dissimilar peers. As the level of shared perceptions of peer support increases, the inverse association between the proportion of racially different others in the work unit and the relative prevalence of supportive relationships with dissimilar peers will weaken.

Tipping Point

Although the discussion above implicitly positions homophily and intergroup contact as competing hypotheses, a number of studies suggest that they may instead describe processes along a continuum of minority/majority representation, whereby homophilic effects decrease in magnitude (and perhaps even reverse) as minority representation increases beyond some "tipping point" (Allmendinger & Hackman, 1995: 425). Drawing from Kanter (1977), Allmendinger and Hackman (1995) suggested that upon the achievement of some moderate level of minority representation, minority homophilic tendencies are likely to diminish as their increased representation begins to ameliorate many of the "difficulties experienced by the pioneers" (Allmendinger & Hackman, 1995: 426). Blalock (1967) suggested a similar curvilinear association between minority representation and *majority* homophily. His hypothesis about minority group size inequality states that "a given increase in the minority percentage should produce a smaller increment in intergroup competition in situations where the minority percentage is already high" (Blalock, 1967: 148) Given Blalock's assumption that homophilic tendencies on the part of the majority stem largely from the perceived threat of minority competition, this theory suggests that, beyond some tipping point, the positive relationship between minority representation and homophily will also likely have a diminishing slope.

Empirical support for such a curvilinear relationship is limited, with most of the evidence stemming from gender-based studies of employment discrimination (e.g., Pfeffer & Davis-Blake, 1987). However, in one study of the impact of minority representation on organizational outcomes, Allmendinger and Hackman (1995) found that although satisfaction with work relationships and organizational unit members' perceived relationship quality declined as the proportion of female unit members increased from 0 percent to the 30–40 percent range; beyond that point, further increases in the proportion of female unit members were associated with *increased* levels of perceived relationship quality and satisfaction.

Interestingly, in spite of the arguments noted above regarding equivalent homophily effects for minority and majority group members, Allmendinger and Hackman (1995) identified a significant gender-by-proportion interaction effect. Specifically, the association between female representation and relationship quality was curvilinear for women (that is, U-shaped with a tipping point at approximately 40 percent), but for men, the association was essentially monotonic, with only a slight decline in the slope at the highest levels of female representation. Ruef and coauthors (2003) reported similar findings of a significant race-by-proportion interaction. Consequently, we propose:

Hypothesis 5a. The association between the proportion of racially different others in an employee's work unit and the relative prevalence of supportive relationships with dissimilar peers will be curvilinear, with the inverse effect of the proportion of dissimilar others on the relative prevalence of supportive relationships with dissimilar peers decreasing in magnitude as the proportion of dissimilar others increases.

Hypothesis 5b. Race will moderate the curvilinear association between the proportion of racially different others in an employee's work unit and the relative prevalence of supportive relationships with dissimilar peers, with increased minority representation dampening the association between the proportion of racially different others and homophily more for blacks than for whites.

METHODS

Sample

To test the hypotheses generated above, we analyzed data collected from nonexempt workers employed in over 60 work units in multiple organizations in New York State. Using employees' unions as a point of access, these data were collected (as part of a larger study on workplace conditions and employee emotional well-being) in the late 1990s via a self-report questionnaire distributed to randomly sampled members of ten unions. We focused on nonexempt workers as they account for the bulk (approximately 65 percent) of the civilian workforce in the United States, and since 73 percent of nonwhites (and 75 percent of African Americans) were employed in such positions (Bureau of Labor Statistics, 2003). We chose a union-based sample after comparing the potential for sample bias of employees accessed through management and those accessed through their union. Preliminary interviews with over 100 workers employed by both unionized and nonunionized organizations suggested a substantial risk of sample bias were we to access the study sample via management. Specifically, the interview data indicated that many employees might be reluctant to disclose information regarding their intimate relations with coworkers to investigators identified with management. In

contrast, interviewees employed in unionized firms indicated that, conditional upon anonymity, they would have little such concern were they to be asked to provide such data to their union or to researchers brought in by their union. Although sampling unionized workers only could introduce sample bias, given that race relations in nonunion firms tend to be little different from race relations in unionized firms (Heywood, 1992), we concluded that the risk of sample bias stemming from systematic nonresponse among employees accessed via management was likely to be greater than any bias associated with a unionized sample accessed via the employees' unions.

Of 6,720 questionnaires distributed, 3,319 were returned, for an overall response rate of 46.23 percent. The data analyzed in the current study are drawn from a subsample of employees represented by six unions for which data regarding supportive relations were available (n = 2,661). Within this subsample, 1,245 workers were employed in three enterprises engaged in manufacturing/industrial processing (i.e., automobile and electrical components manufacturing and mail/parcel sorting) and were represented by three different unions. Depending on their particular work units, these individuals performed a wide variety of assembly, packaging, sorting, machining, and skilled tasks. The other 1,416 workers were employed by a dozen enterprises in the service sector (i.e., retail, utilities, and health care) and were represented by the remaining three unions. Depending on their particular work units, these workers were engaged in such tasks as nursing, customer service, meter reading, warehousing, maintenance, and retail sales. All respondents were informed that the general purpose of the survey was to examine the link between workplace conditions and employee well-being. All respondents were also told to complete the questionnaires anonymously in order to guarantee participant confidentiality.

We included in our analysis only those respondents who specified the work units to which they belonged (bringing the sample down to 2,342) and who responded to the ethnicity item and categorized themselves as either white (48%) or African-American (24%) (n = 1,678). The elimination of observations from work units with fewer than three observations or a unit-level sampling rate of less than 20 percent further reduced our sample to 1,247 respondents. Of these, 716 were employed in one of 34 work units whose employees were represented by one of the three manufacturing/industrial processing unions, and 531 were in one of 31 work units whose employees were represented by one of the three service unions. Of the 1,247 respondents included in the analysis, 448 were African-American, and 799 were white. Women comprised 57.37 percent of the African Americans and 32.29 percent of the whites. Respondents ranged in age from 18 to 65, with a mean age of 38.

Table 1 gives sample characteristics at the workgroup level for the 34 units represented by the three manufacturing/industrial processing unions and for the 31 units represented by the three service unions. As this table shows, the service units included, on the average, a significantly greater proportion of female and African American respondents than the manufacturing/industrial units: 73 versus 24 percent women (t = 7.06, $p < .001$); and 56 versus 26 percent African Americans (t = 4.19, $p < .001$). Compared to the manufacturing/industrial units, the service units also had significantly more minorities other than African Americans (27% vs. 14%, t = 4.71, $p < .001$) and higher mean levels of task interdependence (4.85 vs. 4.40; t = 3.75, $p < .001$) and peer support climate (2.61 vs. 2.38; t = 2.88, $p < .01$). In each of the 65 units studied, a union official confirmed that the demographic composition of the unit-specific sample was consistent with the unit from which the sample was drawn. As did Tsui, Egan, and O'Reilly (1992), we verified the representativeness of the sample by having a union official compare the sample demographic parameters noted above with those of the employee population in each of the sampled work units represented by the union of interest. These officials confirmed that the demographic profile of the each unit sample was highly similar to the profile of employees in the respective work unit.

Measures

Dependent variable. As noted earlier, we defined supportive peer relationships in the workplace as deep associations with coworkers grounded on a sense of intimacy and trust, the sharing of thoughts and feelings, and the sense that one is able to seek help from the other. On the basis of this definition, we "operationalized" the dependent variable used in this study—namely, the *relative prevalence of supportive relationships with racially dissimilar peers*—as the number of such relations a worker had with those racially dissimilar (whites for African Americans and vice versa), *above and beyond* the number of such relationships that might be expected given the proportions of whites and African Americans in their units. As such, our measurement is consistent with the approach homophily researchers have adopted in the past (e.g., McPherson et al., 2001), in that it cap-

TABLE 1
Unit-Level Sample Characteristics

Variable	Setting[a]	Minimum	Maximum	Mean	s.d.	*t*	Pr > |*t*|
Mean age	Service	3.00	8.50	6.48	1.09	0.50	0.62
	Industrial	3.75	7.90	6.35	1.07		
Mean gender	Service	0.00	1.00	0.73	0.33	7.06	<.00
	Industrial	0.00	0.67	0.24	0.22		
Mean seniority	Service	1.67	24.71	12.64	5.22	−1.53	0.13
	Industrial	5.27	22.17	14.60	5.11		
Mean perception of racial discrimination	Service	1.56	5.00	3.42	0.91	−2.51	0.01
	Industrial	2.13	6.75	4.06	1.14		
Mean social desirability	Service	4.50	10.22	7.52	1.51	0.73	0.47
	Industrial	5.00	11.33	7.25	1.51		
Mean extraversion	Service	2.94	3.70	3.39	0.20	2.39	0.02
	Industrial	2.77	3.60	3.27	0.18		
Mean number of people in unit	Service	6.14	30.60	15.42	4.97	−1.57	0.12
	Industrial	7.40	47.00	17.84	7.31		
Mean percentage of other minorities in unit	Service	0.04	0.50	0.27	0.12	4.71	<.00
	Industrial	0.02	0.46	0.14	0.10		
Mean unit task interdependence	Service	3.08	5.75	4.85	0.55	3.75	0.00
	Industrial	3.71	5.46	4.40	0.42		
Mean unit peer support climate	Service	1.89	3.25	2.61	0.36	2.88	0.01
	Industrial	1.71	2.85	2.38	0.29		
Mean proportion of racially different others in employee's work unit	Service	0.21	4.67	1.00	0.93	−0.38	0.70
	Industrial	0.14	4.00	1.09	0.81		
Mean curvilinear proportion	Service	0.04	35.22	4.32	7.69	−0.15	0.88
	Industrial	0.04	19.41	4.57	5.60		
Mean race	Service	0.00	1.00	0.44	0.33	−4.19	<.00
	Industrial	0.17	1.00	0.74	0.25		
Mean relative prevalence of supportive relationships	Service	−0.61	0.37	−0.13	0.18	1.27	0.21
	Industrial	−0.39	0.06	−0.17	0.10		

[a] The service workers sample contained 31 work units, and the industrial workers sample contained 34 work units.

tures the prevalence of such relationships in the context of the probability of such cross-racial supportive relations in the unit in the first place.

To calculate the relative prevalence of supportive relationships with dissimilar peers, we used an approach similar to one that is common in social network analysis (Ibarra, 1993; Morrison, 2002). This approach requires the collection of data regarding the demographic characteristics of those individuals with whom the respondent reports having supportive relationships as well as data on unit-level racial composition. Appendix A gives the texts of the items in each measure included in this study. Prior to designing our survey instrument, we conducted over 50 preliminary interviews with individuals who were members of the sampled unions but who were not included in our sample. The purpose of the preliminary interviews was to clarify the nature of supportive peer relations at work as manifested in the occupations studied and to gain a better idea of the base rate of such relations in the blue-collar workplace. Adopting the terminology and phrases used by interviewees in our preliminary, qualitative research to describe intimate and supportive relations with peers at work, in our survey instrument we asked respondents to record the initials of up to three coworkers. We described the coworkers they should list as those to whom they "feel closest: That is, people you can really talk to and rely upon, and with whom you would feel comfortable discussing an important personal matter." The wording of this "grounded" item is nearly identical to that used in previous network studies to elicit the names of those with whom a given target has strong or intimate ties (Burt, 1984; Fischer, 1982; Verbrugge, 1977). The decision to leave columns for only three coworkers' initials was based on our preliminary interviews. Most interviewees were able to identify only one or two individuals to whom they felt close at work and who met the criteria specified above, and many were unable to identify even a single such person. In no case did interviewees identify more than three such coworkers. To put this finding into context, note that Morrison (2002: 1153) found that organizational newcomers turned to an average of 4.4 (s.d. = 2.1) individuals (not necessarily coworkers) for job- and firm-related informa-

tion (i.e., more casual support relationships). Similarly, in one of the earliest studies of homophily, Verbrugge (1977: 579), limiting respondents to three "alters," found a mean of 2.8 alters per "ego." Following the approach used in the General Social Survey (Burt, 1984; Marsden, 1987), for each individual whose initials were recorded in the questionnaire, we asked a respondent a number of questions, including job title (e.g., "coworker/peer," "supervisor," "company executive"), and race ("white," "African American," "other").

Our data on unit racial composition were based on respondent self-reports, as is common in sociological research on intergroup relations (e.g., Bacharach & Bamberger, 2004; Chiricos, McEntire, & Gertz, 2001). Specifically, following Gutek and Cohen (1987), we asked respondents to estimate the proportion of unit members falling into a number of ethnic classifications, including white and African-American. We then validated these estimates against union records for each respondent's work unit. Respondent estimates deviated from union records by 10 percent or less in 96.8 percent of the observations, and underestimates were as prevalent as overestimates. Such deviation was expected given that, in many cases, the union records were several months past their last update.

Of the 1,247 respondents, (1) 263 identified only nonpeers as those with whom they had supportive relationships at work; (2) 59 failed to respond to the support-related items; and, as noted above, (3) 3.2 percent ($n = 40$) provided estimates of unit racial composition that were deemed to be unreliable (deviating more than 10 percent from union records). All of these 362 observations were consequently dropped from the analysis. The exclusion of these observations from the analysis could have introduced bias if respondents in either the first or second category described in the preceding sentence worked in units systematically differing from the work units of retained respondents with regard to the proportion of African Americans to whites, task interdependence, or peer support climate, the three unit-level dimensions hypothesized to influence the relative prevalence of supportive relationships with dissimilar peers. To test for such bias, we conducted 12 *t*-tests looking for differences between retained and excluded respondents in means on each of the three independent variables associated with (1) identifying nonpeers as sources of workplace support or (2) not responding to the support-related items. These *t*-tests were run separately for whites and blacks. None of the resulting values were statistically significant ($p > .10$, two-tailed tests).

The 885 remaining respondents reported having an average of 1.8 (s.d. = 1.1) supportive peer relationships. Following Verbrugge (1977), and using the data described above, we then calculated the *relative* prevalence of supportive relations with racially dissimilar peers (or what Verbrugge [1977: 581] referred to as the "marginal ratio") for whites and African Americans, respectively, as:

$$\left[\left(\frac{\textit{supportive relations with whites}}{\textit{all supportive relations}} \times 100\right) - \textit{\% whites in unit}\right] \div 100$$

and

$$\left[\left(\frac{\textit{supportive relations with blacks}}{\textit{all supportive relations}} \times 100\right) - \textit{\% blacks in unit}\right] \div 100.$$

Although it logically makes little sense to estimate the relative prevalence of supportive relationships with dissimilar peers among those reporting a complete lack of supportive peer relationships to begin with, it is also impossible to calculate since the denominator in the equation above would be equal to zero. Because, as Marsden (1987: 124) noted, "Heterogeneity measures cannot be defined for networks of size 0," and since data on the prevalence of norms cannot be generated without unit demographic data, we excluded the 362 observations noted above from our analyses. Consequently, the effective sample for all analyses incorporating the relative prevalence of supportive relationships with dissimilar peers as the dependent variable was no more than 885 whites and African Americans. Values for this variable ranged from −1 (indicating that the prevalence of relations with dissimilar peers was substantially less than the prevalence that could be expected given the demographic composition of the work unit) to +1 (indicating that the prevalence of relations with dissimilar peers was greater than the prevalence that could be expected given the demographic composition of the work unit), with 0 indicating that the prevalence of relations with dissimilar peers was no different from the prevalence that could be expected by chance, given the demographic composition of the work unit.

Because the dependent variable was theoretically bounded by +1 and −1, a violation of the assumptions underlying ordinary least square (OLS) regression with regard to "homoscedasticity" and the normal distribution of residuals was theoretically possible. Consequently, applying Cohen, Cohen, West, and Aiken's (2003: 120) rule of thumb (specifying that there is homoscedasticity only if the ratio of the conditional variances at different regions of the "X-space" never exceeds ten), we conducted an assessment of the possible heteroscedasticity of our data. We partitioned the predicted values of the dependent variable into quartiles and

compared the conditional variances for each of these "X-regions." The variances ranged from 0.08 to 0.10, clearly suggesting adequate homoscedasticity. In contrast, although 99 percent of the observations were well within the range of −0.88 to +0.71 on the dependent variable, we did find some nonnormality in the distribution of the residuals. According to Cohen et al. (2003), although nonnormally distributed residuals do not affect the coefficients themselves, such nonnormality may, *but need not,* affect the interpretation of the confidence intervals. Indeed, as Cohen et al. pointed out, "In large samples, non-normality of the residuals does not lead to serious problems with the interpretation of either significance tests or confidence intervals" (2003: 120). As Efron and Tibshirani (1993) recommended, we used "bootstrapping" to assess the robustness of the inferences about parameters to violations of assumptions such as normality. We conducted 20 bootstrap replications to estimate biases and standard errors of the OLS estimates. With the exception of one coefficient in one of the six models analyzed below, the bootstrap analysis (available from the authors upon request) confirmed that the results of the tests of significance were qualitatively unaffected by any possible deviation from the assumptions underlying OLS regression. With this validation in mind, we noted coefficients as statistically significant ($p < .05$ or less) only when the bootstrap analysis confirmed the OLS analysis.

Independent variables. *Unit-level task interdependence* was measured with a six-item measure drawn from Pearce and Gregersen (1991). This scale assesses the degree to which the satisfactory performance of one's job affects the performance of others and is contingent upon coordination with and inputs from others. Responses are made on seven-point Likert scales, with 1 indicating a low level of the characteristic, and 7, a high level. We aggregated measures taken at the individual level ($\alpha = .68$) up to the unit level. The mean coefficient of homogeneity (Raudenbush & Bryk, 2002: 111) was 0.73.

Drawing from the shared perceptions and facet-specific approaches to organizational climate analyses (Anderson & West, 1998), we similarly assessed *unit-level peer support climate* on the basis of individual-level self-reports aggregated up to the unit-level means. Drawing from Caplan, Cobb, French, Van Harrison, and Pinneau's (1975) social support scale, we asked respondents to indicate the extent to which they could count on their unit coworkers to provide both emotional and instrumental support ($\alpha = .78$). At the unit level, the mean coefficient of homogeneity was 0.59. Although this estimate is somewhat lower than that for task interdependence, a rule of thumb regarding the adequacy of different levels of homogeneity has yet to be specified, primarily because different levels of homogeneity are likely for different phenomena that are measured (Snijders & Bosker, 1999).

Finally, we calculated the *proportion of racially different others in an employee's work unit* as the ratio of whites to blacks in each of the African-American respondents' work units, and the ratio of blacks to whites in each of the white respondents' work units. To operationalize the curvilinear associations posited in Hypotheses 5a and 5b, we squared each of these ratios.

Control variables. In testing the hypotheses noted above, we sought to control for the effects of unit size, as interethnic supportive relationships may be more difficult to establish in larger units (Hallinan & Smith, 1985), and the direct demographic attributes of participants, such as age, gender, and seniority. Furthermore, although our focus in the current study was on intergroup relations between whites and African Americans (the dominant racial minority in most American organizations), it may be that supportive relations between white and African-American peers are more prevalent when the social majority is less of a numerical majority—that is, in more racially heterogeneous units. Consequently, we controlled for the percentage of unit members who, although not African American, were nonetheless members of a racial minority (i.e., Asian-Pacific Islander, Hispanic, Native American, or other). We also sought to control for the effects of certain personality-related attributes and the effects of perceptions of status inequality that, according to Amir (1969), may underlie the emergence of intimate relationships with racially different others.

Regarding personality characteristics, it has been suggested that inner security (Amir, 1969: 335) as well as empathy and perspective taking (Batson, Turk, Shaw, & Klein, 1995) may predetermine the ability of an individual to value others, with individuals lacking such abilities tending to avoid intimate relationships with others. Schnake (1991) identified extraversion—the degree to which an individual has an outward orientation—as being directly related to such abilities. Consequently, we controlled for extraversion in our analyses, using the extroversion dimension of the Revised NEO Personality Inventory (Costa & McCrae, 1992). Using the Balanced Inventory of Desirable Responding (BIDR) measure (Paulhus, 1991), we also controlled for social desirability since some individuals may overreport their number of cross-eth-

TABLE 2
Means, Standard Deviations, and Correlations, Individual Level[a]

Variable[b]	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	6.24	1.99													
2. Gender	0.42	0.49	.00												
3. Seniority	14.47	9.60	.53***	−.15											
4. Perception of racial discrimination	3.69	2.24	−.06	−.04	−.04										
5. Social desirability	7.13	4.00	.07*	.05	.03	.04									
6. Extraversion	3.35	0.48	.02	.07*	−.02	−.08*	.21***	(.71)							
7. Number of people in unit	17.76	15.92	−.02	−.09**	.04	.00	.05	.09**							
8. Percentage of other minorities in unit	16.98	21.49	.04	.08*	−.08*	.04	.11**	−.00	.07*						
9. Unit task interdependence	4.59	0.46	.04	.39***	−.04	−.15***	−.01	.08*	−.07*	−.05	(.65)				
10. Unit peer support climate	2.55	0.27	.04	.24***	−.04	−.16***	.10**	.06	.03	.14***	.34***	(.77)			
11. Proportion of racially different others in employee's work unit[c]	1.20	2.04	.00	.03	−.04	.07	.02	.00	.13***	.11**	.01	.03			
12. Curvilinear proportion of dissimilar others	5.59	27.30	.03	.03	.02	.06	−.02	.01	.15***	.06	.05	.03	.89***		
13. Race	0.67	0.47	.10**	−.23***	.14***	−.12***	−.24***	−.05	−.09**	−.23***	−.08*	−.13***	−.15***	−.08*	
14. Relative prevalence of supportive relations with dissimilar peers	−0.16	0.29	.06	.03	−.01	−.06	.01	−.01	−.08*	.15***	.03	.14***	−.35***	−.19***	.01

[a] Values in parentheses are alpha coefficients.
[b] For gender, 0 = "male," 1 = "female"; for race, 0 = "African American," 1 = "white."
[c] The proportion for whites was the number of African Americans over the number of whites; the proportion for African Americans was the number of whites over the number of African Americans.
* $p < .05$
** $p < .01$
*** $p < .001$

nic supportive relationships in order make a positive impression on researchers.

Finally, although the equal status of racioethnic groups in the workplace is guaranteed by law, employees may nevertheless perceive some degree of unequal status. Consequently, we sought to control for any such variance in perceived differences in racial status in the workplace using a single-item, proxy measure of racial sensitivity suggested by Brown (2001). Respondents were asked to indicate their level of agreement/disagreement with the following statement: "In my line of work, how much you can get away with depends on what race/ethnic group you belong to."

Analytical procedures. We applied a multilevel (i.e., mixed-model) approach to data analysis, because all respondents belonged to one of 65 different work units. Using this approach, we were able to estimate coefficients for the independent variables at the individual level of analysis while taking into consideration the nested structure of individuals within work units within the six unions. The mixed-model algorithm (detailed in Appendix B) incorporates both individual- and unit-level independent variables while taking into account the random effects of higher-level units of aggregation (in this case, both an individual's work unit and the union representing its workers). In none of the models examined was the random variance between unions significant. Consequently, to enhance model parsimony, we ran the models a second time, including the random variance between the units only. The relative explanatory potential of each model was assessed on the basis of the difference in the "–2 res log-likelihood" from that of the control model. Since this assessment is accurate only when it is based on observations included in both models, where missing data resulted in fewer observations for the expanded models, we based the difference on a reestimate for the control model, excluding those observations missing in the expanded model.

RESULTS

Table 2 displays the means, standard deviations, and correlations among the variables. Results of the multilevel analyses are presented in Table 3.

Direct effects. As can be seen in Table 3 (in the column labeled "model 1"), only two of the nine control variables (the number of people in unit and the percentage of other minorities in unit) and the estimate of the random variance between work units were significant. Interestingly, the random variance between work units was not significant in any of the expanded models subsequently tested. We tested Hypothesis 1 (which posits a positive association between unit task interdependence and the relative prevalence of supportive relationships with racially dissimilar peers) and Hypothesis 2 (a positive association between the strength of the unit peer support climate and the relative prevalence of supportive relationships with racially dissimilar peers), in a single model. As can be seen in Table 3, model 2, we found no support for Hypothesis 1. Nevertheless, Hypothesis 2 was supported. Specifically, shared perceptions of peer support in a unit (that is, a unit's support climate) had a positive association with the relative prevalence of supportive relations with dissimilar peers ($b = 0.13$, $p < .01$). Moreover, the significant change in the -2 log-likelihood ($p < .05$) indicated that the inclusion of peer support climate significantly contributed to the model's explanatory potential.

To test Hypothesis 3 (which posits an inverse association between the proportion of racially different others in an employee's work unit and the relative prevalence of supportive relationships with racially dissimilar peers), we expanded model 2 to include the opportunity variable (the proportion of dissimilar others to similar others in the unit). As can be seen in model 3 of Table 3, despite the fact that a higher proportion of racially dissimilar others in a work unit presents employees with greater opportunities to develop supportive relations with racially dissimilar peers, as predicted in Hypothesis 3, we found this variable to be *inversely* associated with the relative prevalence of supportive relations with dissimilar peers ($b = -0.05$, $p < .001$).

Moderation effects. As can be seen in model 4 of Table 3, we found support for Hypothesis 4b (regarding the moderation effect of unit peer support climate), but no support for Hypothesis 4a (regarding the moderation effect of task interdependence on the association between proportion of dissimilar others and the relative prevalence of supportive relations with dissimilar peers). Specifically, unit-level support climate was found to moderate the association between the proportion of racially dissimilar others in a work unit and the relative prevalence of supportive relations with racially dissimilar peers ($b = 0.04$, $p < .05$). Figure 1 depicts this moderating effect, showing the association plotted for three levels of peer support climate: low (10th percentile, where climate = 2.2), moderate (median, where climate = 2.5) and high (90th percentile, where climate = 2.9). These findings indicate that a stronger peer support climate weakens the inverse association between the proportion of racially dissimilar peers in a unit and the relative prevalence of

TABLE 3
Results of Multilevel Regression Analyses Examining the Variance in the Relative Prevalence of Supportive Relations with Dissimilar Peers[a]

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
Variable	***b***	**s.e.**	***b***	**s.e.**	***b***	**s.e.**	***b***	**s.e.**	***b***	**s.e.**	***b***	**s.e.**
Intercept	−0.16	0.08	−0.40	0.16	−0.36	0.16	−0.10	0.18	−0.24	0.15	−0.26	0.15
Age	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.01
Gender	−0.01	0.02	−0.02	0.02	0.01	0.02	0.01	0.02	0.01	0.02	0.02	0.02
Seniority	−0.00	0.00	−0.00	0.00	0.00	0.00	−0.00	0.00	−0.00	0.00	−0.00	0.00
Perception of racial discrimination	−0.01	0.00	−0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
Social desirability	−0.00	0.00	−0.00	0.00	−0.00	0.00	−0.00	0.00	0.00	0.00	0.00	0.00
Extraversion	0.00	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Number of people in unit	−0.002**	0.00	−0.002**	0.00	−0.00	0.00	−0.00	0.00	−0.00	0.00	−0.00	0.00
Percentage of other minorities in unit	0.22***	0.05	0.21***	0.05	0.24***	0.07	0.24***	0.07	0.26***	0.07	0.27***	0.07
Unit task interdependence			−0.02	0.03	−0.03	0.01	−0.05	0.03	−0.04	0.02	−0.04	0.02
Unit peer support climate			0.13**	0.05	0.08	0.04	0.03	0.05	0.08*	0.04	0.08*	0.04
Proportion of racially different others in employee's work unit					−0.05***	0.01	−0.25***	0.06	−0.13***	0.01	−0.13***	0.02
Unit task interdependence × proportion							0.02	0.01				
Unit peer support climate × proportion							0.04*	0.02				
Curvilinear proportion									0.01***	0.00	0.01***	0.00
Race											0.02	0.03
Proportion × race											0.00	0.02
Curvilinear proportion × race											−0.00	0.00
Work unit[b]	0.004*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
−2 res log-likelihood	255.1		248.0		70.9		59.8		6.1		5.4	
Change in −2 res log-likelihood[c]			7.1*		89.2***		11.1**		64.8***		0.7	

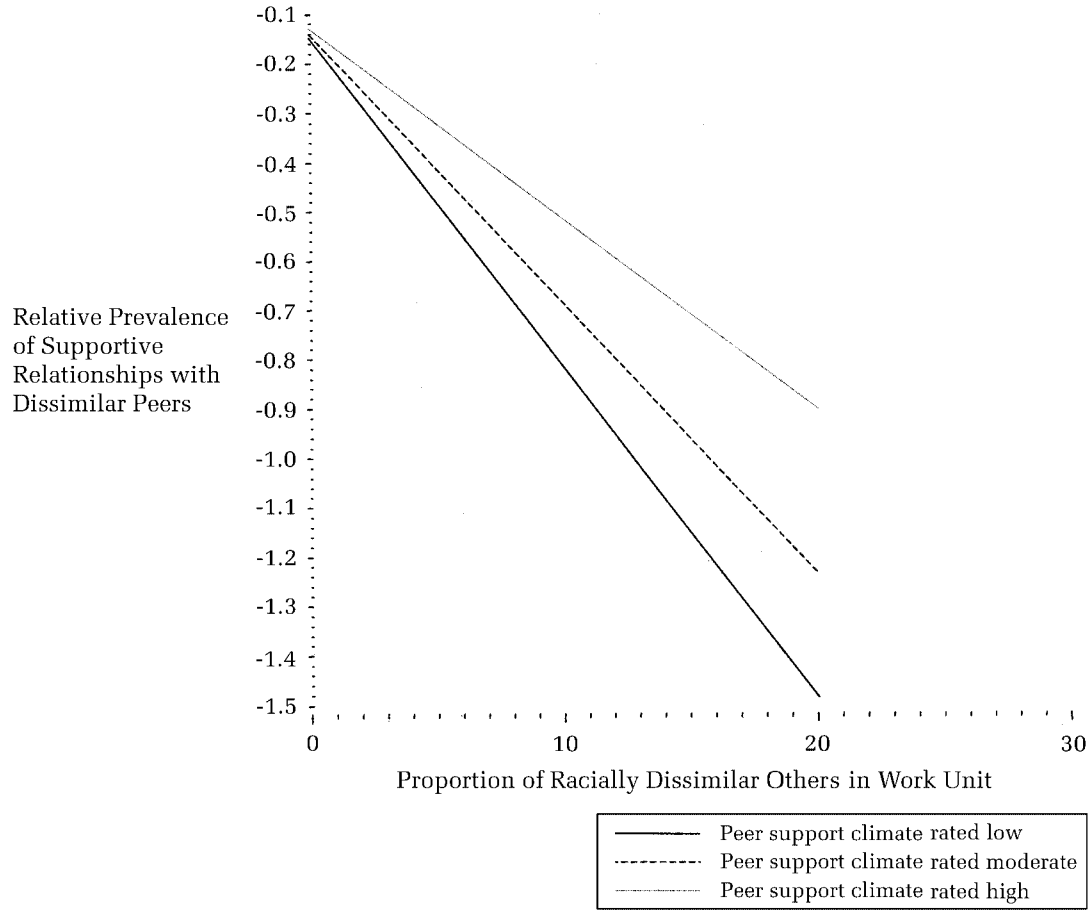
[a] Models 1 and 2, $n = 867$; models 3–6, $n = 638$.
[b] Estimate of the random variance between work units.
[c] Where missing data resulted in fewer observations for the expanded model, the difference was based on a reestimate of the reduced model excluding the missing observations (that is, omitting all the observations in model 2 where the variable "proportion of dissimilar others to similar others" was missing).

* $p < .05$
** $p < .01$
*** $p < .001$

supportive relations with racially dissimilar peers. Moreover, the significant ($p < .01$) −2 res log-likelihood indicates that the addition of this moderation effect contributes to the explanatory potential of model 4.

Tipping-point effect. Finally, as can be seen in model 5 of Table 3, support was found for Hypothesis 5a, which states that the association between opportunity and the RPSR with dissimilar others will be curvilinear. As posited, a positive curvilinear effect ($b = 0.01$; $p < .001$) was found, suggesting that while opportunity and relative prevalence are inversely related, the association is not monotonic and that homophily decreases in strength as the relative number of dissimilar others in a unit increases. Figure 2 depicts this curvilinear association. In contrast, Hypothesis 5b was not supported (see model 6 of Table 3). Respondent race significantly moderated neither the linear nor the curvilinear associations be-

FIGURE 1
Moderating Effect of Peer Support Climate

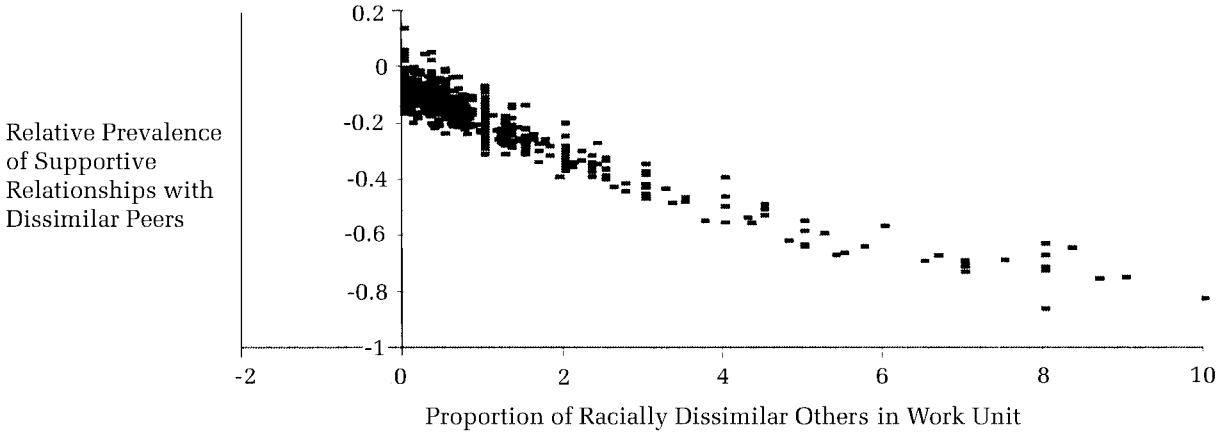


tween the relative number of dissimilar others and the relative prevalence of supportive relationships with dissimilar peers.

DISCUSSION

The results presented above provide four important insights into the way in which a unit's demographic composition and support climate may influence the emergence and maintenance of supportive relations among racially diverse members. First, when using the proportion of racially dissimilar peers in a work unit as a proxy for the degree of opportunity to develop supportive relations with racially dissimilar others, we found a strongly *inverse* association between the proportion of dissimilar others (i.e., opportunity) and the relative prevalence of such relations. That is, contrary to the contact hypothesis, the prevalence of close intergroup ties did not increase proportionately with the representation of a numerical minority in a unit. Our findings suggest that the prevalence of an individual's supportive relations with racially dissimilar others declines—relative to an expectation based on the simple proportion of whites and African-Americans in a unit—as the presence of these dissimilar others in the unit's workforce increases. This finding is consistent with the homophily perspective. Second, although we found no support for a "main effect" of task interdependence, in keeping with Hypothesis 2, we found a significant, positive association between unit-level, shared perceptions of peer support (i.e., support climate) and the relative prevalence of supportive relationships with racially dissimilar peers. The lack of a task interdependence effect, while somewhat surprising in light of the contact theory literature cited above, is actually consistent with recent findings in the social network literature. Specifically, in their examination of the emergence of entrepreneurial teams, Ruef and colleagues (2003) found no significant role for the functional competence or potential functional contribution of potential team members, suggesting instead that socially embedded patterns of association may more strongly influence relations within nascent organizations than do functional interdependencies.

FIGURE 2
Curvilinear Association between Proportion of Dissimilar Others and Relative Prevalence of Supportive Relationships with Dissimilar Peers



As for the link between support climate and the relative prevalence of supportive relations with racially dissimilar peers, in view of the work of Nadler (1991) and Anderson and Williams (1996), we suspect that this association may have something to do with the perceived costs of seeking help from dissimilar others. The perceived costs of help seeking have been found to increase as a function of the perceived risk of having a request for help rejected (Anderson & Williams, 1996). Given individuals' uncertainty about how to interact with dissimilar others and the anxiety that such interactions can raise, these risks of rejection may, in general, be perceived to be greater when the potential source of support is someone who is dissimilar on some salient social category (Dovidio & Gaertner, 1986; Miller, 2002). Individuals employed in units in which peer support is generally perceived to be more widespread and entrenched (that is, units with strong support climates) may sense a lessened risk of rejection overall, and therefore also perceive lower costs in turning to dissimilar others for help, thus facilitating the emergence of supportive relations with peers.

Third, although Hypothesis 4a (regarding the moderating effect of task interdependence) was not supported, we found that the peer support climate may play an important role as a moderator of the opportunity-prevalence relationship. As Hypothesis 4b predicts, we found that homophily effects weakened among those employed in work units characterized by stronger shared perceptions of peer support. This finding is consistent with an underlying theme in contact theory, namely, that supportive norms are a key prerequisite condition for a positive effect of increased opportunity on intergroup relations (Dovidio et al., 2003).

Up to this point, our findings suggest that the contact hypothesis and its corollaries may have somewhat mixed applicability as guidance for an organizational diversity management strategy. Changing intergroup staffing ratios—and therefore intergroup contact opportunities—may result in shifts in actual casual contact between demographically dissimilar peers, yet our results suggest that ratio changes are unlikely to generate the kind of intimate, supportive relations among demographically dissimilar peers necessary to achieve what Cox, Lobel, and McLeod referred to as "value-in-diversity" (1991: 827). Indeed, although negative, homophily-based effects may diminish somewhat in units whose members share the perception that peers tend to support one another, a comparison of the sizes of our main and moderated effects suggests that even if that prerequisite is met, opportunity is likely to remain *inversely* associated with the relative prevalence of supportive relations with dissimilar peers.

Interestingly, we did find support for a main effect of a unit-level peer support climate on the relative prevalence of relations among dissimilar peers. Our findings suggest that such a positive effect is likely even in the absence of norms supportive of specifically *intergroup* relations, as long as unit members perceive peer-based support in general to be both legitimate and encouraged. That is, our findings suggest that organizations focusing on encouraging peer support and helping as a diversity management tool may more successfully facilitate the emergence of supportive intergroup relations than organizations simply seeking to increase opportunities for intergroup contact. Of course, a core assumption underlying this finding is that at least some minimal degree of intergroup

contact exists. Diversity strategies aimed at encouraging peer-based support and help giving are unlikely to facilitate the emergence of intergroup supportive relations if members of demographically different groups do not have the opportunity to seek help from or give help to one another. In this sense, despite findings more consistent with the homophily perspective than the opportunity perspective, we suggest that organizations might still want to take action against so called "ethnic drift" (Milliken & Martins, 1996) and implement policies aimed at ensuring that minorities are not disproportionately concentrated in certain departments with limited opportunities for interaction with majority group members (and vice versa). Although occupational segregation and labor market constraints may limit organizations' ability to minimize ethnic drift, an increased reliance upon internal labor markets along with targeted employee development programs might be one possible means by which to overcome such external constraints (Bamberger & Meshulam, 2000).

Fourth, organizational attempts to minimize ethnic drift may be *particularly* important given our findings regarding the nonmonotonic relationship between intergroup ratios and the relative prevalence of supportive relations with dissimilar peers. On the one hand, our findings of an inverse association between intergroup contact opportunities and supportive relations suggest a real dilemma for managers seeking to maximize opportunities for whites and African Americans to develop supportive intergroup peer relationships. Specifically, our findings suggest that were an organization to increase the proportion of African Americans in a work unit relative to the proportion of whites, the relative prevalence of African Americans' supportive relations with white peers would likely increase. However, because the proportion of African Americans is often inversely related to the proportion of whites, our findings also suggest that such a move would result in a decline in the relative prevalence of whites' supportive relations with African-American peers. That is, the increased proportion of African Americans, while providing greater opportunities for whites to have supportive relations with African-American peers, would tend to heighten the white workers' homophilic tendencies. On the other hand, our findings suggest that, by minimizing ethnic drift, managers may be able to effectively avoid this dilemma. Supporting the findings of Allmendinger and Hackman (1995), our results suggest that any increased representation of a minority in a majority-dominated unit (for instance, from very low to moderately low levels of representation) is likely to be associated with a *decrease* in the relative prevalence of supportive relations with racially dissimilar peers that members of the majority have with the minority. In contrast, our findings suggest that in organizations in which racial representation is already more balanced at the unit level, additional infusion of minorities may in fact take place without any strengthening of such homophilic tendencies among members of the dominant group. Furthermore, given that we found no evidence that race moderates the curvilinear association between ethnic representation and the relative prevalence of supportive relations with dissimilar others, our findings suggest that under such conditions such an infusion might actually increase the relative prevalence of blacks' supportive relationships with whites without substantially lowering whites' relative prevalence of supportive relations with blacks.

Finally, it is important to note that in each of the models tested, the relative prevalence of supportive relations with racially dissimilar peers was found to be highly sensitive to the number of minorities other than blacks in a work unit. In all cases, the relative prevalence of supportive relations with racially dissimilar peers increased as a function of the number of non–African-American minorities in a work unit (e.g., $b = .22$, $p < .001$ in model 1 of Table 3). Although it goes beyond the realm of the current analysis to examine how different ethnic/racial configurations affect cross-group relations, supportive relations between the two dominant racial groups in many American organizations are clearly enhanced in units employing a more ethnically heterogeneous workforce.

Limitations

Several limitations of our study offer research opportunities in addition to those suggested above. First, despite the use of multilevel analyses and the assessment of task- and support-related variables at the group level, given that all our data were from self-report questionnaires, a small possibility remains that common method variance inflated some of the reported associations. For example, even though we demonstrated convergent validity for our self-reported measure of the proportion of dissimilar others in a unit, it may be that those having few supportive relations with dissimilar others simply tend to perceive high proportions of dissimilar others in their work units, thus generating the significant associations identified above. To rule out this possibility, we replaced the self-reported measure of proportion of dissimilar others with the *sample* proportion of dissimilar others in each of

the 65 work units studied. This measure is essentially identical to the sample demographic profile metric used in the research of Tsui and her coauthors (1992). The results of this reanalysis were identical to those reported above. All significant parameters retained the same level of significance, and the relative magnitude of association remained unchanged. Although we were unable to run similar sensitivity analyses for the other independent variables, we deemed the possibility of common method bias to be remote. Had the relationships observed in this study been a function of common method bias, we would have found significant structural links among *all* of the relations posited. The fact that several of these relationships were insignificant suggests that it is unlikely that our significant findings can be solely attributed to method variance.

Second, although, as noted above, researchers have used similar approaches for examining supportive relations among dissimilar others, given the subjective nature of the assessment and the fact that this assessment requires a relatively high degree of cognitive and emotional processing, the observed variance in the dependent variable here may be somewhat underestimated (Frese & Zapf, 1988). This lack of reliability may account for some of the observed null results and small effect sizes reported, thus making for overly conservative results. However, as Frese and Zapf (1988: 381) noted, such measurement conditions make significant results "all the more remarkable." Unfortunately, it is difficult to imagine any means to assess the dependent variable other than by means of self-report. Indeed, even were it possible to assess the relative prevalence of supportive relations with dissimilar peers via observer reports, the observed variance would most likely remain underestimated, as observers would face the same cognitive and emotional processing constraints as the subjects themselves (Frese & Zapf, 1988: 380).

Third, our results may have been influenced by our decision to drop 362 observations from the analysis, and by possible threats to the assumption of asymptotic normality upon which multilevel modeling is typically based. On the one hand, the elimination of certain observations (namely, those of the 59 respondents who failed to indicate the existence or absence of such relationships, and the 40 for whom we were unable to validate unit demographic composition data) may have restricted the range of the dependent variable. Assuming that such missing data are random, the exclusion of these observations may have resulted in an underestimation of statistical significance. On the other hand, we cannot rule out the possibility that unit-level conditions served as the antecedent leading many of those excluded to either not respond to the support-related items or to identify individuals other than coworkers as their primary source of workplace support. While it is impossible to "solve" such an incomplete data problem (the available data simply do not allow us to assess the magnitude of any hidden biases), sensitivity analyses could be used to assess the possible biasing effects of our sample exclusion decisions (Little & Rubin, 2002). Consequently, we retested model 3 including the dropped respondents and making the conservative assumption that each of these previously excluded respondents had the highest possible value on the relative prevalence of supportive relations with dissimilar others, 1.0 (relative to the mean value of −0.16 for the sample as a whole). Not only did the parameter for proportion (shown to be statistically significant in Table 3) remain significant ($p < .001$), but the coefficient for peer support climate, previously statistically insignificant, became significant ($p < .05$). These findings suggest that the results presented above are likely to be robust to any bias stemming from the exclusion of the 362 observations noted above.

Regarding the possible threat to the assumption of asymptotic normality upon which multilevel modeling is typically based, Hox and Mass's (2002) recent findings suggest that only the standard errors of the second-level variances are likely to be affected (i.e., downwardly biased) when the number of groups is such that asymptotic normality may be questioned. Furthermore, their findings suggest that even with only 50 groups, estimations are likely to be subject to only very minor bias having minimal practical effects. Given that our analyses involved 65 groups, and that (with the exception of the control model), the random variance model components were found to be nonsignificant, even if the standard error for these variance terms was estimated to be smaller than it is in reality, the bias is not of sufficient magnitude to make these variance components significant in the models of theoretical interest.

Fourth, given that our sample contained only unionized, nonexempt workers, we cannot attest to the generalizability of our findings to employees in nonunionized organizations or serving in exempt positions. As noted above, intergroup relations may be no better in unionized than in nonunionized firms, but the development of supportive relationships among coworkers may be more encouraged in unionized than nonunions firms (Bacharach et al., 2003). If this is indeed the case, the base rate of support may be higher in unionized firms than in nonunionized firms, and the antecedents of inter-

group supportive relations may differ as well. Moreover, there is also the possibility that our findings are unique to the workers employed in the northeastern United States. In the future, researchers may wish to test the applicability of the current findings to other types of workplaces and workforces in other regions.

Finally, for the sake of parsimony, in the current study we limited our attention to the two dominant racial groups in American society, namely whites and African Americans. Yet, as noted earlier, many of the work groups studied also employed Hispanics, Asians, and other racial or ethnic minorities. Consequently, it is conceivable for whites to have had no supportive relationships with any of their African American peers, but to have supportive relations with other racially dissimilar peers (e.g., Asians). Moreover, given that the relative prevalence of supportive relations with dissimilar others for whites and African Americans was found to be sensitive to the number of minorities other than African Americans in a work unit, it is quite probable that opportunity and homophily effects vary with the particular mix of groups being analyzed. In addition, the findings reported in the current study with regard to supportive relations between whites and African Americans may not necessarily be generalizable to relations between other racial or ethnic groups. In the future, researchers may want to develop models of supportive relations among dissimilar peers that incorporate more than just the social majority and a single (albeit predominant) social minority.

Conclusion

Employee diversity has become a common characteristic of many American organizations. However, as Shipler noted, while diversity brings blacks and whites together, "It does not teach them how to deal with one another once they are there. Every workplace is a warren of unseen walls and barriers" (1997: 509). As such, the degree to which such cross-ethnic group contact is in fact beneficial to organizations remains a question. Indeed, Chatman and Flynn noted that demography research has produced enough mixed evidence "to support two diametrically opposed positions" (2001: 972), namely the value-in-diversity hypothesis and the costs-of-diversity perspective.

We began the current analysis assuming that the value of diversity is very much contingent upon how intergroup contact is defined, with the true benefits of diversity emergent only when intergroup contact is defined in terms of the existence of deep, support-based relationships among dissimilar others. On the basis of this assumption, and drawing from several decades of research on intergroup relations, we posited and found an inverse relationship between intergroup contact opportunities and the relative prevalence of supportive relations with dissimilar peers. This finding provides empirical support for the troubling compositional paradox Shipler hinted at in his qualitative analysis of black-white relations: "The level [of racial integration] that makes blacks comfortable is probably about the point at which whites get nervous" (1997: 65). However, in contrast to Shipler's pessimistic statement, our analyses also pointed out that this relationship is not necessarily monotonic and is subject to moderation. In this regard, we believe that our findings may have important implications for both researchers and practitioners.

Research implications. For researchers, our findings drive home the point that intergroup helping and the development of intergroup supportive relations among racially dissimilar peers, while themselves microlevel processes, macrolevel phenomenona are likely to profoundly influence them. Important macro phenomena here would include unit support climate, and, most importantly, staffing ratios of one racial/ethnic group relative to another. Such a structuralist perspective on intergroup relations has become well established (Blau, 1994; Blau & Schwartz, 1997), yet its application to the realm of organizations and micro organizational processes has been more limited. Our findings suggest that structuralist inquiries into the nature of organizational support relations in general, and support relations among demographically dissimilar organizational actors in particular, are likely to offer valuable insights.

Second, our findings are important in that they suggest the need for a reconsideration of the role of both the opportunity and homophily perspectives in organizational diversity research. Our findings suggest that intergroup ratios may have profound implications for the emergence of supportive relations among dissimilar peers. Whether such micro processes of intergroup support may, over time, generate more macrolevel benefits is yet another question. On the one hand, some evidence exists that enhancement in positive affect toward dissimilar others may not extend beyond the dissimilar partner in a helping dyad (Brewer & Brown, 1998); on the other hand, evidence exists for the opposite, namely that the establishment of such intergroup supportive relationships may have broad and positive implications extending well beyond actual interactants (Pettigrew, 1998). Our findings suggest that the potential contagion effect of microlevel,

intergroup supportive relations deserves far greater attention by organizational researchers.

Finally, these findings are important for organizational researchers because they call into question both the broad applicability of the contact hypothesis, as well as the often-assumed monotonic association between group representation and homophilic tendencies. Our findings suggest that both social minorities and majorities are likely to "turn to their own" for support when employed in a work unit increasingly dominated by those ethnically dissimilar to themselves, but that this effect holds true only until some representational tipping point is reached. After that, the magnitude of association—for both whites and blacks—is, at the very least, diminished. Indeed, for both whites and blacks, until some level of more balanced representation within the social unit is reached, the tendency toward same-race supportive relationships increases as a function of the relative presence of the other group. Although we found unit-level support climate to moderate the homophilic effects of intergroup ratios on the relative prevalence of supportive peer relations with dissimilar peers, it is likely that other factors moderate these influences as well. One such factor may be the level of comfort that members of different groups have in expressing to each other the characteristics that make their group unique. Polzer, Milton, and Swann (2002) have demonstrated that such expression can significantly contribute to harmonious intergroup relations and moderate the diversity-effectiveness link. Research is needed to identify and explore other contextual factors having the potential to weaken or perhaps even reverse these homophilic effects.

Research is also needed to examine how intergroup ratios and support-related norms may affect the emergence and maintenance of intergroup supportive relations over time. The work of Harrison, Price, Gavin, and Florey (2002) suggests that time may moderate the homophilic effects of intergroup ratios on the relative prevalence of supportive relations between racially dissimilar peers in that, over time, surface-level differences such as race play less of a role in influencing interaction patterns than do deeper, psychological differences. However, if collaboration is limited and supportive relations fail to develop among racially dissimilar peers in the early stages of group formation, Milliken and coauthors' (2003) analysis suggests that the demographic differences may, over time, actually *increase* the potential for intergroup conflict, thereby harming group performance. Longitudinal analyses would be useful in this regard in that they might provide a dynamic mapping of such relations over time.

Practitioner implications. Given our core assumption that employee diversity is unlikely to offer competitive advantage unless close, supportive relations among dissimilar peers can be established and maintained, our findings offer practitioners some useful insights into just how such relations can be enhanced at the level of the work unit. First, in keeping with Allmendinger and Hackman's (1995) conclusions, our findings regarding the curvilinearity of homophily effects suggest that managers might best avoid the placement of ethnic tokens and work instead toward balanced minority-majority representation in work units. Specifically, since increased opportunities for cross-ethnic contact are less strongly predictive of homophilic tendencies at higher levels of minority representation, it may make sense for managers to try to work against ethnic drift and toward demographically balanced work units. Indeed, our finding with regard to the direct effect of the proportion of minorities other than blacks on the relative prevalence of supportive relations with dissimilar peers further drives home the point that increased intergroup contact in the absence of more balanced racial/ethnic representation at the work-unit level may actually do more harm to diversity objectives than good.

Second, even in the absence of demographically balanced work units, our findings suggest that it may be possible to reduce, if not neutralize, homophily effects if managers bundle efforts aimed at increasing minority representation with interventions intended to enhance unit-level support climate. As we have demonstrated, stronger unit-level peer support climates may counter homophily effects in two ways: First, these stronger climates may directly, positively influence the relative prevalence of supportive relations with dissimilar peers—thus countering any negative influence of increased representation of the "other." Second, these climates may moderate the negative impact of increased representation of the minority on the majority's relative prevalence of supportive relations, and vice versa. Existing empirical research evidence suggests that leaders' hands-on coaching through feedback and process consultation may play a particularly important role in enhancing the quality of members' interpersonal relations (Wageman, 2001). Such unitwide shared perceptions of peer support may also be enhanced to the extent that managers implement appraisal and reward systems that are more consistent with peer-based help seeking and giving (Wageman, 2001).

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APPENDIX A

Items for Selected Measures[a]

Relative Prevalence of Supportive Relations with Dissimilar Peers

Who are the individuals you feel closest to at work? In column 1, please write the initials of up to three people at work to whom you *feel* the closest, people you can really talk to and rely upon. By writing their initials you will be able to distinguish between these people as you answer the rest of the questions. In Column 2, please fill in the circle that best describes their job (Response options: Supervisor, Co-worker, Union representative, Company executive, Secretary or administrative staff). In column 3, please specify their race/ethnic background (Response options: White, African American, Hispanic/Latino, Asian/Pacific Islander, Native American, Other).

Number of Employees in Work Unit and Unit-Level Racial Composition

Including yourself, how many workers are employed in your department or work unit?

Considering all of those individuals employed in your department or work unit, how many would fit into each of the following ethnic classifications? (Ethnic classifications: White, African American, Hispanic/Latino, Asian/Pacific Islander, Native American, Other).

Task Interdependence (Source: Pearce & Gregersen, 1991)

I work closely with others in doing my work.

I frequently must coordinate my efforts with others.

I work fairly independently of others in my work. (reversed)

My own performance depends on receiving accurate information from others.

The way I perform my work has a significant impact upon others.

My work requires me to consult with others fairly frequently.

[a] Items and response scales are given verbatim.

Support Climate (Source: Caplan et al., 1975)

How much do coworkers go out of their way to do things (like sharing your tasks or helping with your childcare) to make your worklife easier for you?
How much could you rely on your coworkers to provide money or other things if you were in need?
When things get tough at work, how much can you count on your coworkers to listen, show understanding or show that they care?
When things get tough at work, how much can you rely on your coworkers for advice or information?

APPENDIX B

The Hierarchical Model[a]

$$Y_{ijk} = \sum_{p=0}^{P} \pi_{pjk} a_{pijk} + e_{ijk}.$$

$$\pi_{pjk} = \sum_{q=0}^{Q_p} \beta_{pqk} X_{qjk} + r_{pjk}.$$

$$\beta_{pqk} = \sum_{s=0}^{Spq} \gamma_{pqs} W_{sk} + u_{pqk}.$$

where

$i = 1, \ldots, n_{jk}$: the index of the individual level (level 1),

n_{jk} = the number of participants in the jth unit in the kth union,

$j = 1, \ldots, J_k$: the index of the unit level (level 2),

J_k = the number of units that belong to the kth union,

$k = 1, \ldots, K$: the number of unions (level 3),

$p = 1, \ldots, P$: the number of explanatory variables in the individual level,

$q = 1, \ldots, Q_p$: the number of explanatory variables in the unit level that explains the p coefficient in the individual level,

and

$s = 1, \ldots, S_{pq}$: the number of explanatory variables in the union level that explains the q-coefficient in the unit level that explains the p-coefficient in the individual level.

[a] Source: Singer (1998).

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